

Urologic Diseases in America

2012



Copyright Information

All material appearing in this report is in the public domain and may be reproduced or copied without permission: citation as to source, however, is appreciated.

Suggested Citation

[Table X-X. Chapter title. In:] Litwin MS, Saigal CS, editors. Urologic Diseases in America. US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Washington, DC: US Government Printing Office, 2012; NIH Publication No. 12-7865 [pp. XX-XX].

UROLOGIC DISEASES IN AMERICA

2012

EDITORS

Mark S. Litwin, MD, MPH
David Geffen School of Medicine
School of Public Health
University of California, Los Angeles
RAND Health, Santa Monica, California

Christopher S. Saigal, MD, MPH
David Geffen School of Medicine
University of California, Los Angeles
RAND Health, Santa Monica, California



**Urologic
Diseases**
in America



This compendium is dedicated to the memory of

Richard D. Williams, MD

Educator, Clinician, Colleague, Advocate, Guiding Light

**Urologic
Diseases**
in America



UROLOGIC DISEASES IN AMERICA

EDITORS

Mark S. Litwin, MD, MPH
Christopher S. Saigal, MD, MPH

MANAGING EDITOR

Sylvia I. Lambrechts, MPH, MA

UCLA

Kerry M. Madison
Elizabeth Garcia
Beth A. Miller
Kristen C. Williams

RAND HEALTH

Jan M. Hanley, MS
Rodger A. Madison, MA
Julie C. Lai, MPH
Alexandria C. Smith, MSPH
Andrew W. Dick, PhD
Hangsheng Liu, PhD, MS, BMed
Nancee Inouye

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES

Paul W. Eggers, PhD
John W. Kusek, PhD
Stuart S. Howards, MD
Ziya Kirkali, MD

**Urologic
Diseases**
in America



Contents

Introduction

Chapter 1

Interstitial Cystitis and Prostatitis..... 1

Chapter 2

Benign Prostatic Hyperplasia/Lower Urinary Tract Symptoms and Bladder Stones.....45

Chapter 3

Prostate Cancer.....73

Chapter 4

Urinary Incontinence.....97

Chapter 5

Bladder and Upper Tract Urothelial Cancer.....161

Chapter 6

Urethral Diseases.....213

Chapter 7

Perinatal Hydronephrosis.....249

Chapter 8

Kidney Cancer.....283

Chapter 9

Urinary Tract Stones.....313

Chapter 10

Testicular Cancer.....347

Chapter 11

Urinary Tract Infection.....365

Chapter 12	
Male Reproductive Health.....	405
Chapter 13	
Pediatric Urologic Diseases.....	445
Chapter 14	
Economic Impact of Urologic Disease.....	463
Chapter 15	
Methods.....	497

Introduction

Table 1. Conditions analyzed in *Urologic Diseases in America*

Prostate
Prostatitis
Benign Prostatic Hyperplasia
Prostate Cancer
Bladder
Interstitial Cystitis, (specific)
Interstitial Cystitis, (non-specific)
Bladder Stones
Urinary Incontinence
Female Adult
Male Adult
Bladder Cancer
Lower Tract Transitional Cell Carcinoma
Upper Tract Transitional Cell Carcinoma
Urethral Disease
Urethral Stricture
Female Adult
Male Adult
Kidney
Urinary Tract Stones
Lower Urinary Tract Stones
Upper Urinary Tract Stones
Kidney Cancer
Pediatric
Hypospadias
Ureterocele
Ureteropelvic Junction Obstruction
Posterior Urethral Valves
Vesicoureteral Reflux
Undescended Testes
Urinary Incontinence in Children
Urinary Tract Infection in Children
Male Reproductive Health
Male Infertility
Erectile Dysfunction
Peyronie's Disease
Testicular Cancer
Infections
Urinary Tract Infections
Female Adult
Male Adult

Table 2. Nationally representative physician office visits by urologic diagnosis

Diagnosis	Physician Office Visits
Prostate	
Prostatitis	572,285
Benign Prostatic Hyperplasia	3,044,051
Prostate Cancer	4,555,043
Bladder	
Interstitial Cystitis (specific)	232,361
Interstitial Cystitis (non-specific)	1,972,689
Bladder Stones	50,040
Urinary Incontinence	
Female Adult	2,114,688
Male Adult	718,430
Bladder Cancer	
Lower Tract Transitional Cell Carcinoma	967,507
Urethral Diseases	
Urethral Stricture	
Female Adult	227,483
Male Adult	231,503
Kidney	
Urinary Tract Stones	
Lower Urinary Tract Stones	50,040
Upper Urinary Tract Stones	557,102
Kidney Cancer	392,964
Pediatric	
Hypospadias	71,921
Ureteropelvic Junction Obstruction	2,804
Posterior Urethral Valves	12,669
Vesicoureteral Reflux	73,196
Undescended Testes	126,750
Urinary Incontinence in Children	344,901
Urinary Tract Infection in Children	1,320,352
Male Reproductive Health	
Erectile dysfunction	2,503,207
Testicular Cancer	135,046
Infections	
Urinary Tract Infections	
Female Adult	5,383,244
Male Adult	1,298,107

SOURCE: National Ambulatory Medical Care Survey, 2007; National Hospital Ambulatory Medical Care Survey, 2007.

Table 3. Annual expenditures, exclusive of medication costs, for Medicare beneficiaries 65 and older with urologic diseases

	Inpatient	Hospital Outpatient	Ambulatory Surgery	Physician Office	Emergency Room	Total
Prostate						
Prostatitis	\$27,519,657	\$2,264,573	\$4,846,933	\$15,984,976	\$1,821,292	\$52,437,432
Benign Prostatic Hyperplasia	\$938,407,142	\$16,878,711	\$152,482,587	\$268,758,996	\$34,262,565	\$1,410,790,000
Prostate Cancer	\$535,971,300	\$525,221,173	\$263,617,058	\$822,657,973	\$8,037,664	\$2,155,505,168
Bladder						
Interstitial Cystitis (specific)	\$7,296,797	\$745,710	\$5,862,396	\$6,500,221	\$146,027	\$20,551,152
Interstitial Cystitis (non-specific)	\$83,723,169	\$15,719,122	\$37,388,005	\$84,083,186	\$7,695,598	\$228,609,081
Bladder Stone	\$33,029,045	\$989,258	\$15,936,746	\$2,773,120	\$417,764	\$53,145,933
Urinary Incontinence						
Female Adult	\$183,412,766	\$12,225,661	\$122,389,793	\$88,401,353	\$955,409	\$407,384,983
Male Adult	\$29,966,124	\$2,462,025	\$16,855,696	\$22,640,981	\$470,930	\$72,395,756
Bladder Cancer						
Lower Tract Transitional Cell Carcinoma	\$595,413,936	\$60,855,797	\$209,833,165	\$173,583,436	\$1,881,963	\$1,041,568,297
Upper Tract Transitional Cell Carcinoma	\$49,376,054	\$2,866,276	\$4,974,585	\$7,859,760	\$12,796	\$65,089,472
Kidney						
Urinary Tract Stones	\$791,927,236	\$50,566,048	\$198,562,038	\$16,238,062	\$25,815,001	\$1,083,108,385
Ureteropelvic Junction Obstruction	\$2,521,933	\$216,234	\$1,684,379	\$522,786	†	\$4,945,332
Kidney Cancer	\$296,353,849	\$35,322,593	\$5,553,348	\$40,194,594	\$1,151,295	\$378,575,680
Male Reproductive Health						
Infertility	\$111,390	\$112,717	\$781,851	\$245,687	\$148,401	\$1,400,046
Erectile Dysfunction	\$26,780,414	\$2,001,219	\$35,682,778	\$17,176,446	\$592,579	\$82,233,436
Peyronie's Disease	\$3,678,560	\$63,339	\$2,440,135	\$263,360	†	\$6,445,393
Urethral Stricture	\$42,645,082	\$2,072,391	\$38,807,398	\$9,430,039	\$471,474	\$93,426,384
Testicular Cancer	\$702,811	\$1,446,929	\$2,294,446	\$667,036	\$9,493	\$5,120,715
Infections						
Urinary Tract Infection						
Female Adult	\$3,060,509,250	\$34,544,275	\$22,452,519	\$191,072,016	\$109,051,829	\$3,417,629,889
Male Adult	\$1,605,902,534	\$9,664,855	\$20,749,649	\$60,950,022	\$42,847,875	\$1,740,114,936

† Figure does not meet standard for reliability or precision.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2007.

Table 4. Estimated annual charges^a for an individual^b with a urologic diagnosis

Diagnosis	Individual annual charges
Prostate	
Prostatitis	\$9,184
Benign Prostatic Hyperplasia	\$9,935
Prostate Cancer	\$19,535
Bladder	
Interstitial Cystitis (specific)	\$17,407
Interstitial Cystitis (non-specific)	\$15,815
Urinary Incontinence	
Female Adult	\$18,264
Male Adult	\$15,817
Lower Tract Transitional Cell Carcinoma	\$24,718
Kidney	
Urinary Tract Stones	\$23,739
Kidney Cancer	\$39,841
Male Reproductive Health	
Infertility	\$11,437
Erectile Dysfunction	\$9,174
Urethral Stricture	\$19,350
Testicular Cancer	\$33,747
Urinary Tract Infection	
Female Adult	\$12,131
Male Adult	\$12,325

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

**Urologic
Diseases**
in America



CHAPTER 1
Interstitial Cystitis
and Prostatitis

Table 1-1. Codes used in the diagnosis of interstitial cystitis and prostatitis

Interstitial Cystitis

Individuals 18 years or older with one or more of the following ICD-9 diagnosis codes:

Disease-specific

- 595.1 Chronic interstitial cystitis
- 625.8^a Other specified symptoms associated with female genital organs
- 625.9^a Unspecified symptom associated with female genital organs

Disease non-specific

- 595.2 Other chronic cystitis
- 595.9 Cystitis, unspecified
- 596.9 Unspecified disorder of bladder
- 625.8^b Other specified symptoms associated with female genital organs
- 625.9^b Unspecified symptom associated with female genital organs
- 788.41^b Urinary frequency

Prostatitis

Males 18 years or older with one or more of the following ICD-9 diagnosis codes:

Infectious

- 601.0 Acute prostatitis
- 601.2 Abscess of prostate
- 601.3 Prostatocystitis
- 601.4 Prostatitis in diseases classified elsewhere
- 601.8 Other specified inflammatory diseases of prostate

Chronic

- 601.1 Chronic prostatitis
 - 601.9 Prostatitis, unspecified
-

^aMust occur with 788.41 (urinary frequency).

^bBut not counted in disease-specific.

Table 1-2. Nationally representative inpatient stays for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,378)		2003 (N=1,429)		2004 (N=1,513)		2005 (N=1,461)		2006 (N=1,214)		2007 (N=1,189)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5
Age												
18-24	0.2		0.4		0.4		0.2		0.3		0.2	
25-34	0.6		0.7		0.7		0.7		0.7		0.6	
35-39	0.7		0.8		0.7		0.9		0.5		0.7	
40-44	0.7		0.6		0.8		0.6		0.6		0.4	
45-54	0.8		0.8		0.6		0.5		0.5		0.5	
55-64	0.6		0.6		0.6		0.7		0.4		0.5	
▶ 65-74	0.7		0.8		1.0		0.9		0.6		0.6	
75-84	0.9*		0.6*		1.3*		1.2*		0.9*		1.4*	
85+	2.2*		1.6*		1.6*		1.7*		1.8*		1.1*	
Race/ethnicity												
▶ White	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
Black	0.3*	0.4	0.3*	0.3	0.2*	0.4	0.2*	0.3	0.2*	0.3	0.3*	0.4
Hispanic	†	†	0.5*	0.5	0.3*	0.3	0.2*	0.3	0.3*	0.3	0.2*	0.3
Asian	†	0.4	...	...	†	1.6	†	0.6	0.3*	0.8	...	...
Other	†	2.2	0.9*	1.3	†	0.9	0.8*	2.3	†	1.1	0.8*	1.4
Region												
Northeast	0.6	0.6	0.4	0.4	0.7	0.8	0.5	0.5	0.3	0.3	0.5	0.5
South	0.6	0.6	0.7	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.6
▶ Midwest	0.7	0.7	0.7	0.7	1.0	1.0	0.7	0.7	0.6	0.6	0.7	0.7
West	0.6*	0.6	0.6*	0.7	0.4*	0.4	0.6*	0.6	0.4*	0.4	0.3*	0.3
Gender												
Female	1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.9
▶ Male	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 1-3. Inpatient stays by privately insured individuals for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=105)		2003 (N=117)		2004 (N=116)		2005 (N=111)		2006 (N=118)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.2	1.7	1.2	1.3	1.2	1.2	1.0	1.5	1.1	1.7
Age										
18-24	0.3**		0.9*		0.7*		0.5**		0.6**	
25-34	1.2*		1.2*		1.4		0.7**		1.0*	
35-39	1.0*		1.2*		1.2*		1.6*		0.6**	
40-44	1.5*		1.7*		1.0*		0.8**		1.2*	
45-54	1.0*		1.4*		1.2*		1.0**		1.4	
55-64	1.5*		0.6*		1.0*		0.9**		1.4*	
▶ 65-74	2.1*		1.1*		0.8*		2.6*		1.6*	
75-84	3.8**		1.6**		2.0**		3.3**		2.5**	
85+	...		...		4.5**		3.6**		6.6**	
Race/ethnicity										
▶ White	1.2	1.9	1.3	1.4	1.4	1.3	1.0	1.5	1.3	1.8
Black	0.5**	4.0	1.3**	3.2	0.9**	4.0	1.0**	2.6	0.5**	1.4
Hispanic	1.5**	5.2	0.6**	3.7	0.5**	2.1	1.2**	5.3	0.8**	2.4
Asian	2.9**	5.9	0.5**	3.9	...	...	1.0**	37.1	0.3**	...
Other	...	...	3.5**	61.3	...	...	...	...	...	...
Unknown	1.2*	...	1.3**	...	0.6**	...	1.0**	...	1.3**	...
Missing	1.1*	...	1.2*	...	0.9**	...	1.1**	...	1.1**	...
Region										
Northeast	1.2	1.8	1.2*	2.1	1.4*	2.3	0.8*	1.9	1.3*	2.6
South	1.0	1.1	1.2	0.9	1.1	1.1	1.2	1.6	1.1	1.5
▶ Midwest	1.3	1.9	1.3	1.7	1.1	1.2	0.9	1.2	1.3	2.0
West	1.5**	4.1	1.1**	2.0	1.3**	1.7	1.1**	2.3	1.0**	1.8
Gender										
Female	2.0*	2.8	2.1*	2.1	2.0*	1.9	1.7*	2.0	1.9*	2.3
▶ Male	0.4*	0.5	0.2*	0.4	0.3*	0.5	0.4*	0.9	0.3*	1.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-4. Hospital outpatient visits by Medicare beneficiaries for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,460)		2003 (N=3,300)		2004 (N=3,120)		2005 (N=3,420)		2006 (N=4,840)		2007 (N=4,840)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.9	5.5	9.0	8.3	8.4	8.7	9.2	8.7	13.3	10.6	13.4	11.8
Under 65/65+												
< 65 Years	13.3*	13.3	12.9*	12.9	9.4*	9.4	11.3*	11.3	23.9*	23.9	18.2*	18.2
▶ 65+ Years	5.3	5.5	8.0	8.3	8.2	8.7	8.6	8.7	10.3	10.6	11.9	11.8
Age												
▶ 65-69	8.4		11.1		6.4*		11.0		17.6		19.0	
70-74	4.9**		5.8**		10.6*		11.4*		14.0*		13.0*	
75-79	4.4**		10.3*		9.4**		5.5**		4.3**		8.2**	
80-84	5.3**		7.9**		5.9**		8.1**		5.1**		6.7**	
85-89	1.7**		2.5**		13.1**		4.1**		4.9**		4.8**	
90-94	...		2.0**		...		5.9**		...		13.7**	
Race/ethnicity												
▶ White	5.8	5.5	8.0	8.5	8.3	9.5	9.8	9.5	12.6	10.9	12.7	11.2
Black	15.5**	10.8	16.1**	8.6	8.1**	2.3	6.0**	7.8	14.5**	6.6	10.8**	5.1
Hispanic	...	...	2.9**	...	8.5**	...	8.2**	...	22.5**	...	5.5**	16.3
Asian	...	...	...	...	7.2**	35.8	...	...	0.0**	0.0	0.0**	...
Other	27.7**	14.1	31.6**	21.3	18.1**	13.3	8.6**	20.1	42.1**	109.9	73.1**	243.1
Unknown	...	...	28.7**	...	...	...	...	...	...	...	...	...
Region												
▶ Northeast	13.6	6.8	17.3	11.8	13.3	11.8	13.4	10.9	15.7	8.7	14.3	6.6
South	2.3**	2.3	3.7**	3.6	4.7*	4.5	4.3*	3.1	5.4*	1.2	5.0*	3.7
Midwest	8.9*	9.1	10.7*	12.4	9.3*	11.0	11.6*	12.9	21.6*	23.4	27.5*	28.8
West	6.6**	6.6	9.3**	10.0	10.0*	12.6	12.0*	13.5	16.4*	13.9	11.1*	11.8
Gender												
Female	10.9*	8.2	14.5*	12.8	13.5*	13.3	15.5*	13.9	22.6*	17.3	22.2*	18.4
▶ Male	1.8*	2.6	2.1*	3.0	2.1*	2.4	1.3*	2.3	1.8*	2.6	2.6*	3.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-5. Hospital outpatient visits by privately insured individuals for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,664)		2003 (N=1,531)		2004 (N=1,512)		2005 (N=1,741)		2006 (N=1,637)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	18.9	23.1	15.5	17.4	15.0	15.9	16.3	17.3	15.7	18.7
Age										
18-24	8.9*		8.8*		11.1*		11.8*		12.1*	
25-34	16.3*		15.4		15.4		16.5		14.9*	
35-39	19.4*		15.5		13.9		16.8		14.6*	
40-44	19.0*		17.0		16.5		14.5		17.1*	
45-54	22.9*		16.6		17.0		17.6		16.8*	
55-64	23.2*		18.5		14.5		18.8		16.1*	
▶ 65-74	33.2		18.7		15.1		17.2		23.3	
75-84	16.7*		15.4**		15.9*		14.0*		30.6*	
85+	...		20.9**		15.1**		31.1**		6.6**	
Race/ethnicity										
▶ White	21.2	23.8	18.5	20.9	16.8	17.1	17.5	18.0	17.6	20.4
Black	17.2*	13.5	16.2*	15.0	9.5*	10.5	14.7*	17.3	9.7*	8.7
Hispanic	14.0*	24.0	10.1*	11.0	7.5*	9.4	11.9*	11.5	10.3*	12.2
Asian	3.6**	4.3	5.0**	4.0	5.0**	9.0	7.1**	10.2	5.0**	12.6
Other	9.9**	17.5	20.7**	44.1	11.0**	23.4	4.5**	...	16.5**	29.1
Unknown	14.4*	...	15.8*	...	12.6*	...	12.9*	...	12.5*	...
Missing	18.4*	...	13.1*	...	16.3*	...	18.0*	...	16.3*	...
Region										
Northeast	17.2*	21.9	11.3*	13.0	12.7*	13.2	14.2*	13.8	11.7*	13.1
South	19.9	22.9	15.6*	17.2	15.7	16.7	16.9	17.7	16.6	19.1
▶ Midwest	20.6	26.5	17.5	18.9	16.4	16.7	16.4	18.4	16.8	19.2
West	12.4*	16.2	14.2*	18.8	11.5*	14.7	15.9*	15.8	14.1*	19.4
Gender										
Female	34.1*	40.8	27.5*	28.6	26.8*	27.0	28.4*	27.3	27.7*	31.9
▶ Male	2.7	4.5	2.9	5.4	2.7	4.0	3.6	6.5	3.2	5.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-6. Ambulatory surgery center visits by Medicare beneficiaries for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,840)		2003 (N=3,380)		2004 (N=3,000)		2005 (N=4,340)		2006 (N=3,280)		2007 (N=3,100)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	10.5	10.0	12.4	12.6	11.7	10.8	15.4	13.3	13.4	12.5	12.8	10.9
Age												
▶ 65-69	11.2		12.4		10.6		15.6		20.1		12.0	
70-74	11.0*		12.2*		10.9*		15.0*		8.4**		11.7*	
75-79	11.5*		16.3*		13.7*		13.8*		12.1*		11.9*	
80-84	7.2**		9.3*		9.1**		13.1**		5.6**		10.0**	
85-89	6.0**		11.7**		7.4**		3.3**		11.5**		5.6**	
90-94	2.1**		...		2.0*		2.0**		...		2.0**	
95-97	...		...		...		9.7**		0.0		...	
Race/ethnicity												
▶ White	11.0	10.6	13.3	13.0	12.6	11.9	16.7	14.8	14.3	13.1	13.8	11.7
Black	7.4**	8.1	7.8**	13.0	4.9**	2.0	8.7**	4.6	8.9**	17.8	9.6**	10.3
Hispanic	0.0**	0.0	...	...	8.5**	16.8	5.5**	12.6	16.9**	23.3	2.7**	...
Asian	4.0**	...	3.8**	18.8	3.6**	17.9	...	...	3.3**	...	0.0**	...
Other	17.3**	24.2	12.6**	27.4	12.1**	...	11.4**	30.8	2.8**	...	10.8**	9.7
Unknown	26.7**	...	28.7**	...	27.1**	...	29.4**	...	0.0**	...	...	...
Region												
▶ Northeast	13.3	13.6	15.3	16.2	10.0	9.5	10.0	8.7	8.0*	8.6	12.0	9.4
South	9.7*	9.3	11.8*	12.3	14.1*	11.7	15.2*	12.9	14.9*	13.4	13.4*	11.3
Midwest	12.6*	12.2	12.8*	11.7	12.1*	12.7	17.7*	15.7	12.1*	9.8	13.8*	11.7
West	5.6**	6.6	9.7**	11.9	7.5**	7.6	18.3*	19.4	17.7*	18.5	11.1*	10.6
Gender												
Female	15.3*	13.9	18.4*	17.5	18.4*	16.3	23.6*	19.3	21.6*	19.2	19.9*	15.8
▶ Male	4.4	4.8	4.7	6.0	3.2*	3.3	5.1	5.7	3.2*	3.7	4.2	4.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-7. Ambulatory surgery center visits by privately insured individuals for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=364)		2003 (N=389)		2004 (N=343)		2005 (N=395)		2006 (N=453)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.1	4.2	3.9	4.2	3.4	3.3	3.7	4.0	4.4	4.3
Age										
18-24	2.1**		2.4*		3.1		2.4		3.9	
25-34	4.0		3.6		4.1		3.4		4.4	
35-39	5.9		4.5		3.0		3.6		5.1	
40-44	3.9		5.1		2.7		4.3		4.1	
45-54	4.9		4.0		3.6		4.4		4.5	
55-64	3.9		4.3		3.6		4.3		4.2	
▶ 65-74	5.0*		4.1*		3.3*		3.2*		5.8*	
75-84	1.7**		4.3**		2.6**		3.3**		1.7**	
85+	...		1.6**		...		1.2**		...	
Race/Ethnicity										
▶ White	4.2	4.2	4.7	5.2	3.7	3.2	3.8	3.9	4.6	4.3
Black	4.3**	6.0	3.2**	4.0	2.0**	2.7	3.4**	3.8	2.9**	4.2
Hispanic	2.4**	2.5	1.4**	2.0	2.2**	2.8	2.3**	4.3	4.2*	4.6
Asian	0.7**	4.3	1.5**	3.9	1.8**	5.3	1.6**	3.2	2.8**	4.2
Other	7.4**	...	1.7**	12.6	3.7**	6.2	3.4**	5.6	2.2**	15.7
Unknown	3.2**	...	3.8**	...	3.6**	...	4.1**	...	5.9*	...
Missing	4.3*	...	3.6*	...	3.6*	...	4.2*	...	3.4*	...
Region										
Northeast	2.6**	2.2	2.1**	2.5	1.3**	1.6	2.1**	2.5	2.3*	2.7
South	5.1*	4.8	4.7	5.2	4.4*	4.8	5.1*	5.6	6.3*	6.4
▶ Midwest	4.1	4.7	4.2	4.3	3.5	2.9	3.3	3.5	3.0	2.6
West	2.1**	2.4	2.5*	3.7	1.8**	2.0	1.4**	1.9	2.7*	2.9
Gender										
Female	7.4*	7.2	6.9*	7.4	6.0*	5.8	6.4*	6.8	7.7*	7.2
▶ Male	0.7*	1.1	0.8	1.1	0.7	0.8	0.8	1.2	0.8	1.3
Unknown	...	...	30.1**	...	...	...	...	...	37.3**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-8. Nationally representative ambulatory surgery center visits for interstitial cystitis, disease specific, listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	23,592	10.7	12.5
Age			
18-24	6,628	23.7	
25-34	8,606	21.8*	
35-39	973	4.7*	
40-44	433	1.9*	
45-54	4,149	9.7*	
55-64	2,283	7.4*	
▶ 65-74	...	...
75-84	...	...
85+	520	13.0*	
Gender			
Female	22,639	19.9*	23.6
▶ Male	953	0.9	3.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 1-9. Physician office visits by Medicare beneficiaries for interstitial cystitis, disease specific, listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=61,820)		2003 (N=66,480)		2004 (N=73,000)		2005 (N=80,820)		2006 (N=83,920)		2007 (N=89,800)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	173.8	176.7	182.3	189.0	197.3	195.7	217.8	210.7	230.9	225.0	248.2	244.8
Under 65/65+												
< 65 Years	171.4*	171.4	175.2*	175.2	225.3*	225.3	259.9*	259.9	273.2*	273.2	278.9*	278.9
▶ 65+ Years	174.4	176.7	184.1	189.0	189.7	195.7	205.9	210.7	218.7	225.0	239.0	244.8
Age												
▶ 65-69	143.4		176.9		173.5		202.5		234.2		256.8	
70-74	188.5*		205.0*		190.5*		213.6*		221.7*		247.7*	
75-79	221.3*		209.1*		246.2*		247.0*		251.8*		288.7*	
80-84	192.0*		176.3*		189.3*		181.9*		196.2*		194.9*	
85-89	129.6*		164.8*		174.9*		194.9*		195.7*		190.3*	
90-94	107.7*		79.7*		82.0*		139.4*		124.7*		166.6*	
95-97	102.4**		90.2**		39.5**		58.4**		10.0**		49.7**	
98+	21.6**		...		10.6**		41.4**		20.5**		10.2**	
Race/ethnicity												
▶ White	181.9	186.8	193.2	201.8	206.3	206.2	234.1	225.7	248.7	241.4	266.8	262.8
Black	115.6*	101.4	112.1*	111.3	118.3*	111.5	100.9*	81.7	117.6*	91.2	143.9*	111.5
Hispanic	97.1*	112.7	81.6**	114.9	141.4*	173.8	192.2*	190.0	224.9*	278.0	120.9*	126.4
Asian	56.5**	55.1	64.3**	55.0	50.1**	70.0	57.1**	88.5	59.8**	48.0	76.0**	50.1
Other	269.8*	184.4	249.4*	133.0	362.8*	171.3	239.6*	153.3	173.8*	116.6	249.0*	228.9
Unknown	320.5**	...	258.1**	...	488.6**	...	470.2**	...	344.1**	...	302.9**	...
Region												
▶ Northeast	121.1	129.2	122.9	131.8	160.2	158.9	167.9	158.5	175.4	178.0	204.3	202.0
South	203.1*	202.9	217.2*	217.6	231.6*	221.6	257.9*	247.5	274.3*	260.6	300.4*	291.3
Midwest	157.2*	164.3	157.4*	174.9	157.3*	164.2	182.0*	175.6	193.9*	188.0	191.9*	189.7
West	194.6*	196.1	209.1*	217.2	220.9*	231.3	235.7*	243.8	249.0*	256.2	260.2*	271.9
Gender												
Female	265.7*	260.0	279.9*	278.8	307.2*	290.5	342.1*	314.6	369.4*	344.0	401.6*	379.6
▶ Male	56.3	62.5	58.4	67.2	59.0	67.8	62.2	71.8	59.3	67.8	60.2	69.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-10. Physician office visits by privately insured individuals for interstitial cystitis, disease specific, listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=12,612)		2003 (N=14,319)		2004 (N=17,392)		2005 (N=20,226)		2006 (N=19,467)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	142.9	177.1	145.3	168.5	172.9	197.7	189.5	214.4	187.1	226.1
Age										
18-24	66.6*		67.1*		94.0*		91.8*		83.3*	
25-34	121.0*		136.9*		156.9*		176.3*		175.9*	
35-39	133.2*		154.1*		180.9*		197.3		176.5*	
40-44	154.7*		155.1*		187.2*		199.4		207.6*	
45-54	181.7*		165.9		200.9*		219.4*		217.1*	
55-64	177.2*		178.7		200.2*		238.3*		231.8	
▶ 65-74	212.1		173.6		217.6		205.0		248.0	
75-84	151.8*		191.4*		205.0*		208.3*		260.0*	
85+	...		96.5*		84.4*		130.4*		169.6*	
Race/ethnicity										
▶ White	163.2	195.4	178.2	201.8	189.1	214.4	203.6	224.2	202.7	240.7
Black	124.0*	138.5	122.1*	106.2	134.2*	161.2	152.8*	191.3	130.6*	169.5
Hispanic	107.3*	171.1	104.6*	119.9	118.3*	153.1	157.1*	201.1	156.1*	206.3
Asian	67.5*	71.9	89.2*	101.4	73.9*	74.0	84.0*	83.1	72.7*	86.0
Other	106.7*	145.8	112.2*	169.1	173.3*	198.5	121.1*	164.0	147.7*	169.8
Unknown	160.1*	...	152.4*	...	160.2*	...	189.8*	...	192.3*	...
Missing	132.6*	...	114.7*	...	168.4*	...	179.7*	...	174.4*	...
Region										
Northeast	109.3	122.5	105.0*	108.9	118.8*	119.3	131.5*	154.3	124.8*	155.1
South	173.4*	201.7	170.0*	184.9	212.6*	248.6	227.1*	259.8	220.7*	270.3
▶ Midwest	115.2	154.1	124.1	157.8	134.1	157.4	143.2	161.2	139.3	168.1
West	146.7*	220.8	152.7*	208.4	182.0*	211.1	220.0*	247.5	224.6*	265.5
Gender										
Female	260.8*	318.2	264.5*	295.8	315.5*	344.8	344.6*	371.9	341.4*	392.5
▶ Male	18.0	28.3	19.3	32.6	22.6*	39.9	26.3	44.5	26.3	52.2
Unknown	46.4**	...	60.2**	...	35.5*	...	95.1**	...	37.3**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-11. Nationally representative physician office visits for interstitial cystitis, disease specific, listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	1,236,607
Age	
40-44	198,460
45-54	457,685
55-64	112,547
65-74	155,488
75-84	277,012
85+	35,415
Race/ethnicity	
White	982,831
Black	183,799
Hispanic	69,977
Region	
Northeast	148,882
South	320,927
Midwest	425,619
West	341,179
Gender	
Female	1,021,791
Male	214,816

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-12. Physician office visits for use of bladder irrigation and cystoscopy by Medicare beneficiaries with interstitial cystitis, disease specific, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Irrigation												
Total	16,000	34,072	15,020	29,873	19,020	35,752	23,000	40,112	23,900	39,926	28,240	46,204
Gender												
Female	14,600	36,813	13,820	32,687	17,120	37,676	21,920	44,698	22,460	43,493	26,220	49,791
Male	1,400	19,178	1,200	15,000	1,900	24,485	1,080	13,012	1,440	17,518	2,020	23,877
Region^c												
Northeast	400	5,479	840	10,526	2,840	31,278	2,120	23,297	2,900	30,851	3,020	29,151
South	8,740	43,097	8,600	40,112	10,140	45,430	12,440	52,445	13,140	53,676	13,320	52,153
Midwest	4,400	39,497	3,460	30,948	3,680	31,081	3,960	29,333	4,740	33,101	6,380	49,381
West	2,420	31,347	2,000	21,882	2,320	24,066	4,120	38,577	3,120	27,273	5,520	45,246
Cystoscopy												
Total	3,580	7,624	3,040	6,046	2,700	5,075	3,940	6,871	3,940	6,582	4,240	6,937
Gender												
Female	2,660	6,707	2,480	5,866	2,160	4,754	3,220	6,566	2,920	5,655	3,700	7,026
Male	920	12,603	560	7,000	540	6,959	720	8,675	1,020	12,409	540	6,383
Region												
Northeast	720	9,863	320	4,010	380	4,185	760	8,352	980	10,426	1,000	9,653
South	1,520	7,495	1,360	6,343	1,200	5,376	1,240	5,228	1,460	5,964	1,880	7,361
Midwest	860	7,720	720	6,440	600	5,068	820	6,074	660	4,609	580	4,489
West	440	5,699	560	6,127	520	5,394	960	8,989	800	6,993	740	6,066

^aUnweighted counts multiplied by 20 to arrive at values in the table.

^bRate per 100,000 Medicare beneficiaries 65 and older with interstitial cystitis (as defined by ICD-9 code 595.1 only).

^cPersons of other region are included in the totals.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 2002- 2007.

Table 1-13. Emergency room visits by privately insured individuals for interstitial cystitis, disease specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=88)		2003 (N=121)		2004 (N=81)		2005 (N=73)		2006 (N=98)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.0	1.0	1.2	1.3	0.8	0.9	0.7	0.6	0.9	0.6
Age										
18-24	0.9**		1.5*		0.7*		0.3*		0.6*	
25-34	1.3*		1.2*		0.7*		1.3*		2.3*	
35-39	0.7**		1.2*		0.5*		0.6*		0.6*	
40-44	0.8**		1.0*		0.9*		0.3*		0.6*	
45-54	1.1*		1.0*		1.5*		0.4*		0.2*	
55-64	0.5**		2.0*		0.6*		1.0*		1.0*	
▶ 65-74	2.1*		1.1*		0.3*		0.4*		0.6*	
75-84	0.4**		...		...		0.8**		...	
85+	...		...		...		1.2**		...	
Race/ethnicity										
▶ White	1.3	0.9	1.0	1.1	0.9	1.1	0.7	0.7	0.9	0.4
Black	1.4**	...	2.6**	3.2	0.2**	1.2	0.4**	1.9	0.7**	1.9
Hispanic	...	...	1.0**	1.9	0.3**	1.0	0.8**	0.9	0.5**	0.6
Asian	0.7**	...	0.5**	...	...	...	...	...	...	...
Unknown	...	...	0.2**	...	0.6**	...	0.4**	...	...	...
Missing	0.9*	...	1.6*	...	1.0**	...	1.1**	...	2.3*	...
Region										
Northeast	0.1**	0.8	1.0*	6.5	0.2**	...	0.3*	0.7	0.2**	...
South	1.2	1.1	1.3	1.6	1.2*	1.7	1.0*	1.0	1.6*	1.1
▶ Midwest	1.2	1.6	1.4	1.4	0.8*	0.6	0.5*	0.5	0.7*	0.3
West	0.6**	...	0.6**	0.5	0.2**	0.7	0.3**	0.6	0.2**	0.3
Gender										
Female	1.9*	1.7	2.4*	2.6	1.3*	1.6	1.2*	1.1	1.7*	1.0
▶ Male	0.1*	0.3	0.0*	...	0.2*	0.9	0.1*	0.3	0.1*	0.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-14. Nationally representative inpatient stays for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=26,386)		2003 (N=26,710)		2004 (N=26,445)		2005 (N=27,597)		2006 (N=26,403)		2007 (N=27,101)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	12.4	12.2	12.4	12.2	12.3	12.3	12.7	12.7	12.0	12.0	12.2	12.3
Age												
18-24	5.1		5.5		5.7		5.4		4.9		4.3	
25-34	17.3		17.5		17.1		17.3		14.9		15.0	
35-39	20.9		21.0		19.5		19.3		19.8		19.6	
40-44	16.6		17.5		16.8		17.4		17.5		17.4	
45-54	8.1		8.5		7.7		8.9		9.1		9.5	
55-64	5.1		5.2		5.1		5.1		5.5		5.6	
▶ 65-74	8.6		8.4		9.1		10.2		9.2		8.7	
75-84	15.0*		13.2*		18.1*		18.3*		15.8*		20.0*	
85+	44.2*		39.1*		46.4*		49.1*		44.1*		45.1*	
Race/ethnicity												
▶ White	7.6	7.4	8.5	8.4	8.8	8.8	9.6	9.6	8.9	8.9	8.1	8.2
Black	9.7*	9.7	9.8*	9.6	10.5*	10.5	8.1*	8.1	9.0*	9.1	9.0*	9.1
Hispanic	†	†	7.0*	6.9	6.3*	6.4	6.2*	6.2	6.5*	6.4	6.3*	6.3
Asian	2.3*	2.4	2.2*	2.5	2.6*	2.9	2.3*	2.3	1.7*	1.9	3.1*	2.9
Other	13.8*	13.2	13.2*	13.1	12.6*	12.6	9.4*	9.4	12.1*	11.9	14.9*	14.9
Region												
Northeast	9.1	8.8	8.3	8.1	8.0	8.0	7.6	7.6	7.5	7.6	6.4	6.5
South	16.2	16.0	16.5	16.4	14.9	14.8	15.1	15.1	14.5	14.4	15.1	15.2
▶ Midwest	14.0	13.9	14.4	14.3	16.1	16.1	17.0	17.0	16.3	16.4	16.1	16.4
West	7.5*	7.4	7.2*	7.1	8.1*	8.2	8.8*	8.8	7.6*	7.6	8.4*	8.5
Gender												
Female	21.0*	20.8	21.5*	21.4	21.2*	21.1	21.9*	21.9	20.9*	21.0	20.7*	20.9
▶ Male	2.9	2.9	2.4	2.4	2.8	2.9	2.8	2.8	2.5	2.5	3.1	3.1

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 1-15. Inpatient stays by Medicare beneficiaries for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=7,520)		2003 (N=7,840)		2004 (N=8,760)		2005 (N=8,940)		2006 (N=8,560)		2007 (N=8,200)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	21.1	19.2	21.5	18.6	23.7	19.2	24.1	19.7	23.5	21.0	22.7	21.0
Under 65/65+												
< 65 Years	29.9*	29.9	31.8*	31.8	40.4*	40.4	39.2*	39.2	30.8*	30.8	29.0*	29.0
▶ 65+ Years	18.9	19.2	18.8	18.6	19.2	19.2	19.8	19.7	21.5	21.0	20.8	21.0
Age												
▶ 65-69	12.3		16.2		13.3		16.4		15.7		15.2	
70-74	19.4*		16.0*		16.8*		14.4*		18.7*		20.6*	
75-79	18.9*		17.7*		21.8*		23.8*		21.4*		21.5*	
80-84	24.4*		18.0*		20.5*		20.7*		31.0*		25.7*	
85-89	29.8*		33.5*		32.8*		30.4*		25.4*		29.6*	
90-94	12.7**		30.7**		24.0**		21.6**		29.7**		17.6**	
95-97	41.0**		40.1**		49.3**		48.6**		19.9**		49.7**	
98+	21.6**		10.7**		10.6**		41.4**		51.1**		0.0**	
Race/ethnicity												
▶ White	20.4	19.8	21.0	19.0	22.7	19.3	23.9	19.6	23.0	21.0	22.6	21.5
Black	24.6*	15.3	25.0*	14.1	29.9*	19.2	25.5*	23.2	34.0*	27.8	23.2*	20.1
Hispanic	30.4**	17.5	20.4**	18.0	17.0**	5.7	27.5**	15.3	14.1**	18.5	24.7**	12.3
Asian	4.0**	0.0	7.6**	5.9	14.3**	12.8	13.4**	11.2	3.3**	5.2	3.2**	0.0
Other	45.0**	31.2	31.6**	24.6	42.3**	23.4	28.5**	23.9	19.6**	8.5	35.2**	28.1
Unknown	0.0**	...	86.0**	...	81.4**	...	58.8**	...	31.3**	...	33.7**	...
Region												
▶ Northeast	13.0	13.8	13.4	11.2	16.1	12.0	22.0	18.9	16.0	16.8	14.0	12.9
South	27.4*	24.5	25.9*	22.9	27.3*	21.7	29.1*	23.1	30.4*	26.0	28.1*	25.1
Midwest	20.6*	18.3	23.5*	21.7	28.1*	23.6	24.4*	18.9	23.2*	22.7	20.3*	17.9
West	17.1*	14.4	17.7*	12.9	17.5*	15.2	14.5*	14.5	17.0*	12.4	23.4*	25.7
Gender												
Female	31.1*	25.3	32.2*	25.7	36.2*	26.6	37.2*	26.8	36.0*	29.5	34.2*	29.7
▶ Male	8.5	10.9	8.0	9.0	7.9	9.2	7.6	10.2	8.1	9.9	8.5	9.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-16. Inpatient stays by privately insured individuals for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,077)		2003 (N=7,990)		2004 (N=7,265)		2005 (N=7,381)		2006 (N=6,408)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	91.5	76.3	81.1	70.4	72.2	64.9	69.2	63.9	61.6	59.3
Age										
18-24	49.4		45.2		37.8*		36.3*		35.2*	
25-34	117.3*		100.7*		91.8*		84.5*		68.2*	
35-39	134.0*		120.5*		103.7*		104.5*		91.2*	
40-44	124.9*		108.5*		95.8*		98.9*		92.5*	
45-54	76.1*		69.8*		62.6*		60.0*		57.1*	
55-64	40.4*		37.8*		37.1*		31.9*		31.5*	
▶ 65-74	56.6		46.2		49.0		45.2		43.7	
75-84	101.3*		99.9*		95.3*		99.6*		76.5*	
85+	...		117.4*		96.5*		113.6*		119.0*	
Race/ethnicity										
▶ White	89.7	73.8	84.9	73.8	72.4	64.9	67.4	62.2	61.1	59.2
Black	117.8*	83.0	110.4*	85.6	102.3*	94.3	101.6*	98.1	75.7*	72.7
Hispanic	104.3*	98.0	94.7*	80.1	83.1*	71.1	83.8*	74.3	67.8*	72.8
Asian	55.9*	51.1	43.4*	48.3	41.0*	40.2	38.9*	47.7	38.1*	47.6
Other	67.0**	59.2	69.1*	63.6	62.2*	72.1	50.5*	45.0	57.3*	66.7
Unknown	79.1*	...	77.6*	...	65.2*	...	62.0*	...	56.7*	...
Missing	93.0*	...	74.6*	...	66.8*	...	69.3*	...	63.4*	...
Region										
Northeast	59.0*	50.6	51.4*	58.1	47.8*	59.3	41.5*	43.8	41.8*	46.6
South	108.3*	84.1	98.5*	75.5	84.8*	68.9	82.3*	68.8	70.5*	64.2
▶ Midwest	80.2	72.4	70.9	64.6	65.5	61.6	63.2	63.5	55.4	55.4
West	94.5*	76.2	74.7*	75.1	68.3*	58.9	63.2*	61.6	61.2*	62.8
Gender										
Female	172.4*	133.1	152.3*	120.3	135.2*	108.9	128.5*	106.8	115.7*	100.6
▶ Male	5.9	14.7	5.8	15.6	5.8	16.9	6.7	16.7	5.2	14.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-17. Hospital outpatient visits by Medicare beneficiaries for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=46,100)		2003 (N=48,900)		2004 (N=52,740)		2005 (N=54,840)		2006 (N=59,580)		2007 (N=60,340)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	129.6	122.5	134.1	128.6	142.6	138.0	147.8	142.2	163.9	159.3	166.8	163.8
Under 65/65+												
< 65 Years	152.1*	152.1	153.6*	153.6	162.6*	162.6	170.4*	170.4	183.6*	183.6	179.0*	179.0
▶ 65+ Years	123.9	122.5	128.9	128.6	137.1	138.0	141.4	142.2	158.2	159.3	163.2	163.8
Age												
▶ 65-69	96.1		104.3		115.1		117.5		135.7		135.6	
70-74	118.1*		109.9*		128.3*		129.4*		139.0*		149.6*	
75-79	137.5*		149.0*		144.7*		146.8*		166.4*		174.2*	
80-84	145.7*		157.3*		152.0*		171.1*		182.8*		186.8*	
85-89	139.8*		152.3*		186.4*		185.1*		217.8*		215.9*	
90-94	164.7*		163.5*		157.9*		147.2*		186.0*		194.0*	
95-97	184.4**		150.3**		128.3**		155.7**		139.4**		159.1**	
98+	86.4**		64.2**		84.7**		124.3**		71.6**		81.7**	
Race/ethnicity												
▶ White	120.9	119.6	125.4	124.5	135.6	135.5	144.6	140.9	161.6	159.6	159.7	162.6
Black	160.3*	122.5	169.8*	147.3	163.4*	135.5	152.9*	136.4	148.8*	128.1	176.8*	139.3
Hispanic	136.6*	98.8	163.2*	139.9	164.0*	134.3	170.2*	164.1	188.4*	126.5	272.1*	207.4
Asian	84.8**	61.1	87.1**	60.8	100.2**	89.8	57.1**	62.4	129.6*	131.7	82.4**	100.5
Other	415.1*	367.6	344.1*	360.2	374.9*	359.8	302.4*	315.0	328.0*	353.8	370.8*	371.2
Unknown	240.4**	...	286.8**	...	81.4**	...	264.5**	...	312.8**	...	302.9**	...
Region												
▶ Northeast	121.4	108.4	126.8	108.4	145.5	121.8	149.8	125.1	167.1	152.1	186.3	172.1
South	94.0*	86.6	103.2*	95.4	101.4*	97.8	103.8*	98.4	106.9*	100.5	113.6*	106.4
Midwest	179.8*	173.5	179.4*	181.4	189.3*	190.0	211.6*	213.5	244.9*	247.4	228.2*	239.7
West	146.1*	143.8	146.1*	148.7	164.9*	172.0	151.7*	154.2	171.2*	171.4	177.2*	174.9
Gender												
Female	183.5*	167.3	182.7*	165.5	192.2*	176.8	205.6*	187.5	216.9*	200.2	230.2*	214.8
▶ Male	60.7	60.9	72.4	78.5	80.1	85.8	75.4	81.9	98.3	105.6	89.1	97.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-18. Hospital outpatient visits by privately insured individuals for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=29,815)		2003 (N=29,698)		2004 (N=30,780)		2005 (N=34,092)		2006 (N=34,172)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	337.8	242.6	301.3	221.3	306.0	234.1	319.5	243.5	328.4	263.8
Age										
18-24	386.7*		342.7*		346.5*		375.2*		376.2*	
25-34	476.8*		424.4*		424.3*		447.7*		442.9*	
35-39	392.0*		353.4*		356.7*		373.0*		384.3*	
40-44	326.9*		298.1*		297.6*		303.7*		322.6*	
45-54	240.6*		202.5		214.8*		232.1		235.2	
55-64	186.4*		180.0*		198.1*		202.9*		216.5*	
▶ 65-74	220.7		209.3		234.6		226.0		249.3	
75-84	260.0*		246.7*		272.6*		281.2*		375.5*	
85+	...		260.4*		212.6		282.3*		284.2*	
Race/ethnicity										
▶ White	337.6	252.8	320.2	245.4	313.7	241.5	326.9	250.6	335.5	267.4
Black	419.2*	274.3	402.2*	246.9	380.4*	254.5	396.4*	267.2	419.9*	283.9
Hispanic	347.8*	239.2	339.1*	247.1	305.3*	220.8	322.4*	226.0	321.1*	244.7
Asian	214.0*	139.0	203.9*	149.6	175.1*	142.2	189.7*	174.0	216.3*	211.7
Other	330.1*	287.7	338.5*	273.9	296.6*	242.8	243.4*	186.2	309.8*	250.2
Unknown	330.7*	...	310.6*	...	288.7*	...	294.2*	...	309.9*	...
Missing	337.9*	...	267.8*	...	284.8*	...	300.7*	...	303.8*	...
Region										
Northeast	316.5*	277.2	290.3*	256.0	310.9*	278.2	357.3	310.7	385.1*	373.4
South	336.6*	217.4	297.0*	191.9	292.8*	200.4	298.9*	193.2	306.5*	208.5
▶ Midwest	353.2	265.6	317.5	247.4	332.9	261.1	356.3	284.9	370.1	316.2
West	320.9*	228.7	285.6*	218.3	283.0*	250.0	275.4*	246.2	274.5*	237.4
Gender										
Female	612.3*	382.1	543.6*	339.9	549.9*	359.4	567.4*	365.5	587.4*	400.0
▶ Male	47.0	91.3	45.1	90.8	48.7	97.1	58.4	109.1	58.4	116.5
Unknown	510.4**	...	331.0**	...	248.4**	...	190.1**	...	372.7**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-19. Nationally representative hospital outpatient visits for interstitial cystitis, disease non-specific, listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	531,410
Age	
40-44	161,750
45-54	147,248
55-64	91,460
65-74	78,888
75-84	49,032
85+	3,032
Race/ethnicity	
White	431,796
Black	79,526
Hispanic	5,471
Asian	14,617
Region	
Northeast	101,013
South	246,226
Midwest	125,424
West	58,747
Gender	
Female	439,641
Male	91,769

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-20. Ambulatory surgery center visits by Medicare beneficiaries for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=19,980)		2003 (N=20,960)		2004 (N=20,280)		2005 (N=20,600)		2006 (N=20,760)		2007 (N=20,000)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	56.2	62.8	57.5	64.8	54.8	59.2	55.5	62.0	57.1	62.7	55.3	62.3
Under 65/65+												
< 65 Years	36.2*	36.2	36.5*	36.5	41.7*	41.7	38.3*	38.3	41.5*	41.5	36.4*	36.4
▶ 65+ Years	61.3	62.8	63.0	64.8	58.4	59.2	60.4	62.0	61.6	62.7	60.9	62.3
Age												
▶ 65-69	50.9		53.1		44.2		47.1		46.0		50.5	
70-74	65.0*		66.0*		62.2*		58.7*		64.4*		58.1*	
75-79	66.2*		76.0*		68.7*		77.5*		75.4*		80.0*	
80-84	79.3*		66.2*		75.6*		68.0*		75.0*		72.3*	
85-89	59.7*		68.6*		50.9*		69.1*		60.6*		53.6*	
90-94	25.3**		34.8**		48.0**		33.4**		47.5**		47.0**	
95-97	30.7**		20.0**		19.7**		58.4**		49.8**		29.8**	
98+	21.6**		...		...		20.7**		20.5**		10.2**	
Race/ethnicity												
▶ White	57.9	64.7	60.4	68.2	57.4	62.0	58.0	64.2	60.5	65.7	58.0	64.7
Black	48.7*	56.4	43.8*	49.7	44.0*	48.9	43.4*	53.4	37.9*	47.7	43.1*	53.0
Hispanic	18.2**	17.6	29.1**	46.3	19.8**	34.5	38.4**	32.0	45.0**	52.3	27.5**	35.3
Asian	20.2**	33.0	26.5**	30.3	17.9**	33.3	20.2**	25.1	13.3**	19.3	34.8**	56.3
Other	65.7**	76.1	50.5**	68.2	54.4**	56.5	48.5**	64.1	53.3**	53.2	46.0**	51.0
Unknown	213.7**	...	28.7**	...	108.6**	...	117.5**	...	93.8**	...	67.3**	...
Region												
▶ Northeast	60.3	68.1	67.5	76.2	58.0	62.0	56.3	63.5	58.0	63.4	60.2	69.0
South	58.6*	65.1	57.0*	63.0	55.8*	60.3	56.8*	63.9	53.0*	58.5	55.7*	64.5
Midwest	64.5*	71.5	64.4*	71.8	63.5*	67.4	66.9*	73.8	71.8*	77.5	67.5*	71.7
West	32.1*	36.3	36.0*	44.4	35.6*	40.7	35.1*	38.7	44.0*	50.1	31.9*	36.5
Gender												
Female	55.2*	57.0	56.8*	58.9	55.2	53.8	54.3*	55.6	59.5*	58.2	57.0*	58.1
▶ Male	57.4	71.2	58.4	73.2	54.3	66.8	57.0	70.8	54.2	69.0	53.2	68.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-21. Ambulatory surgery center visits by privately insured individuals for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,045)		2003 (N=3,138)		2004 (N=1,853)		2005 (N=1,983)		2006 (N=2,039)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	45.8	29.9	31.8	22.0	18.4	15.1	18.6	14.6	19.6	16.3
Age										
18-24	41.8*		26.8*		14.0		15.5		17.7	
25-34	61.8*		43.4*		25.2*		26.9*		27.8*	
35-39	69.5*		47.3*		26.0*		24.8*		23.9*	
40-44	56.2*		39.1*		19.9*		19.8*		20.7	
45-54	31.9*		22.9*		14.5		13.2		13.6*	
55-64	23.3		15.1		9.7*		12.5		13.3*	
▶ 65-74	18.7		16.8		14.9		14.6		17.5	
75-84	8.6**		14.9**		23.6*		17.7*		20.4**	
85+	...		12.9**		7.5**		4.8**		24.2**	
Race/Ethnicity										
▶ White	55.1	36.3	36.4	25.5	19.1	15.1	19.2	14.1	20.7	17.0
Black	52.9*	27.2	35.4*	19.6	18.2*	17.5	17.6*	11.6	18.7*	18.9
Hispanic	93.2*	70.5	49.7*	44.1	20.1*	19.0	17.9*	14.8	20.4*	21.0
Asian	42.8*	54.7	23.9*	13.6	13.1*	17.2	10.1*	15.2	10.7*	14.2
Other	62.0**	87.4	31.1**	20.9	15.9**	18.4	23.6**	23.6	7.7**	17.4
Unknown	53.0*	...	41.1*	...	16.4*	...	20.1*	...	16.7*	...
Missing	34.4*	...	22.7*	...	16.6*	...	17.1*	...	18.4*	...
Region										
Northeast	39.5*	28.8	18.1*	14.1	12.7*	12.7	7.6*	6.3	7.6*	8.0
South	58.0*	37.0	40.0*	29.4	20.5*	18.5	20.0	16.6	23.1*	21.2
▶ Midwest	30.5	20.3	25.0	14.6	17.6	13.1	19.5	15.3	17.7	12.4
West	52.9*	34.0	34.1*	25.1	18.7*	11.9	21.1*	13.7	21.6*	16.6
Gender										
Female	85.8*	51.2	58.5*	35.2	32.2*	21.3	32.4*	20.2	33.8*	22.1
▶ Male	3.5	6.8	3.7	7.4	3.9	8.3	4.1	8.3	4.8	9.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-22. Nationally representative ambulatory surgery center visits for interstitial cystitis, disease non-specific, listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	132,719	60.4	60.4
Age			
18-24	8,422	30.1	
25-34	40,377	102.3*	
35-39	13,071	62.9	
40-44	22,947	102.7*	
45-54	22,151	51.8	
55-64	7,785	25.1	
▶ 65-74	8,173	44.1	
75-84	9,255	71.4*	
85+	538	13.5*	
Gender			
Female	124,723	109.9*	109.9
▶ Male	7,996	7.5	11.3

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 1-23. Physician office visits by Medicare beneficiaries for interstitial cystitis, disease non-specific, listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,238,600)		2003 (N=1,351,100)		2004 (N=1,420,960)		2005 (N=1,494,140)		2006 (N=1,545,280)		2007 (N=1,550,120)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3,482	3,891	3,704	4,150	3,841	4,307	4,026	4,563	4,251	4,848	4,285	4,934
Under 65/65+												
< 65 Years	2,038*	2,038	2,212*	2,212	2,312*	2,312	2,345*	2,345	2,402*	2,402	2,370*	2,370
▶ 65+ Years	3,851	3,891	4,098	4,150	4,254	4,307	4,499	4,563	4,781	4,848	4,860	4,934
Age												
▶ 65-69	2,824		2,966		3,135		3,290		3,464		3,492	
70-74	3,688*		3,953*		4,069*		4,276*		4,483*		4,696*	
75-79	4,504*		4,770*		4,919*		5,250*		5,552*		5,631*	
80-84	4,862*		5,189*		5,392*		5,743*		6,185*		6,223*	
85-89	4,570*		5,009*		5,178*		5,526*		6,022*		6,064*	
90-94	3,838*		3,923*		4,392*		4,531*		4,865*		4,958*	
95-97	2,715*		3,176*		2,586*		2,851*		3,366*		3,600*	
98+	799.2*		823.3*		847.4*		932.0*		1,258*		929.3*	
Race/ethnicity												
▶ White	3,571	3,989	3,800	4,247	3,926	4,388	4,140	4,659	4,402	4,985	4,450	5,086
Black	2,627*	2,884	2,808*	3,146	2,981*	3,411	2,978*	3,522	3,102*	3,666	3,054*	3,609
Hispanic	2,996*	2,938	3,329*	3,443	3,443*	3,485	3,643*	3,706	3,590*	3,725	3,483*	3,656
Asian	2,665*	2,733	2,733*	2,784	3,004*	3,180	3,518*	3,778	3,363*	3,603	3,437*	3,733
Other	4,797*	5,631	5,022*	6,026	5,312*	6,050	4,863*	5,897	4,598*	5,694	4,574*	5,737
Unknown	7,078*	...	6,825*	...	7,790*	...	7,905*	...	7,851*	...	8,314*	...
Region												
▶ Northeast	3,881	4,421	4,180	4,757	4,446	5,089	4,809	5,589	5,150	5,975	5,275	6,202
South	3,830*	4,245	4,037*	4,476	4,071*	4,548	4,225*	4,734	4,418*	4,998	4,473*	5,109
Midwest	2,953*	3,267	3,102*	3,437	3,292*	3,612	3,355*	3,741	3,650*	4,068	3,579*	4,001
West	2,989*	3,384	3,274*	3,759	3,421*	3,891	3,669*	4,241	3,735*	4,379	3,767*	4,463
Gender												
Female	3,973*	4,162	4,105*	4,299	4,190*	4,387	4,367*	4,605	4,481*	4,754	4,562*	4,888
▶ Male	2,855	3,542	3,197	3,965	3,402	4,219	3,599	4,528	3,965	4,991	3,946	5,005

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-24. Physician office visits by privately insured individuals for interstitial cystitis, disease non-specific, listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=253,259)		2003 (N=261,295)		2004 (N=271,491)		2005 (N=292,520)		2006 (N=287,438)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,870	2,666	2,651	2,617	2,699	2,792	2,741	2,879	2,762	3,030
Age										
18-24	2,453*		2,131*		2,021*		2,041*		1,994*	
25-34	3,446*		3,102*		3,075*		3,047*		3,053*	
35-39	3,204*		2,961*		3,025*		3,025*		3,103*	
40-44	2,941*		2,756		2,845*		2,845*		2,922*	
45-54	2,465*		2,308*		2,375*		2,467*		2,551*	
55-64	2,406*		2,283*		2,403*		2,531*		2,589*	
▶ 65-74	2,706		2,729		3,129		3,220		3,424	
75-84	3,373*		3,751*		4,188*		4,309*		4,925*	
85+	...		3,373*		3,696*		3,788*		3,985*	
Race/ethnicity										
▶ White	2,953	2,815	2,801	2,833	2,637	2,786	2,666	2,850	2,700	3,023
Black	3,552*	2,949	3,545*	3,280	3,071*	2,908	3,084*	2,960	3,243*	3,232
Hispanic	3,567*	3,331	3,386*	3,209	3,109*	3,091	3,080*	3,175	3,156*	3,321
Asian	2,632*	2,662	2,609*	2,947	2,531*	2,805	2,518*	2,755	2,453*	2,829
Other	3,286*	3,044	3,212*	3,094	2,961*	3,134	2,747*	2,884	2,944*	3,092
Unknown	3,023*	...	2,876*	...	2,750*	...	2,699*	...	2,744*	...
Missing	2,715*	...	2,253*	...	2,639*	...	2,863*	...	2,720*	...
Region										
Northeast	2,838*	2,941	2,724*	2,959	2,928*	3,313	2,910*	3,388	2,968*	3,717
South	3,010*	2,653	2,782*	2,601	2,804*	2,793	2,882*	2,926	2,912*	3,076
▶ Midwest	2,789	2,622	2,541	2,556	2,564	2,668	2,583	2,681	2,575	2,791
West	2,671*	2,478	2,439*	2,409	2,489*	2,538	2,527*	2,755	2,543*	2,835
Gender										
Female	4,939*	3,949	4,496*	3,698	4,522*	3,884	4,551*	4,008	4,580*	4,098
▶ Male	677.4	1,281	700.5	1,427	776.7	1,591	836.4	1,632	867.4	1,839
Unknown	2,088*	...	1,866*	...	2,307*	...	1,901*	...	2,311*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-25. Nationally representative physician office visits for interstitial cystitis, disease non-specific, listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	13,028,006
Age	
40-44	2,029,152
45-54	3,416,537
55-64	2,790,006
65-74	2,062,078
75-84	2,207,976
85+	522,257
Race/ethnicity	
White	11,030,238
Black	1,689,480
Hispanic	308,288
Region	
Northeast	2,592,607
South	5,540,395
Midwest	3,179,547
West	1,715,457
Gender	
Female	10,238,232
Male	2,789,774

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-26. Physician office visits by Medicare beneficiaries for interstitial cystitis, disease specific,^a or interstitial cystitis, disease non-specific,^b by specialty of care, count,^c rate^d

Specialty	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Urology	79,260	4,322	82,220	4,131	86,860	4,141	92,480	4,283	94,300	4,301	99,520	4,538
Gynecologist	2,440	133.0	3,560	179.0	5,940	283.0	8,320	385.0	9,040	412.0	10,740	490.0
Primary Care	12,160	663.0	14,960	752.0	14,920	711.0	15,900	736.0	17,780	811.0	18,320	835.0
Other	8,180	446.0	9,480	476.0	10,440	498.0	13,920	645.0	13,900	634.0	17,520	799.0

^aInterstitial cystitis, disease specific, ICD-9 code 595.1.

^bPainful bladder syndrome (interstitial cystitis, disease non-specific), ICD-9 code 788.41 (urinary frequency), along with either ICD-9 code 625.8 or 625.9.

^cUnweighted counts multiplied by 20 to arrive at values in the table.

^dRate per 100,000 people 65 and older and eligible for Medicare.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 1-27. Emergency room visits by Medicare beneficiaries for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=25,960)		2003 (N=26,360)		2004 (N=26,440)		2005 (N=26,420)		2006 (N=25,200)		2007 (N=25,820)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	73.0	62.9	72.3	62.1	71.5	63.0	71.2	62.7	69.3	55.8	71.4	57.2
Under 65/65+												
< 65 Years	110.0*	110.0	110.0*	110.0	100.6*	100.6	100.3*	100.3	113.8*	113.8	114.3*	114.3
▶ 65+ Years	63.5	62.9	62.3	62.1	63.6	63.0	63.0	62.7	56.6	55.8	58.5	57.2
Age												
▶ 65-69	44.7		45.8		39.3		54.7		39.8		40.0	
70-74	49.0*		54.7*		53.4*		54.2*		46.6*		57.2*	
75-79	75.7*		65.4*		70.3*		61.0*		56.1*		59.7*	
80-84	80.7*		77.7*		88.8*		74.3*		75.9*		72.7*	
85-89	90.4*		92.9*		96.1*		88.8*		89.2*		76.0*	
90-94	92.9*		90.0*		80.0*		86.4*		93.0*		86.2*	
95-97	112.7**		80.2**		167.8**		107.0**		99.6**		119.3**	
98+	64.8**		32.1**		63.6**		20.7**		20.5**		91.9**	
Race/ethnicity												
▶ White	66.9	60.4	68.2	61.3	66.5	59.7	65.1	58.8	63.9	54.4	66.0	55.0
Black	116.8*	89.7	98.8*	72.1	108.0*	101.6	111.7*	95.3	111.5*	75.6	119.6*	83.5
Hispanic	94.1*	78.4	78.7**	57.2	50.9**	54.5	101.6*	98.1	67.5**	45.2	82.5*	75.8
Asian	28.3**	25.0	53.0**	36.4	64.4**	53.4	33.6**	36.2	33.2**	40.1	34.8**	32.3
Other	117.6*	93.1	107.3*	74.4	130.0*	99.3	108.4*	84.5	100.9*	65.1	75.8**	69.0
Unknown	267.1**	...	258.1**	...	81.4**	...	293.9**	...	312.8**	...	168.3**	...
Region												
▶ Northeast	60.8	52.9	60.2	52.6	60.0	50.0	63.0	57.8	54.3	45.5	63.6	51.6
South	82.9*	71.1	76.5*	63.7	77.0*	68.7	75.9*	66.6	74.5*	58.7	71.6*	55.2
Midwest	73.6*	63.5	74.9*	69.3	75.2*	64.1	75.7*	66.0	75.1*	58.8	80.4*	65.5
West	63.1*	54.7	72.7*	58.2	66.4*	63.0	63.2*	54.2	66.2*	56.5	66.9*	56.1
Gender												
Female	98.0*	77.9	99.0*	77.2	96.5*	78.5	100.1*	81.4	99.9*	72.5	102.6*	75.0
▶ Male	41.0	42.0	38.3	41.8	39.9	42.2	35.0	37.7	31.5	33.8	33.1	34.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-28. Emergency room visits by privately insured individuals for interstitial cystitis, disease non-specific, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,148)		2003 (N=8,003)		2004 (N=5,630)		2005 (N=4,242)		2006 (N=3,936)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	92.3	41.6	81.2	46.9	56.0	36.3	39.8	30.0	37.8	20.5
Age										
18-24	223.5*		165.4*		112.1*		76.7*		80.0*	
25-34	140.2*		117.1*		77.4*		58.3*		54.6*	
35-39	74.3*		71.2*		50.8*		31.2		29.4*	
40-44	58.3*		58.2*		36.1		24.2*		22.2*	
45-54	36.1		42.0		29.8		19.6*		19.4	
55-64	29.6		38.7		35.0		21.1*		27.3*	
▶ 65-74	34.4		37.3		32.3		36.2		17.1	
75-84	68.0*		67.0*		51.2*		62.6*		12.7**	
85+	...		74.0*		85.9*		106.5*		11.0**	
Race/ethnicity										
▶ White	78.7	37.4	71.1	39.0	42.1	28.3	25.6	21.4	23.1	10.6
Black	195.1*	80.8	206.5*	110.1	120.0*	71.9	80.4*	52.9	77.5*	45.5
Hispanic	77.4*	45.1	103.6*	86.5	78.9*	66.9	53.9*	51.2	55.2*	50.8
Asian	37.0*	18.8	36.4*	30.2	19.5*	13.4	15.2*	12.5	12.6*	8.5
Other	79.4*	63.4	81.2*	38.6	43.9*	25.8	30.3**	32.2	24.3**	18.0
Unknown	73.0*	...	76.7*	...	48.7*	...	32.6*	...	28.5*	...
Missing	102.2*	...	83.2*	...	93.6*	...	98.1*	...	101.1*	...
Region										
Northeast	27.7*	17.8	30.2*	17.4	22.6*	11.4	19.4*	13.8	18.7*	6.4
South	83.0*	40.2	82.0*	55.2	55.3*	46.2	35.8*	38.5	38.8*	32.1
▶ Midwest	142.4	58.2	121.9	56.4	89.7	40.8	69.8	33.8	62.8	21.1
West	43.7*	14.4	20.3*	9.8	6.7*	9.0	3.1*	3.8	2.0*	1.7
Gender										
Female	173.2*	69.3	150.7*	77.3	103.2*	58.7	72.8*	47.7	70.8*	34.1
▶ Male	6.7	11.7	7.7	13.9	6.2	12.1	5.0	11.0	3.5	6.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-29. Nationally representative emergency room visits for interstitial cystitis, disease non-specific, listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	652,870
Age	
40-44	225,487
45-54	185,223
55-64	68,684
65-74	70,246
75-84	72,510
85+	30,720
Race/ethnicity	
White	485,769
Black	134,575
Hispanic	24,346
Asian	2,488
Other	5,692
Region	
Northeast	114,303
South	262,640
Midwest	141,970
West	133,957
Gender	
Female	542,516
Male	110,354

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-30. Nationally representative inpatient stays for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,219)		2003 (N=7,294)		2004 (N=7,014)		2005 (N=6,978)		2006 (N=6,581)		2007 (N=6,675)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	8.1	8.1	7.0	7.0	6.8	6.8	6.6	6.6	6.2	6.1	6.2	6.1
Age												
18-24	0.5		0.7		0.6		0.3		0.7		0.6	
25-34	1.9		1.5		1.3		1.4		1.5		1.3	
35-39	2.7		2.4		2.7		2.7		1.9		2.4	
40-44	3.9		3.9		3.4		3.4		3.1		3.1	
45-54	6.4		5.4		5.7		5.5		5.1		5.0	
55-64	13.4		12.5		11.5		11.9		11.5		10.1	
▶ 65-74	25.6		20.7		18.4		17.2		17.0		17.6	
75-84	26.6*		23.3*		26.8*		24.5*		19.4*		22.1*	
85+	38.3*		28.1*		31.6*		32.3*		30.3*		29.7*	
Race/ethnicity												
▶ White	5.1	5.5	5.3	5.3	5.4	5.5	5.3	5.3	4.9	4.9	4.7	4.6
Black	4.1*	4.2	4.6*	4.6	4.6*	5.5	4.5*	4.5	4.3*	4.2	4.8*	4.8
Hispanic	†	†	3.5*	4.3	3.6*	3.7	3.2*	3.2	4.1*	4.0	3.2*	3.1
Asian	3.0*	4.1	2.3*	4.4	2.9*	5.6	1.5*	2.9	2.2*	3.4	3.5*	4.1
Other	14.3*	20.5	11.6*	13.2	6.8*	8.7	4.7*	6.6	8.6*	10.4	9.6*	11.6
Region												
Northeast	8.2	7.9	6.4	6.2	5.8	5.9	6.3	6.3	7.3	7.2	7.3	7.2
South	10.2	10.2	9.1	9.0	9.5	9.5	8.0	8.0	7.8	7.7	7.5	7.4
▶ Midwest	7.5	7.5	7.3	7.5	6.2	7.5	6.9	6.9	5.9	5.9	5.8	5.8
West	5.3*	5.4	4.1*	4.0	3.9*	3.9	4.5*	4.5	3.1*	3.6	3.7*	3.7

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 1-31. Inpatient stays by Medicare beneficiaries for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,960)		2003 (N=1,900)		2004 (N=1,500)		2005 (N=1,500)		2006 (N=1,180)		2007 (N=1,280)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	12.6	13.7	11.8	12.2	9.2	11.0	9.1	10.7	7.3	8.3	7.9	9.0
Under 65/65+												
▶ < 65 Years	8.8**	8.8	9.4**	9.4	4.8**	4.8	5.1**	5.1	4.2**	4.2	5.0**	5.0
▶ 65+ Years	13.8	13.7	12.6	12.2	10.7	11.0	10.5	10.7	8.4	8.3	8.9	9.0
Age												
▶ 65-69	10.5*		8.0*		6.7*		5.1*		7.3*		10.4*	
70-74	12.4**		13.6**		9.1**		11.9**		8.8**		6.9**	
75-79	17.2**		14.4**		16.1**		16.4**		8.4**		10.4**	
80-84	12.8**		13.6**		18.1**		14.3**		9.7**		8.6**	
85-89	21.8**		15.8**		7.6**		7.6**		7.4**		7.1**	
90-94	34.3**		32.6**		0.0**		7.6**		7.5**		7.3**	
95-97	0.0**		51.9**		0.0**		0.0**		0.0**		0.0**	
98+	0.0**		0.0**		0.0**		0.0**		41.2**		...	
Race/ethnicity												
▶ White	12.0	13.0	12.2	12.6	9.4	11.1	9.2	10.6	7.6	8.5	7.7	8.8
Black	9.3**	12.0	7.7**	4.0	6.3**	11.7	11.2**	15.9	3.8**	4.0	10.2**	12.7
Hispanic	32.3**	24.1	12.4**	23.2	18.1**	15.3	5.8**	6.9	6.0**	0.0	5.9**	7.1
Asian	0.0**	0.0	0.0**	0.0	0.0**	0.0	0.0**	0.0	15.5**	22.5	7.4**	16.7
Other	28.6**	44.2	26.0**	80.3	12.4**	11.5	5.8**	9.6	5.6**	11.9	5.4**	8.4
Unknown	152.1**	...	0.0**	...	0.0**	...	0.0**	...	...	...	...	...
Region												
▶ Northeast	10.0*	9.9	7.2*	8.1	6.5*	7.4	7.1*	7.0	5.9*	7.3	7.2*	8.5
South	14.9*	15.9	16.3*	17.6	12.5*	14.9	13.5*	16.4	11.4*	12.7	8.9**	11.0
Midwest	13.8**	15.8	11.0**	10.6	9.9**	12.7	6.9**	9.1	4.5**	4.7	8.2**	8.6
West	8.3**	9.5	7.9**	7.2	3.5**	3.8	4.8**	5.0	3.4**	5.0	6.0**	6.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-32. Inpatient stays by privately insured individuals for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=459)		2003 (N=454)		2004 (N=412)		2005 (N=415)		2006 (N=365)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	10.7	23.9	9.5	23.8	8.4	20.9	8.0	17.4	7.2	19.3
Age										
18-24	0.7**		1.3**		0.3**		0.7**		0.7**	
25-34	2.6**		1.8**		1.4**		0.9**		1.4**	
35-39	5.3**		3.0**		2.0**		2.7**		2.9**	
40-44	4.1**		3.8**		4.4**		3.3**		3.2**	
45-54	10.7*		8.8*		6.9*		8.2*		5.9*	
55-64	26.3*		23.5*		22.4*		19.7*		18.2*	
▶ 65-74	50.6		44.5		39.0		32.5		41.7	
75-84	67.5*		88.3*		73.3*		47.2*		70.0*	
85+	...		32.0**		34.5**		36.1**		25.8**	
Race/ethnicity										
▶ White	14.1	29.1	11.5	28.7	8.6	21.5	7.7	16.7	7.6	20.1
Black	15.3**	31.5	9.6**	23.2	9.3**	19.9	9.6**	23.3	10.8**	26.5
Hispanic	13.6**	24.0	8.8**	26.1	8.7*	21.7	8.8*	21.9	6.7*	16.6
Asian	10.2**	125.8	8.1**	25.0	5.0**	30.4	4.6**	19.5	4.4**	21.0
Other	14.1**	138.8	13.0**	45.3	4.6**	42.3	10.5**	36.0	4.1**	13.4
Unknown	6.8**	...	9.8**	...	9.0**	...	6.8**	...	4.5**	...
Missing	8.1*	...	7.0*	...	7.7*	...	9.6*	...	6.8*	...
Region										
Northeast	11.1	25.2	8.8	21.1	10.1*	24.3	7.3	18.7	8.6	22.5
South	11.8	25.8	10.1	23.2	9.8*	24.3	9.0*	19.4	7.6	21.3
▶ Midwest	11.6	25.3	10.7	27.3	7.2	17.6	7.4	15.4	6.7	18.7
West	4.4**	10.8	5.1*	17.9	5.1*	15.7	6.6*	17.9	5.7*	15.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-33. Hospital outpatient visits by Medicare beneficiaries for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=12,900)		2003 (N=13,900)		2004 (N=13,940)		2005 (N=14,520)		2006 (N=15,100)		2007 (N=11,880)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	82.6	88.7	86.5	94.2	85.1	90.0	88.0	88.7	93.0	97.0	73.1	79.2
Under 65/65+												
< 65 Years	63.5*	63.5	65.3*	65.3	72.3*	72.3	85.0*	85.0	81.5*	81.5	58.9*	58.9
▶ 65+ Years	88.9	88.7	93.6	94.2	89.5	90.0	89.1	88.7	97.1	97.0	78.4	79.2
Age												
▶ 65-69	81.8		96.0		91.1		88.8		94.7		81.4	
70-74	100.2*		104.5*		87.5*		93.0*		102.1*		74.5*	
75-79	97.3*		85.9*		99.6*		96.1*		106.4*		99.9*	
80-84	75.8*		79.1*		79.6*		69.0*		84.6*		57.7*	
85-89	81.9*		105.2*		86.4*		90.9*		89.1*		69.0**	
90-94	77.1**		73.2**		78.3**		128.5**		90.1**		73.4**	
95-97	107.8**		103.8**		50.5**		47.5**		143.5**		0.0**	
98+	44.2**		...		42.9**		...		82.3**		...	
Race/ethnicity												
▶ White	77.1	82.6	82.0	89.3	81.9	85.2	83.9	84.3	92.4	95.4	73.0	79.3
Black	103.5*	116.7	109.2*	141.0	90.3*	115.2	106.2*	111.0	64.8*	86.0	57.6*	47.3
Hispanic	84.0**	69.8	111.8**	123.0	138.5**	227.1	116.8**	105.0	143.7**	123.7	105.6**	187.1
Asian	9.4**	25.5	26.5**	41.7	41.7**	117.8	70.6**	84.1	31.0**	93.2	0.0**	0.0
Other	271.4*	384.4	188.6**	247.4	167.2**	191.1	162.8**	210.9	225.9*	251.7	155.7**	190.1
Unknown	228.1**	...	80.1**	...	146.1**	...	...	...	248.6**	...	262.9**	...
Region												
▶ Northeast	48.5	40.3	50.9	47.6	61.4	52.8	64.6	62.1	62.5	60.2	53.9	51.5
South	100.4*	109.7	94.8*	105.5	106.3*	114.6	99.5*	98.6	100.0*	108.0	77.1*	83.9
Midwest	81.3*	89.6	98.5*	105.1	81.0*	90.5	80.2*	80.6	88.2*	94.5	76.4*	84.6
West	82.6*	96.2	89.5*	107.3	69.2*	76.9	98.5*	107.1	116.2*	115.4	79.9*	91.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-34. Hospital outpatient visits by privately insured individuals for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,629)		2003 (N=2,676)		2004 (N=3,118)		2005 (N=3,266)		2006 (N=3,015)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	61.4	109.0	55.9	99.6	63.7	108.7	62.9	100.4	59.2	100.7
Age										
18-24	11.6*		9.0*		11.3*		10.5*		10.4*	
25-34	26.3*		26.0*		27.3*		28.3*		27.1*	
35-39	34.6*		29.9*		44.0*		38.8*		32.6*	
40-44	54.4*		38.6*		45.0*		46.8*		50.3*	
45-54	70.3*		66.1*		75.9*		75.4*		68.9*	
55-64	145.1*		141.8*		150.6*		148.6		142.1*	
▶ 65-74	192.2		164.8		170.9		157.5		181.4	
75-84	145.4*		153.3*		167.9*		101.1*		105.9*	
85+	...		50.3**		69.1**		59.1**		41.3**	
Race/ethnicity										
▶ White	72.5	123.2	66.2	112.7	68.9	116.4	66.8	105.5	63.4	105.1
Black	75.2*	117.1	82.5*	127.5	62.7*	85.7	82.3*	119.3	69.4*	112.7
Hispanic	64.5*	125.4	51.7*	117.3	49.9*	99.2	47.7*	84.4	45.5*	79.9
Asian	39.3**	94.6	38.4*	97.1	35.1*	76.0	47.1*	61.3	35.4*	95.0
Other	70.3**	160.6	87.8**	179.4	47.9**	104.8	77.4*	134.7	55.3**	80.7
Unknown	77.2*	...	64.4*	...	66.2*	...	59.4*	...	56.7*	...
Missing	51.7*	...	41.3*	...	54.7*	...	50.5*	...	51.2*	...
Region										
Northeast	74.1	130.9	68.7*	125.0	75.5	128.6	75.6	125.0	83.2*	143.8
South	56.8*	97.3	50.3*	88.3	54.4*	87.6	54.6*	83.7	49.9*	81.1
▶ Midwest	69.7	126.0	61.4	107.8	76.9	131.3	75.7	120.1	67.8	121.8
West	44.6*	81.9	49.9*	101.8	54.0*	112.2	51.7*	89.8	53.2*	93.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-35. Nationally representative hospital outpatient visits for prostatitis listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	202,640
Age	
40-44	12,477
45-54	74,669
55-64	77,798
65-74	30,212
75-84	6,478
85+	1,006
Race/ethnicity	
White	193,088
Black	7,817
Hispanic	1,735
Region	
Northeast	15,766
South	123,692
Midwest	60,399
West	2,783

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-36. Ambulatory surgery center visits by Medicare beneficiaries for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,920)		2003 (N=3,340)		2004 (N=3,000)		2005 (N=3,120)		2006 (N=2,680)		2007 (N=2,380)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	29.5	34.0	25.9	30.9	24.8	30.0	24.5	29.6	20.6	25.2	18.8	22.9
Age												
▶ 65-69	37.6		30.9		32.1		31.3		23.4		28.2	
70-74	44.3*		36.3*		36.6*		35.0*		32.7*		22.1*	
75-79	31.9*		31.3*		28.9*		30.4*		29.5*		25.2**	
80-84	20.5**		28.4**		20.5**		22.6**		20.5**		19.7**	
85-89	19.1**		18.4**		22.9**		17.7**		7.4**		4.8**	
90-94	8.6**		...		23.5**		7.6**		22.5**		7.3**	
95-97	...		...		0.0**		...		...		...
Race/ethnicity												
▶ White	28.9	32.7	24.1	28.5	23.9	28.7	24.7	29.0	20.3	23.5	19.3	23.0
Black	31.8**	53.6	39.8*	60.1	41.4*	68.1	27.5**	45.8	25.4**	46.5	16.6**	27.4
Hispanic	32.3**	86.4	31.1**	46.0	6.0**	62.2	11.7**	33.0	...	...	5.9**	34.7
Asian	9.4**	76.1	8.8**	39.3	0.0**	0.0	15.7**	142.0	7.8**	65.7	14.7**	58.6
Other	42.9**	45.9	45.5**	73.7	6.2**	20.7	23.3**	46.4	33.9**	88.8	26.8**	44.3
Unknown	152.1**	...	...	...	146.1**	...	...	...	82.9**	...	...	...
Region												
▶ Northeast	33.9	41.6	32.0	39.7	29.1	36.9	26.5	33.8	27.6	37.6	18.4*	21.9
South	27.7*	33.2	28.8*	32.2	27.6*	32.9	30.1*	36.5	21.3*	26.2	18.4*	22.6
Midwest	36.3*	39.5	22.0*	26.9	25.7*	29.7	25.1*	29.8	23.1*	30.3	26.5*	32.4
West	18.2**	21.0	18.1**	26.7	12.6**	17.3	9.5**	13.7	8.2**	11.2	10.1**	15.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-37. Ambulatory surgery center visits by privately insured individuals for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=149)		2003 (N=175)		2004 (N=133)		2005 (N=130)		2006 (N=146)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.5	5.4	3.7	5.7	2.7	4.2	2.5	3.9	2.9	4.9
Age										
18-24	1.3**		0.5**		0.5**		1.0**		0.9**	
25-34	1.5**		2.6**		1.4**		1.0**		1.6**	
35-39	2.7**		3.0**		2.0**		2.6**		1.4**	
40-44	3.7**		3.2**		3.3*		2.2**		3.7*	
45-54	4.4*		4.0*		3.1*		2.6**		3.6	
55-64	7.0		6.8*		5.4		4.4*		5.0	
▶ 65-74	10.1*		11.4*		5.6*		8.2*		4.3*	
75-84	1.0**		6.1**		4.7**		3.8**		12.6**	
85+	...		4.6**		4.3*		...		5.2**	
Race/Ethnicity										
▶ White	4.7	7.4	3.7	5.8	2.8	4.3	2.6	4.2	3.1	5.3
Black	3.5**	6.7	5.6**	7.9	2.2**	7.9	4.5**	9.0	4.3**	11.1
Hispanic	7.1**	11.9	5.0**	7.1	2.6**	5.0	2.3**	6.1	2.9**	4.1
Asian	4.4**	12.2	1.0**	5.8	1.4**	...	1.3**	5.1	1.3**	16.4
Other	...	...	6.5**	18.4	2.3**	23.0	2.1**	10.1	2.0**	19.0
Unknown	2.5**	...	6.7**	...	1.9**	...	1.8**	...	2.4**	...
Missing	2.4*	...	3.0*	...	3.0**	...	2.0**	...	1.8**	...
Region										
Northeast	2.6*	6.8	2.4*	3.8	2.3*	4.4	1.9*	6.1	1.8*	4.4
South	5.3*	8.5	6.0*	10.0	4.2*	6.8	3.9*	5.8	4.3*	8.3
▶ Midwest	1.9*	2.9	1.9*	2.1	1.6*	2.1	1.6*	2.2	1.9*	3.3
West	2.2**	11.6	1.3**	4.3	0.6**	4.4	0.7**	1.6	1.1**	1.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-38. Nationally representative ambulatory surgery center visits for prostatitis listed as primary diagnosis, count, rate^a

	Count	Rate
Total	5,589	5.3
Age		
40-44	1,042	9.4
45-54	154	0.7
55-64	3,599	24.2
▶ 65-74	479	5.6
75-84	315	5.9*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 1-39. Physician office visits by Medicare beneficiaries for prostatitis listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=447,980)		2003 (N=451,500)		2004 (N=444,920)		2005 (N=423,900)		2006 (N=417,260)		2007 (N=374,580)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,869	3,408	2,809	3,339	2,716	3,276	2,570	3,087	2,569	3,097	2,305	2,801
Under 65/65+												
< 65 Years	1,325*	1,325	1,303*	1,303	1,177*	1,177	1,178*	1,178	1,165*	1,165	1,031*	1,031
▶ 65+ Years	3,378	3,408	3,314	3,339	3,243	3,276	3,062	3,087	3,070	3,097	2,776	2,801
Age												
▶ 65-69	3,252		3,199		3,098		2,922		2,780		2,511	
70-74	3,583*		3,551*		3,361*		3,182*		3,327*		3,035*	
75-79	3,641*		3,564*		3,522*		3,467*		3,466*		3,128*	
80-84	3,300*		3,246*		3,317*		2,969*		3,124*		2,793*	
85-89	3,095*		2,844*		3,013*		2,675*		2,650*		2,418*	
90-94	2,100*		2,254*		2,193*		2,547*		2,508*		2,423*	
95-97	1,778*		1,661*		2,122*		1,282**		1,483*		1,772*	
98+	442.1**		566.7**		471.9**		379.3**		658.7**		80.8**	
Race/ethnicity												
▶ White	2,902	3,383	2,853	3,322	2,745	3,252	2,602	3,058	2,637	3,103	2,359	2,809
Black	2,295*	3,230	2,256*	3,204	2,288*	3,226	2,064*	2,927	1,890*	2,742	1,748*	2,472
Hispanic	3,037*	3,561	2,683*	3,049	2,781*	3,435	3,002*	3,639	2,933*	3,763	2,564*	3,277
Asian	2,389*	2,452	2,223*	2,294	2,443*	2,647	2,543*	2,873	2,287*	2,662	2,281*	2,402
Other	3,822*	5,038	3,668*	5,050	3,221*	4,080	2,879*	3,980	2,637*	3,379	2,250*	2,949
Unknown	10,570*	...	9,535*	...	8,400*	...	7,482*	...	5,468*	...	5,872*	...
Region												
▶ Northeast	2,504	2,989	2,379	2,863	2,408	2,958	2,316	2,832	2,287	2,796	2,084	2,571
South	3,635*	4,352	3,572*	4,246	3,362*	4,082	3,212*	3,861	3,240*	3,903	2,887*	3,501
Midwest	1,982*	2,306	2,003*	2,347	1,952*	2,307	1,780*	2,115	1,795*	2,155	1,598*	1,900
West	2,839*	3,459	2,726*	3,363	2,690*	3,285	2,536*	3,106	2,471*	3,052	2,231*	2,816

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-40. Physician office visits by privately insured individuals for prostatitis listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=63,867)		2003 (N=65,639)		2004 (N=64,176)		2005 (N=65,069)		2006 (N=61,578)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,491	2,289	1,370	2,188	1,312	2,071	1,252	1,925	1,209	1,952
Age										
18-24	271.1*		213.7*		196.7*		204.3*		195.0*	
25-34	786.3*		702.4*		647.8*		601.0*		583.0*	
35-39	1,203*		1,059*		996.3*		914.5*		907.2*	
40-44	1,500*		1,302*		1,222*		1,178*		1,176*	
45-54	1,962*		1,805*		1,719*		1,589*		1,572*	
55-64	3,048		2,751*		2,647*		2,548		2,429*	
▶ 65-74	2,978		3,127		2,899		2,588		2,748	
75-84	2,115*		2,743*		2,546*		2,213*		2,673*	
85+	...		1,335*		1,330*		1,389*		1,295*	
Race/ethnicity										
▶ White	1,708	2,463	1,568	2,383	1,351	2,089	1,286	1,937	1,261	2,004
Black	1,743*	2,396	1,608*	2,306	1,238*	1,899	1,232*	1,849	1,132*	1,841
Hispanic	1,832*	3,019	1,656*	3,098	1,325*	2,508	1,202*	2,128	1,160*	1,979
Asian	1,154*	2,312	1,157*	2,325	1,116*	1,977	912.1*	1,695	922.3*	1,639
Other	1,912*	2,862	1,745*	2,976	1,523*	2,664	1,399*	2,265	1,462*	2,298
Unknown	1,541*	...	1,457*	...	1,230*	...	1,220*	...	1,170*	...
Missing	1,295*	...	1,064*	...	1,216*	...	1,200*	...	1,058*	...
Region										
Northeast	1,543*	2,165	1,393*	2,012	1,374*	2,021	1,286*	1,876	1,249*	1,888
South	1,843*	2,810	1,682*	2,679	1,574*	2,491	1,493*	2,309	1,424*	2,326
▶ Midwest	1,143	1,783	1,038	1,671	998.5	1,582	957.6	1,455	937.0	1,488
West	1,202*	2,061	1,134*	2,095	1,118*	1,984	1,105*	1,858	1,064*	1,812

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-41. Nationally representative physician office visits for prostatitis listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	4,982,822
Age	
40-44	371,344
45-54	1,469,506
55-64	1,678,055
65-74	883,208
75-84	473,312
85+	107,397
Race/ethnicity	
White	4,526,015
Black	321,301
Hispanic	135,506
Region	
Northeast	759,540
South	2,658,680
Midwest	673,622
West	890,980

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 1-42. Emergency room visits by Medicare beneficiaries for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=6,300)		2003 (N=5,840)		2004 (N=5,420)		2005 (N=5,780)		2006 (N=5,520)		2007 (N=5,940)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	40.3	35.0	36.3	32.8	33.1	29.8	35.0	31.8	34.0	34.7	36.6	32.7
Under 65/65+												
< 65 Years	55.8*	55.8	48.0*	48.0	44.1*	44.1	44.6*	44.6	33.2	33.2	47.0*	47.0
▶ 65+ Years	35.3	35.0	32.4	32.8	29.3	29.8	31.7	31.8	34.2	34.7	32.7	32.7
Age												
▶ 65-69	37.0		30.9		29.5		28.7		30.2		35.0	
70-74	41.0*		30.5*		26.1*		42.9*		30.6*		31.0*	
75-79	33.5*		35.3*		32.9*		28.8*		40.5*		28.7*	
80-84	27.0**		27.2**		30.2**		28.6**		47.1*		33.2**	
85-89	27.3**		50.0**		33.0**		25.3**		27.2**		38.1**	
90-94	34.3**		40.7**		7.8**		22.7**		22.5**		29.4**	
95-97	53.9**		...		101.1**		...		47.8**		46.6**	
98+	...		...		...		...		...		40.4**	
Race/ethnicity												
▶ White	34.0	30.3	34.0	32.4	30.0	27.8	32.9	29.8	33.1	34.4	35.1	31.7
Black	96.8*	86.9	54.0*	38.3	52.7*	42.6	56.2*	48.0	47.0*	39.8	51.2*	56.0
Hispanic	32.3**	38.8	43.5**	78.0	30.1**	71.2	52.6**	138.4	53.9**	109.4	41.1**	39.8
Asian	18.8**	41.5	...	...	33.4**	68.9	31.4**	41.1	7.8**	41.6	7.4**	29.3
Other	42.9**	75.7	65.0**	45.9	49.5**	61.0	11.6**	32.8	11.3**	9.3	48.3**	24.4
Unknown	228.1**	...	80.1**	...	292.2**	...	...	...	...	...	...	...
Region												
▶ Northeast	19.3*	15.1	18.3*	17.7	27.8	25.7	25.8	24.3	15.8*	16.4	28.3	21.4
South	60.8*	47.9	48.7*	41.9	46.1*	38.5	49.5*	43.7	47.0*	44.9	49.2*	46.2
Midwest	32.7*	36.1	36.0*	33.9	25.7*	24.0	28.1*	26.2	31.1*	34.0	31.6*	30.3
West	28.8*	27.2	28.9*	30.6	20.3**	24.3	23.1*	25.2	28.9*	33.3	24.9*	20.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 1-43. Emergency room visits by privately insured individuals for prostatitis listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=568)		2003 (N=653)		2004 (N=434)		2005 (N=333)		2006 (N=238)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	13.3	14.9	13.6	19.3	8.9	13.9	6.4	11.0	4.7	6.6
Age										
18-24	7.8*		4.5**		2.4**		1.3**		1.8**	
25-34	12.3		9.3*		4.5*		2.7*		1.9**	
35-39	14.8		11.7*		7.4*		4.2**		4.2**	
40-44	11.4		12.2*		8.7*		3.8**		5.3	
45-54	14.5		15.7*		9.4*		7.4*		4.5*	
55-64	18.2		27.3		18.8		13.1*		11.6	
▶ 65-74	14.9*		22.2		20.0		21.7		8.0*	
75-84	15.6**		22.1**		21.3**		17.0**		1.8*	
85+	...		22.9**		4.3**		13.1**		...	
Race/ethnicity										
▶ White	10.4	11.3	10.8	15.5	7.2	11.1	4.7	8.3	2.8	4.1
Black	20.0**	61.3	20.0**	21.3	9.8**	14.5	5.6**	10.1	4.8**	8.2
Hispanic	30.2*	17.2	41.0*	67.5	17.9*	37.4	11.1*	22.8	10.4*	19.5
Asian	...	...	2.0**	8.0	...	...	2.6**	8.6	0.6**	...
Other	23.4**	185.1	13.0**	60.5	2.3**	...	10.5**	40.3	...	...
Unknown	15.4**	...	10.7**	...	5.5**	...	2.7**	...	1.8**	...
Missing	13.9*	...	13.7*	...	14.5*	...	15.4*	...	13.5*	...
Region										
Northeast	5.9**	10.0	5.6*	4.6	2.5**	6.4	2.3**	5.7	1.3**	1.9
South	14.8	15.3	19.4*	28.5	13.5*	21.3	9.3*	16.4	7.4*	11.0
▶ Midwest	15.1	19.9	12.0	17.7	8.0	11.3	6.5	10.4	3.8	5.0
West	9.5*	4.4	5.3*	3.2	0.9**	2.1	0.5**	1.1	0.9**	2.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 1-44. Medication use associated with visits for prostatitis listed as any diagnosis, 2002-2007 (merged), 6-year count,^a 6-year rate,^b annualized rate,^c rate per visit^d

	6-Year Count	6-Year Rate	Annualized Rate	Rate Per Visit
Chronic or Infectious prostatitis				
Total	5,680,417	5,423	904.0	100,000
Quinolones ordered/provided at visit	1,946,278	1,858	310.0	34,263
TMP-SMX/Sulfa medications ordered/provided at visit	498,910	476.0	79.0	8,783
BPH medications ordered/provided at visit	456,104	436.0	73.0	8,029
Chronic prostatitis				
Total	5,199,515	4,964	827.0	100,000
Quinolones ordered/provided at visit	1,758,145	1,679	280.0	33,814
TMP-SMX/Sulfa medications ordered/provided at visit	433,404	414.0	69.0	8,335

TMP-SMX/Sulfa: Trimethoprim/sulfamethoxazole.

BPH: Benign prostatic hyperplasia.

^aCounts may not sum to total due to rounding.

^bRate per 100,000 is based on 2002-2007 population estimates from Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male civilian non-institutionalized population.

^cBased on averages calculated using the 6-year rate.

^dRate per 100,000 adult male visits is based on 2002-2007 estimated number of visits for prostatitis in National Ambulatory Medical Care Survey.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007.

**Urologic
Diseases**
in America



CHAPTER 2
Benign Prostatic Hyperplasia
Lower Urinary Tract Symptoms
Bladder Stones

Table 2-1. Codes used in the diagnosis and management of benign prostatic hyperplasia**Benign Prostatic Hyperplasia****Males 40 years or older with any of the following ICD-9 diagnosis codes:**

594.1	Other calculus in bladder
599.6	Urinary obstruction
599.60	Urinary obstruction, unspecified
599.69	Urinary obstruction, not elsewhere classified
600	Hyperplasia of prostate
600.0	Hypertrophy (benign) of prostate
600.01	Hypertrophy (benign) of prostate with urinary obstruction and other lower urinary tract symptoms (LUTS)
600.9	Hyperplasia of prostate, unspecified
600.90	Hyperplasia of prostate, unspecified, without urinary obstruction and other lower urinary tract symptoms (LUTS)
600.91	Hyperplasia of prostate, unspecified, with urinary obstruction and other lower urinary tract symptoms (LUTS)

Males 40 years or older one of the following ICD-9 diagnosis codes, but not carrying diagnosis code 185 (malignant neoplasm of prostate) as another diagnosis:

788.2	Retention of urine
788.20	Retention of urine, unspecified
788.21	Incomplete bladder emptying
788.29	Other specified retention of urine
788.4	Frequency of urination and polyuria
788.41	Urinary frequency
788.42	Polyuria
788.43	Nocturia
788.61	Splitting of urinary stream
788.62	Slowing of urinary stream

Males 40 years or older with any of the following ICD-9 diagnosis codes and any of the following procedure or BPH medication codes:*ICD-9 diagnosis codes*

600.1	Nodular prostate
600.2	Benign localized hyperplasia of prostate
600.20	Benign localized hyperplasia of prostate without urinary obstruction and other lower urinary tract symptoms (LUTS)
600.21	Benign localized hyperplasia of prostate with urinary obstruction and other lower urinary tract symptoms (LUTS)

ICD-9 procedure codes

60.2	Transurethral prostatectomy
60.21	Transurethral (ultrasound) guided laser induced prostatectomy (TULIP)
60.29	Other transurethral prostatectomy
60.3	Suprapubic prostatectomy
60.4	Retropubic prostatectomy
60.94	Control of (postoperative) hemorrhage of prostate
60.95	Transurethral balloon dilation of the prostatic urethra
60.96	Transurethral destruction of prostate tissue by microwave thermotherapy
60.97	Other transurethral destruction of prostate tissue by other thermotherapy

CPT procedure codes

52450	Transurethral incision of prostate
52510	Transurethral balloon dilation of the prostatic urethra
52601	Transurethral electrosurgical resection of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)

Continued on next page.

Table 2-1 (continued). Codes used in the diagnosis and management of benign prostatic hyperplasia

52606	Transurethral fulguration for postoperative bleeding occurring after the usual follow-up time
52612	Transurethral resection of prostate; first stage of two-stage resection (partial resection)
52614	Transurethral resection of prostate; second stage of two-stage resection (resection completed)
52620	Transurethral resection of residual obstructive tissue after 90 days postoperative
52630	Transurethral resection; residual or regrowth of obstructive prostate tissue including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)
52640	Transurethral resection; of postoperative bladder neck contracture
52647	Laser coagulation of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included if performed)
52648	Laser vaporization of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, internal urethrotomy and transurethral resection of prostate are included if performed)
53850	Transurethral destruction of prostate tissue by microwave thermotherapy
53852	Transurethral destruction of prostate tissue by radiofrequency thermotherapy
55801	Prostatectomy, perineal, subtotal (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy)
55821	Prostatectomy (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy); suprapubic, subtotal, 1 or 2 stages
55831	Prostatectomy (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy); retropubic, subtotal

Table 2-2. Nationally representative inpatient stays for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=105,462)		2003 (N=88,295)		2004 (N=68,975)		2005 (N=69,053)		2006 (N=67,504)		2007 (N=63,249)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	103.5	174.2	85.2	142.1	66.5	116.4	65.8	113.3	63.5	109.4	58.6	100.7
Age												
40-44	3.5*		3.2*		3.6*		3.1*		3.9*		3.0*	
45-54	20.1*		17.3*		13.4*		11.6*		11.9*		12.0*	
55-64	143.5*		112.3*		82.9*		77.9*		74.8*		67.5*	
▶ 65-74	457.3		377.5		284.6		274.7		259.7		240.4	
75-84	601.6*		481.9*		454.3*		450.2*		443.9*		400.3*	
85+	803.1*		698.0*		588.5*		610.4*		575.0*		556.3*	
Race/ethnicity												
▶ White	74.5	128.0	68.1	105.5	56.0	90.9	57.6	91.4	53.2	84.7	48.9	77.3
Black	49.4*	92.8	41.6*	76.2	37.3*	71.0	29.3*	55.4	32.3*	60.9	31.5*	59.2
Hispanic	†	†	47.2*	113.0	24.8*	64.2	26.0*	65.1	28.2*	68.9	22.1*	53.5
Asian	38.4*	107.4	40.1*	75.4	25.0*	61.6	20.9*	53.4	19.5*	38.9	23.7*	60.5
Other	184.8*	488.3	90.2*	185.1	72.2*	152.7	68.3*	139.0	74.0*	139.5	71.7*	129.3
Region												
Northeast	126.5	196.7	94.3	144.4	76.2	125.4	72.3	120.2	73.4	120.5	67.6	109.9
South	99.3	167.4	84.4	140.5	63.1	108.6	62.2	107.2	59.7	103.1	51.1	87.0
▶ Midwest	109.5	185.7	90.2	158.0	70.1	127.4	73.1	124.1	71.5	122.6	67.7	115.9
West	84.1*	152.5	73.8*	127.9	60.3*	110.6	59.0*	105.9	53.7*	96.8	54.6*	99.7

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 2-3. Inpatient stays by Medicare beneficiaries for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=65,360)		2003 (N=57,080)		2004 (N=44,400)		2005 (N=43,200)		2006 (N=40,260)		2007 (N=37,380)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	418.5	535.8	355.1	459.3	271.0	345.5	261.9	333.2	247.9	317.2	230.1	298.3
Under 65/65+												
< 65 Years	72.8*	72.8	55.9*	55.9	58.4*	58.4	55.3*	55.3	54.3*	54.3	44.7*	44.7
▶ 65+ Years	532.5	535.8	455.6	459.3	343.8	345.5	334.9	333.2	316.9	317.2	298.5	298.3
Age												
▶ 65-69	317.3		260.3		180.6		172.0		153.0		159.7	
70-74	496.6*		411.5*		312.7*		315.3*		280.3*		244.8*	
75-79	631.2*		570.7*		404.0*		410.0*		406.1*		355.4*	
80-84	758.8*		648.8*		544.2*		516.4*		448.4*		477.8*	
85-89	851.5*		741.9*		574.1*		485.1*		593.8*		523.6*	
90-94	754.1*		667.3*		642.2*		657.6*		593.3*		491.9*	
95-97	1,131**		726.9**		252.7**		332.4**		813.0**		746.3**	
98+	265.3**		218.0**		128.7**		379.3**		123.5**		363.6**	
Race/ethnicity												
▶ White	434.9	547.6	368.3	467.1	282.3	352.3	274.2	340.7	256.5	321.5	241.7	308.9
Black	289.2*	443.4	267.2*	420.7	203.2*	323.2	172.4*	276.0	182.9*	301.2	160.1*	258.8
Hispanic	420.0*	573.8	316.8*	419.9	246.8*	337.6	245.3*	302.0	221.5*	315.2	164.3**	181.3
Asian	178.7**	165.0	291.1*	285.5	125.1**	116.9	141.3**	156.5	217.1**	219.3	132.4**	121.2
Other	450.0*	641.0	286.2*	480.0	247.7*	388.2	255.9*	376.6	225.9*	299.9	220.1*	297.7
Unknown	1,141**	...	560.9**	...	365.2**	...	701.5**	...	580.0**	...	350.6**	...
Region												
▶ Northeast	436.7	554.1	376.1	480.3	241.2	307.8	273.3	339.7	251.2	319.6	222.8	279.5
South	401.0*	512.9	337.7*	442.0	267.2*	343.2	245.7*	311.6	239.3*	309.6	206.3*	265.4
Midwest	464.7*	587.3	375.0*	477.0	296.0*	368.8	291.4*	366.2	256.1*	320.3	270.5*	344.1
West	369.6*	487.1	342.2*	444.2	276.6*	358.4	244.5*	326.1	251.6*	325.5	234.4*	324.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-4. Inpatient stays by privately insured individuals for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,260)		2003 (N=4,175)		2004 (N=3,701)		2005 (N=4,240)		2006 (N=3,065)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	99.4	300.6	87.2	296.8	75.6	254.7	81.6	244.4	60.2	229.4
Age										
40-44	18.6*		13.1*		12.3*		15.3*		10.8*	
45-54	51.9*		40.1*		34.8*		34.4*		37.2*	
55-64	243.6*		199.0		153.3*		151.0*		149.1*	
▶ 65-74	669.0		603.0		507.7		498.9		424.0	
75-84	1,401*		1,326*		1,186*		1,092*		1,059*	
85+	...		1,610*		1,421*		1,389*		1,326*	
Race/ethnicity										
▶ White	106.1	291.4	99.2	315.6	82.5	282.8	88.7	271.1	67.8	253.0
Black	164.4*	372.0	128.1*	271.3	101.4*	239.5	107.0*	216.3	53.2*	159.2
Hispanic	77.5*	248.4	53.3*	180.0	41.0*	147.0	39.1*	139.0	32.9*	140.8
Asian	42.2**	262.4	48.5*	236.7	35.1*	145.6	39.9*	194.3	27.8*	163.6
Other	79.7**	411.8	61.8**	308.7	52.5**	249.1	31.4**	146.6	51.2**	198.6
Unknown	124.1*	...	96.1*	...	66.5*	...	85.9*	...	65.1*	...
Missing	93.7*	...	75.8*	...	71.5*	...	76.3*	...	47.4*	...
Region										
Northeast	127.4*	331.0	114.9*	351.1	87.8	262.3	86.0*	249.9	72.1*	262.7
South	90.0*	274.8	79.2*	269.4	69.1*	241.9	69.3*	220.0	53.6*	215.1
▶ Midwest	117.1	334.1	101.5	322.4	91.5	279.0	106.2	286.5	63.0	252.8
West	61.7*	245.1	54.2*	249.1	49.9*	215.5	64.4*	203.4	65.7*	208.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-5. Hospital outpatient visits by Medicare beneficiaries for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=91,640)		2003 (N=81,700)		2004 (N=48,040)		2005 (N=54,880)		2006 (N=63,780)		2007 (N=67,880)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	586.8	702.6	508.2	606.9	293.3	352.4	332.8	394.2	392.7	466.2	417.8	512.5
Under 65/65+												
< 65 Years	248.4*	248.4	217.7*	217.7	127.9*	127.9	145.0*	145.0	180.3*	180.3	164.3*	164.3
▶ 65+ Years	698.4	702.6	605.9	606.9	349.8	352.4	399.1	394.2	468.4	466.2	511.3	512.5
Age												
▶ 65-69	524.5		446.9		231.3		242.3		303.4		318.3	
70-74	698.3*		563.4*		281.4*		374.7*		382.4*		473.8*	
75-79	726.8*		683.9*		407.2*		456.0*		564.8*		603.9*	
80-84	837.2*		720.5*		452.5*		506.9*		603.1*		668.1*	
85-89	1,097*		947.2*		703.7*		674.5*		838.7*		859.3*	
90-94	942.7*		992.8*		657.8*		907.1*		953.8*		873.7*	
95-97	862.1**		726.9**		404.2**		902.2**		765.2**		653.0**	
98+	442.1**		348.7**		257.4**		210.7**		370.5**		161.6**	
Race/ethnicity												
▶ White	540.8	647.6	462.4	544.0	282.5	335.5	316.6	369.5	386.6	457.0	415.5	504.6
Black	697.8*	949.1	680.9*	979.0	311.1*	416.8	347.3*	468.9	332.7*	409.7	379.0*	517.6
Hispanic	988.6*	1,202	739.1*	952.6	349.2*	433.1	391.4*	534.2	478.9*	512.4	404.9*	514.5
Asian	592.5*	598.1	546.9*	658.3	300.2*	277.2	415.9*	456.5	620.2*	653.9	375.2*	431.5
Other	1,614*	2,185	1,372*	2,090	613.2*	914.1	767.7*	1,133	576.0*	806.7	649.7*	936.7
Unknown	1,749**	...	801.3**	...	219.1**	...	779.4**	...	1,408**	...	1,315**	...
Region												
▶ Northeast	695.2	817.2	558.9	630.4	345.9	391.8	348.3	388.6	522.9	612.6	609.4	751.6
South	393.4*	459.6	332.9*	394.6	162.1*	192.5	196.0*	229.6	206.0*	241.5	206.0*	235.0
Midwest	723.9*	866.2	661.5*	797.2	434.9*	518.8	500.5*	599.0	540.3*	639.1	559.9*	696.0
West	703.7*	867.1	626.0*	771.8	328.3*	418.8	381.8*	460.2	458.5*	542.0	482.9*	599.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-6. Hospital outpatient visits by privately insured individuals for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=10,819)		2003 (N=10,343)		2004 (N=7,618)		2005 (N=10,469)		2006 (N=9,725)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	252.6	634.1	215.9	579.3	155.7	421.1	201.5	505.7	190.9	574.8
Age										
40-44	98.5*		90.3*		68.1*		80.1*		83.9*	
45-54	255.1*		217.3*		142.1*		169.5*		174.9*	
55-64	866.0*		657.2*		428.5*		535.8*		554.7*	
▶ 65-74	1,270		1,171		834.7		952.3		1,099	
75-84	1,586*		1,601*		1,207*		1,614*		1,759*	
85+	...		1,591*		1,861*		1,668*		3,059*	
Race/ethnicity										
▶ White	310.3	705.8	257.3	642.2	170.5	459.6	225.1	574.9	206.1	576.6
Black	327.7*	575.2	273.0*	526.7	153.7*	322.8	183.7*	353.6	174.8*	479.5
Hispanic	198.3*	562.8	180.8*	586.3	90.9*	293.8	99.5*	289.8	102.6*	399.8
Asian	176.2*	546.8	104.0*	347.5	57.2*	191.5	105.9*	366.4	92.4*	369.0
Other	281.1*	746.7	273.0*	781.7	125.5*	354.5	192.3*	506.9	200.6*	502.1
Unknown	334.1*	...	265.1*	...	161.5*	...	200.5*	...	202.7*	...
Missing	206.6*	...	165.1*	...	146.1*	...	174.7*	...	197.1*	...
Region										
Northeast	365.6*	855.4	307.8*	778.2	202.9*	491.0	233.5*	541.9	264.8*	675.8
South	198.9*	510.8	168.6*	463.6	127.0*	354.2	160.0*	403.9	149.3*	484.7
▶ Midwest	290.8	696.9	259.5	653.7	187.6	476.5	253.6	609.9	224.3	726.6
West	236.5*	706.9	188.6*	610.4	137.1*	461.1	195.3*	511.3	197.5*	528.6
Missing	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-7. Nationally representative hospital outpatient visits for benign prostatic hyperplasia listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	553,614
Age	
40-44	21,660
45-54	102,895
55-64	159,106
65-74	143,215
75-84	71,105
85+	55,633
Race/ethnicity	
White	392,626
Black	148,561
Hispanic	9,426
Other	3,001
Region	
Northeast	106,272
South	236,747
Midwest	141,633
West	68,962

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 2-8. Ambulatory surgery center visits by Medicare beneficiaries for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=34,580)		2003 (N=33,440)		2004 (N=29,140)		2005 (N=35,880)		2006 (N=37,900)		2007 (N=38,840)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	329.4	411.9	310.3	389.0	264.7	334.4	319.4	400.8	333.4	426.8	336.9	431.5
Age												
▶ 65-69	302.3		260.8		207.0		270.5		277.3		305.8	
70-74	389.2*		340.7*		329.0*		368.7*		410.3*		429.0*	
75-79	468.5*		489.6*		392.7*		493.8*		527.6*		510.9*	
80-84	557.3*		537.6*		456.1*		508.1*		522.1*		529.4*	
85-89	499.4*		502.5*		475.0*		565.9*		621.0*		545.1*	
90-94	454.2*		496.4*		430.7*		551.8*		540.7*		528.6*	
95-97	431.0**		363.4**		151.6**		427.4**		382.6**		279.9**	
98+	...		43.6**		85.8**		84.3**		123.5**		40.4**	
Race/ethnicity												
▶ White	340.9	418.5	325.9	402.2	279.1	345.3	335.1	411.6	352.6	441.4	355.5	444.1
Black	274.6*	414.8	232.5*	346.0	199.4*	312.2	247.4*	379.4	226.0*	376.4	272.7*	443.3
Hispanic	206.8*	312.6	217.4*	272.2	108.4**	121.4	186.9*	283.6	167.6**	228.7	158.4**	264.7
Asian	131.7**	135.9	61.7**	61.3	83.4**	144.5	196.2**	233.9	193.8**	242.7	139.8**	149.8
Other	307.2**	434.9	279.7*	401.3	253.9*	381.4	221.0*	324.0	288.0*	360.6	220.1*	311.6
Unknown	912.5**	...	480.8**	...	365.2**	...	623.5**	...	911.4**	...	525.9**	...
Region												
▶ Northeast	300.4	371.8	314.7	398.5	245.0	306.4	281.1	345.2	309.1	389.2	293.2	377.4
South	380.2*	488.4	343.5*	435.2	286.3*	364.1	336.2*	429.6	337.0*	440.6	353.2*	458.7
Midwest	347.1*	413.0	323.5*	392.9	295.0*	367.6	367.6*	443.4	399.5*	498.1	407.1*	504.0
West	219.7*	281.1	211.5*	268.0	194.9*	248.4	256.8*	338.3	260.5*	337.8	254.5*	329.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-9. Ambulatory surgery center visits by privately insured individuals for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=693)		2003 (N=690)		2004 (N=539)		2005 (N=805)		2006 (N=875)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.2	40.6	14.4	37.7	11.0	29.1	15.5	38.5	17.2	50.8
Age										
40-44	7.1*		7.4*		5.2*		4.1**		7.8*	
45-54	16.2*		14.2*		9.4*		12.8*		13.8*	
55-64	53.7*		46.6*		34.0*		44.2*		53.5*	
▶ 65-74	92.8		71.0		54.9		80.3		114.0	
75-84	87.3*		106.7*		98.2*		115.3*		152.6*	
85+	...		68.6**		38.9**		88.7**		144.4**	
Race/ethnicity										
▶ White	18.7	42.5	17.3	43.5	12.3	32.2	16.8	42.2	19.9	57.5
Black	12.9**	66.4	27.2*	50.5	16.4*	34.4	14.1**	27.0	16.1*	55.2
Hispanic	11.2**	28.7	10.0**	26.6	6.1**	17.8	7.9*	25.2	10.2*	29.8
Asian	4.4**	9.8	7.1**	39.2	2.9**	23.7	4.6**	45.1	4.4**	13.3
Other	14.1**	†	3.3**	15.8	...	...	6.3**	26.8	14.3**	49.7
Unknown	17.9**	...	17.0*	...	11.3*	...	16.5*	...	19.1*	...
Missing	15.1*	...	10.9*	...	8.9*	...	16.8*	...	10.2*	...
Region										
Northeast	16.0	37.2	18.6*	47.5	11.2	29.7	11.5*	27.2	15.0	44.6
South	19.3*	49.1	18.1*	46.6	12.6	36.2	16.4*	43.0	20.4*	64.9
▶ Midwest	15.3	36.7	11.0	27.0	11.3	26.0	18.9	43.4	16.1	41.9
West	8.0*	27.1	6.9*	28.3	4.9*	16.1	8.6*	24.0	11.5*	35.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-10. Nationally representative ambulatory surgery center visits for benign prostatic hyperplasia listed as primary diagnosis, count, rate^a

	Count	Rate
Total	88,942	83.6
Age		
40-44	558	5.0*
45-54	3,206	15.3*
55-64	15,470	104.0*
▶ 65-74	33,184	389.2
75-84	30,209	566.8*
85+	6,315	475.1*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 2-11. Physician office visits by Medicare beneficiaries for benign prostatic hyperplasia listed as any diagnosis, rate^a, age-adjusted rate^b

	2002 (N=4,174,580)		2003 (N=4,091,000)		2004 (N=2,685,340)		2005 (N=2,805,040)		2006 (N=3,053,200)		2007 (N=3,121,180)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	26,731	34,059	25,449	32,547	16,393	20,943	17,008	21,858	18,797	24,145	19,209	24,873
Under 65/65+												
< 65 Years	5,342*	5,342	5,167*	5,167	3,567*	3,567	3,796*	3,796	4,241*	4,241	4,334*	4,334
▶ 65+ Years	33,784	34,059	32,265	32,547	20,781	20,943	21,673	21,858	23,990	24,145	24,701	24,873
Age												
▶ 65-69	23,524		21,989		13,329		13,678		15,236		15,519	
70-74	33,235*		31,332*		19,357*		20,258*		22,402*		23,144*	
75-79	40,676*		38,716*		25,067*		26,552*		29,396*		30,163*	
80-84	43,688*		42,660*		28,911*		29,594*		32,721*		34,082*	
85-89	42,987*		42,999*		30,177*		32,234*		34,835*		36,027*	
90-94	38,855*		38,558*		29,219*		31,257*		34,938*		35,822*	
95-97	29,526*		31,983*		24,305*		24,359*		27,451*		30,597*	
98+	6,322*		6,364*		6,178*		5,773*		8,316*		5,616*	
Race/ethnicity												
▶ White	27,773	34,708	26,324	32,994	16,960	21,232	17,702	22,273	19,629	24,658	20,061	25,388
Black	16,240*	24,505	16,189*	24,790	10,993*	17,023	11,331*	17,771	12,539*	19,757	12,692*	20,341
Hispanic	19,888*	24,194	20,342*	26,300	11,354*	14,734	11,875*	15,655	12,750*	17,019	13,261*	17,722
Asian	32,333*	33,474	30,176*	31,663	18,569*	19,358	18,622*	20,002	19,940*	21,950	21,224*	23,682
Other	33,260*	50,358	32,442*	49,272	20,389*	29,610	17,796*	25,476	17,891*	25,901	17,735*	25,932
Unknown	67,681*	...	62,019*	...	38,495*	...	36,477*	...	39,602*	...	43,383*	...
Region												
▶ Northeast	31,945	40,660	31,405	40,105	21,685	27,737	22,156	28,459	24,400	31,288	24,985	32,320
South	26,702*	34,306	25,351*	32,696	15,740*	20,186	16,734*	21,615	18,870*	24,406	19,559*	25,459
Midwest	22,792*	28,410	21,002*	26,265	13,517*	16,868	14,195*	17,815	15,489*	19,359	15,356*	19,362
West	26,691*	34,544	25,508*	33,129	16,196*	21,099	16,074*	21,095	17,322*	22,743	17,649*	23,382

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-12. Physician office visits by privately insured individuals for benign prostatic hyperplasia listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=202,992)		2003 (N=199,879)		2004 (N=126,916)		2005 (N=146,343)		2006 (N=138,178)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4,739	11,943	4,173	11,042	2,594	6,844	2,816	6,930	2,713	7,690
Age										
40-44	1,901*		1,734*		1,286*		1,301*		1,463*	
45-54	5,165*		4,415*		2,594*		2,617*		2,917*	
55-64	15,104*		12,782*		7,088*		7,222*		7,767*	
▶ 65-74	25,078		22,270		13,769		14,015		15,314	
75-84	29,724*		29,995*		20,325*		20,336*		23,595*	
85+	...		25,590*		18,398*		18,809*		20,432*	
Race/ethnicity										
▶ White	5,844	13,515	5,062	12,646	2,714	7,112	2,934	7,207	2,965	8,156
Black	6,280*	11,040	5,606*	10,911	2,881*	6,078	3,060*	5,944	2,685*	6,885
Hispanic	3,766*	10,512	3,294*	9,936	1,799*	5,485	1,806*	5,353	1,816*	5,819
Asian	3,762*	13,367	3,659*	13,018	2,299*	8,286	2,198*	7,549	1,797*	6,612
Other	5,225*	13,475	4,365*	11,938	2,573*	7,078	2,526*	6,676	2,428*	6,338
Unknown	5,797*	...	4,925*	...	2,723*	...	2,948*	...	2,872*	...
Missing	3,874*	...	3,036*	...	2,439*	...	2,900*	...	2,179*	...
Region										
Northeast	5,698*	13,558	5,026*	12,721	3,667*	9,165	3,604*	8,711	3,605*	9,936
South	4,773*	11,905	4,240*	10,933	2,485*	6,594	2,726	6,913	2,719*	7,927
▶ Midwest	4,732	11,631	4,140	10,737	2,518	6,371	2,727	6,367	2,310	6,614
West	3,878*	11,590	3,312*	10,900	2,223*	6,851	2,683*	6,989	2,814*	7,421

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-13. Nationally representative physician office visits for benign prostatic hyperplasia listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	22,828,855
Age	
40-44	468,040
45-54	2,130,417
55-64	5,115,891
65-74	6,449,945
75-84	6,880,298
85+	1,784,264
Race/ethnicity	
White	19,966,634
Black	1,645,359
Hispanic	1,216,862
Region	
Northeast	5,410,737
South	9,208,768
Midwest	4,381,648
West	3,827,702

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 2-14. Emergency room visits by Medicare beneficiaries for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=83,020)		2003 (N=84,960)		2004 (N=87,340)		2005 (N=88,120)		2006 (N=83,360)		2007 (N=82,500)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	531.6	651.4	528.5	657.2	533.2	653.1	534.3	666.2	513.2	630.3	507.7	638.0
Under 65/65+												
< 65 Years	158.5*	158.5	148.9*	148.9	166.2*	166.2	154.3*	154.3	164.8*	164.8	148.4*	148.4
▶ 65+ Years	654.6	651.4	656.1	657.2	658.7	653.1	668.5	666.2	637.5	630.3	640.4	638.0
Age												
▶ 65-69	381.9		362.1		381.9		388.1		332.5		362.2	
70-74	580.5*		565.3*		560.1*		590.4*		597.4*		553.8*	
75-79	744.0*		773.0*		807.1*		792.1*		758.1*		716.0*	
80-84	942.5*		1,010*		902.5*		925.7*		906.5*		1,007*	
85-89	1,141*		1,139*		1,128*		1,172*		1,054*		1,093*	
90-94	1,431*		1,294*		1,425*		1,338*		1,337*		1,219*	
95-97	1,185**		1,038**		1,769*		1,519*		1,435*		1,166**	
98+	442.1**		218.0**		429.0**		337.1**		699.9**		363.6**	
Race/ethnicity												
▶ White	528.7	641.4	527.7	644.4	532.3	638.1	539.2	661.8	534.4	642.7	518.6	637.3
Black	567.8*	799.3	557.6*	862.6	555.7*	857.5	531.0*	818.2	375.9*	578.0	454.6*	728.5
Hispanic	471.7*	583.4	441.0*	605.4	499.7*	635.5	572.4*	714.4	425.0*	506.6	475.3*	669.6
Asian	451.4*	426.8	335.2*	297.7	383.6*	361.4	431.6*	454.8	379.9*	388.5	412.0*	424.5
Other	550.0*	829.4	604.9*	899.5	545.0*	767.8	348.9*	475.1	412.3*	584.1	418.8*	586.4
Unknown	1,065**	...	1,122**	...	1,242**	...	1,091**	...	1,574**	...	701.1**	...
Region												
▶ Northeast	554.3	693.4	536.1	679.4	532.1	653.9	528.5	670.2	522.2	633.6	481.2	597.6
South	550.9*	677.7	542.1*	679.4	552.2*	680.1	545.0*	686.5	506.5*	615.3	504.9*	629.7
Midwest	499.4*	593.6	524.0*	633.1	537.2*	636.8	548.3*	663.2	533.8*	653.4	562.5*	696.9
West	509.0*	631.1	496.0*	617.6	486.2*	621.1	497.9*	623.2	490.1*	622.8	468.8*	611.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-15. Emergency room visits by privately insured individuals for benign prostatic hyperplasia listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,131)		2003 (N=2,786)		2004 (N=1,855)		2005 (N=1,790)		2006 (N=763)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	49.7	149.0	58.2	175.2	37.9	125.7	34.4	107.7	15.0	37.4
Age										
40-44	18.4*		16.3*		7.6*		5.0*		5.3*	
45-54	30.9*		42.2*		23.2*		12.0*		12.1*	
55-64	103.2*		159.7*		69.0*		51.6*		58.1*	
▶ 65-74	349.4		361.7		256.1		236.9		88.2	
75-84	674.1*		607.0*		566.5*		502.7*		64.6*	
85+	...		818.5*		708.3*		637.0*		46.4**	
Race/ethnicity										
▶ White	53.9	145.4	53.0	156.5	32.7	114.1	28.7	94.9	7.5	18.4
Black	83.4*	147.4	125.7*	250.9	77.9*	181.3	59.6*	122.7	24.2*	51.0
Hispanic	39.7*	130.9	87.4*	296.1	37.1*	136.9	26.4*	97.9	28.2*	82.9
Asian	23.3**	149.3	24.2**	95.6	22.9*	139.5	17.0**	100.9	3.8**	54.2
Other	23.4**	100.3	35.8**	181.2	13.7**	71.7	20.9**	203.7	6.1**	49.3
Unknown	37.1*	...	62.6*	...	36.8*	...	28.9*	...	11.0*	...
Missing	48.2*	...	57.4*	...	55.1*	...	70.8*	...	49.0*	...
Region										
Northeast	37.8*	97.8	36.9*	102.8	21.0*	65.0	19.6*	65.0	2.3**	7.5
South	46.9*	143.3	72.0	200.3	41.1*	135.0	36.6*	118.5	23.4*	53.8
▶ Midwest	71.9	202.4	67.9	208.8	54.4	166.6	52.0	147.0	13.8	47.1
West	11.5*	28.8	6.3*	18.1	3.1**	16.5	2.4**	7.3	1.8**	4.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-16. Nationally representative emergency room visits for benign prostatic hyperplasia listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	1,192,311
Age	
40-44	28,949
45-54	105,317
55-64	158,417
65-74	407,081
75-84	334,856
85+	157,691
Race/ethnicity	
White	1,019,534
Black	138,324
Hispanic	29,273
Asian	5,180
Region	
Northeast	275,322
South	474,699
Midwest	233,403
West	208,887

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 2-17. Use of inpatient surgical procedures to treat symptoms of benign prostatic hyperplasia, count

Procedure	2002	2003	2004	2005	2006	2007
Laser prostatectomy	1,622	1,815	2,694	5,616	6,980	7,049
Open prostatectomy	4,538	4,649	3,430	3,311	3,025	3,214
TUMT	†	†	†	†	†	†
TUNA	†	†	190	†	†	158
TURP	101,436	84,221	64,122	59,090	55,197	50,246

TUMT: Transurethral microwave therapy.

TUNA: Transurethral needle ablation.

TURP: Transurethral resection of the prostate.

† Figure does not meet standard for reliability or precision.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 2-18. Surgical procedures among Medicare beneficiaries for symptomatic treatment of benign prostatic hyperplasia, count,^a percent^b

	2002		2003		2004		2005		2006		2007	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total	113,480	3.01%	112,760	3.26%	108,140	4.54%	124,720	5.08%	124,340	4.78%	120,000	4.58%
Open prostatectomy	3,220	0.09%	3,140	0.09%	2,640	0.11%	2,180	0.09%	1,740	0.07%	1,520	0.06%
Ambulatory Surgery Center	20	0.00%	0	0.00%	20	0.00%	0	0.00%	0	0.00%	0	0.00%
Hospital Outpatient	0	0.00%	60	0.00%	0	0.00%	0	0.00%	0	0.00%	20	0.00%
Inpatient	3,160	0.08%	3,080	0.09%	2,600	0.11%	2,140	0.09%	1,740	0.07%	1,480	0.06%
Physician Office	40	0.00%	0	0.00%	20	0.00%	40	0.00%	0	0.00%	20	0.00%
TUNA	7,120	0.19%	7,540	0.22%	7,280	0.31%	7,120	0.29%	6,080	0.23%	6,820	0.26%
Ambulatory Surgery Center	840	0.02%	600	0.02%	620	0.03%	380	0.02%	240	0.01%	180	0.01%
Hospital Outpatient	80	0.00%	100	0.00%	220	0.01%	60	0.00%	100	0.00%	120	0.00%
Inpatient	120	0.00%	80	0.00%	120	0.01%	120	0.00%	40	0.00%	140	0.01%
Physician Office	6,080	0.16%	6,760	0.20%	6,320	0.27%	6,560	0.27%	5,700	0.22%	6,380	0.24%
TURP	78,580	2.09%	70,420	2.03%	54,520	2.29%	53,420	2.17%	46,620	1.79%	44,240	1.69%
Ambulatory Surgery Center	12,040	0.32%	11,760	0.34%	9,780	0.41%	10,940	0.45%	10,140	0.39%	10,760	0.41%
Hospital Outpatient	1,660	0.04%	1,560	0.05%	1,100	0.05%	1,380	0.06%	1,240	0.05%	1,340	0.05%
Inpatient	63,180	1.68%	55,600	1.61%	42,640	1.79%	39,880	1.62%	34,240	1.32%	30,940	1.18%
Physician Office	1,700	0.05%	1,500	0.04%	1,000	0.04%	1,220	0.05%	1,000	0.04%	1,200	0.05%
Laser prostatectomy	7,460	0.20%	11,900	0.34%	21,680	0.91%	36,120	1.47%	41,860	1.61%	41,500	1.58%
Ambulatory Surgery Center	3,700	0.10%	5,400	0.16%	10,700	0.45%	20,420	0.83%	25,360	0.97%	25,840	0.99%
Hospital Outpatient	300	0.01%	460	0.01%	820	0.03%	2,300	0.09%	2,120	0.08%	2,320	0.09%
Inpatient	1,520	0.04%	1,780	0.05%	3,440	0.14%	4,860	0.20%	6,100	0.23%	6,500	0.25%
Physician Office	1,940	0.05%	4,260	0.12%	6,720	0.28%	8,540	0.35%	8,280	0.32%	6,840	0.26%
TUIP	1,480	0.04%	1,640	0.05%	1,720	0.07%	1,320	0.05%	1,340	0.05%	1,220	0.05%
Ambulatory Surgery Center	720	0.02%	960	0.03%	900	0.04%	840	0.03%	820	0.03%	780	0.03%
Hospital Outpatient	140	0.00%	80	0.00%	120	0.01%	100	0.00%	40	0.00%	120	0.00%
Inpatient	500	0.01%	520	0.02%	580	0.02%	260	0.01%	300	0.01%	220	0.01%
Physician Office	120	0.00%	80	0.00%	120	0.01%	120	0.00%	180	0.01%	100	0.00%
TUMT	15,620	0.41%	18,120	0.52%	20,300	0.85%	24,560	1.00%	26,700	1.03%	24,700	0.94%
Ambulatory Surgery Center	1,460	0.04%	580	0.02%	200	0.01%	140	0.01%	140	0.01%	200	0.01%
Hospital Outpatient	300	0.01%	300	0.01%	300	0.01%	200	0.01%	240	0.01%	180	0.01%
Inpatient	140	0.00%	80	0.00%	100	0.00%	80	0.00%	200	0.01%	160	0.01%
Physician Office	13,720	0.36%	17,160	0.50%	19,700	0.83%	24,140	0.98%	26,120	1.00%	24,160	0.92%

TUNA: Transurethral needle ablation.

TURP: Transurethral resection of the prostate.

TUIP: Transurethral incision of the prostate.

TUMT: Transurethral microwave therapy.

^aUnweighted counts multiplied by 20 to arrive at counts in table.^bPercentage of adult Medicare beneficiaries with a diagnosis of benign prostatic hyperplasia and/or lower urinary tract symptoms.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 2-19. Use of imaging tests in Medicare beneficiaries for evaluation of benign prostatic hyperplasia and/or lower urinary tract symptoms, count,^a percent^b

	2003		2004		2005		2006		2007	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total	47,040	1.36%	21,940	0.92%	22,060	0.90%	21,560	0.83%	20,120	0.77%
Intravenous pyelogram	6,840	0.20%	2,780	0.12%	1,800	0.07%	1,560	0.06%	840	0.03%
Ambulatory Surgery Center	560	0.02%	260	0.01%	160	0.01%	160	0.01%	60	0.00%
Hospital Outpatient	3,040	0.09%	960	0.04%	620	0.03%	600	0.02%	280	0.01%
Inpatient	420	0.01%	200	0.01%	120	0.00%	100	0.00%	80	0.00%
Physician Office	2,820	0.08%	1,360	0.06%	900	0.04%	700	0.03%	420	0.02%
Transrectal Ultrasound	24,020	0.69%	13,600	0.57%	15,000	0.61%	14,440	0.55%	13,920	0.53%
Ambulatory Surgery Center	1,840	0.05%	820	0.03%	860	0.04%	640	0.02%	680	0.03%
Hospital Outpatient	2,320	0.07%	500	0.02%	640	0.03%	460	0.02%	720	0.03%
Inpatient	600	0.02%	260	0.01%	560	0.02%	500	0.02%	320	0.01%
Physician Office	19,260	0.56%	12,020	0.50%	12,940	0.53%	12,840	0.49%	12,200	0.47%
CT scan abdomen/pelvis	16,180	0.47%	5,560	0.23%	5,260	0.21%	5,560	0.21%	5,360	0.20%
Ambulatory Surgery Center	600	0.02%	300	0.01%	420	0.02%	380	0.01%	300	0.01%
Hospital Outpatient	8,780	0.25%	2,340	0.10%	1,940	0.08%	2,060	0.08%	2,120	0.08%
Inpatient	2,320	0.07%	1,300	0.05%	1,040	0.04%	1,120	0.04%	1,060	0.04%
Physician Office	4,480	0.13%	1,620	0.07%	1,860	0.08%	2,000	0.08%	1,880	0.07%

^aUnweighted counts multiplied by 20 to arrive at counts in table.

^bPercentage of men with a diagnosis of benign prostatic hyperplasia who had each test.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2003-2007.

Table 2-20. Nationally representative inpatient stays for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,367)		2003 (N=4,564)		2004 (N=4,596)		2005 (N=4,141)		2006 (N=4,019)		2007 (N=3,559)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.3	8.8	4.4	7.4	4.4	7.8	3.9	6.8	3.8	6.5	3.3	5.7
Age												
40-44	0.5		0.7		0.9		0.8		0.6		0.6	
45-54	1.5		1.2		1.5		0.8		1.2		1.1	
55-64	5.9		5.3		5.2		4.4		3.7		3.2	
▶ 65-74	21.8		19.5		16.9		16.1		15.4		12.2	
75-84	31.4*		24.1*		30.4*		28.1*		25.2*		23.7*	
85+	51.0*		36.1*		40.4*		29.9*		35.9*		32.5*	
Race/ethnicity												
▶ White	3.9	6.6	3.8	5.9	3.9	6.3	3.8	6.0	3.3	5.3	2.9	4.6
Black	2.6*	4.9	2.3*	4.1	2.1*	4.1	1.5*	3.7	1.7*	3.9	1.7*	3.3
Hispanic	†	†	2.0*	4.9	1.4*	3.6	1.4*	3.5	2.1*	5.2	1.3*	3.2
Asian	1.3*	6.3	1.8*	8.0	2.1*	5.2	0.8*	3.6	1.6*	4.0	1.8*	4.4
Other	12.8*	33.8	4.8*	10.0	3.6*	10.1	4.9*	23.9	5.9*	14.3	3.3*	13.9
Region												
Northeast	8.2	12.7	6.8	10.3	6.7	11.1	6.8	11.2	5.4	8.9	5.3	8.7
South	4.9	8.2	3.9	6.5	4.2	7.2	3.6	6.3	3.8	6.6	2.8	4.7
▶ Midwest	5.0	8.7	4.1	7.1	4.0	7.2	3.1	5.3	3.7	6.3	3.1	5.3
West	3.6*	6.6	3.5*	6.1	3.3*	6.1	2.9*	5.3	2.5*	4.5	2.7*	5.0

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 males aged 40 and up, based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 2-21. Inpatient stays by Medicare beneficiaries for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,640)		2003 (N=1,960)		2004 (N=1,900)		2005 (N=1,640)		2006 (N=1,800)		2007 (N=1,660)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.9	20.0	12.2	15.1	11.6	14.7	9.9	12.0	11.1	14.1	10.2	12.4
Under 65/65+												
< 65 Years	6.2**	6.2	4.0**	4.0	2.9**	2.9	4.2**	4.2	2.8**	2.8	5.0**	5.0
▶ 65+ Years	20.4	20.0	15.0	15.1	14.6	14.7	12.0	12.0	14.0	14.1	12.1	12.4
Age												
▶ 65-69	13.3*		5.9*		5.2*		4.6*		7.8*		5.7*	
70-74	18.9**		11.0**		20.2*		13.2**		16.3**		8.3**	
75-79	24.5*		16.9**		13.7**		13.1**		14.4**		11.3**	
80-84	30.8**		21.0**		22.9**		22.6**		20.5**		20.9**	
85-89	19.1**		47.4**		22.9**		15.2**		19.8**		38.1**	
90-94	42.8**		40.7**		15.7**		22.7**		22.5**		22.0**	
95-97	53.9**		51.9**		50.5**		0.0**		0.0**		0.0**	
98+	0.0**		...		0.0**		...		...		...
Race/ethnicity												
▶ White	17.8	20.7	12.8	15.4	12.4	15.4	10.5	12.6	11.8	14.6	11.4	13.8
Black	9.3**	11.4	6.4**	11.7	6.3**	8.4	5.0**	7.0	3.8**	4.0	5.1**	7.7
Hispanic	32.3**	55.8	6.2**	20.6	6.0**	11.3	11.7**	10.2	18.0**	33.9	0.0**	0.0
Asian	9.4**	24.4	17.6**	30.5	0.0**	0.0	0.0**	...	7.8**	42.1	0.0**	0.0
Other	7.1**	23.8	19.5**	72.5	18.6**	29.9	11.6**	16.2	11.3**	17.9	5.4**	0.0
Unknown	...	...	...	...	0.0**	...	77.9**	...	0.0**	...	...	...
Region												
▶ Northeast	21.9	27.6	15.0*	15.8	13.6*	16.1	11.6*	14.5	17.8*	21.2	13.8*	18.9
South	14.2*	15.2	10.6*	13.6	11.3*	14.6	9.1**	10.7	10.5*	13.6	8.6**	10.7
Midwest	18.4*	23.1	11.0**	14.0	11.4**	14.2	9.4**	11.1	8.0**	10.6	10.2**	10.1
West	15.1**	18.1	14.4**	19.4	10.5**	13.7	10.9**	13.4	9.6**	13.0	10.1**	12.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-22. Inpatient stays by privately insured individuals for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=136)		2003 (N=169)		2004 (N=152)		2005 (N=157)		2006 (N=135)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.2	9.4	3.5	11.0	3.1	9.6	3.0	8.5	2.7	8.0
Age										
40-44	0.9**		0.8**		0.9**		0.9**		0.8**	
45-54	1.5**		2.5**		2.9*		2.5**		2.6**	
55-64	8.2*		8.2*		5.2*		4.9*		7.7*	
▶ 65-74	24.4		28.2		21.6		18.7		15.9*	
75-84	36.4*		39.2*		40.2*		36.8*		25.1**	
85+	...		36.6**		34.5**		26.3**		36.1**	
Race/ethnicity										
▶ White	4.2	11.1	4.0	11.4	2.8	8.9	3.6	10.6	3.2	9.4
Black	5.9**	26.5	6.4**	33.7	4.4**	19.2	1.0**	5.8	1.1**	8.8
Hispanic	1.8**	8.2	4.2**	20.6	2.6**	11.4	1.6**	9.4	1.8**	10.2
Asian	4.4**	33.0	2.0**	8.0	2.1**	21.7	1.3**	39.9	1.9**	29.6
Other	...	...	3.3**	303.0	6.8**	184.1	...	...	...	...
Unknown	5.6**	...	4.9**	...	3.6**	...	1.8**	...	1.8**	...
Missing	2.2*	...	2.5*	...	4.1*	...	2.8**	...	1.8**	...
Region										
Northeast	5.5*	13.8	4.7*	17.8	4.5*	12.1	5.2*	18.9	4.3*	14.4
South	2.1*	6.4	3.2	9.9	2.8	9.6	2.7	8.3	2.1	8.0
▶ Midwest	3.9	11.2	3.7	11.2	3.1	10.4	3.1	7.8	2.9	8.1
West	2.7**	10.6	3.1**	10.8	3.1**	12.8	1.9**	6.7	2.4**	6.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-23. Hospital outpatient visits by Medicare beneficiaries for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=480)		2003 (N=560)		2004 (N=520)		2005 (N=340)		2006 (N=820)		2007 (N=640)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.1*	3.5	3.5*	4.1	3.2*	2.4	2.1*	1.5	5.0	6.3	3.9	4.9
Under 65/65+												
< 65 Years	2.6**	2.6	2.5**	2.5	5.7**	5.7	3.3**	3.3	0.9**	0.9	1.8**	1.8
▶ 65+ Years	3.2*	3.5	3.8*	4.1	2.3*	2.4	1.6*	1.5	6.5	6.3	4.7*	4.9
Age												
▶ 65-69	2.2*		1.6*		1.0*		1.0*		9.4*		5.2*	
70-74	2.6**		1.9**		2.6**		0.0**		3.4**		2.8**	
75-79	4.1**		5.6**		2.4**		0.0**		5.9**		6.1**	
80-84	2.6**		7.4**		4.8**		8.3**		6.0**		6.1**	
85-89	10.9**		10.5**		2.5**		0.0**		4.9**		4.8**	
90-94	0.0**		0.0**		0.0**		7.6**		15.0**		0.0**	
Race/ethnicity												
▶ White	3.2*	3.7	2.9*	3.6	2.9*	2.0	1.9*	1.0	4.5	5.7	4.2*	5.2
Black	2.7**	0.0	5.1**	4.1	3.8**	4.8	2.5**	9.0	3.8**	19.0	2.6**	3.0
Hispanic	0.0**	0.0	18.6**	158.7	12.0**	24.4	0.0**	0.0	18.0**	57.1	0.0**	0.0
Asian	...	...	...	...	...	...	7.8**	65.0	7.8**	65.7	...	...
Other	7.1**	28.1	6.5**	38.6	6.2**	72.6	5.8**	19.7	16.9**	57.5	0.0**	0.0
Unknown	...	...	...	...	...	...	...	...	0.0**	...	87.6**	...
Region												
▶ Northeast	3.3*	3.1	11.1*	13.9	8.4*	3.5	2.6*	0.9	9.9*	12.6	5.9*	6.8
South	4.0**	4.8	1.3**	1.8	2.8**	3.0	1.3**	0.9	3.8**	5.4	2.5**	2.7
Midwest	2.6**	2.4	1.0**	1.3	1.5**	2.2	2.0**	2.2	2.0**	2.2	3.6**	5.3
West	1.5**	2.0	3.6**	2.9	0.7**	0.0	3.4**	2.8	6.9**	7.8	5.4**	7.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-24. Hospital outpatient visits by privately insured individuals for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=488)		2003 (N=557)		2004 (N=534)		2005 (N=624)		2006 (N=549)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.4	27.8	11.6	31.3	10.9	30.3	12.0	29.6	10.8	32.5
Age										
40-44	9.3*		5.9*		4.0**		6.6*		4.2**	
45-54	10.5*		11.3*		9.6*		10.8*		10.3*	
55-64	37.3*		32.2*		27.8*		30.9*		31.3*	
▶ 65-74	59.5		80.3		74.4		59.4		68.6	
75-84	58.2*		76.0*		99.3*		95.4*		111.3*	
85+	...		50.3**		38.9**		42.7**		77.4**	
Race/ethnicity										
▶ White	13.6	30.2	15.5	39.7	12.6	35.2	13.4	33.2	11.9	33.1
Black	8.2**	19.9	7.2**	19.1	9.3**	51.5	6.1**	16.1	13.4**	41.0
Hispanic	8.9**	25.4	9.2**	27.4	4.9**	16.5	5.3**	17.3	6.4**	24.6
Asian	1.5**	18.0	5.0**	25.6	5.0**	18.0	5.2**	21.4	3.2**	23.4
Other	...	...	9.8**	84.3	13.7**	57.3	14.6**	54.3	18.4**	64.2
Unknown	20.4*	...	14.8*	...	8.7**	...	5.9**	...	11.3*	...
Missing	9.8*	...	7.5*	...	9.5*	...	15.5*	...	8.3*	...
Region										
Northeast	13.3	32.1	14.0	36.5	13.1	33.8	12.3	31.8	14.9*	38.6
South	11.9	29.3	11.1	30.8	10.8	29.9	11.9	31.3	9.3*	29.4
▶ Midwest	10.6	25.2	11.6	29.5	11.4	30.3	12.2	27.9	11.7	36.0
West	10.2*	27.0	11.6*	34.9	8.3*	29.4	11.7*	27.9	10.4*	30.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-25. Ambulatory surgery center visits by Medicare beneficiaries for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,300)		2003 (N=4,680)		2004 (N=4,600)		2005 (N=4,560)		2006 (N=4,940)		2007 (N=4,160)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	35.7	44.6	36.7	45.3	37.0	46.0	34.1	42.0	39.4	48.6	34.3	43.1
Age												
▶ 65-69	30.4		30.4		29.0		27.2		31.2		39.1	
70-74	41.7*		34.4*		50.3*		42.2*		53.1*		40.7*	
75-79	52.3*		54.6*		49.8*		50.1*		53.2*		40.8*	
80-84	74.5*		75.4*		66.4*		61.9*		59.2*		57.7*	
85-89	35.5**		57.9**		53.3**		42.9**		71.7**		45.2**	
90-94	34.3**		48.8**		39.2**		15.1**		67.6**		44.1**	
95-97	...		...		...		0.0**		...		...
Race/ethnicity												
▶ White	39.5	47.6	39.9	48.5	40.7	49.7	36.8	43.9	43.1	51.9	36.6	44.6
Black	13.3**	25.5	20.6**	32.5	12.5**	21.8	18.7**	32.0	12.7**	24.9	23.0**	48.7
Hispanic	0.0**	0.0	12.4**	44.5	12.0**	43.2	23.4**	55.7	29.9**	51.7	23.5**	69.6
Asian	0.0**	0.0	26.5**	72.8	16.7**	92.9	23.5**	60.3	31.0**	55.4	14.7**	27.4
Other	35.7**	61.8	6.5**	22.3	43.4**	45.6	17.4**	39.4	28.2**	18.8	21.5**	33.6
Unknown	152.1**	...	80.1**	...	0.0**	...	...	...	82.9**	...	87.6**	...
Region												
▶ Northeast	41.2	51.7	46.4	57.2	43.3	52.1	42.6	54.2	49.3	61.1	35.5	43.9
South	35.0*	44.5	33.0*	39.8	32.6*	41.1	29.1*	35.7	34.9*	44.1	33.6*	43.9
Midwest	37.8*	45.5	42.5*	54.7	44.5*	55.6	38.9*	47.3	43.1*	53.6	40.2*	49.5
West	28.0*	35.5	26.0*	29.2	29.3*	35.4	29.2*	35.0	33.7*	38.1	26.9*	31.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-26. Ambulatory surgery center visits by privately insured individuals for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=44)		2003 (N=73)		2004 (N=66)		2005 (N=92)		2006 (N=78)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.0	2.8	1.5	3.9	1.3	3.1	1.8	4.1	1.5	4.4
Age										
40-44	0.5**		0.6**		0.3**		0.5**		0.8**	
45-54	0.9**		2.1**		1.4**		1.3**		1.2**	
55-64	2.6**		4.3*		5.2		5.9*		5.6	
▶ 65-74	7.1*		7.0*		6.2*		10.4*		4.3*	
75-84	8.3**		11.0**		4.7**		7.6**		18.0**	
85+	...		4.6**		4.3**		6.6**		15.5**	
Race/Ethnicity										
▶ White	1.5*	3.9	1.7	4.6	1.5	3.4	2.0	4.6	1.6	4.5
Black	...	...	3.2**	9.3	1.6**	9.7	1.0**	3.1	1.1**	3.2
Hispanic	...	...	1.1**	3.1	0.3**	108.7	0.5**	1.9	1.6**	6.2
Asian	1.5**	11.5	...	...	...	...	...	...	...	...
Unknown	1.9*	...	2.2**	...	1.3**	...	1.8**	...	2.1**	...
Missing	0.7**	...	1.2**	...	1.8**	...	2.4**	...	1.7**	...
Region										
Northeast	1.5*	9.7	3.0**	9.6	0.9*	3.1	1.6*	8.7	2.3**	7.6
South	0.9*	2.4	1.8*	4.6	1.7	4.2	2.1*	5.5	1.5	4.2
▶ Midwest	1.0*	3.3	0.7*	1.6	1.3*	3.7	1.3*	3.3	1.2*	3.2
West	1.3**	2.7	1.4**	4.6	0.8**	2.7	1.9**	6.2	1.5**	4.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-27. Nationally representative ambulatory surgery center visits for bladder stones listed as primary diagnosis, count, rate^a

	Count	Rate
Total	14,580	6.6
Age		
45-54	138	0.3*
55-64	4,662	15.0
▶ 65-74	5,620	30.3
75-84	3,216	24.8*
75-84	944	23.7*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 males aged 40 and up, based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 2-28. Physician office visits by Medicare beneficiaries for bladder stones listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=21,200)		2003 (N=23,520)		2004 (N=24,340)		2005 (N=26,660)		2006 (N=29,860)		2007 (N=29,420)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	135.7	169.5	146.3	185.2	148.6	188.7	161.7	206.3	183.8	238.1	181.1	235.7
Under 65/65+												
< 65 Years	34.1*	34.1	46.5*	46.5	45.5*	45.5	41.8*	41.8	47.3*	47.3	41.1*	41.1
▶ 65+ Years	169.3	169.5	179.9	185.2	183.8	188.7	204.0	206.3	232.5	238.1	232.7	235.7
Age												
▶ 65-69	110.5		114.1		109.2		116.5		141.0		150.3	
70-74	159.4*		141.5*		192.6*		203.8*		228.6*		186.9*	
75-79	199.5*		250.4*		211.2*		258.0*		275.2*		290.2*	
80-84	258.1*		292.9*		299.2*		277.2*		331.2*		358.6*	
85-89	193.8*		228.9*		231.2*		300.6*		378.5*		349.9*	
90-94	265.7*		105.8*†		94.0*†		264.6*		225.3*		345.1*	
95-97	107.8*†		51.9*†		101.1*†		284.9*†		95.6*†		93.3*†	
Race/ethnicity												
▶ White	145.9	178.8	157.5	196.3	158.7	196.6	173.6	216.5	195.8	246.8	196.8	249.4
Black	66.3*	97.6	73.2*	105.2	64.0*	111.3	80.0*	123.9	86.4*	137.9	79.4*	142.3
Hispanic	58.2*†	87.4	111.8*†	181.7	102.3*†	108.0	116.8*†	241.8	155.6*†	227.3	88.0*†	136.2
Asian	65.8*†	146.8	70.6*†	84.4	66.7*†	120.9	86.3*†	157.5	232.6*	261.0	161.8*†	182.8
Other	150.0*†	230.2	97.6*†	151.9	235.4*	337.9	127.9*†	214.4	135.5*†	168.0	128.9*†	173.7
Unknown	304.2*†	...	320.5*†	...	219.1*†	...	545.6*†	...	331.4*†	...	175.3*†	...
Region												
▶ Northeast	186.8	238.6	205.7	264.1	206.9	269.6	238.4	306.1	278.9	363.4	261.6	351.8
South	132.1*	163.2	134.6*	166.0	142.4*	177.2	141.5*	179.5	171.4*	220.5	169.5*	219.2
Midwest	107.4*	133.7	125.5*	160.0	117.6*	150.3	130.4*	164.7	126.3*	162.4	146.7*	185.9
West	128.0*	160.7	137.2*	176.0	143.2*	179.3	167.8*	217.8	190.4*	246.8	168.6*	220.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

†Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 2-29. Physician office visits by privately insured individuals for bladder stones listed as any diagnosis, rate^a, age-adjusted rate^b

	2002 (N=872)		2003 (N=1,024)		2004 (N=1,020)		2005 (N=1,261)		2006 (N=1,178)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	20.4	55.7	21.4	60.6	20.8	61.0	24.3	66.0	23.1	71.6
Age										
40-44	8.7*		8.0*		7.8*		8.3*		8.9*	
45-54	15.4*		18.5*		17.1*		15.9*		20.2*	
55-64	56.7*		59.3*		48.9*		55.4*		68.0*	
▶ 65-74	141.1		145.3		134.5		141.0		144.0	
75-84	170.4*		180.3*		243.6*		265.5*		260.3*	
85+	...		146.3*		108.0*		154.3*		211.5*	
Race/ethnicity										
▶ White	23.9	59.8	25.6	70.4	22.0	65.5	25.8	73.0	24.4	72.8
Black	20.0**	46.1	27.2*	53.9	16.9*	47.3	12.6**	30.8	16.1*	47.7
Hispanic	19.5*	61.3	24.9*	84.4	15.9*	50.8	11.6*	37.9	15.8*	56.5
Asian	18.9**	69.5	14.1**	74.0	19.3**	65.4	19.0**	65.5	23.4*	102.6
Other	14.1**	69.0	13.0**	143.2	22.8**	98.0	16.7**	82.7	30.7**	101.9
Unknown	40.1*	...	27.7*	...	22.9*	...	18.3*	...	28.4*	...
Missing	16.3*	...	15.0*	...	18.9*	...	33.2*	...	20.5*	...
Region										
Northeast	42.2*	105.7	30.0*	81.1	36.2*	100.4	35.1*	94.6	33.5*	98.0
South	20.2*	55.8	21.5*	62.2	20.7*	61.7	22.7	68.0	21.0	65.5
▶ Midwest	15.3	41.3	18.4	50.2	17.3	46.3	21.9	54.6	22.0	70.1
West	16.2*	39.2	20.9*	63.0	16.7*	66.3	25.9*	69.0	24.0*	69.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 2-30. Emergency room visits by privately insured individuals for bladder stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=52)		2003 (N=64)		2004 (N=34)		2005 (N=22)		2006 (N=19)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.2	2.5	1.3	2.7	0.7	1.8	0.4*	1.1	0.4*	0.8
Age										
40-44	2.7*		1.8**		0.9**		0.3**		0.2*	
45-54	1.7**		2.1**		0.8**		0.3**		0.5*	
55-64	3.0*		4.0*		1.0**		0.7**		1.4*	
▶ 65-74	4.2*		4.3*		5.1*		3.9*		0.6*	
75-84	1.0**		1.2**		4.7**		2.8**		1.8**	
Race/ethnicity										
▶ White	1.8*	3.1	1.5	3.2	0.5*	1.3	0.4*	1.4	0.1*	0.3
Black	3.5**	6.8	0.8**	3.7	2.2**	8.3	...	...	...	...
Hispanic	2.4**	22.0	1.1**	3.1	0.3**	1.5	0.2**	9.9	...	...
Asian	1.5**	11.5	...	...	0.7**	4.2	0.7**	7.1	0.6**	155.3
Unknown	...	...	1.3**	...	1.0**	...	0.3**	...	0.6**	...
Missing	0.7**	...	1.3**	...	1.4**	...	0.8**	...	2.0**	...
Region										
Northeast	0.9*	2.2	1.5*	3.2	...	...	0.2*	4.1	...	...
South	1.5*	3.2	1.3*	2.8	1.0*	3.1	0.5*	3.1	0.5*	1.0
▶ Midwest	1.3*	2.6	1.8*	3.7	0.9*	1.9	0.6*	1.3	0.5*	1.9
West	0.5**	1.2	0.3**	1.4	...	...	0.1**	1.1	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 males aged 40 and up, based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

CHAPTER 3

Prostate Cancer

Table 3-1. Codes used in the diagnosis and management of prostate cancer**Males 40 years or older with one or more of the following:***ICD-9 diagnosis codes*

185	Malignant neoplasm of prostate
233.4	Carcinoma in situ of prostate
236.5	Neoplasm of uncertain behavior of prostate

ICD-9 procedure codes

60.5	Radical prostatectomy
60.62	Perineal prostatectomy

CPT procedure codes

55810	Prostatectomy, perineal radical
55812	Prostatectomy, perineal radical; with lymph node biopsy(s) (limited pelvic lymphadenectomy)
55815	Prostatectomy, perineal radical; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric and obturator nodes
55840	Prostatectomy, retropubic radical, with or without nerve sparing
55842	Prostatectomy, retropubic radical, with or without nerve sparing; with lymph node biopsy(s) (limited pelvic lymphadenectomy)
55845	Prostatectomy, retropubic radical, with or without nerve sparing; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric, and obturator nodes
55859	Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy
55860	Exposure of prostate, any approach, for insertion of radioactive substance
55862	Exposure of prostate, any approach, for insertion of radioactive substance; with lymph node biopsy(s) (limited pelvic lymphadenectomy)
55865	Exposure of prostate, any approach, for insertion of radioactive substance; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric and obturator nodes
55866	Laparoscopy, surgical prostatectomy, retropubic radical, including nerve sparing, includes robotic assistance, when performed
55873	Cryosurgical ablation of the prostate (includes ultrasonic guidance and monitoring)
55875	Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy
55899	Unlisted procedure, male genital system
76873	Ultrasound, transrectal; prostate volume study for brachytherapy treatment planning (separate procedure)
J9202 ^a	Goserelin acetate implant, per 3.6 mg
J9217 ^a	Leuprolide acetate (for deposit suspension), 7.5 mg
J9218 ^a	Leuprolide acetate, per 1 mg
J9219 ^a	Leuprolide acetate implant, 65 mg

^aIncluded in definition of outpatient and physician office visits only.**Table 3-2. Incidence^a and mortality^b rates for the most common cancer sites among men in the United States, 2008**

	Incidence	Mortality
All Sites	530.84	215.65
Lung/Bronchus	70.24	64.03
Colon/Rectum	50.39	19.66
Prostate	153.03	22.82
Urinary Bladder	36.42	7.59

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).^bUS Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.**Table 3-3. Estimated new cases and deaths for the most common cancer sites among men in the United States, 2011**

	Estimated New Cases	Estimated New Deaths
All Sites	822,300 (100%)	300,430 (100%)
Lung & Bronchus	115,060 (14%)	85,600 (28%)
Colon & Rectum	71,850 (9%)	25,250 (8%)
Prostate	240,890 (29%)	33,720 (11%)
Urinary Bladder	52,020 (6%)	10,670 (4%)

SOURCE: American Cancer Society. *Cancer Facts & Figures 2011*. Atlanta: American Cancer Society, Inc.

Table 3-4. Incidence rates^a for prostate cancer, by race/ethnicity and age, age-adjusted

Year of Diagnosis	All Males			White Males			Black Males		
	All	< 65	65+	All	< 65	65+	All	< 65	65+
1975	94.0	13.7	649.3	92.2	13.0	639.4	141.0	26.8	930.5
1976	97.9	14.6	673.9	97.3	13.9	673.8	140.8	29.4	910.9
1977	100.5	15.0	690.9	98.5	14.4	680.5	159.2	29.2	1,057
1978	99.4	15.3	681.1	97.7	14.8	670.8	148.1	26.8	986.4
1979	103.4	15.0	714.9	102.3	14.7	708.0	162.3	26.4	1,102
1980	106.0	15.5	731.6	105.0	14.7	729.0	161.1	33.8	1,041
1981	108.9	16.8	745.3	107.9	16.0	743.3	161.9	34.6	1,042
1982	108.2	16.3	743.3	107.3	15.8	740.1	167.6	31.3	1,110
1983	111.6	17.2	764.5	110.8	16.6	762.1	170.8	34.1	1,116
1984	111.7	17.3	764.3	110.1	16.2	758.9	178.8	37.1	1,158
1985	115.5	17.9	790.4	114.6	17.6	785.4	170.1	31.4	1,128
1986	119.1	18.5	814.0	119.0	18.3	815.3	168.6	34.1	1,098
1987	133.7	21.5	909.1	134.5	21.1	918.7	189.2	36.1	1,248
1988	137.6	22.2	935.4	138.8	22.3	943.5	189.9	34.6	1,263
1989	145.3	24.1	983.1	146.1	24.0	990.2	192.0	37.3	1,261
1990	170.9	28.8	1,153	172.7	28.9	1,167	222.1	44.6	1,449
1991	214.8	38.9	1,431	216.4	39.3	1,441	288.5	57.3	1,887
1992	237.3	49.4	1,536	238.3	49.4	1,544	328.2	77.8	2,059
1993	209.4	50.5	1,308	204.4	49.0	1,278	344.8	94.3	2,076
1994	180.1	48.6	1,089	174.1	46.8	1,054	313.5	95.3	1,822
1995	169.0	49.9	991.7	164.1	48.1	966.2	281.9	98.5	1,549
1996	169.2	53.4	969.3	164.8	52.0	944.8	282.7	100.3	1,543
1997	173.3	55.2	989.9	169.7	54.0	969.7	283.9	97.0	1,576
1998	170.5	54.8	970.3	167.0	53.0	954.9	286.0	102.4	1,555
1999	183.1	60.7	1,029	178.8	58.8	1,008	289.7	112.0	1,518
2000	182.5	61.7	1,017	178.9	59.8	1,002	290.9	114.2	1,512
2001	184.3	64.6	1,012	182.1	62.5	1,009	273.8	114.8	1,373
2002	181.6	65.6	983.8	178.9	63.8	974.6	288.0	118.2	1,461
2003	169.0	62.1	908.0	165.3	59.6	895.9	259.7	117.2	1,245
2004	164.8	62.0	875.5	160.9	60.0	858.2	254.8	106.6	1,279
2005	154.9	57.6	827.3	149.7	54.6	807.0	245.2	106.1	1,207
2006	168.9	64.1	893.2	163.8	61.4	871.8	248.2	108.8	1,212
2007	171.2	66.1	898.1	164.5	62.2	871.7	260.5	118.4	1,243
2008	153.0	61.6	785.3	146.3	58.0	757.0	244.3	109.9	1,173
1975-2008	152.8	41.6	921.3	149.5	39.6	909.0	237.9	78.2	1,342

^aSEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-5. Incidence rates^a for prostate cancer, 2004-2008, age-specific and age-adjusted rates, by race/ethnicity

	All Males	White Males	Black Males
Age-Specific Rates			
Age at Diagnosis			
<1	...	...	...
1-4	...	...	...
5-9	...	...	...
10-14	...	...	...
15-19	...	...	...
20-24	...	...	...
25-29	...	...	...
30-34	...	...	...
35-39	0.8	0.7	1.9
40-44	10.0	8.4	25.6
45-49	43.0	38.8	92.7
50-54	139.1	131.2	255.3
55-59	326.6	312.0	569.6
60-64	573.1	550.7	964.7
65-69	857.4	829.5	1,301
70-74	935.1	909.6	1,249
75-79	885.5	848.8	1,106
80-84	721.4	677.7	903.2
85+	604.4	571.8	874.4
Age-Adjusted Rates			
Age at Diagnosis/ Death			
All ages	156.0	149.5	233.8
Under 65	58.1	55.3	103.1
65 and over	832.7	800.7	1,138
All ages ^b	106.1	101.8	165.4

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-6. Age-adjusted incidence rates^a and trends^b for prostate cancer, by race/ethnicity

Race/ethnicity	Rate 2004-2008 Rate per 100,000	Trend 1999-2008 AAPC ^c (%)
All Races	156.0	-1.7*
White	149.5	-1.9*
White Hispanic ^d	127.2	-2.7*
White Non-Hispanic ^d	153.1	-1.6*
Black	233.8	-2.0*
Asian/Pacific Islander	88.3	-1.4
American Indian/ Alaska Native ^e	75.3	-2.3*
Hispanic ^d	129.0	-2.3*

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

*The AAPC is significantly different from zero ($p < .05$).

^aBased on the SEER 17 areas. Rates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 13 areas. Trends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cThe 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^dHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^eIncidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-7. Estimated prostate cancer prevalence counts^a on January 1, 2008 in the United States, by race/ethnicity and years since diagnosis

Years Since Diagnosis	0 to < 5	5 to < 10	10 to < 15	15 to < 20	20 to < 25	25 to < 30	0 to < 18 ^e	0 to < 33 ^e	≥ 33 ^f	Complete ^g
Race/ethnicity										
All Races ^b	947,233	719,432	438,078	142,054	27,477	8,596	2,275,367	2,353,355	2,109	2,355,464
White ^b	780,290	608,406	378,709	129,392	25,198	7,935	1,910,974	1,982,239	2,364	1,984,603
Black ^b	124,196	87,139	48,310	10,111	1,967	553	278,480	284,018	190	284,208
Asian/Pacific Islander ^c	18,979	12,388	5,850	...	...	...	38,742	...	...	...
Hispanic ^d	52,180	35,973	18,196	...	...	...	110,871	...	...	...

... Data unavailable.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bStatistics based on the SEER 9 Areas.

^cStatistics based on the SEER 11 Areas and Rural Georgia.

^dStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

^eMaximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^fCases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^gComplete prevalence is obtained by summing 0 to <33 and ≥33.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-8. Risk of being diagnosed with prostate cancer in 10, 20 and 30 years, lifetime risk of being diagnosed with cancer given alive and cancer-free at current age, males, 2006-2008 by race/ethnicity

Current Age	All Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	16.48
10	0.00	0.00	0.01	16.69
20	0.00	0.01	0.33	16.78
30	0.01	0.33	2.60	17.00
40	0.33	2.63	8.60	17.27
50	2.39	8.58	14.67	17.57
60	6.84	13.57	16.29	16.77
70	8.50	11.93	...	12.54
80	5.49	...	...	6.47
Lifetime Risk of Being Diagnosed = 16.48		Lifetime Risk of Dying = 2.77		

Current Age	White Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	15.89
10	0.00	0.00	0.01	16.07
20	0.00	0.01	0.30	16.15
30	0.01	0.30	2.46	16.36
40	0.30	2.48	8.28	16.60
50	2.27	8.27	14.19	16.89
60	6.60	13.11	15.64	16.08
70	8.17	11.34	...	11.90
80	5.08	...	...	5.97
Lifetime Risk of Being Diagnosed = 15.89		Lifetime Risk of Dying = 2.60		

Current Age	Black Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	19.10
10	0.00	0.00	0.03	19.58
20	0.00	0.03	0.68	19.75
30	0.03	0.69	4.37	20.19
40	0.68	4.48	12.55	20.76
50	4.04	12.63	18.81	21.39
60	10.28	17.66	20.29	20.75
70	10.83	14.69	...	15.36
80	7.16	...	...	8.42
Lifetime Risk of Being Diagnosed = 19.10		Lifetime Risk of Dying = 4.44		

... Statistic could not be calculated.

NOTE: A percent of 0.00 represents a value that is below 0.005.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-9. Stage at diagnosis for prostate cancer 2001-2007,^a total case counts, estimated case counts, and percentages

Stage at Diagnosis	All Males		
	All	< 65	65+
All Stages	332,115 (100%)	132,852 (100%)	199,263 (100%)
Localized	269,013 (81%)	106,282 (79%)	165,388 (83%)
Regional	39,854 (12%)	21,256 (17%)	15,941 (8%)
Distant	13,285 (4%)	3,985 (3%)	9,963 (5%)
Unstaged	9,963 (3%)	1,328 (1%)	7,971 (4%)
Stage at Diagnosis	White Males		
	All	< 65	65+
All Stages	263,353 (100%)	103,366 (100%)	159,987 (100%)
Localized	213,316 (81%)	81,659 (79%)	132,789 (83%)
Regional	31,602 (12%)	18,606 (18%)	12,799 (8%)
Distant	10,534 (4%)	3,101 (3%)	7,999 (5%)
Unstaged	7,901 (3%)	1,034 (1%)	6,399 (4%)
Stage at Diagnosis	Black Males		
	All	< 65	65+
All Stages	41,690 (100%)	21,015 (100%)	20,675 (100%)
Localized	33,352 (80%)	16,602 (79%)	16,954 (82%)
Regional	4,586 (11%)	3,152 (15%)	1,447 (7%)
Distant	2,501 (6%)	841 (4%)	1,447 (7%)
Unstaged	1,251 (3%)	210 (1%)	827 (4%)

^aBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJMLA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-10. Survival (%) for prostate cancer, by race, diagnosis year, stage and age

	All Males			White Males			Black Males		
	All	< 65	65+	All	< 65	65+	All	< 65	65+
5-Year Relative Survival (%)									
Year of Diagnosis									
1960-1963 ^a	...	...	...	50.0	...	...	35.0	...	...
1970-1973 ^a	...	...	...	63.0	...	...	55.0	...	...
► 1975-1977 ^b	68.3	73.7	66.6	69.0	75.4	67.1	61.0	62.2	60.5
1978-1980 ^b	70.5	75.5	69.1	71.7	77.1	70.1	62.1	65.2	60.8
1981-1983 ^b	72.4	76.3	71.4	73.5	77.9	72.3	63.2	65.4	62.3
1984-1986 ^b	75.5	77.6	75.0	76.8	79.3	76.2	65.8	67.6	65.2
1987-1989 ^b	83.2	83.3	83.2	84.8	84.8	84.8	71.5	72.7	71.2
1990-1992 ^b	93.3	93.1	93.3	94.4	94.1	94.5	84.6	86.6	83.8
1993-1995 ^b	95.4	95.9	95.2	96.1	96.6	95.9	91.7	93.2	90.9
1996-2000 ^b	98.3	98.7	98.1	98.9	99.1	98.7	95.6	97.2	94.3
2001-2007 ^b	99.9*	99.7*	99.9*	99.9*	99.8*	99.9*	97.9*	99.1*	96.2*
5-Year Relative Survival (%), 2001-2007^c									
Stage at Diagnosis									
All Stages	99.4	99.1	99.5	99.7	99.3	99.7	96.2	98.2	94.1
Localized	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Regional	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.6
Distant	28.7	30.8	27.9	28.1	30.4	27.5	27.9	30.4	26.2
Unstaged	69.9	83.4	66.8	68.8	83.4	65.9	58.8	74.4	52.8
Age at Diagnosis									
< 45	96.4	...	...	96.1	...	...	96.6	...	...
45-54	98.2	...	...	98.3	...	...	97.6	...	...
55-64	99.5	...	...	99.7	...	...	98.4	...	...
65-74	100.0	...	...	100.0	...	...	97.8	...	...
75+	97.4	...	...	98.0	...	...	85.9	...	...
< 65	99.1	...	...	99.3	...	...	98.2	...	...
65+	99.5	...	...	99.7	...	...	94.1	...	...

... Statistic could not be calculated due to fewer than 25 cases during the time period.

► Denotes reference group.

*The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^aBased on End Results data from a series of hospital registries and one population-based registry.

^bBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2008.

^cBased on SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD,

http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-11. Relative survival^a (%) for prostate cancer, by year of diagnosis, all races

	1975- 1980- 1985-																					
	1979	1984	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Survival Time																						
1-year	91.9	94.0	95.9	97.7	98.8	99.6	99.4	99.2	98.9	99.3	99.5	99.6	99.7	99.9	100.0	99.9	99.9	100.0	99.9	99.9	99.9	99.9
2-year	85.1	87.9	91.5	94.8	97.4	98.4	98.2	98.1	97.8	98.2	98.9	99.1	99.7	99.7	100.0	99.9	99.8	99.9	99.8	99.8	99.9	99.9
3-year	78.8	82.0	87.2	92.4	95.9	97.8	97.0	96.8	97.1	97.6	98.6	98.6	99.7	99.3	100.0	99.9	99.6	99.9	99.8			
4-year	73.6	76.8	83.8	90.3	94.4	97.2	96.5	95.6	96.5	97.0	98.1	98.4	99.4	99.1	100.0	99.9	99.6	99.9				
5-year	69.2	72.4	80.9	88.9	93.0	96.4	95.5	94.8	95.8	96.7	97.7	98.4	99.4	99.1	100.0	99.9	99.4					
6-year	65.6	68.8	78.2	87.4	91.5	95.2	94.7	94.0	95.4	96.3	97.5	98.2	99.4	98.8	100.0	99.9						
7-year	62.1	65.3	75.7	85.3	90.8	94.3	93.6	93.1	95.0	95.6	97.4	98.0	99.4	98.8	100.0							
8-year	58.9	62.3	73.7	83.7	89.6	93.0	93.0	92.5	94.8	95.1	97.3	98.0	99.1	98.7								
9-year	56.1	60.0	71.7	82.5	88.5	92.1	91.7	91.7	94.4	94.7	97.0	97.5	99.0									
10-year	53.5	58.1	69.9	80.7	87.6	91.1	90.8	91.2	93.8	94.5	96.9	97.2										
11-year	51.0	55.8	68.2	79.2	86.2	90.6	90.3	90.1	93.1	94.3	96.8											
12-year	48.7	53.8	66.4	78.3	85.5	89.9	88.9	89.3	92.3	94.0												
13-year	46.9	52.0	64.7	77.6	84.5	89.0	88.4	88.7	91.4													
14-year	45.1	50.4	63.3	76.5	84.1	88.4	87.8	87.6														
15-year	43.9	49.1	61.7	75.5	83.2	87.7	86.7															
16-year	42.1	47.2	60.1	73.8	82.1	86.8																
17-year	40.5	46.1	59.6	72.7	81.8																	
18-year	39.1	44.7	58.5	72.1																		
19-year	38.3	43.3	58.0																			
20-year	37.3	41.9																				

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-12. Age-adjusted mortality rates^a for prostate cancer by year, race, and age

	All Races			Whites			Blacks		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Death									
1975	31.0	2.5	227.5	29.1	2.2	214.9	55.5	6.6	394.0
1976	31.8	2.7	232.9	29.9	2.3	220.8	55.6	6.9	392.2
1977	31.8	2.7	233.3	29.9	2.3	220.6	56.4	6.9	398.7
1978	32.7	2.6	240.3	30.6	2.2	226.8	58.5	6.8	416.1
1979	32.8	2.6	242.1	30.8	2.2	228.2	59.2	6.6	422.9
1980	33.1	2.7	243.1	30.8	2.3	227.4	62.0	6.6	445.0
1981	33.2	2.7	244.0	30.8	2.3	227.5	63.6	7.1	454.5
1982	33.4	2.7	245.5	31.1	2.3	229.9	62.4	6.6	447.7
1983	33.9	2.8	249.3	31.6	2.4	233.2	64.6	7.0	462.5
1984	34.1	2.7	250.8	31.6	2.4	233.5	65.9	6.7	475.1
1985	33.9	2.7	249.4	31.3	2.3	231.3	67.3	7.2	482.7
1986	34.9	2.8	257.0	32.5	2.5	239.7	67.4	6.6	487.4
1987	35.1	2.7	259.1	32.6	2.4	241.3	68.9	6.7	499.0
1988	35.9	2.8	264.4	33.4	2.5	247.1	69.6	7.0	502.3
1989	37.1	3.0	273.0	34.5	2.6	255.2	71.7	7.1	518.5
1990	38.6	3.0	284.2	35.7	2.7	264.0	78.0	7.4	565.7
1991	39.3	2.9	291.1	36.5	2.5	271.4	78.2	7.1	570.2
1992	39.2	2.9	290.6	36.3	2.4	270.3	79.8	7.7	578.7
1993	39.3	2.7	292.5	36.3	2.3	270.8	81.9	7.0	599.1
1994	38.5	2.7	286.5	35.6	2.3	266.0	80.0	6.8	585.9
1995	37.3	2.6	277.2	34.4	2.2	256.9	78.2	6.7	572.5
1996	36.0	2.5	267.6	33.0	2.1	246.4	78.8	6.5	579.2
1997	34.2	2.3	254.3	31.4	1.9	234.6	74.3	6.3	544.2
1998	32.6	2.3	242.5	29.9	1.9	223.4	72.8	6.3	532.4
1999	31.6	2.1	235.5	28.9	1.7	216.9	70.1	5.8	514.8
2000	30.4	2.0	226.6	27.8	1.7	208.1	68.9	5.4	508.0
2001	29.4	1.9	219.3	26.9	1.6	201.3	67.9	5.4	499.7
2002	28.6	1.9	212.6	26.2	1.6	196.2	65.0	5.4	477.6
2003	27.0	1.9	200.4	24.9	1.6	185.5	60.5	5.5	440.9
2004	26.0	1.8	193.0	23.9	1.6	178.0	59.2	5.0	434.1
2005	25.2	1.8	186.9	23.2	1.5	172.7	57.3	5.0	418.5
2006	24.1	1.9	177.5	22.2	1.6	164.4	54.0	4.8	394.2
2007	24.0	1.8	178.0	22.1	1.5	164.1	55.3	4.8	404.4
2008	22.8	1.8	168.1	21.2	1.5	156.9	49.5	4.8	358.7
1975-2008	32.1	2.4	237.7	29.7	2.1	221.0	66.5	6.2	483.2
Age at Death									
All ages	24.4	...	...	22.4	...	...	54.9	...	...
Under 65	1.8	...	...	1.5	...	...	4.9	...	...
65 and over	180.4	...	...	167.0	...	...	401.1	...	...
All ages ^b	10.6	...	...	9.6	...	...	24.7	...	...

... Statistic could not be calculated due to fewer than 25 cases during the time period.

^aUS Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-13. Age-adjusted mortality^a rates^b and trends^c for prostate cancer by race/ethnicity

Race/ethnicity	Rate 2004-2008 Rate per 100,000	Trend 1999-2008 AAPC ^d (%)
All Races	24.4	-3.7*
White	22.4	-3.3*
White Hispanic ^e	18.9	-3.1*
White Non-Hispanic ^e	22.6	-3.4*
Black	54.9	-3.5*
Asian/Pacific Islander	10.5	-3.9*
American Indian/Alaska Native		
Total U.S.	16.9	-3.1*
CHSDA ^f Counties	20.7	-2.3*
Non-CHSDA ^f Counties	12.3	-3.8*
Hispanic ^e	18.5	-3.5*

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

^aUS Mortality Files, National Center for Health Statistics, CDC.

^bRates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cTrends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^dThe 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

^eHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^fIncidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer E.J, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 3-14. Nationally representative inpatient stays for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=99,374)		2003 (N=90,224)		2004 (N=80,992)		2005 (N=82,613)		2006 (N=89,199)		2007 (N=102,372)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	97.5	172.2	87.1	151.3	78.1	136.6	78.7	135.5	83.9	142.4	94.9	159.0
Age												
40-44	6.6*		6.2*		6.0*		7.1*		7.8*		9.6*	
45-54	68.9*		58.5*		52.5*		50.0*		58.7*		71.8*	
55-64	293.0		247.8		222.9		219.7		236.5		269.9	
▶ 65-74	380.3		346.9		306.7		309.6		331.7		371.4	
75-84	220.4*		196.4*		186.7*		191.5*		168.6*		157.2*	
85+	377.5*		369.6*		346.5*		322.3*		268.9*		252.8*	
Race/ethnicity												
▶ White	65.9	117.1	68.8	111.1	63.7	102.9	66.3	105.1	67.2	104.9	75.0	115.1
Black	80.9*	159.4	78.9*	149.7	74.9*	144.4	62.3*	118.0	75.5*	140.5	80.6*	148.4
Hispanic	†	†	34.5*	85.7	23.3*	60.1	24.9*	62.6	30.8*	75.1	27.9*	67.3
Asian	25.9*	57.9	28.9*	73.5	20.7*	40.7	17.4*	34.5	18.6*	47.8	27.4*	55.8
Other	192.9*	396.6	81.3*	171.6	68.8*	146.2	107.2*	218.2	113.8*	224.9	106.5*	200.8
Region												
Northeast	98.6	163.2	94.8	156.8	79.9	133.5	82.4	137.0	79.4	128.1	123.0	197.6
South	98.0	172.3	87.8	151.2	78.8	136.5	73.1	126.1	88.1	150.7	81.7	136.9
▶ Midwest	106.8	189.4	90.1	161.6	85.1	152.8	84.4	143.3	85.4	143.6	103.6	172.2
West	86.4*	163.7	76.5*	136.8	68.6*	123.8	78.9*	141.6	79.5*	140.7	84.9*	149.1

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 3-15. Inpatient stays by Medicare beneficiaries for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=33,560)		2003 (N=30,880)		2004 (N=29,860)		2005 (N=27,940)		2006 (N=28,780)		2007 (N=30,200)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	214.9	271.6	192.1	240.0	182.3	230.0	169.4	214.0	177.2	217.6	185.9	237.9
Under 65/65+												
< 65 Years	43.4*	43.4	47.5*	47.5	39.8*	39.8	41.4*	41.4	53.4*	53.4	42.9*	42.9
▶ 65+ Years	271.5	271.6	240.7	240.0	231.0	230.0	214.6	214.0	221.4	217.6	238.6	237.9
Age												
▶ 65-69	344.3		321.1		318.2		308.0		312.2		357.5	
70-74	306.5*		270.0*		256.6*		247.4*		257.9*		295.9*	
75-79	210.1*		154.9*		151.0*		138.0*		149.4*		141.6*	
80-84	166.9*		163.1*		135.1*		115.4*		111.2*		87.2*	
85-89	232.0*		194.7*		182.9*		123.8*		99.0*		121.4*	
90-94	214.2**		244.1*		195.8**		128.5**		240.3*		95.4**	
95-97	161.6**		0.0**		202.1**		95.0**		191.3**		93.3**	
98+	0.0**		43.6**		42.9**		0.0**		41.2**		80.8**	
Race/ethnicity												
▶ White	209.8	259.3	189.0	229.2	180.5	220.2	164.9	202.7	178.3	214.4	187.2	233.0
Black	290.5*	455.3	244.1*	383.6	203.2*	323.5	224.9*	360.6	191.8*	276.7	213.8*	331.4
Hispanic	109.8**	140.5	124.2**	178.6	114.4**	154.7	99.3**	147.8	83.8**	95.7	88.0**	163.4
Asian	56.4**	52.4	79.4**	96.8	75.0**	73.8	102.0**	128.8	62.0**	78.4	73.6**	90.7
Other	235.7*	346.6	175.6**	258.2	278.7*	409.2	180.3*	229.6	237.2*	313.6	171.8*	231.5
Unknown	760.5**	...	721.2**	...	511.3**	...	623.5**	...	248.6**	...	525.9**	...
Region												
▶ Northeast	206.7	256.6	174.3	213.0	153.2	191.0	157.7	199.5	144.7	164.0	153.2	187.6
South	218.0*	279.5	196.4*	249.4	182.5*	234.5	166.9*	210.9	176.1*	219.5	193.9*	251.5
Midwest	221.9*	277.8	185.0*	227.3	184.3*	227.8	182.1*	228.8	191.5*	237.6	181.4*	232.1
West	206.8*	262.0	212.3*	267.7	210.3*	264.3	169.8*	214.9	193.8*	241.8	208.2*	268.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 3-16. Inpatient stays by privately insured individuals for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,213)		2003 (N=4,240)		2004 (N=4,044)		2005 (N=4,523)		2006 (N=4,011)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	98.3	258.3	88.5	242.4	82.6	214.9	87.0	214.2	78.7	218.2
Age										
40-44	9.3*		9.3*		7.3*		8.1*		9.9*	
45-54	81.6*		65.5*		66.6*		61.1*		65.2*	
55-64	360.8*		330.3*		297.7*		284.5*		286.1*	
▶ 65-74	597.0		517.8		469.7		480.3		491.4	
75-84	649.2*		619.2*		502.6*		549.0*		527.8*	
85+	...		750.0*		604.6*		535.3*		639.6*	
Race/ethnicity										
▶ White	109.1	250.4	102.9	251.8	88.6	226.0	92.0	224.5	85.0	226.4
Black	150.3*	338.2	148.1*	280.4	122.1*	261.5	155.5*	307.4	100.0*	264.7
Hispanic	50.3*	209.8	45.2*	137.9	40.5*	130.7	34.0*	108.0	43.5*	161.6
Asian	42.2**	160.7	31.3*	99.6	31.5*	115.3	33.3*	124.0	37.3*	141.9
Other	75.0**	229.5	87.8**	281.4	73.0*	244.2	66.9*	241.6	49.1**	222.7
Unknown	98.8*	...	92.5*	...	98.8*	...	82.7*	...	84.5*	...
Missing	94.0*	...	75.5*	...	73.7*	...	92.3*	...	74.1*	...
Region										
Northeast	111.0	271.5	93.6	248.5	89.0	230.5	90.0	228.0	81.1	231.5
South	99.0	257.6	87.9*	239.0	78.7*	205.7	81.8*	210.9	74.5	210.5
▶ Midwest	102.3	262.7	94.0	247.1	88.2	219.3	95.4	218.3	78.2	214.8
West	75.9*	239.3	73.2*	238.4	77.6*	219.7	83.3*	209.8	90.0*	231.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 3-17. Nationally representative inpatient stays for prostate cancer listed as primary diagnosis with radical prostatectomy performed, rate,^a rate per visit^b

	2002 (N=66,549)		2003 (N=58,704)		2004 (N=55,649)		2005 (N=54,653)		2006 (N=65,680)		2007 (N=79,662)	
	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit
Total	114.0	66,968	98.0	65,064	93.0	68,710	90.0	66,155	106.0	73,634	126.0	77,817
Age												
40-54	42.0	92,047	36.0	91,007	32.0	90,696	31.0	90,167	38.0	91,183	47.0	93,136
55-64	255.0	87,166	212.0	85,665	196.0	87,956	186.0	84,765	210.0	88,934	243.0	90,072
65-74	251.0	66,044	226.0	65,158	215.0	70,230	206.0	66,389	246.0	74,194	289.0	77,761
75-84	22.0	10,023	15.0	7,871	17.0	8,941	20.0	10,481	25.0	14,953	29.0	18,580
85+	†	†	†	†	†	†	†	†	†	†	†	†
Race/ethnicity												
White	76.0	67,139	73.0	66,379	71.0	69,923	70.0	66,987	80.0	75,457	94.0	79,304
Black	98.0	61,581	87.0	58,230	87.0	60,854	72.0	61,433	93.0	65,414	107.0	70,485
Hispanic	†	†	51.0	56,911	36.0	59,326	39.0	62,630	48.0	64,070	49.0	71,778
Region												
Northeast	104.0	62,114	95.0	59,483	82.0	60,729	87.0	63,535	85.0	64,462	158.0	78,378
South	110.0	64,121	96.0	63,876	94.0	69,147	84.0	66,311	112.0	74,501	106.0	75,579
Midwest	125.0	69,062	105.0	67,035	103.0	70,013	96.0	67,314	108.0	75,530	139.0	79,333
West	120.0	74,110	98.0	70,696	92.0	73,876	95.0	66,944	110.0	77,540	119.0	78,721

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male 40+ civilian non-institutionalized population.

^bRate per 100,000 male 40+ visits with radical prostatectomy performed is based on estimated number of visits for prostate cancer in Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 3-18. Most common procedures during inpatient stays for prostate cancer listed as primary diagnosis, count, rate,^a rate per visit^b

	2002			2003			2004		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Radical prostatectomy	66,549	114.2	66,968	58,704	98.3	65,065	55,649	93.3	68,710
Regional lymph node excision	32,293	55.4	32,496	28,095	47.0	31,140	26,423	44.3	32,625
Transurethral resection of prostate	14,410	24.7	14,501	12,917	21.6	14,317	10,466	17.5	12,923
	2005			2006			2007		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Radical prostatectomy	54,653	89.7	66,156	65,680	105.8	73,634	79,662	126.5	77,817
Regional lymph node excision	21,956	36.0	26,577	24,899	40.1	27,914	32,634	51.8	31,878
Transurethral resection of prostate	9,375	15.4	11,348	8,478	13.7	9,505	7,474	11.9	7,301

^aRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male 40+ civilian non-institutionalized population.

^bRate per 100,000 male 40+ visits is based on estimated number of visits for prostate cancer in Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 3-19. Hospital outpatient visits by Medicare beneficiaries for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=169,880)		2003 (N=175,760)		2004 (N=174,260)		2005 (N=181,300)		2006 (N=179,600)		2007 (N=180,100)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,088	1,401	1,093	1,411	1,064	1,389	1,099	1,440	1,106	1,451	1,108	1,470
Under 65/65+												
< 65 Years	153.4*	153.4	184.0*	184.0	158.6*	158.6	161.2*	161.2	179.8*	179.8	182.2*	182.2
▶ 65+ Years	1,396	1,401	1,399	1,411	1,373	1,389	1,431	1,440	1,436	1,451	1,450	1,470
Age												
▶ 65-69	985.5		994.1		896.7		1,010		1,025		991.5	
70-74	1,413*		1,506*		1,543*		1,505*		1,544*		1,653*	
75-79	1,862*		1,777*		1,772*		1,868*		1,841*		1,758*	
80-84	1,613*		1,577*		1,652*		1,631*		1,680*		1,815*	
85-89	1,411*		1,508*		1,392*		1,468*		1,418*		1,435*	
90-94	1,448*		1,221*		1,057*		1,663*		1,344*		1,322*	
95-97	915.9**		726.9**		1,162**		759.7**		1,339**		1,026**	
98+	265.3**		218.0**		171.6**		379.3**		247.0**		121.2**	
Race/ethnicity												
▶ White	1,005	1,273	1,009	1,283	983.8	1,270	1,015	1,314	1,041	1,347	1,053	1,376
Black	1,782*	2,908	1,786*	2,848	1,646*	2,603	1,848*	2,956	1,716*	2,775	1,713*	2,840
Hispanic	833.5*	1,014	1,205*	1,644	1,246*	1,613	817.8*	1,226	724.3*	1,140	586.8*	892.9
Asian	611.3*	556.8	529.2*	555.9	592.0*	586.0	714.1*	711.0	659.0*	753.7	706.2*	785.2
Other	1,800*	2,887	1,496*	2,382	1,747*	2,691	1,512*	2,464	1,389*	2,209	1,251*	1,855
Unknown	2,357*	...	2,804*	...	1,534**	...	2,104**	...	3,645*	...	3,155*	...
Region												
▶ Northeast	1,521	1,947	1,582	2,020	1,480	1,939	1,487	1,961	1,574	2,061	1,561	2,058
South	766.0*	983.0	745.0*	971.2	701.2*	912.4	735.0*	960.7	740.1*	965.8	738.4*	993.8
Midwest	1,339*	1,698	1,368*	1,720	1,375*	1,745	1,442*	1,827	1,398*	1,798	1,400*	1,840
West	959.7*	1,258	941.5*	1,238	981.4*	1,300	1,009*	1,347	1,007*	1,352	1,046*	1,357

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 3-20. Hospital outpatient visits by privately insured individuals for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=41,467)		2003 (N=41,224)		2004 (N=41,147)		2005 (N=46,765)		2006 (N=35,798)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	968.0	2,822	860.7	2,563	840.9	2,479	899.9	2,421	702.7	2,239
Age										
40-44	27.7*		44.5*		47.2*		41.0*		41.7*	
45-54	418.8*		444.7*		397.3*		393.0*		378.1*	
55-64	3,043*		2,759*		2,512*		2,518*		2,373*	
▶ 65-74	9,018		7,517		7,175		6,898		6,221	
75-84	7,466*		7,384*		7,844*		7,495*		6,949*	
85+	...		3,320*		3,088*		3,730*		3,647*	
Race/ethnicity										
▶ White	1,196	3,174	1,018	2,792	872.1	2,540	906.9	2,432	718.8	2,155
Black	2,214*	3,991	2,118*	4,292	1,712*	3,842	1,813*	3,614	1,160*	3,204
Hispanic	546.3*	1,782	505.7*	1,949	451.4*	1,786	473.0*	1,728	347.0*	1,597
Asian	365.6*	2,102	327.2*	1,429	357.7*	1,448	290.3*	1,572	201.8*	1,041
Other	782.5*	3,315	646.8*	2,863	436.0*	1,694	522.7*	1,549	468.8*	1,878
Unknown	1,094*	...	982.7*	...	833.7*	...	806.3*	...	806.8*	...
Missing	792.5*	...	648.1*	...	817.4*	...	1,092*	...	831.0*	...
Region										
Northeast	1,311*	3,382	1,080*	2,970	1,156*	3,135	1,170	3,029	1,008*	3,300
South	832.3*	2,499	730.7*	2,196	700.9*	2,098	749.4*	2,141	555.6*	1,777
▶ Midwest	1,223	3,331	1,146	3,173	1,066	2,908	1,148	2,846	819.9	2,614
West	467.4*	1,750	406.1*	1,683	515.6*	1,894	634.8*	1,779	697.1*	1,986

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 3-21. Nationally representative hospital outpatient visits for prostate cancer listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	922,113
Age	
40-44	14,449
45-54	64,190
55-64	210,437
65-74	297,934
75-84	269,291
85+	65,812
Race/ethnicity	
White	673,491
Black	236,848
Hispanic	11,452
Other	322
Region	
Northeast	289,853
South	380,564
Midwest	233,283
West	18,413

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 3-22. Ambulatory surgery center visits by Medicare beneficiaries for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=31,280)		2003 (N=29,760)		2004 (N=27,400)		2005 (N=28,480)		2006 (N=28,260)		2007 (N=29,980)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	231.7	294.5	220.5	281.9	211.5	276.8	224.3	292.6	234.3	306.9	251.6	332.4
Under 65/65+												
< 65 Years	42.9*	42.9	41.6*	41.6	28.3*	28.3	42.8*	42.8	41.7*	41.7	43.8*	43.8
▶ 65+ Years	293.9	294.5	280.6	281.9	274.1	276.8	288.5	292.6	303	306.9	328.3	332.4
Age												
▶ 65-69	236.6		258.1		215.8		268		250.3		298	
70-74	351.4*		331*		338.2*		327.2*		381.7*		397.3*	
75-79	360.6*		317.1*		325.3*		346.7*		359.6*		372.8*	
80-84	285*		242.2*		300.4*		229.6*		271.9*		292.3*	
85-89	199.2*		210.5*		167.7*		257.7*		232.6*		242.8*	
90-94	171.4**		154.6**		101.8**		158.7**		187.8**		220.3*	
95-97	53.9**		207.7**		252.7**		95**		95.6**		93.3**	
98+	44.2**		...		...		...		...		0**	
Race/ethnicity												
▶ White	237.3	294.9	219.8	274.3	209.2	267.6	224.5	287.7	237.7	304.9	250.9	323.9
Black	233.5*	370.6	250.5*	391.3	239.6*	389.1	269.8*	434.6	276.8*	441.3	316.3	516.7
Hispanic	122.8**	162.3	167.7**	327.2	138.5**	184.5	122.7**	160.2	47.9**	114.6	117.4**	192.7
Asian	122.3**	133.1	88.2**	93.5	116.7**	145.2	86.3**	104.6	139.5**	150.8	117.7**	147.3
Other	142.9**	251.6	208.1*	324.7	291.1*	464.5	186.1*	248.6	141.2**	222.7	220.1*	336.7
Unknown	380.2**	...	721.2**	...	511.3**	...	545.6**	...	497.1**	...	350.6**	...
Region												
▶ Northeast	262.5	330.7	231.2	291.4	205.6	262.7	217.7	284.8	210.5	271	232.7	303.8
South	229.6*	296.3	217.6*	285.8	223.3*	297	237.6*	309.6	262.4*	353.8	296.4*	401
Midwest	266.8*	333.4	245.5*	303.1	246.1*	314.9	258.4*	333.1	256.1*	324.8	264.9*	342.5
West	149.2*	188	179.1*	230.1	142.5*	192	155.6*	204.1	168.4*	221.7	158.5*	206.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 3-23. Ambulatory surgery center visits by privately insured individuals for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=393)		2003 (N=425)		2004 (N=546)		2005 (N=756)		2006 (N=756)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.2	24.3	8.9	24.9	11.2	30.3	14.5	36.9	14.8	46.1
Age										
40-44	2.0**		0.8**		1.7**		1.4**		2.1**	
45-54	5.3*		5.7*		6.2*		7.3*		9.2*	
55-64	35.7*		31.7*		37.8*		48.7*		48.6*	
▶ 65-74	70.8		64.0		88.3		91.5		132.4	
75-84	40.5*		62.5*		71.0*		110.5*		136.4*	
85+	...		54.9**		30.2**		19.7**		41.3**	
Race/ethnicity										
▶ White	11.3	27.4	10.9	28.1	11.6	31.3	14.7	36.0	16.4	48.8
Black	17.6**	39.5	16.0**	32.1	12.0**	33.0	22.7*	56.9	26.9*	92.0
Hispanic	0.6**	41.8	2.7**	13.0	4.6**	18.8	5.6**	24.0	5.1**	23.9
Asian	...	...	4.0**	55.8	1.4**	25.2	4.6**	20.3	5.1**	74.9
Other	4.7**	46.3	...	...	11.4**	83.9	8.4**	40.6	12.3**	51.6
Unknown	10.5**	...	8.0**	...	13.2*	...	8.6**	...	14.9*	...
Missing	8.1*	...	7.3*	...	13.8*	...	23.5*	...	12.5*	...
Region										
Northeast	10.3	25.3	8.0	24.6	7.4*	18.7	8.7	25.3	8.2*	35.0
South	10.5	29.0	10.9*	32.5	12.6	39.6	20.1*	57.4	18.1*	56.5
▶ Midwest	8.8	21.8	8.0	20.6	11.6	27.3	10.7	24.3	13.2	56.7
West	5.1**	14.5	5.0*	18.3	8.6*	28.0	10.2*	33.7	13.2*	35.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 3-24. Nationally representative ambulatory surgery center visits for prostate cancer listed as primary diagnosis, count, rate^a

	Count	Rate
Total	74,691	70.2
Age		
45-54	4,158	19.8*
55-64	12,095	81.3*
▶ 65-74	38,789	455.0
75-84	17,088	320.6*
85+	2,561	192.7*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 3-25. Physician office visits by Medicare beneficiaries for prostate cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,757,740)		2003 (N=2,817,160)		2004 (N=2,652,460)		2005 (N=2,588,400)		2006 (N=2,561,000)		2007 (N=2,544,420)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	17,658	23,293	17,525	23,184	16,192	21,469	15,695	20,970	15,767	21,046	15,660	21,039
Under 65/65+												
< 65 Years	1,450*	1,450	1,508*	1,508	1,481*	1,481	1,506*	1,506	1,542*	1,542	1,544*	1,544
▶ 65+ Years	23,004	23,293	22,907	23,184	21,225	21,469	20,705	20,970	20,842	21,046	20,870	21,039
Age												
▶ 65-69	12,171		12,137		11,412		11,078		11,390		11,490	
70-74	20,475*		20,343*		19,256*		18,632*		18,734*		19,171*	
75-79	29,549*		29,299*		26,099*		25,725*		25,720*		25,791*	
80-84	35,104*		34,881*		32,695*		31,143*		31,601*		30,455*	
85-89	37,338*		37,568*		34,881*		35,601*		34,261*		34,339*	
90-94	33,525*		33,122*		31,710*		31,129*		31,851*		32,775*	
95-97	21,659*		24,351*		22,991*		25,071*		24,486*		22,341*	
98+	5,261*		7,105*		6,392*		5,647*		5,105*		7,192*	
Race/ethnicity												
▶ White	17,877	23,159	17,672	22,935	16,338	21,251	15,846	20,745	15,900	20,777	15,849	20,830
Black	18,488*	30,518	18,668*	31,052	17,232*	28,701	17,113*	29,141	17,588*	30,158	17,412*	30,172
Hispanic	12,050*	16,045	12,491*	16,239	11,131*	14,432	10,263*	13,986	10,014*	13,421	9,612*	13,560
Asian	10,373*	10,307	11,299*	11,266	10,248*	10,446	9,990*	10,316	9,652*	10,502	9,674*	10,280
Other	13,187*	21,092	13,593*	21,598	13,285*	19,987	11,562*	17,642	11,487*	17,491	10,653*	16,033
Unknown	32,471*	...	36,058*	...	29,584*	...	29,618*	...	29,080*	...	25,679*	...
Region												
▶ Northeast	21,355	28,150	21,267	28,138	19,616	25,925	18,728	24,929	18,441	24,318	18,253	24,307
South	18,088*	24,002	18,043*	23,992	16,624*	22,151	16,173*	21,708	16,376*	22,004	16,561*	22,385
Midwest	15,158*	19,514	15,031*	19,396	14,062*	18,168	13,885*	18,055	14,143*	18,484	13,681*	17,975
West	16,166*	21,739	15,821*	21,399	14,542*	19,793	13,965*	19,251	13,880*	19,106	13,712*	18,949

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 3-26. Physician office visits by privately insured individuals for prostate cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=117,329)		2003 (N=121,549)		2004 (N=134,497)		2005 (N=159,165)		2006 (N=131,751)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,739	8,206	2,538	8,177	2,749	8,640	3,063	8,663	2,586	9,084
Age										
40-44	130.0*		121.8*		119.5*		144.7*		168.0*	
45-54	1,185*		1,091*		1,133*		1,168*		1,288*	
55-64	7,837*		7,177*		7,537*		7,838*		7,909*	
▶ 65-74	21,988		20,170		20,733		20,912		22,113	
75-84	31,005*		31,150*		34,225*		33,470*		36,107*	
85+	...		27,168*		27,916*		26,930*		24,936*	
Race/ethnicity										
▶ White	3,318	9,064	3,106	9,398	2,867	8,970	3,164	9,024	2,881	9,719
Black	5,310*	9,483	4,847*	9,978	4,383*	9,792	4,927*	9,809	3,523*	10,445
Hispanic	1,948*	6,516	1,820*	7,110	1,596*	6,561	1,402*	5,194	1,215*	5,177
Asian	1,202*	5,290	989.6*	4,330	932.3*	4,009	1,115*	4,835	756.5*	4,291
Other	2,137*	5,705	1,713*	5,735	1,947*	6,222	2,174*	6,352	1,814*	6,730
Unknown	2,942*	...	2,904*	...	2,936*	...	3,028*	...	2,659*	...
Missing	2,306*	...	1,834*	...	2,767*	...	3,624*	...	2,207*	...
Region										
Northeast	3,716*	9,699	3,317*	9,637	3,341*	9,746	3,409*	9,680	2,989*	10,253
South	2,911*	8,964	2,728*	8,876	2,826*	9,348	3,163*	9,630	2,650*	9,898
▶ Midwest	2,560	7,257	2,350	7,112	2,696	7,730	2,938	7,521	2,195	7,727
West	1,843*	7,046	1,705*	7,617	2,118*	8,085	2,754*	8,209	2,842*	8,688

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 3-27. Nationally representative physician office visits for prostate cancer listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	23,681,506
Age	
40-44	124,208
45-54	883,637
55-64	3,985,315
65-74	7,136,967
75-84	8,608,270
85+	2,943,109
Race/ethnicity	
White	18,816,152
Black	3,798,481
Hispanic	1,066,873
Region	
Northeast	5,343,422
South	9,327,881
Midwest	4,432,098
West	4,578,105

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 3-28. Emergency room visits by Medicare beneficiaries for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,660)		2003 (N=2,800)		2004 (N=2,780)		2005 (N=2,740)		2006 (N=2,140)		2007 (N=2,340)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	23.4	28.7	17.4	22.7	17.0	21.6	16.6	20.9	13.2	16.6	14.4	19.4
Under 65/65+												
< 65 Years	5.7**	5.7	1.0**	1.0	3.8**	3.8	4.2**	4.2	2.3**	2.3	3.2**	3.2
▶ 65+ Years	29.3	28.7	22.9	22.7	21.5	21.6	21.0	20.9	17.0	16.6	18.5	19.4
Age												
▶ 65-69	12.7*		8.5*		11.4*		6.7*		8.3*		8.3*	
70-74	20.8*		15.6**		14.4**		14.5**		10.2**		14.5**	
75-79	45.0*		29.7*		28.9*		25.5*		13.5**		17.4**	
80-84	52.6*		39.5*		30.2**		35.7*		33.8**		34.4**	
85-89	30.0**		50.0**		48.3**		55.6**		44.5**		54.7**	
90-94	85.7**		48.8**		39.2**		60.5**		45.1**		14.7**	
95-97	0.0**		207.7**		50.5**		95.0**		143.5**		0.0**	
98+	0.0**		...		42.9**		0.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	24.5	30.3	18.0	23.0	16.0	20.8	16.9	21.1	11.0	14.0	13.0	17.9
Black	22.6**	28.6	16.7**	30.5	23.8**	32.2	15.0**	25.6	30.5**	44.0	20.5**	30.4
Hispanic	6.5**	7.5	18.6**	33.9	24.1**	71.9	17.5**	27.0	35.9**	86.6	17.6**	40.3
Asian	0.0**	0.0	0.0**	0.0	8.3**	22.5	7.8**	0.0	7.8**	11.3	22.1**	46.0
Other	7.1**	12.9	6.5**	9.9	18.6**	35.4	17.4**	20.1	5.6**	8.9	21.5**	23.9
Unknown	76.0**	...	0.0**	...	73.0**	...	0.0**	...	0.0**	...	175.3**	...
Region												
▶ Northeast	17.9*	23.5	9.8*	13.2	14.9*	18.0	12.3*	13.9	7.2*	6.2	8.5*	11.3
South	20.8*	22.4	13.8*	19.0	18.2*	23.3	13.1*	16.0	14.6*	19.5	14.0*	19.4
Midwest	37.8*	48.1	32.5*	39.6	18.8*	24.6	18.2*	22.9	17.0*	21.3	17.3*	21.3
West	14.4**	19.3	12.3**	15.5	14.0**	17.1	26.5*	36.7	11.0**	14.6	17.5**	25.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 3-29. Emergency room visits by privately insured individuals for prostate cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=156)		2003 (N=789)		2004 (N=788)		2005 (N=624)		2006 (N=726)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.6	12.7	16.5	39.8	16.1	37.3	12.0	32.6	14.3	34.4
Age										
40-44	...		0.3**		0.3**		...		0.5**	
45-54	4.2*		14.8*		9.0*		5.3*		3.8*	
55-64	8.0*		74.1		81.0		58.2*		72.0*	
▶ 65-74	22.0		83.5		74.4		39.0		93.8	
75-84	42.6*		52.7*		44.9*		36.8*		25.1**	
85+	...		68.6**		60.5**		131.3*		56.7**	
Race/ethnicity										
▶ White	2.7	7.6	10.5	31.5	8.4	21.5	8.1	21.6	4.8	14.3
Black	9.4**	41.3	90.5*	230.2	53.4*	135.6	38.4*	91.5	88.2*	214.7
Hispanic	1.8**	14.8	29.5*	119.9	20.5*	84.7	14.3*	61.6	19.8*	78.7
Asian	1.5**	18.0	2.0**	26.5	...	...	...	...	...	...
Other	...	...	9.8**	97.6	6.8**	69.0	12.5**	43.9	12.3**	114.2
Unknown	1.9**	...	8.5**	...	5.8**	...	5.6**	...	4.8**	...
Missing	4.5*	...	18.7*	...	45.3*	...	29.3*	...	48.0*	...
Region										
Northeast	7.2*	20.0	5.2*	16.7	3.1*	13.1	3.8*	25.3	0.4**	2.8
South	3.6	11.6	31.8*	72.1	33.2*	74.3	23.4*	60.4	30.2*	75.8
▶ Midwest	3.4	12.5	5.4	20.7	3.2	9.7	3.9	13.3	1.6*	6.0
West	1.5**	20.2	2.4**	8.1	0.5**	4.0	0.4**	1.6	1.4**	10.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

CHAPTER 4

Urinary Incontinence

Female Urinary Incontinence
Female Fistula-Related Urinary Incontinence
Female Stress Urinary Incontinence
Male Urinary Incontinence
Pediatric Urinary Incontinence
Spinal Cord Injury-Related Urinary Incontinence

Table 4-1. Codes used in the diagnosis and management of urinary incontinence**Female Urinary Incontinence****Females 18 years or older, with one of the following ICD-9 diagnosis codes, but not a coexisting 952.XX or 953.XX code:**

Stress

596.51	Hypertonicity of bladder
596.52	Low bladder compliance
596.59	Other functional disorder of bladder
599.8	Other specified disorders of urethra and urinary tract
599.81	Urethral hypermobility
599.82	Intrinsic (urethral) sphincter deficiency (ISD)
599.83	Urethral instability
599.84	Other specified disorders of urethra
625.6	Stress incontinence, female
788.3	Urinary incontinence
788.30	Urinary incontinence unspecified
788.31	Urge incontinence
788.33	Mixed incontinence, male and female
788.34	Incontinence without sensory awareness
788.37	Continuous leakage

Fistulae

596.1	Intestinovesical fistula
596.2	Vesical fistula not elsewhere classified
619.0	Urinary-genital tract fistula, female
619.1	Digestive-genital tract fistula, female

Male Urinary Incontinence**Males 18 years or older, with one of the following ICD-9 diagnosis codes, but not a coexisting 952.XX or 953.XX code:**

596.51	Hypertonicity of bladder
596.52	Low bladder compliance
596.59	Other functional disorder of bladder
599.8	Other specified disorders of urethra and urinary tract
599.81	Urethral hypermobility
599.82	Intrinsic (urethral) sphincter deficiency (ISD)
599.83	Urethral instability
599.84	Other specified disorders of urethra
788.3	Urinary incontinence
788.30	Urinary incontinence unspecified
788.31	Urge incontinence
788.33	Mixed incontinence, male and female
788.34	Incontinence without sensory awareness
788.35	Post-void dribbling
788.37	Continuous leakage

Post-Radical Prostatectomy Incontinence

Males 18 years or older, carrying ICD-9 diagnosis code 185, at least one of the above codes and at least one of the following prostatectomy codes:

ICD-9 procedure codes

60.5

CPT procedure codes

55840 Prostatectomy, retropubic radical, with or without nerve sparing

Continued on next page.

Table 4-1 (continued). Codes used in the diagnosis and management of urinary incontinence

55842	Prostatectomy, retropubic radical, with or without nerve sparing; with lymph node biopsy(s) (limited pelvic lymphadenectomy)
55845	Prostatectomy, retropubic radical, with or without nerve sparing; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric, and obturator nodes
55866	Laparoscopy, surgical prostatectomy, retropubic radical, including nerve sparing, includes robotic assistance, when performed

Spinal Cord Injury-Related Incontinence

Individuals with a diagnosis code for spinal cord injury 952.XX or 953.XX and at least one of the following:

ICD-9 diagnosis codes

344.61	Cauda equina syndrome with neurogenic bladder
596.51	Hypertonicity of bladder
596.52	Low bladder compliance
596.54	Neurogenic bladder, NOS
596.55	Detrusor sphincter dyssynergia
596.59	Other functional disorder of bladder
599.8	Other specified disorders of urethra and urinary tract
599.84	Other specified disorders of urethra
625.6	Stress incontinence, female
788.3	Urinary incontinence
788.30	Urinary incontinence unspecified
788.31	Urge incontinence
788.32	Stress incontinence, male
788.33	Mixed incontinence, male and female
788.34	Incontinence without sensory awareness
788.37	Continuous Leakage
788.39	Other urinary incontinence

Pediatric Incontinence

Individuals under 18 with one of the following ICD-9 diagnosis codes, but not a coexisting 952.XX or 953.XX code:

307.6	Enuresis
596.51	Hypertonicity of bladder
596.52	Low bladder compliance
596.59	Other functional disorder of bladder
596.8	Other specified disorders of bladder
599.8	Other specified disorders of urethra and urinary tract
599.81	Urethral hypermobility
599.82	Intrinsic (urethral) sphincter deficiency (ISD)
599.83	Urethral instability
599.84	Other specified disorders of urethra
625.6	Stress incontinence, female
788.3	Urinary incontinence
788.30	Urinary incontinence unspecified
788.31	Urge incontinence
788.32	Stress incontinence, male
788.33	Mixed incontinence, male and female
788.34	Incontinence without sensory awareness
788.36	Nocturnal enuresis
788.37	Continuous Leakage
788.39	Other urinary incontinence

Table 4-2. Prevalence of stress urinary incontinence among adult females, 2001-2008 (merged), count, percent^f

	Total Count	Difficulty Controlling Bladder					
		Yes		No		Refused to Answer or Don't Know	
		Count	Percent	Count	Percent	Count	Percent
Total	99,142,845	41,441,531	41.80%	57,530,091	58.03%	†	†
Age							
18-24	6,044,968	1,296,109	21.44%	4,748,859	78.56%	†	†
25-34	15,442,667	4,338,795	28.10%	11,052,844	71.57%	†	†
35-44	20,295,974	8,132,933	40.07%	12,163,040	59.93%	†	†
45-54	22,714,794	10,682,105	47.03%	12,027,586	52.95%	†	†
55-64	13,734,065	6,716,912	48.91%	7,004,106	51.00%	†	†
65-74	10,948,331	5,582,235	50.99%	5,326,928	48.66%	†	†
75-84	8,354,221	3,957,845	47.38%	4,360,507	52.20%	†	†
85+	1,607,826	734,598	45.69%	846,220	52.63%	†	†
Race/ethnicity							
Mexican American	6,824,264	2,913,188	42.69%	3,908,145	57.27%	†	†
Other Hispanic	4,380,785	1,531,411	34.96%	2,849,374	65.04%	†	†
Non-Hispanic White	71,362,072	31,811,064	44.58%	39,432,327	55.26%	†	†
Non-Hispanic Black	11,438,566	3,310,183	28.94%	8,106,523	70.87%	†	†
Other ^b	5,137,157	1,875,683	36.51%	3,233,723	62.95%	†	†
Education							
< 9th grade	6,504,075	2,922,882	44.94%	3,556,030	54.67%	†	†
9-11th grade	11,545,097	4,997,568	43.29%	6,532,854	56.59%	†	†
High school graduate ^c	78,114,878	32,484,740	41.59%	45,536,114	58.29%	†	†
Refused	†	†	†	†	†	†	†
Don't Know	†	†	†	†	†	†	†

† Figure does not meet standard for reliability or precision.

^aPercent calculated using total count within each demographic group.

^bIncluding multi-racial.

^cGED or equivalent.

NOTE: The data in this table are based on question KIQ.042: During the past 12 months, {have you/has sample person} leaked or lost control of even a small amount of urine with an activity like coughing, lifting or exercise?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-3. Prevalence of non-stress urinary incontinence among adult females, 2001-2008 (merged), count, percent^a

	Total Count	Difficulty Controlling Bladder					
		Yes		No		Refused to Answer or Don't Know	
		Count	Percent	Count	Percent	Count	Percent
Total	99,094,515	9,428,239	9.51%	89,365,687	90.18%	300,589	0.30%
Age							
18-24	6,031,386	197,042	3.27%	5,834,343	96.73%	† †	
25-34	15,442,667	696,082	4.51%	14,695,559	95.16%	† †	
35-44	20,274,568	1,191,369	5.88%	19,075,581	94.09%	† †	
45-54	22,714,794	1,904,181	8.38%	20,798,914	91.57%	† †	
55-64	13,734,065	1,484,459	10.81%	12,197,317	88.81%	† †	
65-74	10,934,988	1,818,069	16.63%	9,059,521	82.85%	† †	
75-84	8,354,221	1,672,262	20.02%	6,606,547	79.08%	† †	
85+	1,607,826	464,776	28.91%	1,097,907	68.29%	† †	
Race/ethnicity							
Mexican American	6,824,264	471,253	6.91%	6,349,118	93.04%	† †	
Other Hispanic	4,380,785	376,396	8.59%	4,001,973	91.35%	† †	
Non-Hispanic White	71,327,324	7,309,201	10.25%	63,790,836	89.43%	† †	
Non-Hispanic Black	11,438,566	904,151	7.90%	10,495,176	91.75%	† †	
Other ^b	5,123,575	† †		4,728,585	92.29%	† †	
Education							
< 9th grade	6,504,075	1,088,095	16.73%	5,373,175	82.61%	† †	
9-11th grade	11,545,097	1,321,813	11.45%	10,180,978	88.18%	† †	
High school graduate ^c	78,066,547	6,787,837	8.69%	71,100,591	91.08%	† †	
Refused	†	† †		† †		† †	
Don't Know	†	† †		† †		† †	

† Figure does not meet standard for reliability or precision.

^aPercent calculated using total count within each demographic group.

^bIncluding multi-racial.

^cGED or equivalent.

NOTE: The data in this table are based on question KIQ.046: During the past 12 months, {have you/has sample person} leaked or lost control of even a small amount of urine without an activity like coughing, lifting, or exercise, or an urge to urinate?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-4. Frequency of stress urinary incontinence among adult females who responded "yes" to difficulty controlling bladder during physical activity, 2001-2008 (merged), count, percent^a

	Total Count	Every Day/Night		A Few Times per Week		A Few Times per Month		A Few Times per Year		Refused to Answer or Don't Know	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total	41,441,531	14,505,034	35.00%	10,561,926	25.49%	7,442,459	17.96%	8,852,218	21.36%	† †	
Age											
18-24	1,296,109	578,066	44.60%	234,223	18.07%	† †		† †		† †	
25-34	4,338,795	1,372,891	31.64%	991,734	22.86%	810,444	18.68%	1,161,932	26.78%	† †	
35-44	8,132,933	3,104,362	38.17%	1,605,101	19.74%	1,311,573	16.13%	2,102,733	25.85%	† †	
45-54	10,682,105	3,302,420	30.92%	3,020,199	28.27%	2,053,365	19.22%	2,306,121	21.59%	† †	
55-64	6,716,912	2,349,066	34.97%	1,962,263	29.21%	1,150,841	17.13%	1,235,130	18.39%	† †	
65-74	5,582,235	2,038,415	36.52%	1,586,210	28.42%	1,041,419	18.66%	898,381	16.09%	† †	
75-84	3,957,845	1,438,658	36.35%	1,020,342	25.78%	738,093	18.65%	735,230	18.58%	† †	
85+	734,598	321,158	43.72%	† †		† †		† †		† †	
Race/ethnicity											
Mexican American	2,913,188	983,908	33.77%	831,814	28.55%	540,164	18.54%	550,819	18.91%	† †	
Other Hispanic	1,531,411	556,182	36.32%	397,034	25.93%	259,517	16.95%	312,711	20.42%	† †	
Non-Hispanic White	31,811,064	11,031,431	34.68%	8,147,197	25.61%	5,650,716	17.76%	6,926,888	21.78%	† †	
Non-Hispanic Black	3,310,183	1,225,310	37.02%	799,818	24.16%	633,927	19.15%	638,517	19.29%	† †	
Other ^b	1,875,683	708,202	37.76%	† †		† †		423,283	22.57%	† †	
Education											
< 9th grade	2,922,882	1,026,997	35.14%	760,590	26.02%	649,407	22.22%	481,204	16.46%	† †	
9-11th grade	4,997,568	1,762,728	35.27%	1,385,430	27.72%	858,552	17.18%	965,408	19.32%	† †	
High school graduate ^c	32,484,740	11,402,903	35.10%	8,090,527	24.91%	5,748,574	17.70%	7,192,976	22.14%	† †	
Refused	†	† †		† †		† †		† †		† †	
Don't Know	†	† †		† †		† †		† †		† †	

† Figure does not meet standard for reliability or precision.

^aPercent calculated using total count within each demographic group.^bIncluding multi-racial.^cGED or equivalent.

NOTE: The data in this table are based on question KIQ.043: How frequently does this (referring to KIQ.042) occur? Would you say this occurs...every day, a few times a week, a few times a month, or a few times a year?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-5. Frequency of non-stress urinary incontinence among adult females who responded "yes" to difficulty controlling bladder without any physical activity, 2001-2008 (merged), count, percent

Total Count	Every Day/Night		A Few Times per Week		A Few Times per Month		A Few Times per Year		Refused to Answer or Don't Know	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
9,428,239	2,800,262	29.70%	2,801,176	29.71%	1,589,250	16.86%	2,178,827	23.11%	† †	

† Figure does not meet standard for reliability or precision.

NOTE: The data in this table are based on question KIQ.047: How frequently does this (referring to KIQ.046) occur? Would you say this occurs...every day, a few times a week, a few times a month, or a few times a year?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-6. Nationally representative inpatient stays for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=48,582)		2003 (N=40,709)		2004 (N=35,245)		2005 (N=33,525)		2006 (N=26,822)		2007 (N=24,482)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	43.7	44.3	36.2	36.5	31.8	31.8	29.8	29.8	23.6	23.5	21.3	21.1
Age												
18-24	2.1*		1.6*		1.2*		1.7*		1.2*		0.8*	
25-34	11.3*		9.2*		9.3*		8.8*		6.7*		5.3*	
35-39	29.0*		23.7		23.9		22.8		17.3		14.9	
40-44	43.4		38.4		36.7		32.6		23.5		24.5	
45-54	61.8		53.3		43.7		42.1		32.0		28.6	
55-64	78.3		62.6		48.8		43.9		35.1		31.5	
▶ 65-74	94.4		72.2		60.2		55.3		47.6		42.6	
75-84	50.2*		40.5*		46.0*		46.2*		38.8*		32.1*	
85+	30.0*		28.0*		27.7*		25.8*		18.8*		22.4*	
Race/ethnicity												
▶ White	29.8	31.4	29.6	29.9	25.9	26.0	25.4	25.4	19.3	19.2	18.0	17.9
Black	10.8*	11.0	11.4*	11.4	8.6*	8.6	6.8*	6.8	7.1*	7.0	7.6*	7.5
Hispanic	†	†	25.5*	26.1	21.6*	21.8	18.3*	18.3	16.9*	16.6	17.5*	17.1
Asian	9.3*	11.3	7.5*	8.6	8.1*	9.2	6.0*	6.8	4.0*	4.5	4.7*	4.7
Other	65.0*	63.4	33.9*	34.3	29.5*	36.4	33.3*	33.3	28.3*	27.6	27.5*	27.3
Region												
Northeast	36.0	36.7	28.6	29.1	26.4	26.6	27.5	27.5	20.6	20.7	21.5	21.6
South	47.1	47.9	40.3	40.8	36.6	36.7	30.7	30.7	25.6	25.4	22.2	22.0
▶ Midwest	42.0	41.8	35.8	35.8	29.5	29.4	30.8	30.8	20.6	20.5	20.4	20.1
West	47.1*	48.6	36.6*	36.8	30.9*	30.9	29.4*	29.4	26.0*	25.7	20.6*	20.3

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 4-7. Inpatient stays by Medicare beneficiaries for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=15,960)		2003 (N=15,420)		2004 (N=13,160)		2005 (N=10,960)		2006 (N=10,140)		2007 (N=9,020)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	80.0	84.2	75.6	78.8	63.8	68.1	53.1	58.8	50.4	55.3	45.3	48.6
Under 65/65+												
< 65 Years	73.8*	73.8	72.2*	72.2	54.6*	54.6	38.9*	38.9	38.6*	38.6	41.4*	41.4
▶ 65+ Years	81.2	84.2	76.3	78.8	65.9	68.1	56.4	58.8	53.2	55.3	46.2	48.6
Age												
▶ 65-69	99.5		94.9		82.7		65.7		60.5		58.0	
70-74	99.4*		100.6*		80.7*		62.0*		77.3*		67.1*	
75-79	92.7*		89.0*		71.2*		73.0*		52.0*		50.4*	
80-84	66.1*		50.3*		58.5*		44.2*		46.5*		30.2*	
85-89	33.5**		24.5**		21.8**		32.9**		22.0**		15.7**	
90-94	16.8**		27.3**		18.8**		15.9**		16.1**		10.7**	
95-97	25.3**		0.0**		0.0**		24.5**		12.6**		0.0**	
98+	0.0**		0.0**		14.1**		0.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	86.1	90.1	80.1	83.3	68.7	72.6	57.8	62.4	53.4	58.3	48.8	51.7
Black	32.2*	33.4	36.1*	34.0	26.8**	24.2	18.2**	27.4	21.8**	17.0	18.3**	17.3
Hispanic	57.3**	51.4	60.4**	74.1	21.3**	36.1	36.3**	23.0	42.4**	51.7	41.4**	63.5
Asian	42.5**	34.3	19.9**	45.2	6.3**	15.4	5.9**	8.4	23.3**	30.1	16.7**	25.3
Other	100.6**	79.9	153.3**	106.6	129.9**	109.6	78.4**	86.9	105.8**	107.1	54.6**	47.4
Unknown	164.7**	...	89.3**	...	172.8**	...	188.7**	...	50.3**	...	109.3**	...
Region												
▶ Northeast	62.1	67.1	53.0	55.2	36.5	38.9	33.9	35.8	37.4	41.5	33.5	35.6
South	86.6*	90.7	80.8*	85.2	73.1*	80.4	63.1*	70.2	50.7*	55.8	51.9*	54.9
Midwest	75.6*	76.2	72.1*	75.6	59.5*	62.6	49.5*	55.7	48.9*	52.3	38.5*	42.8
West	94.4*	104.6	97.3*	98.3	82.1*	84.4	58.5*	65.1	67.5*	76.0	53.6*	57.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-8. Inpatient stays by privately insured individuals for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,329)		2003 (N=3,528)		2004 (N=3,197)		2005 (N=3,259)		2006 (N=2,995)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	73.3	129.9	69.7	119.7	61.9	104.3	59.6	102.0	56.4	105.3
Age										
18-24	4.4**		3.1**		4.1**		1.7**		2.2**	
25-34	16.3*		20.2*		17.1*		14.4*		16.1*	
35-39	52.3*		53.8*		44.7*		42.4*		44.1*	
40-44	84.1*		80.3*		74.9*		64.5*		65.0*	
45-54	119.3*		109.2*		98.5*		92.5*		89.1*	
55-64	157.9		143.3		115.8*		109.4*		96.9*	
▶ 65-74	155.2		142.5		139.3		129.8		149.4	
75-84	138.9*		142.7*		104.9*		136.5*		167.8*	
85+	...		84.3*		78.8*		96.0*		115.6*	
Race/ethnicity										
▶ White	83.0	130.8	80.5	132.8	68.0	111.0	64.7	108.4	61.5	112.7
Black	47.4*	72.8	50.8*	83.8	36.5*	66.1	33.8*	56.8	31.0*	60.7
Hispanic	87.5*	179.1	80.0*	145.2	61.0*	113.7	60.9*	115.2	65.6*	129.4
Asian	40.5**	107.5	30.5*	63.8	25.9*	60.5	24.5*	62.8	18.8*	46.2
Other	63.3**	135.8	59.0**	119.4	42.0**	90.6	72.7*	148.5	45.4**	107.6
Unknown	66.9*	...	66.9*	...	57.2*	...	50.0*	...	52.0*	...
Missing	68.1*	...	59.3*	...	55.8*	...	55.6*	...	46.9*	...
Region										
Northeast	49.3*	88.5	51.2*	95.4	44.9*	79.2	44.2*	87.4	42.7*	89.1
South	84.5*	142.1	77.7*	126.8	71.0*	117.8	63.0*	102.6	61.0*	110.3
▶ Midwest	68.5	123.8	64.4	110.5	55.8	94.2	56.4	97.4	50.8	98.2
West	71.4*	143.5	73.7*	156.8	62.7*	110.0	68.4*	121.9	63.8*	116.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-9. Inpatient procedures among privately insured individuals for female urinary incontinence, any cause, listed as primary diagnosis, or any diagnosis, count, rate^a

	2002		2003		2004		2005		2006	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Primary Diagnosis										
Total	2,815	10,037	4,047	10,859	4,008	10,290	4,311	9,736	3,967	9,534
Age										
18-24	8	1,223	3	365.0	6	726.0	2	236.0	3	337.0
25-34	91	3,762	206	6,151	189	5,736	189	5,328	175	4,977
35-39	704	27,970	989	29,549	1,051	30,731	1,004	27,689	980	25,508
45-54	1,004	12,101	1,449	12,964	1,431	12,528	1,526	11,949	1,518	11,623
55-64	709	12,052	1,004	12,756	919	10,823	1,033	10,569	911	9,249
65-74	193	8,294	283	9,408	293	8,990	345	8,325	275	9,735
75-84	106	4,621	104	4,969	107	4,542	187	6,003	92	5,450
85+	...	...	9	1,255	12	1,465	25	2,392	13	2,421
Any Diagnosis										
Total	3,505	7,337	4,984	7,863	5,215	7,942	5,670	7,524	5,366	7,764
Age										
18-24	9	818.0	5	354.0	10	707.0	5	353.0	4	278.0
25-34	138	3,415	284	4,966	267	4,814	273	4,557	274	4,738
35-39	917	22,220	1,265	23,500	1,407	25,356	1,397	23,638	1,410	22,779
45-54	1,265	9,030	1,751	9,312	1,888	9,936	2,062	9,614	2,037	9,434
55-64	820	8,116	1,194	8,869	1,139	8,031	1,248	7,463	1,181	7,086
65-74	230	5,668	347	6,654	354	6,165	439	6,035	339	7,120
75-84	126	2,940	126	3,252	138	3,149	217	3,803	108	3,675
85+	...	...	12	813.0	12	728.0	29	1,365	13	1,272

... Data unavailable.

^aRate per 100,000 based on patients with diagnosis of urinary incontinence in the same calendar year.

NOTE: Counts less than 30 should be interpreted with caution.

SOURCE: i3 Claims Database, 2002-2006.

Table 4-10. Hospital outpatient visits by Medicare beneficiaries for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=52,920)		2003 (N=50,400)		2004 (N=53,280)		2005 (N=56,500)		2006 (N=58,520)		2007 (N=56,140)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	265.2	268.1	247.1	247.2	258.4	259.1	274.0	274.0	291.0	289.9	281.8	287.6
Under 65/65+												
< 65 Years	273.7*	273.7	248.6	248.6	262.8*	262.8	304.2*	304.2	300.0*	300.0	260.2*	260.2
▶ 65+ Years	263.5	268.1	246.8	247.2	257.5	259.1	267.0	274.0	288.9	289.9	287.1	287.6
Age												
▶ 65-69	231.7		216.7		213.9		223.2		227.5		238.2	
70-74	249.6*		254.4*		251.8*		252.5*		300.1*		274.2*	
75-79	276.4*		273.8*		259.1*		285.9*		289.7*		305.0*	
80-84	303.4*		257.5*		320.1*		313.7*		308.9*		326.5*	
85-89	318.6*		239.2*		290.0*		347.6*		376.9*		336.0*	
90-94	238.1*		237.5*		260.4*		212.1*		341.3*		339.5*	
95-97	202.4**		298.0**		220.8**		134.6**		314.4**		227.5**	
98+	57.2**		127.5**		126.6**		123.6**		122.5**		150.3**	
Race/ethnicity												
▶ White	261.1	264.4	236.2	236.2	242.6	243.3	265.9	264.8	291.5	291.2	284.0	292.8
Black	248.7*	251.7	283.2*	301.3	322.5*	337.3	285.6*	317.7	278.1*	284.9	252.1*	241.7
Hispanic	292.0*	278.9	302.1*	242.9	410.4*	425.7	497.3*	465.1	259.7*	207.3	284.4*	326.9
Asian	127.4**	112.6	139.2**	130.7	119.2**	132.3	76.4**	84.3	139.6**	182.4	166.9*	194.0
Other	650.5*	686.8	625.6*	706.9	643.8*	651.3	515.0*	598.4	490.0*	545.0	436.6*	400.0
Unknown	617.5**	...	312.6**	...	259.2**	...	518.9**	...	552.8**	...	382.5**	...
Region												
▶ Northeast	281.2	269.9	268.1	275.2	294.5	287.0	326.8	314.8	356.0	343.5	321.6	313.2
South	191.4*	193.7	186.5*	183.5	169.0*	164.3	179.8*	173.3	178.2*	173.6	182.6*	177.3
Midwest	341.1*	347.9	301.2*	298.1	335.2*	339.3	349.3*	363.7	373.3*	375.6	370.5*	391.8
West	302.5*	315.3	281.4*	283.7	308.6*	323.7	315.5*	323.5	351.6*	365.9	332.0*	362.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-11. Hospital outpatient visits by privately insured individuals for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,277)		2003 (N=8,797)		2004 (N=8,663)		2005 (N=9,947)		2006 (N=9,426)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	182.3	362.1	173.7	346.5	167.8	313.1	181.8	322.8	177.5	332.8
Age										
18-24	19.6*		19.0*		18.5*		21.4*		17.2*	
25-34	52.7*		51.2*		53.5*		54.3*		54.4*	
35-39	114.4*		116.1*		117.8*		123.5*		130.5*	
40-44	150.1*		158.0*		173.3*		178.0*		195.7*	
45-54	250.7*		251.6*		239.5*		255.0*		270.8*	
55-64	354.7*		308.2*		300.4*		326.0*		317.0*	
▶ 65-74	528.1		550.0		352.9		374.0		462.4	
75-84	797.0*		697.4*		727.3*		666.5*		529.3*	
85+	...		391.8*		254.9*		304.9*		477.7*	
Race/ethnicity										
▶ White	198.0	322.7	193.4	319.4	176.4	293.7	194.0	315.4	197.4	349.3
Black	137.3*	244.2	121.8*	203.2	99.1*	160.0	101.0*	159.1	95.4*	199.2
Hispanic	161.2*	269.0	145.6*	258.1	137.3*	236.4	141.5*	246.8	148.3*	270.6
Asian	85.3*	198.3	86.6*	214.1	51.1*	104.2	72.1*	172.3	62.1*	154.0
Other	79.2**	161.1	151.1*	266.2	141.7*	234.3	155.0*	276.7	119.6*	243.1
Unknown	172.6*	...	174.9*	...	166.7*	...	172.4*	...	174.1*	...
Missing	179.3*	...	162.9*	...	192.5*	...	206.4*	...	161.0*	...
Region										
Northeast	119.9*	223.8	111.1*	208.9	154.8*	269.5	175.8*	311.8	181.8*	324.9
South	154.4*	259.8	152.7*	251.4	156.3*	265.6	163.8*	269.0	168.2*	293.7
▶ Midwest	267.9	536.2	251.1	519.2	219.2	415.3	232.6	412.2	212.2	421.7
West	92.6*	194.0	99.5*	215.5	91.9*	179.8	131.5*	249.7	136.5*	278.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-12. Nationally representative hospital outpatient visits for female urinary incontinence, any cause, listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	461,053
Age	
40-44	72,304
45-54	119,673
55-64	67,138
65-74	97,976
75-84	24,000
85+	79,962
Race/ethnicity	
White	339,866
Black	105,084
Hispanic	13,998
Asian	637
Other	1,468
Region	
Northeast	123,347
South	203,773
Midwest	104,906
West	29,027

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-13. Ambulatory surgery center visits by Medicare beneficiaries for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=25,300)		2003 (N=24,280)		2004 (N=27,140)		2005 (N=25,400)		2006 (N=27,200)		2007 (N=28,260)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	157.8	168.8	158	167.9	170.1	182.7	164.4	175.7	182.5	195.1	187.6	206.6
Under 65/65+												
< 65 Years	135.1*	135.1	135.5*	135.5	146.5*	146.5	143.8*	143.8	161.2*	161.2	150.8*	150.8
▶ 65+ Years	162.4	168.8	162.7	167.9	175.2	182.7	169.1	175.7	187.5	195.1	196.7	206.6
Age												
▶ 65-69	166.3		153.1		162.5		180.8		192.3		195.5	
70-74	182.6*		185.4*		226.5*		178.4*		226.2*		221.3*	
75-79	194.6*		214.4*		203.9*		211.2*		197.5*		223.6*	
80-84	146.7*		159.1*		171.7*		168.8*		201*		217.1*	
85-89	132.7*		99.4*		123.8*		108.5*		133.4*		161.4*	
90-94	61.6**		62.8**		48.3**		66.3**		77.9**		64.2**	
95-97	25.3**		37.2**		36.8**		24.5**		12.6**		25.3**	
98+	...		14.2**		...		...		13.6**		...	
Race/ethnicity												
▶ White	170.5	182.3	169.9	180.9	184.7	197.5	181	192	201.1	215	204.7	224.8
Black	83.6*	79.8	74.2*	61.8	80.4*	78.3	65.2*	65.9	77.5*	56.1	89.4*	83
Hispanic	103.1**	95.6	82.4**	81.1	74.6**	79.3	124.3**	106.8	74.2**	64.3	87.9**	123.7
Asian	28.3**	38.5	33.1**	42.6	31.4**	54.3	...	...	64**	101.4	66.8**	92.5
Other	114**	92.9	220.8*	237.4	194.9*	250.5	123.2**	145.7	105.8**	106	147.3**	175.8
Unknown	164.7**	...	357.3**	...	259.2**	...	235.8**	...	301.5**	...	273.2**	...
Region												
▶ Northeast	120.2	129	124.5	132.3	137.3	150.9	136.9	139.3	149	157.5	162.6	183.4
South	171.4*	179.8	180.4*	195.8	187.1*	204.7	188.4*	205.4	190.9*	207.4	204.9*	225.3
Midwest	196.2*	210.1	176.6*	179.3	197.7*	205.8	186.2*	193.5	227.3*	230.4	210.4*	225.3
West	109.9*	123.2	115.9*	126.6	126.2*	134	107.5*	122.6	134.5*	156.1	143.6*	159.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-14. Ambulatory surgery center visits by privately insured individuals for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,199)		2003 (N=1,155)		2004 (N=1,064)		2005 (N=1,343)		2006 (N=1,450)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	26.4	42.0	22.8	36.0	20.6	33.5	24.5	37.1	27.3	45.5
Age										
18-24	2.0**		1.2**		1.5**		1.3**		1.9**	
25-34	9.5*		7.4*		6.1*		7.9*		8.9*	
35-39	17.9*		17.1*		12.4*		18.7*		19.5*	
40-44	34.7		27.9*		26.3*		30.4*		34.4*	
45-54	46.5		39.0		36.3		38.7		42.8*	
55-64	49.0*		46.6*		37.1		48.8*		50.3	
▶ 65-74	38.4		35.6		35.9		37.7		58.9	
75-84	31.3*		29.1*		32.6*		29.2*		45.2**	
85+	...		5.0**		13.9**		5.6**		38.5*	
Race/ethnicity										
▶ White	33.7	45.8	28.3	42.4	22.8	36.1	27.2	39.0	30.2	49.2
Black	16.1**	25.1	14.7**	23.4	15.7*	26.0	12.2*	22.6	14.7*	28.1
Hispanic	26.0*	33.9	30.4*	50.8	20.1*	37.1	22.4*	38.1	30.9*	51.9
Asian	21.7**	46.3	5.9**	10.2	4.9**	10.2	7.7**	14.3	8.2**	20.2
Other	15.8**	28.1	3.7**	19.3	21.0**	52.4	17.0**	34.6	35.9**	110.6
Unknown	30.9*	...	25.7*	...	20.0*	...	21.7*	...	25.3*	...
Missing	21.5*	...	16.6*	...	16.9*	...	23.1*	...	20.5*	...
Region										
Northeast	15.3*	25.7	16.5*	25.4	11.9*	19.9	13.5*	23.7	16.7*	30.8
South	34.5*	54.7	27.9*	44.1	22.4	37.7	25.8*	39.6	29.9	51.5
▶ Midwest	23.7	37.6	21.5	34.3	24.6	37.8	29.8	43.1	30.9	47.3
West	17.0*	29.9	15.0*	32.5	12.7*	23.4	18.0*	29.0	20.9*	37.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-15. Nationally representative ambulatory surgery center visits for female urinary incontinence, any cause, listed as primary diagnosis, count, rate^a

	Count	Rate
Total	155,566	137.1
Age		
18-24	71	0.5*
25-34	3,596	18.3*
35-39	9,594	91.8*
40-44	12,769	113.0
45-54	44,570	204.2
55-64	40,192	249.6
▶ 65-74	22,294	222.3
75-84	14,949	195.9*
85+	7,531	283.2*

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 4-16. Physician office visits by Medicare beneficiaries for female urinary incontinence, any cause, listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,126,180)		2003 (N=1,158,920)		2004 (N=1,191,860)		2005 (N=1,261,200)		2006 (N=1,263,820)		2007 (N=1,281,280)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5,644	6,214	5,682	6,271	5,781	6,362	6,116	6,788	6,285	7,035	6,430	7,257
Under 65/65+												
< 65 Years	3,350*	3,350	3,360*	3,360	3,602*	3,602	3,737*	3,737	3,656*	3,656	3,586*	3,586
▶ 65+ Years	6,109	6,214	6,175	6,271	6,258	6,362	6,662	6,788	6,904	7,035	7,137	7,257
Age												
▶ 65-69	4,849		4,790		4,812		4,985		5,232		5,225	
70-74	6,008*		5,917*		6,004*		6,265*		6,578*		6,911*	
75-79	6,969*		7,100*		7,314*		7,754*		7,969*		8,148*	
80-84	7,294*		7,479*		7,553*		8,311*		8,502*		8,905*	
85-89	6,775*		7,053*		7,105*		7,910*		8,165*		8,509*	
90-94	5,269*		5,518*		5,667*		5,942*		6,251*		6,790*	
95-97	3,403*		4,023*		4,219*		4,234*		4,665*		5,840*	
98+	1,286*		1,615*		1,266*		1,881*		1,715*		2,036*	
Race/ethnicity												
▶ White	5,973	6,529	6,014	6,583	6,056	6,609	6,477	7,126	6,676	7,398	6,842	7,637
Black	3,040*	3,406	3,090*	3,490	3,362*	3,769	3,245*	3,665	3,367*	3,855	3,417*	4,008
Hispanic	4,099*	4,243	4,680*	4,782	4,925*	4,841	5,563*	5,781	5,677*	5,975	5,880*	6,364
Asian	2,979*	3,047	3,076*	3,040	4,090*	4,439	4,038*	4,293	4,020*	4,355	4,351*	4,734
Other	7,987*	9,250	7,446*	9,003	8,546*	10,317	7,384*	8,659	6,531*	8,153	5,921*	7,188
Unknown	9,345*	...	8,754*	...	9,762*	...	9,858*	...	10,101*	...	10,492*	...
Region												
▶ Northeast	4,885	5,394	4,974	5,482	5,250	5,749	5,494	6,074	5,712	6,345	5,831	6,530
South	5,985*	6,565	6,125*	6,759	6,140*	6,757	6,579*	7,281	6,850*	7,692	6,973*	7,908
Midwest	5,325*	5,860	5,186*	5,677	5,298*	5,790	5,498*	6,053	5,733*	6,333	5,948*	6,591
West	6,321*	7,059	6,298*	7,086	6,336*	7,115	6,727*	7,675	6,489*	7,455	6,596*	7,630

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-17. Physician office visits by privately insured individuals for female stress urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=80,200)		2003 (N=85,509)		2004 (N=90,673)		2005 (N=105,493)		2006 (N=96,392)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,767	3,205	1,689	3,089	1,757	3,217	1,928	3,435	1,815	3,556
Age										
18-24	238.6*		201.8*		209.3*		214.8*		210.8*	
25-34	570.8*		568.4*		571.3*		608.5*		591.8*	
35-39	1,211*		1,169*		1,198*		1,276*		1,312*	
40-44	1,748*		1,732*		1,809*		1,867*		1,926*	
45-54	2,560*		2,480*		2,467*		2,625*		2,639*	
55-64	3,542*		3,254*		3,283*		3,473*		3,286*	
▶ 65-74	4,253		3,945		4,140		4,499		4,770	
75-84	5,181*		4,992*		5,482*		6,063*		6,974*	
85+	...		4,325*		5,145*		5,127*		5,359*	
Race/ethnicity										
▶ White	2,061	3,507	1,996	3,526	1,895	3,411	2,056	3,629	1,959	3,794
Black	1,493*	2,458	1,349*	2,309	1,259*	2,216	1,355*	2,284	1,189*	2,333
Hispanic	1,791*	3,209	1,762*	3,295	1,701*	3,155	1,787*	3,236	1,959*	3,576
Asian	1,025*	2,436	913.7*	2,123	792.2*	1,769	852.0*	1,793	832.9*	1,942
Other	1,747*	3,353	1,677*	3,261	1,562*	3,173	1,751*	3,224	1,595*	3,266
Unknown	1,963*	...	1,900*	...	1,598*	...	1,835*	...	1,718*	...
Missing	1,567*	...	1,344*	...	1,636*	...	1,897*	...	1,545*	...
Region										
Northeast	1,288*	2,373	1,270*	2,373	1,351*	2,501	1,437*	2,617	1,458*	2,952
South	1,818*	3,227	1,777	3,165	1,827*	3,361	2,020*	3,579	1,922*	3,711
▶ Midwest	1,917	3,396	1,780	3,199	1,857	3,286	1,986	3,410	1,741	3,400
West	1,607*	3,326	1,542*	3,291	1,648*	3,296	1,918*	3,716	1,912*	3,786

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-18. Nationally representative physician office visits for female urinary incontinence, any cause, listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	13,356,694
Age	
40-44	907,408
45-54	2,297,018
55-64	2,969,697
65-74	3,276,317
75-84	2,750,143
85+	1,156,111
Race/ethnicity	
White	11,622,212
Black	1,243,801
Hispanic	490,681
Region	
Northeast	2,240,155
South	5,346,508
Midwest	3,218,344
West	2,551,687

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-19. Emergency room visits by Medicare beneficiaries for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,340)		2003 (N=2,420)		2004 (N=2,180)		2005 (N=2,420)		2006 (N=2,220)		2007 (N=2,280)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.7	10.7	11.9	10.1	10.6	9.5	11.7	9.5	11.0	9.2	11.4	10.2
Under 65/65+												
< 65 Years	14.3**	14.3	16.2**	16.2	15.1**	15.1	18.7*	18.7	16.7*	16.7	15.6*	15.6
▶ 65+ Years	11.2	10.7	10.9	10.1	9.6	9.5	10.1	9.5	9.7	9.2	10.4	10.2
Age												
▶ 65-69	11.4*		9.1*		4.2*		5.1*		5.7*		7.2*	
70-74	10.5**		5.8**		7.0**		7.7**		9.2**		5.9**	
75-79	9.8**		10.8**		10.9**		9.5**		7.4**		10.3**	
80-84	13.7**		19.2**		14.6**		14.5**		11.2**		14.7**	
85-89	7.4**		7.4**		15.8**		15.9**		17.1**		18.1**	
90-94	19.6**		21.8**		10.7**		21.2**		21.5**		10.7**	
95-97	12.7**		12.4**		36.8**		36.7**		12.6**		37.9**	
98+	14.3**		28.3**		...		0.0**		13.6**		13.7**	
Race/ethnicity												
▶ White	10.2	9.2	10.4	8.6	9.9	9.1	10.1	9.2	10.8	8.8	10.8	9.4
Black	26.2**	27.1	22.5**	25.4	18.2**	15.7	25.9**	16.6	12.9**	15.3	19.3**	24.1
Hispanic	11.5**	13.9	22.0**	31.8	5.3**	30.0	10.4**	7.0	...	...	5.2**	...
Asian	0.0**	0.0	...	...	...	...	...	...	...	...	5.6**	21.7
Other	6.7**	57.7	24.5**	27.6	17.7**	18.1	16.8**	0.0	22.3**	81.1	10.9**	20.4
Unknown	41.2**	...	...	...	...	...	47.2**	...	100.5**	...	...	...
Region												
▶ Northeast	8.4*	8.5	9.7*	9.6	8.3*	9.8	10.3*	11.1	10.6*	9.4	9.1*	10.3
South	14.0*	13.3	12.4*	10.3	8.5*	7.8	13.6*	10.4	10.8*	10.6	10.4*	8.7
Midwest	13.3*	12.0	13.5*	11.0	13.8*	9.6	10.4**	7.3	9.1**	7.7	12.2*	10.4
West	7.8**	4.9	10.5**	8.8	13.3**	13.2	11.2**	9.1	15.1**	8.2	15.5**	13.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-20. Emergency room visits by privately insured individuals for female urinary incontinence, any cause, listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=296)		2003 (N=541)		2004 (N=392)		2005 (N=261)		2006 (N=294)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.5	10.2	10.7	17.4	7.6	12.3	4.8	8.1	5.5	8.9
Age										
18-24	2.5*		2.4**		2.2**		0.3**		1.2**	
25-34	4.1		4.1*		1.9**		0.8**		1.3**	
35-39	3.4*		4.7**		4.2**		2.8**		3.2**	
40-44	6.0		11.2		7.6		4.0**		4.6**	
45-54	9.5*		16.0		11.5		6.0		7.9	
55-64	11.4*		27.6*		19.0*		14.6*		14.9	
▶ 65-74	4.7*		15.7*		9.7*		8.1*		10.3*	
75-84	23.3*		13.1**		10.0**		5.8**		3.2**	
85+	...		14.9**		16.2**		11.3**		11.6**	
Race/ethnicity										
▶ White	5.9	8.1	8.2	12.0	6.8	9.8	3.2	5.6	3.1	4.5
Black	8.8**	25.0	14.7**	19.6	10.0**	19.8	8.3**	17.8	8.9**	18.1
Hispanic	3.0**	8.2	21.9*	45.7	12.6*	29.2	8.0*	17.3	13.5*	30.6
Asian	...	...	3.9**	32.3	1.4**	4.8	1.3**	56.0	...	...
Other	37.0**	235.1	7.4**	119.0	...	...	...	...	...	...
Unknown	2.8**	...	9.4**	...	4.2**	...	3.6**	...	5.0**	...
Missing	7.4*	...	12.4*	...	10.8*	...	10.6*	...	13.3*	...
Region										
Northeast	6.6	12.8	4.6**	7.0	2.3**	6.1	0.3**	...	0.7**	1.1
South	7.1	11.8	15.9*	25.4	12.5*	21.0	8.3*	13.7	10.2*	18.1
▶ Midwest	6.6	8.8	7.8	12.5	4.7	7.0	3.2	5.6	2.8	5.0
West	4.4**	7.5	6.4*	12.0	3.1**	4.0	0.9**	7.3	0.7**	2.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-21. Surgical procedures among Medicare beneficiaries for treatment of female urinary incontinence, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	49,340	10,062	48,020	9,659	48,600	9,678	46,620	9,113	48,700	9,542	49,900	9,857
Anterior urethropexy, e.g. MMK	4,340	885.0	2,480	499.0	1,820	362.0	1,360	266.0	1,080	212.0	820	162.0
Ambulatory Surgery Center	220	45.0	200	40.0	220	44.0	60	12.0	60	12.0	100	20.0
Hospital Outpatient	20	4.0	40	8.0	20	4.0	0	0.0	0	0.0	20	4.0
Inpatient	4,060	828.0	2,200	443.0	1,560	311.0	1,280	250.0	1,020	200.0	700	138.0
Physician Office	40	8.0	40	8.0	20	4.0	20	4.0	0	0.0	0	0.0
Raz-type suspension	1,100	224.0	680	137.0	480	96.0	320	63.0	220	43.0	100	20.0
Ambulatory Surgery Center	300	61.0	140	28.0	120	24.0	160	31.0	40	8.0	40	8.0
Hospital Outpatient	40	8.0	20	4.0	40	8.0	0	0.0	40	8.0	20	4.0
Inpatient	700	143.0	520	105.0	300	60.0	160	31.0	100	20.0	40	8.0
Physician Office	60	12.0	0	0.0	20	4.0	0	0.0	40	8.0	0	0.0
Laparoscopic repair	680	139.0	600	121.0	540	108.0	480	94.0	500	98.0	560	111.0
Ambulatory Surgery Center	360	73.0	400	80.0	380	76.0	260	51.0	400	78.0	340	67.0
Hospital Outpatient	20	4.0	0	0.0	20	4.0	20	4.0	0	0.0	120	24.0
Inpatient	280	57.0	200	40.0	120	24.0	180	35.0	100	20.0	100	20.0
Physician Office	20	4.0	0	0.0	20	4.0	20	4.0	0	0.0	0	0.0
Collagen injection	14,100	2,875	12,100	2,434	11,300	2,250	10,160	1,986	10,980	2,151	11,320	2,236
Ambulatory Surgery Center	9,640	1,966	7,660	1,541	7,520	1,498	6,000	1,173	6,520	1,278	6,600	1,304
Hospital Outpatient	1,360	277.0	1,160	233.0	860	171.0	760	149.0	820	161.0	720	142.0
Inpatient	200	41.0	300	60.0	180	36.0	80	16.0	180	35.0	120	24.0
Physician Office	2,900	591.0	2,980	599.0	2,740	546.0	3,320	649.0	3,460	678.0	3,880	766.0
Hysterectomy with colpo-urethropexy	2,900	591.0	3,320	668.0	2,740	546.0	2,280	446.0	2,440	478.0	3,100	612.0
Ambulatory Surgery Center	980	200.0	1,460	294.0	920	183.0	140	27.0	260	51.0	900	178.0
Hospital Outpatient	40	8.0	20	4.0	80	16.0	0	0.0	100	20.0	120	24.0
Inpatient	1,880	383.0	1,820	366.0	1,700	339.0	2,060	403.0	2,080	408.0	1,960	387.0
Physician Office	0	0.0	20	4.0	40	8.0	80	16.0	0	0.0	120	24.0
Pubovaginal sling	25,840	5,270	28,580	5,749	31,480	6,269	31,640	6,185	33,300	6,525	33,880	6,693
Ambulatory Surgery Center	8,660	1,766	10,820	2,176	14,020	2,792	14,900	2,913	16,560	3,245	18,260	3,607
Hospital Outpatient	940	192.0	1,160	233.0	1,080	215.0	1,000	195.0	1,460	286.0	1,860	367.0
Inpatient	15,520	3,165	15,900	3,198	15,500	3,087	14,780	2,889	14,140	2,771	12,480	2,465
Physician Office	720	147.0	700	141.0	880	175.0	960	188.0	1,140	223.0	1,280	253.0
Pereyra procedure	240	49.0	140	28.0	100	20.0	160	31.0	40	8.0	40	8.0
Ambulatory Surgery Center	60	12.0	0	0.0	60	12.0	40	8.0	20	4.0	40	8.0
Hospital Outpatient	20	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inpatient	140	29.0	140	28.0	40	8.0	100	20.0	20	4.0	0	0.0
Physician Office	20	4.0	0	0.0	0	0.0	20	4.0	0	0.0	0	0.0
Kelly plication	140	29.0	120	24.0	140	28.0	220	43.0	140	27.0	80	16.0
Ambulatory Surgery Center	0	0.0	80	16.0	20	4.0	100	20.0	60	12.0	20	4.0
Hospital Outpatient	20	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inpatient	120	24.0	40	8.0	120	24.0	120	23.0	80	16.0	60	12.0
Physician Office	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MMK: Marshall-Marchetti-Krantz procedure.

^aUnweighted counts multiplied by 20 to arrive at counts in table.^bRate per 100,000 female adult Medicare beneficiaries with a primary diagnosis of urinary incontinence.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 4-22. Inpatient stays by Medicare beneficiaries for female fistula-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,960)		2003 (N=1,800)		2004 (N=1,740)		2005 (N=1,880)		2006 (N=1,760)		2007 (N=1,480)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.8	10.8	8.8	9.0	8.4	9.0	9.1	9.9	8.8	9.3	7.4	7.8
Under 65/65+												
< 65 Years	6.5**	6.5	9.0*	9.0	5.9**	5.9	6.2**	6.2	7.8**	7.8	7.1*	7.1
▶ 65+ Years	10.5	10.8	8.8	9.0	9.0	9.0	9.8	9.9	9.0	9.3	7.5	7.8
Age												
▶ 65-69	11.9*		8.7*		11.7*		10.7*		10.0*		8.6*	
70-74	10.5**		7.4**		7.5**		11.0**		8.6**		11.8**	
75-79	10.9**		10.3**		8.0**		8.9**		9.9**		8.4**	
80-84	12.2**		10.4**		9.5**		9.4**		12.7**		3.1**	
85-89	7.4**		8.6**		7.3**		8.5**		3.7**		3.6**	
90-94	5.6**		8.2**		8.1**		5.3**		2.7**		5.3**	
95-97	...		0.0**		0.0**		24.5**		0.0**		...	
98+	...		0.0**		14.1**		...		...		...
Race/ethnicity												
▶ White	10.2	11.0	9.0	9.5	8.4	8.7	9.4	9.7	8.8	9.6	7.9	8.0
Black	11.1**	17.0	7.8**	5.6	8.6**	9.9	7.7**	13.4	6.0**	3.8	4.1**	6.5
Hispanic	0.0*	0.0	5.5**	9.3	5.3**	22.5	5.2**	7.0	5.3**	21.3	...	...
Asian	...	...	...	...	0.0**	...	0.0**	0.0	5.8**	15.0	11.1**	57.9
Other	0.0*	0.0	18.4**	22.8	17.7**	33.9	16.8**	22.8	27.8**	38.1	10.9**	14.2
Unknown	0.0*	...	0.0**	...	43.2**	...	...	...	...	...	...	...
Region												
▶ Northeast	13.3*	15.1	11.2*	11.8	4.9*	3.7	6.9*	6.5	10.6*	11.6	5.1*	5.2
South	8.6*	10.5	7.9*	8.2	11.5*	13.5	12.1*	13.4	7.7*	8.9	9.1*	9.5
Midwest	9.8**	8.4	9.6**	9.2	8.4**	8.3	6.1**	8.0	7.9**	6.3	4.5**	5.3
West	8.4**	10.8	6.8**	6.7	5.4**	6.2	9.5**	9.2	10.3**	14.4	10.7**	11.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-23. Inpatient stays by privately insured individuals for female fistula-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=301)		2003 (N=299)		2004 (N=319)		2005 (N=325)		2006 (N=310)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.6	10.2	5.9	8.7	6.2	9.1	5.9	8.6	5.8	11.5
Age										
18-24	1.5**		0.9**		1.6**		1.0**		0.6**	
25-34	4.7*		4.4*		4.3*		3.5*		2.8*	
35-39	6.4*		6.8		7.0*		6.5*		4.4**	
40-44	6.4*		5.4*		7.3*		5.9*		5.2*	
45-54	8.2*		5.7*		5.7*		6.9*		8.9*	
55-64	8.6*		11.4		9.4*		10.3		9.1*	
▶ 65-74	15.9*		9.2*		14.3*		10.2*		15.8*	
75-84	17.5**		14.1**		13.6**		12.4**		29.0**	
85+	...		14.9**		11.6**		5.6**		7.7**	
Race/ethnicity										
▶ White	6.7	8.4	6.0	9.1	6.5	9.5	6.1	8.8	6.3	12.8
Black	6.4**	17.5	6.0**	11.0	8.8**	14.3	5.4**	8.9	6.2**	16.1
Hispanic	5.4**	13.6	8.2**	15.3	4.0**	7.9	7.8*	16.4	5.6**	11.3
Asian	5.8**	60.8	7.9**	11.8	4.2**	7.5	2.6**	...	0.6**	3.8
Other	...	...	...	...	2.6**	100.2	2.4**	78.8	12.0**	23.7
Unknown	0.6**	...	5.3**	...	6.0**	...	4.9**	...	6.1**	...
Missing	7.2*	...	5.5	...	5.6*	...	5.8*	...	4.1**	...
Region										
Northeast	5.0*	5.3	5.7	8.6	4.5*	6.1	6.0	9.9	7.0	16.8
South	7.6	12.4	6.9*	10.3	7.6*	12.4	6.6	9.6	6.7*	12.5
▶ Midwest	6.1	9.9	5.1	8.0	5.4	8.1	5.4	8.7	5.3	11.2
West	6.3*	8.2	5.0*	6.4	4.8*	6.2	5.2*	6.3	3.6*	7.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-24. Hospital outpatient visits by Medicare beneficiaries for female fistula-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=620)		2003 (N=800)		2004 (N=620)		2005 (N=800)		2006 (N=420)		2007 (N=520)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.1	2.7	3.9	3.6	3.0	2.8	3.9	3.8	2.1*	1.9	2.6*	2.0
Under 65/65+												
< 65 Years	4.8**	4.8	6.2**	6.2	4.3**	4.3	4.2*	4.2	2.6**	2.6	5.0**	5.0
▶ 65+ Years	2.8*	2.7	3.4*	3.6	2.7*	2.8	3.8	3.8	2.0*	1.9	2.0*	2.0
Age												
▶ 65-69	1.5*		3.9*		6.1*		6.5*		1.9*		1.9*	
70-74	7.3**		3.7**		1.1**		5.5**		2.9**		4.7**	
75-79	1.7**		2.3**		2.9**		1.8**		1.9**		0.6**	
80-84	1.5**		6.7**		2.2**		1.4**		0.7**		0.8**	
85-89	0.0**		1.2**		0.0**		1.2**		...		1.2**	
90-94	2.8**		...		...		5.3**		8.1**		0.0**	
95-97	...		...		...		...		...		...
98+	...		...		...		...		...		...
Race/ethnicity												
▶ White	2.7*	2.8	2.4*	2.9	1.9*	1.7	3.8	3.5	1.9*	1.4	2.1*	1.7
Black	7.0**	2.1	15.6**	20.5	11.5**	18.8	5.8**	13.4	5.0**	15.4	3.0**	13.6
Hispanic	...	...	16.5**	...	0.0**	0.0	5.2**	24.3	...	...	5.2**	28.3
Asian	...	...	...	...	...	...	...	...	...	...	...	...
Other	6.7**	57.7	...	...	11.8**	43.5	...	...	0.0**	0.0	21.8**	19.0
Unknown	...	...	...	...	...	...	...	...	0.0**	...	...	...
Region												
▶ Northeast	2.0*	2.8	4.4*	5.5	4.4*	4.2	3.4*	4.7	0.5*	0.0	2.0*	2.0
South	1.8**	0.6	1.5**	1.1	0.8**	0.4	4.0**	3.0	1.8**	1.6	2.6**	2.4
Midwest	3.1**	3.1	4.6**	3.8	2.3**	3.0	4.2**	4.9	3.6**	4.7	2.4**	2.7
West	7.8**	11.0	8.1**	8.3	7.9**	9.6	3.5**	5.1	2.4**	1.8	3.6**	3.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-25. Hospital outpatient visits by privately insured individuals for female fistula-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=332)		2003 (N=297)		2004 (N=279)		2005 (N=313)		2006 (N=312)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	7.3	12.3	5.9	6.8	5.4	6.2	5.7	7.2	5.9	8.1
Age										
18-24	2.1**		0.9**		0.6**		0.4**		0.4**	
25-34	5.0		5.5		5.1		4.7		3.9*	
35-39	5.5		7.0		6.7		6.0		6.8*	
40-44	9.5		6.5		5.6		6.7		5.8*	
45-54	7.0		7.3*		6.7		8.0		8.8	
55-64	6.6		8.3*		7.7		7.3		7.8	
▶ 65-74	5.3*		3.8*		6.7*		6.8*		11.6*	
75-84	52.4*		8.4**		3.6**		7.3**		4.8**	
85+	...		2.5**		2.3**		3.8**		11.6**	
Race/ethnicity										
▶ White	6.8	8.1	7.2	8.1	6.1	6.8	6.2	7.2	6.3	8.5
Black	4.0**	12.5	12.0**	15.4	5.4**	10.3	4.7**	7.9	7.0**	13.8
Hispanic	7.2**	17.5	3.5**	5.0	3.5**	5.5	6.3**	11.2	5.8**	12.9
Asian	5.8**	...	11.8**	22.7	2.1**	4.8	3.9**	...	0.6**	...
Other	5.3**	56.9	7.4**	21.9	...	...	4.8**	24.2	7.2**	19.4
Unknown	5.1**	...	2.9**	...	5.1**	...	4.7**	...	5.3**	...
Missing	8.1*	...	4.0*	...	4.4*	...	4.7*	...	4.7*	...
Region										
Northeast	4.8**	7.7	2.2**	4.3	3.9*	3.5	6.2	8.3	5.7	10.2
South	6.1**	6.5	6.1	6.6	6.5*	8.2	5.7	6.6	6.8	8.5
▶ Midwest	10.4	20.3	7.2	10.0	4.8	6.3	5.8	8.1	5.6	8.2
West	4.9**	5.0	4.8*	4.7	4.6*	4.1	5.4*	7.3	3.9*	5.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-26. Ambulatory surgery center visits by privately insured individuals for female fistula-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=36)		2003 (N=36)		2004 (N=31)		2005 (N=35)		2006 (N=40)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.8	1.0	0.7	0.9	0.6	0.6	0.6	0.9	0.8	1.1
Age										
18-24	...		0.3*		0.3*		...		0.1*	
25-34	1.0*		0.6**		0.8*		0.4*		0.7**	
35-39	0.9**		0.8**		0.7*		0.3*		0.3**	
40-44	0.7**		1.2**		0.5*		1.7*		1.4**	
45-54	0.8**		0.7**		0.6*		0.9*		1.2**	
55-64	1.6**		1.0**		1.0*		0.7*		0.8**	
▶ 65-74	...		...		0.5*		0.4*		...	
75-84	0.7**		0.9**		...		...		...
Race/ethnicity										
▶ White	0.7*	1.0	1.0*	1.2	0.6*	0.7	0.7*	1.0	0.9	1.5
Black	...	...	0.5**	2.8	0.8**	2.0	0.4**	3.3	...	...
Hispanic	1.8**	...	0.8**	5.1	0.5**	2.2	0.5**	1.6	1.2**	3.8
Asian	1.4**	20.3	...	...	0.7**	...	1.9**	...	...	...
Other	...	...	3.7**	19.3	...	...	...	...	2.4**	...
Unknown	0.6**	...	0.8**	...	0.9**	...	0.5**	...	0.3**	...
Missing	0.8**	...	0.3**	...	0.5**	...	0.3**	...	0.1**	...
Region										
Northeast	0.2*	...	0.9*	2.1	0.3*	0.9	0.3*	0.8	1.4**	2.6
South	0.8*	1.3	0.9*	1.1	0.9*	1.0	0.9**	1.4	1.1**	1.5
▶ Midwest	0.6*	0.8	0.6*	1.1	0.3*	0.9	0.4*	0.5	0.1*	0.9
West	1.6**	2.3	0.3**	3.0	0.6**	1.0	0.8**	1.5	0.6**	1.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-27. Physician office visits by Medicare beneficiaries for female fistula-related urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=6,800)		2003 (N=7,560)		2004 (N=7,020)		2005 (N=7,820)		2006 (N=6,500)		2007 (N=6,060)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	34.1	38.0	37.1	39.8	34.1	37.1	37.9	42.8	32.3	33.9	30.4	33.6
Under 65/65+												
< 65 Years	22.6*	22.6	33.6*	33.6	24.9*	24.9	23.4*	23.4	25.0*	25.0	24.2*	24.2
▶ 65+ Years	36.4	38.0	37.8	39.8	36.1	37.1	41.3	42.8	34.0	33.9	32.0	33.6
Age												
▶ 65-69	37.6		30.8		32.7		49.4		32.4		32.1	
70-74	49.2*		46.4*		40.9*		32.4*		30.4*		33.0*	
75-79	37.4*		38.2*		39.6*		45.1*		40.2*		45.2*	
80-84	19.0**		43.6*		31.4*		39.8*		40.5*		31.0*	
85-89	43.4*		44.2*		42.5*		47.6*		24.5**		21.7**	
90-94	16.8**		10.9**		21.5**		26.5**		34.9**		8.0**	
95-97	...		...		...		12.2**		50.3**		...	
98+	14.3**		...		56.3**		...		...		13.7**	
Race/ethnicity												
▶ White	35.9	40.4	38.5	40.9	35.1	37.9	39.5	43.5	34.8	36.7	31.9	35.0
Black	27.2**	41.3	24.4**	35.6	30.6*	38.7	27.8**	38.2	13.9**	22.2	17.3**	24.5
Hispanic	0.0**	0.0	87.9**	171.1	16.0**	45.1	36.3**	47.6	47.7**	142.3	25.9**	45.1
Asian	...	...	...	...	25.1**	30.3	17.6**	67.8	5.8**	28.7	33.4**	173.8
Other	53.6**	47.9	24.5**	48.2	35.4**	101.3	16.8**	44.8	33.4**	41.3	32.7**	36.0
Unknown	...	...	...	...	...	...	235.8**	...	...	...	54.6**	...
Region												
▶ Northeast	34.0	40.1	42.8	49.7	32.6	35.0	33.9	39.2	39.4	44.4	25.4	31.4
South	37.2*	43.0	41.2*	41.8	41.3*	45.8	43.3*	47.9	28.1*	30.1	34.8*	37.6
Midwest	23.9*	25.8	31.2*	35.6	31.1*	33.3	34.5*	40.8	32.8*	35.3	32.0*	33.8
West	43.3*	43.8	29.1*	28.7	23.0*	25.9	35.5*	39.2	33.2*	34.6	23.8*	25.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-28. Physician office visits by privately insured individuals for female fistula-related urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=871)		2003 (N=946)		2004 (N=984)		2005 (N=1,057)		2006 (N=1,024)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	19.2	22.8	18.7	23.8	19.1	23.8	19.3	24.7	19.3	30.6
Age										
18-24	6.6*		5.2*		2.4**		3.7**		2.8**	
25-34	17.6		14.0		17.8*		15.2*		12.3*	
35-39	18.3		21.3		22.5		22.0		17.7*	
40-44	26.4*		19.6		22.1		16.8*		19.5*	
45-54	22.9*		25.1*		20.3*		26.8		30.3*	
55-64	22.7*		26.7*		27.4		25.6		22.6*	
▶ 65-74	13.6*		16.2		27.1		26.7		46.6	
75-84	29.1*		33.8*		30.8*		29.2*		45.2**	
85+	...		14.9**		4.6**		15.1**		27.0**	
Race/ethnicity										
▶ White	21.4	24.9	21.8	27.2	20.3	25.7	19.7	24.5	19.8	30.8
Black	20.1**	49.2	24.0*	30.7	21.9*	30.8	14.4*	24.9	14.7*	30.0
Hispanic	14.5**	29.6	20.3*	32.6	15.8*	25.9	16.1*	27.5	18.1*	26.3
Asian	30.4**	81.1	17.7**	13.9	14.7**	19.7	14.2**	7.8	5.0**	9.8
Other	15.8**	40.0	14.7**	85.9	5.2**	41.6	7.3**	64.1	23.9**	...
Unknown	15.2**	...	19.6*	...	16.1*	...	21.4*	...	31.1*	...
Missing	17.8*	...	14.1*	...	17.5*	...	21.7*	...	16.1*	...
Region										
Northeast	12.7*	16.4	17.7	20.8	16.1	17.5	21.0	21.7	17.5	31.8
South	22.1*	27.9	20.7*	26.1	21.2*	28.3	17.7*	23.5	23.5*	34.3
▶ Midwest	16.9	21.1	16.7	21.8	17.3	22.0	20.0	26.8	17.3	31.8
West	21.6*	24.0	18.0*	29.2	19.0*	25.1	21.6*	30.0	12.4*	18.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-29. Inpatient stays by Medicare beneficiaries for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=14,000)		2003 (N=13,620)		2004 (N=11,420)		2005 (N=9,060)		2006 (N=8,380)		2007 (N=7,540)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	70.2	73.4	66.8	69.8	55.4	59.0	43.9	48.9	41.7	46.1	37.8	40.8
Under 65/65+												
< 65 Years	67.2*	67.2	63.3*	63.3	48.7*	48.7	32.2*	32.2	30.8*	30.8	34.3*	34.3
▶ 65+ Years	70.8	73.4	67.5	69.8	56.9	59.0	46.6	48.9	44.2	46.1	38.7	40.8
Age												
▶ 65-69	87.6		86.2		71.0		55.0		50.5		49.4	
70-74	89.0*		93.2*		73.2*		51.1*		68.7*		55.3*	
75-79	81.8*		78.7*		63.2*		64.1*		42.1*		42.0*	
80-84	54.0*		39.9*		49.0*		34.8*		33.7*		27.1*	
85-89	26.0**		15.9**		14.6**		24.4**		18.4**		12.0**	
90-94	11.2**		19.1**		10.7**		10.6**		13.4**		5.3**	
95-97	25.3**		0.0**		0.0**		0.0**		12.6**		0.0**	
98+	0.0**		0.0**		0.0**		0.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	75.8	79.1	71.0	73.8	60.3	63.9	48.2	52.6	44.5	48.7	40.9	43.7
Black	21.1**	18.5	28.3**	28.3	18.2**	14.3	10.5**	14.1	15.9**	13.9	14.2**	11.7
Hispanic	57.3**	51.4	54.9**	69.2	16.0**	24.2	31.1**	24.7	37.1**	47.1	41.4**	63.5
Asian	42.5**	34.3	19.9**	45.2	6.3**	15.4	5.9**	9.1	17.5**	15.0	5.6**	8.4
Other	100.6**	79.9	134.9**	99.1	112.2**	83.8	61.6**	69.6	78.0**	93.6	43.7**	40.5
Unknown	164.7**	...	89.3**	...	129.6**	...	188.7**	...	50.3**	...	109.3**	...
Region												
▶ Northeast	48.8	52.0	41.8	43.4	31.6	35.2	27.0	29.3	26.8	29.9	28.5	31.1
South	78.0*	80.2	72.9*	77.0	61.6*	66.9	50.8*	56.9	43.0*	46.9	42.9*	45.4
Midwest	65.8*	67.8	62.5*	66.4	51.1*	54.3	43.4*	47.7	41.0*	46.0	34.1*	37.5
West	86.0*	93.8	90.5*	91.6	76.7*	78.3	49.0*	56.0	57.3*	63.4	42.9*	46.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-30. Inpatient stays by privately insured individuals for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,028)		2003 (N=3,229)		2004 (N=2,878)		2005 (N=2,934)		2006 (N=2,685)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	66.7	119.6	63.8	110.9	55.8	95.2	53.6	93.5	50.6	93.8
Age										
18-24	2.8**		2.2**		2.5**		0.7**		1.7**	
25-34	11.7*		15.7*		12.8*		11.0*		13.3*	
35-39	45.9*		47.0*		37.7*		35.9*		39.7*	
40-44	77.5*		74.9*		67.7*		58.6*		59.8*	
45-54	111.1*		103.5*		92.8*		85.6*		80.3*	
55-64	149.3		131.9		106.5*		99.1*		87.9*	
▶ 65-74	139.3		133.3		125.0		119.6		133.6	
75-84	121.4*		128.6*		91.4*		124.1*		138.8*	
85+	...		69.4**		67.2**		90.3*		107.9**	
Race/ethnicity										
▶ White	76.3	122.4	74.5	124.1	61.5	101.5	58.6	99.6	55.1	99.9
Black	41.0*	64.3	44.8*	75.2	27.7*	53.5	28.4*	50.0	24.8*	49.4
Hispanic	82.1*	168.2	71.8*	135.5	57.0*	108.4	53.1*	100.2	60.0*	118.1
Asian	34.7**	97.3	22.6**	56.9	21.7*	56.3	21.9*	62.8	18.2**	44.7
Other	63.3**	135.8	59.0**	119.4	39.4**	89.3	70.2**	139.2	33.5**	92.9
Unknown	65.8*	...	61.6*	...	51.3*	...	45.0*	...	45.9*	...
Missing	60.9*	...	53.7*	...	50.1*	...	49.9*	...	42.8*	...
Region										
Northeast	44.2*	83.6	45.6*	87.1	40.4*	73.2	38.2*	79.1	35.7*	73.0
South	76.9*	130.2	70.8*	116.6	63.3*	105.4	56.5*	93.3	54.3*	97.8
▶ Midwest	62.3	114.0	59.3	102.5	50.4	86.1	51.0	88.7	45.5	87.5
West	65.1*	136.4	68.7*	152.3	57.9*	104.7	63.2*	115.8	60.2*	109.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-31. Hospital outpatient visits by Medicare beneficiaries for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=52,300)		2003 (N=49,600)		2004 (N=52,680)		2005 (N=55,700)		2006 (N=58,080)		2007 (N=55,620)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	262.1	265.4	243.2	243.6	255.5	256.3	270.1	270.3	288.8	288.0	279.1	285.6
Under 65/65+												
< 65 Years	269.0*	269.0	242.4	242.4	259.0	259.0	299.6*	299.6	297.4*	297.4	255.2*	255.2
▶ 65+ Years	260.7	265.4	243.3	243.6	254.8	256.3	263.3	270.3	286.8	288.0	285.1	285.6
Age												
▶ 65-69	230.2		212.8		207.8		216.7		225.6		236.2	
70-74	242.3*		250.2*		250.7*		247.1*		296.6*		269.5*	
75-79	274.6*		272.1*		256.2*		284.7*		287.9*		304.3*	
80-84	301.8*		250.8*		317.9*		312.3*		308.2*		325.7*	
85-89	318.6*		238.0*		290.0*		346.4*		376.9*		334.8*	
90-94	235.3*		237.5*		260.4*		206.8*		333.2*		339.5*	
95-97	202.4**		298.0**		220.8**		134.6**		314.4**		214.9**	
98+	57.2**		127.5**		126.6**		123.6**		122.5**		150.3**	
Race/ethnicity												
▶ White	258.4	261.6	233.8	233.4	240.7	241.6	262.1	261.5	289.5	289.8	281.9	291.1
Black	241.6*	250.3	267.5*	288.5	311.0*	324.5	279.9*	310.4	273.1*	277.4	249.0*	238.3
Hispanic	292.0*	278.9	285.6*	242.9	410.4*	425.7	492.1*	460.5	259.7*	207.3	279.3*	321.6
Asian	127.4**	112.6	139.2**	130.7	119.2**	132.3	76.4**	84.3	139.6**	182.4	166.9**	194.0
Other	643.8*	673.5	625.6*	706.9	631.9*	638.6	515.0*	598.4	490.0*	545.0	414.8*	393.1
Unknown	617.5**	...	312.6**	...	259.2**	...	518.9**	...	552.8**	...	382.5**	...
Region												
▶ Northeast	279.2	267.5	263.7	269.6	290.2	283.4	322.9	310.9	355.5	343.5	319.6	311.9
South	189.6*	193.1	184.9*	182.6	168.3*	164.0	175.8*	170.3	176.4*	172.2	180.0*	175.2
Midwest	337.9*	345.3	296.6*	294.3	333.2*	336.9	345.1*	359.5	369.8*	371.6	368.1*	389.1
West	294.8*	307.6	273.3*	276.5	300.8*	315.3	312.6*	319.8	348.6*	364.3	328.4*	360.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-32. Hospital outpatient visits by privately insured individuals for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=7,952)		2003 (N=8,509)		2004 (N=8,388)		2005 (N=9,640)		2006 (N=9,122)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	175.2	350.0	168.0	339.9	162.5	307.0	176.2	315.8	171.8	324.8
Age										
18-24	17.3*		18.3*		17.9*		21.0*		16.8*	
25-34	47.8*		45.9*		48.5*		49.6*		50.5*	
35-39	109.3*		109.1*		111.2*		117.7*		124.1*	
40-44	141.1*		151.7*		167.7*		171.5*		189.8*	
45-54	243.6*		244.7*		233.0*		247.3*		262.4*	
55-64	348.1*		300.0*		292.8*		318.7*		309.3*	
▶ 65-74	523.4		546.2		346.3		367.2		450.8	
75-84	744.6*		689.0*		723.7*		659.9*		524.5*	
85+	...		389.3*		252.6*		301.2*		466.2*	
Race/ethnicity										
▶ White	191.5	314.7	186.4	311.8	170.4	287.1	187.9	308.4	191.2	340.9
Black	132.5*	237.1	110.9*	193.5	93.7*	152.1	96.4*	152.1	88.4*	186.9
Hispanic	153.9*	258.6	142.1*	254.2	134.1*	232.6	135.7*	237.5	143.0*	262.8
Asian	79.5*	198.3	74.8*	206.0	49.0*	101.5	68.2*	172.3	61.5*	154.0
Other	68.6**	132.7	143.7*	253.6	141.7*	234.3	150.2*	270.8	112.4*	238.8
Unknown	166.9*	...	172.1*	...	161.6*	...	167.8*	...	169.1*	...
Missing	171.2*	...	159.1*	...	188.2*	...	201.9*	...	156.5*	...
Region										
Northeast	115.2*	217.3	108.8*	206.0	151.0*	266.1	169.7*	305.1	176.1*	314.7
South	148.3*	253.2	146.7*	245.2	150.0*	257.9	158.3*	262.6	161.6*	285.4
▶ Midwest	257.7	516.1	244.1	509.8	214.4	409.1	226.9	404.3	206.7	414.0
West	87.9*	190.3	95.1*	212.0	87.3*	176.3	126.1*	243.4	132.7*	272.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-33. Ambulatory surgery center visits by Medicare beneficiaries for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=24,840)		2003 (N=23,860)		2004 (N=26,640)		2005 (N=25,040)		2006 (N=26,860)		2007 (N=27,920)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	155.2	166.3	155.5	165.3	167.3	179.8	162.1	173.6	180.5	193.1	185.4	204.3
Under 65/65+												
< 65 Years	131.5*	131.5	132.7*	132.7	143.3*	143.3	140.7*	140.7	159.7*	159.7	148.3*	148.3
▶ 65+ Years	160.0	166.3	160.4	165.3	172.5	179.8	167.0	173.6	185.4	193.1	194.6	204.3
Age												
▶ 65-69	162.9		151.2		161.1		178.5		189.4		192.6	
70-74	179.5*		182.3*		222.7*		175.7*		223.3*		217.7*	
75-79	192.3*		212.7*		198.2*		209.4*		196.3*		221.6*	
80-84	144.5*		157.6*		171*		165.9*		199.5*		216.4*	
85-89	132.7*		93.2*		121.3*		108.5*		133.4*		160.2*	
90-94	61.6**		62.8**		48.3**		63.6**		72.6**		64.2**	
95-97	25.3**		37.2**		36.8**		24.5**		12.6**		25.3**	
98+	...		14.2**		...		...		13.6**		...	
Race/ethnicity												
▶ White	168.1	179.9	167.4	178.0	181.7	194.4	178.6	189.8	199.2	213.1	202.6	222.6
Black	77.5*	75.4	71.3*	60.4	77.5*	75.4	63.3*	64.5	73.5*	53.1	87.4*	81.3
Hispanic	103.1**	95.6	82.4**	81.1	74.6**	79.3	124.3**	106.8	74.2**	64.3	87.9**	123.7
Asian	28.3**	38.5	33.1**	42.6	31.4**	54.3	...	...	64**	101.4	61.2**	85.5
Other	114**	92.9	220.8*	237.4	194.9*	250.5	123.2**	145.7	105.8**	106.0	136.4**	163.0
Unknown	164.7**	...	357.3**	...	259.2**	...	188.7**	...	301.5**	...	273.2**	...
Region												
▶ Northeast	119.2	127.7	122.1	130.4	132.9	146.6	134.9	136.7	149.0	157.5	161.6	182.0
South	168.8*	177.2	178.6*	194.1	184.6*	202.3	185.9*	203.2	189.3*	206.0	202.3*	222.8
Midwest	193.4*	208.3	172.4*	173.7	196.2*	204.3	183.9*	192.1	222.6*	226.1	208*	223.2
West	105.4*	118.3	114.7*	125.0	122.6*	129.4	105.2*	120.3	133.3*	154.5	141.3*	156.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-34. Ambulatory surgery center visits by privately insured individuals for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,163)		2003 (N=1,119)		2004 (N=1,035)		2005 (N=1,311)		2006 (N=1,412)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	25.6	41.1	22.1	35.2	20.0	33.0	24.0	36.4	26.6	44.8
Age										
18-24	2.0**		0.9**		1.2**		1.3**		1.8**	
25-34	8.5*		6.8*		5.3*		7.5*		8.2*	
35-39	17.0*		16.3*		11.9*		18.5*		19.2*	
40-44	34.0		26.6*		25.9*		29.0*		33.3*	
45-54	45.7		38.3		35.8		37.7		41.6*	
55-64	47.3		45.6*		36.1		48.1*		49.4	
▶ 65-74	38.4		35.6		35.3		37.3		58.9	
75-84	29.8*		28.2*		32.6*		29.2*		45.2**	
85+	...		5.0**		13.9**		5.6**		38.5**	
Race/ethnicity										
▶ White	33.0	45.3	27.3	41.5	22.2	35.7	26.6	38.2	29.3	48.2
Black	16.1**	25.1	14.2**	22.4	15.4*	25.3	11.9*	21.8	14.7*	28.1
Hispanic	24.1*	33.9	29.7*	49.6	19.5*	36.5	22.2*	37.6	29.8*	51.0
Asian	18.8**	40.4	5.9**	10.2	4.2**	10.2	5.8**	14.3	8.2**	20.2
Other	15.8**	28.1	...	...	21.0**	52.4	17.0**	34.6	33.5**	110.6
Unknown	29.8*	...	24.9*	...	19.1*	...	21.1*	...	25.0*	...
Missing	20.7*	...	16.2*	...	16.4*	...	22.8*	...	20.4*	...
Region										
Northeast	15.1*	25.7	15.6*	27.3	11.7*	19.9	13.2*	23.4	15.3*	29.4
South	33.7*	53.5	27.0*	43.3	21.6*	36.8	25.0*	38.6	28.9	50.5
▶ Midwest	23.1	37.1	20.9	33.8	24.3	37.5	29.5	42.7	30.8	47.1
West	15.4*	27.8	14.7*	31.8	12.1*	22.9	17.2*	27.9	20.3*	36.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-35. Physician office visits by Medicare beneficiaries for female stress urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,119,380)		2003 (N=1,151,360)		2004 (N=1,184,860)		2005 (N=1,253,380)		2006 (N=1,257,320)		2007 (N=1,275,240)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5,610	6,176	5,645	6,231	5,747	6,325	6,078	6,745	6,252	7,001	6,400	7,223
Under 65/65+												
< 65 Years	3,327*	3,327	3,326*	3,326	3,577*	3,577	3,713*	3,713	3,631*	3,631	3,561*	3,561
▶ 65+ Years	6,073	6,176	6,137	6,231	6,222	6,325	6,621	6,745	6,870	7,001	7,105	7,223
Age												
▶ 65-69	4,811		4,759		4,779		4,936		5,199		5,193	
70-74	5,959*		5,870*		5,963*		6,232*		6,548*		6,878*	
75-79	6,932*		7,061*		7,275*		7,709*		7,929*		8,102*	
80-84	7,275*		7,435*		7,522*		8,272*		8,461*		8,874*	
85-89	6,732*		7,009*		7,063*		7,863*		8,141*		8,487*	
90-94	5,252*		5,507*		5,645*		5,916*		6,216*		6,785*	
95-97	3,403*		4,023*		4,219*		4,222*		4,615*		5,840*	
98+	1,272*		1,615*		1,210*		1,881*		1,715*		2,023*	
Race/ethnicity												
▶ White	5,937	6,488	5,975	6,542	6,021	6,572	6,438	7,082	6,641	7,361	6,811	7,602
Black	3,013*	3,378	3,066*	3,466	3,331*	3,730	3,218*	3,631	3,353*	3,843	3,400*	3,990
Hispanic	4,099*	4,243	4,592*	4,627	4,909*	4,822	5,527*	5,733	5,629*	5,926	5,854*	6,350
Asian	2,979*	3,047	3,076*	3,040	4,065*	4,433	4,020*	4,272	4,014*	4,349	4,318*	4,699
Other	7,933*	9,214	7,421*	8,972	8,511*	10,275	7,367*	8,636	6,498*	8,141	5,888*	7,157
Unknown	9,345*	...	8,754*	...	9,762*	...	9,623*	...	10,101*	...	10,437*	...
Region												
▶ Northeast	4,851	5,354	4,932	5,433	5,217	5,713	5,460	6,035	5,672	6,300	5,806	6,498
South	5,948*	6,522	6,084*	6,717	6,099*	6,711	6,535*	7,233	6,822*	7,662	6,939*	7,871
Midwest	5,301*	5,835	5,155*	5,641	5,266*	5,757	5,463*	6,012	5,700*	6,303	5,916*	6,557
West	6,278*	7,015	6,268*	7,057	6,313*	7,090	6,692*	7,635	6,456*	7,421	6,573*	7,604

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-36. Physician office visits by privately insured individuals for female stress urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=80,200)		2003 (N=85,509)		2004 (N=90,673)		2005 (N=105,493)		2006 (N=96,392)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,767	3,205	1,689	3,089	1,757	3,217	1,928	3,435	1,815	3,556
Age										
18-24	238.6*		201.8*		209.3*		214.8*		210.8*	
25-34	570.8*		568.4*		571.3*		608.5*		591.8*	
35-39	1,211*		1,169*		1,198*		1,276*		1,312*	
40-44	1,748*		1,732*		1,809*		1,867*		1,926*	
45-54	2,560*		2,480*		2,467*		2,625*		2,639*	
55-64	3,542*		3,254*		3,283*		3,473*		3,286*	
▶ 65-74	4,253		3,945		4,140		4,499		4,770	
75-84	5,181*		4,992*		5,482*		6,063*		6,974*	
85+	...		4,325*		5,145*		5,127*		5,359*	
Race/ethnicity										
▶ White	2,061	3,507	1,996	3,526	1,895	3,411	2,056	3,629	1,959	3,794
Black	1,493*	2,458	1,349*	2,309	1,259*	2,216	1,355*	2,284	1,189*	2,333
Hispanic	1,791*	3,209	1,762*	3,295	1,701*	3,155	1,787*	3,236	1,959*	3,576
Asian	1,025*	2,436	913.7*	2,123	792.2*	1,769	852.0*	1,793	832.9*	1,942
Other	1,747*	3,353	1,677*	3,261	1,562*	3,173	1,751*	3,224	1,595*	3,266
Unknown	1,963*	...	1,900*	...	1,598*	...	1,835*	...	1,718*	...
Missing	1,567*	...	1,344*	...	1,636*	...	1,897*	...	1,545*	...
Region										
Northeast	1,288*	2,373	1,270*	2,373	1,351*	2,501	1,437*	2,617	1,458*	2,952
South	1,818*	3,227	1,777	3,165	1,827*	3,361	2,020*	3,579	1,922*	3,711
▶ Midwest	1,917	3,396	1,780	3,199	1,857	3,286	1,986	3,410	1,741	3,400
West	1,607*	3,326	1,542*	3,291	1,648*	3,296	1,918*	3,716	1,912*	3,786

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-37. Emergency room visits by Medicare beneficiaries for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,220)		2003 (N=2,180)		2004 (N=1,980)		2005 (N=2,300)		2006 (N=2,100)		2007 (N=2,060)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.1	10.3	10.7	9.4	9.6	8.6	11.2	8.9	10.4	9.0	10.3	9.1
Under 65/65+												
< 65 Years	13.1**	13.1	14.6**	14.6	14.1**	14.1	18.2*	18.2	14.6**	14.6	14.1**	14.1
▶ 65+ Years	10.7	10.3	9.9	9.4	8.6	8.6	9.5	8.9	9.5	9.0	9.4	9.1
Age												
▶ 65-69	10.9*		7.7*		2.8*		5.1*		5.7*		6.7*	
70-74	9.4**		5.8**		5.9**		6.0**		8.6**		5.3**	
75-79	9.8**		10.8**		10.3**		9.5**		8.0**		9.0**	
80-84	13.7**		17.0**		14.6**		13.0**		9.7**		12.4**	
85-89	7.4**		7.4**		14.6**		15.9**		17.1**		16.9**	
90-94	16.8**		19.1**		10.7**		21.2**		21.5**		10.7**	
95-97	12.7**		12.4**		24.5**		36.7**		12.6**		37.9**	
98+	14.3**		0.0**		...		0.0**		13.6**		13.7**	
Race/ethnicity												
▶ White	9.8	9.1	9.5	7.9	9.1	8.3	9.4	8.5	10.1	8.5	9.8	8.3
Black	24.2**	24.1	19.5**	23.9	15.3**	12.9	25.9**	16.6	12.9**	15.3	18.3**	22.5
Hispanic	11.5**	13.9	16.5**	31.8	5.3**	30.0	10.4**	14.6	...	...	5.2**	...
Asian	0.0**	0.0	...	...	...	...	...	...	...	...	5.6**	21.7
Other	6.7**	57.7	24.5**	27.6	17.7**	18.1	16.8**	0.0	22.3**	81.1	5.5**	20.4
Unknown	41.2**	...	...	...	...	...	47.2**	...	100.5**	...	...	...
Region												
▶ Northeast	8.4*	8.5	8.8*	8.4	8.3*	9.8	9.8*	10.4	10.6*	9.4	7.6*	8.3
South	13.0*	12.3	10.9*	9.8	7.3**	6.4	13.3*	10.4	10.3*	10.3	9.9*	8.0
Midwest	12.5*	12.0	13.1*	11.0	13.4*	9.6	9.2**	5.8	8.7**	7.2	12.2*	10.4
West	7.8**	4.9	8.7**	7.1	10.9**	15.1	10.6**	8.3	13.3**	8.2	11.9**	10.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-38. Emergency room visits by privately insured individuals for female stress urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=273)		2003 (N=522)		2004 (N=386)		2005 (N=254)		2006 (N=288)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.0	9.5	10.3	16.5	7.5	12.0	4.6	7.9	5.4	8.8
Age										
18-24	2.5*		1.9**		2.2**		0.3**		1.2**	
25-34	3.5		3.8*		1.7**		0.8**		1.2**	
35-39	3.4*		4.6**		4.2**		2.7**		2.8**	
40-44	5.0*		11.2		7.6		4.0**		4.4**	
45-54	8.7*		15.6		11.4		5.8		7.8	
55-64	10.6*		27.6*		19.0*		14.5*		14.9	
▶ 65-74	4.7*		14.6*		8.7*		7.6*		10.3*	
75-84	22.5*		8.4**		9.0**		5.1**		3.2**	
85+	...		12.4**		16.2**		11.3**		11.6**	
Race/ethnicity										
▶ White	5.6	7.8	8.1	11.7	6.7	9.7	3.1	5.4	3.0	4.5
Black	7.2**	22.1	13.7**	19.6	10.0**	19.8	8.3**	17.8	8.9**	18.1
Hispanic	3.0**	8.2	21.5*	46.8	12.6*	29.2	8.0*	17.3	13.2*	30.6
Asian	...	...	3.9**	32.3	1.4**	4.8	1.3**	56.0	...	...
Other	37.0**	235.1	7.4**	119.0	...	...	...	...	...	...
Unknown	2.8**	...	8.6**	...	4.2**	...	3.6**	...	5.0**	...
Missing	6.7*	...	11.9*	...	10.4*	...	10.0*	...	12.9*	...
Region										
Northeast	6.2	11.7	4.6**	7.0	2.3**	6.1	0.3**	...	0.5**	1.0
South	6.4	11.0	15.4*	24.8	12.3*	20.5	8.1*	13.5	10.2*	18.0
▶ Midwest	6.1	8.2	7.2	10.9	4.5	6.8	3.0	5.2	2.6	5.0
West	4.4**	7.5	6.4*	12.0	3.1**	4.0	0.9**	7.3	0.7**	2.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-39. Prevalence of stress urinary incontinence among adult males, 2001-2008 (merged), count, percent^a

	Total Count	Difficulty Controlling Bladder					
		Yes		No		Refused to Answer or Don't Know	
		Count	Percent	Count	Percent	Count	Percent
Total	92,639,724	4,096,666	4.42%	88,410,512	95.43%	†	†
Age							
18-24	5,750,967	†	†	5,671,854	98.62%	†	†
25-34	16,253,961	†	†	15,988,457	98.37%	†	†
35-44	19,895,286	581,283	2.92%	19,286,767	96.94%	†	†
45-54	22,447,815	642,135	2.86%	21,799,828	97.11%	†	†
55-64	13,056,196	792,888	6.07%	12,246,301	93.80%	†	†
65-74	9,050,817	888,942	9.82%	8,123,072	89.75%	†	†
75-84	5,256,020	705,240	13.42%	4,527,098	86.13%	†	†
85+	928,663	154,470	16.63%	767,131	82.61%	†	†
Race/ethnicity							
Mexican American	7,845,474	180,739	2.30%	7,659,746	97.63%	†	†
Other Hispanic	3,836,572	†	†	3,678,353	95.88%	†	†
Non-Hispanic White	67,100,621	3,126,234	4.66%	63,920,682	95.26%	†	†
Non-Hispanic Black	9,397,014	406,084	4.32%	8,968,662	95.44%	†	†
Other ^b	4,460,045	†	†	4,183,069	93.79%	†	†
Education							
< 9th grade	6,549,536	434,454	6.63%	6,101,121	93.15%	†	†
9-11th grade	10,363,604	495,267	4.78%	9,830,619	94.86%	†	†
High school graduate ^c	74,241,718	3,110,266	4.19%	71,053,540	95.71%	†	†
Refused	†	†	†	†	†	†	†
Don't Know	†	†	†	†	†	†	†

† Figure does not meet standard for reliability or precision.

^aPercent calculated using total count within each demographic group.

^bIncluding multi-racial.

^cGED or equivalent.

NOTE: The data in this table are based on question KIQ.042: During the past 12 months, {have you/has sample person} leaked or lost control of even a small amount of urine with an activity like coughing, lifting or exercise?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-40. Prevalence of non-stress urinary incontinence among adult males, 2001-2008 (merged), count, percent^a

	Total Count	Difficulty Controlling Bladder					
		Yes		No		Refused to Answer or Don't Know	
		Count	Percent	Count	Percent	Count	Percent
Total	92,639,724	3,654,917	3.95%	88,845,746	95.90%	†	†
Age							
18-24	5,750,967	†	†	5,665,227	98.51%	†	†
25-34	16,253,961	†	†	16,080,582	98.93%	†	†
35-44	19,895,286	375,301	1.89%	19,514,496	98.09%	†	†
45-54	22,447,815	845,075	3.76%	21,589,898	96.18%	†	†
55-64	13,056,196	570,176	4.37%	12,477,898	95.57%	†	†
65-74	9,050,817	779,388	8.61%	8,236,555	91.00%	†	†
75-84	5,256,020	698,358	13.29%	4,488,566	85.40%	†	†
85+	928,663	132,814	14.30%	792,524	85.34%	†	†
Race/ethnicity							
Mexican American	7,845,474	189,895	2.42%	7,650,590	97.52%	†	†
Other Hispanic	3,836,572	†	†	3,712,336	96.76%	†	†
Non-Hispanic White	67,100,621	2,880,670	4.29%	64,140,282	95.59%	†	†
Non-Hispanic Black	9,397,014	345,883	3.68%	9,031,517	96.11%	†	†
Other ^b	4,460,045	†	†	4,311,021	96.66%	†	†
Education							
< 9th grade	6,549,536	368,731	5.63%	6,147,109	93.86%	†	†
9-11th grade	10,363,604	352,449	3.40%	9,981,951	96.32%	†	†
High school graduate ^c	74,241,718	2,901,602	3.91%	71,266,913	95.99%	†	†
Refused	†	†	†	†	†	†	†
Don't Know	†	†	†	†	†	†	†

† Figure does not meet standard for reliability or precision.

^aPercent calculated using total count within each demographic group.

^bIncluding multi-racial.

^cGED or equivalent.

NOTE: The data in this table are based on question KIQ.046: During the past 12 months, {have you/has sample person} leaked or lost control of even a small amount of urine without an activity like coughing, lifting, or exercise, or an urge to urinate?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-41. Frequency of stress urinary incontinence among adult males who responded "yes" to difficulty controlling bladder during physical activity, 2001-2008 (merged), count, percent

Total Count	Every Day/Night		A Few Times per Week		A Few Times per Month		A Few Times per Year		Refused to Answer or Don't Know	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
4,096,666	1,484,272	36.23%	990,829	24.19%	808,706	19.74%	799,183	19.51%	†	†

† Figure does not meet standard for reliability or precision.

NOTE: The data in this table are based on question KIQ.043: How frequently does this (referring to KIQ.042) occur? Would you say this occurs...every day, a few times a week, a few times a month, or a few times a year?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-42. Frequency of non-stress urinary incontinence among adult males who responded "yes" to difficulty controlling bladder without any physical activity, 2001-2008 (merged), count, percent

Total Count	Every Day/Night		A Few Times per Week		A Few Times per Month		A Few Times per Year		Refused to Answer or Don't Know	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
3,654,917	1,274,779	34.88%	966,920	26.46%	594,397	16.26%	807,870	22.10%	†	†

† Figure does not meet standard for reliability or precision.

NOTE: The data in this table are based on question KIQ.047: How frequently does this (referring to KIQ.046) occur? Would you say this occurs...every day, a few times a week, a few times a month, or a few times a year?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 4-43. Nationally representative inpatient stays for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,399)		2003 (N=1,220)		2004 (N=1,127)		2005 (N=912)		2006 (N=1,085)		2007 (N=1,085)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.4	1.4	1.2	1.2	1.1	1.1	0.9	0.9	1.0	1.0	1.0	1.0
Age												
18-24	†		†		†		†		†		†	
25-34	0.3		0.4		†		†		†		0.2	
35-39	†		†		0.4		†		†		0.4	
40-44	†		0.3		†		†		†		†	
45-54	0.5		0.4		0.4		0.3		0.5		0.4	
55-64	2.0		1.6		1.1		1.2		0.7		1.2	
▶ 65-74	5.3		4.9		4.1		3.4		4.4		3.0	
75-84	6.2*		4.7*		5.9*		4.2*		6.7*		6.1*	
85+	11.6*		6.8*		10.2*		6.2*		6.4*		7.7*	
Race/ethnicity												
▶ White	1.0	1.2	1.0	0.9	1.0	1.0	0.7	0.7	0.9	0.9	0.8	0.9
Black	0.8*	0.9	0.9*	1.4	0.6*	0.9	0.7*	0.9	0.9*	1.8	0.8*	1.2
Hispanic	†	†	0.8*	1.1	0.6*	0.8	0.5*	0.7	0.5*	1.1	0.3*	0.5
Asian	†	†	†	†	†	†	†	†	†	†	†	†
Region												
Northeast	1.5	1.8	1.3	1.4	1.5	1.7	1.0	1.3	0.7	1.3	1.0	1.2
South	1.3	1.5	1.1	1.1	0.8	1.0	0.9	1.1	1.1	1.1	1.1	1.1
▶ Midwest	1.8	1.8	1.0	1.4	1.3	1.9	0.9	1.1	1.1	1.5	1.1	1.7
West	0.8*	1.3	1.3*	1.4	1.0*	1.1	0.6*	0.7	1.0*	1.7	0.7*	0.9

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 4-44. Inpatient stays by Medicare beneficiaries for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,620)		2003 (N=1,360)		2004 (N=1,380)		2005 (N=1,260)		2006 (N=1,220)		2007 (N=1,180)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	10.4	13.1	8.5	10.6	8.4	9.9	7.6	9.4	7.5	8.7	7.3	9.4
Under 65/65+												
< 65 Years	3.1**	3.1	2.0**	2.0	3.8**	3.8	3.3**	3.3	3.3**	3.3	2.3**	2.3
▶ 65+ Years	12.8	13.1	10.6	10.6	10.0	9.9	9.2	9.4	9.0	8.7	9.1	9.4
Age												
▶ 65-69	7.7*		6.4*		6.7*		2.6*		4.2*		6.3*	
70-74	14.3**		7.8**		9.8**		11.2**		9.5**		9.7**	
75-79	14.7**		12.0**		16.1**		14.0**		11.0**		11.3**	
80-84	16.7**		21.0**		12.1**		7.1**		13.3**		14.7**	
85-89	19.1**		13.2**		2.5**		22.7**		9.9**		7.1**	
90-94	0.0**		24.4**		15.7**		7.6**		15.0**		0.0**	
95-97	53.9**		0.0**		0.0**		47.5**		95.6**		0.0**	
98+	0.0**		0.0**		...		0.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	10.1	12.8	8.5	10.5	8.5	9.5	7.5	9.3	7.9	9.0	7.2	9.1
Black	15.9**	19.7	9.0**	13.8	8.8**	15.6	10.0**	14.5	5.1**	7.4	9.0**	13.0
Hispanic	6.5**	8.4	6.2**	15.6	0.0**	0.0	5.8**	20.8	12.0**	10.3	0.0**	0.0
Asian	9.4**	31.8	0.0**	0.0	0.0**	0.0	0.0**	0.0	0.0**	0.0	0.0**	0.0
Other	0.0**	0.0	13.0**	20.8	12.4**	21.6	11.6**	9.2	5.6**	30.4	5.4**	10.7
Unknown	0.0**	...	0.0**	...	73.0**	...	0.0**	...	0.0**	...	175.3**	...
Region												
▶ Northeast	6.0*	7.2	9.1*	10.5	6.5*	8.0	5.8*	8.2	6.6*	7.5	7.2*	10.2
South	11.9*	15.1	7.0**	9.1	8.8**	9.6	8.1**	9.6	7.0**	8.6	6.3**	7.7
Midwest	7.7**	8.7	11.5**	13.7	9.4**	11.1	8.9**	10.9	6.5**	5.5	10.7**	13.9
West	15.9**	23.0	6.5**	9.5	8.4**	10.3	6.8**	7.9	11.0**	15.0	4.7**	5.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-45. Inpatient stays by privately insured individuals for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=263)		2003 (N=268)		2004 (N=247)		2005 (N=310)		2006 (N=194)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.1	16.5	5.6	16.7	5.0	14.3	6.0	16.2	3.8	12.5
Age										
18-24	1.3**		0.3**		0.6**		0.7**		0.6**	
25-34	1.5**		0.8**		1.3**		1.1**		0.5**	
35-39	1.5**		1.8**		1.3**		1.3**		2.1**	
40-44	1.6**		1.3**		2.1**		1.6**		0.6**	
45-54	3.5*		3.7*		3.7*		2.7*		3.2*	
55-64	11.2*		11.3*		7.5*		10.0*		7.5*	
▶ 65-74	37.5		29.8		24.6		29.5		21.4	
75-84	77.9*		68.7*		60.3*		72.8*		66.4*	
85+	...		114.3**		103.6**		105.1*		36.1**	
Race/ethnicity										
▶ White	6.1	15.3	6.5	18.3	5.1	15.1	6.6	18.4	4.3	14.3
Black	14.1**	18.3	9.6**	24.3	9.3**	21.5	8.1**	14.8	3.8**	13.9
Hispanic	2.4**	22.5	4.2**	17.3	1.5**	8.7	3.0**	15.1	1.3**	5.4
Asian	...	...	2.0**	11.4	4.3**	26.9	3.9**	41.2	1.9**	16.4
Other	4.7**	324.7	3.3**	32.5	9.1**	28.3	4.2**	20.1	...	...
Unknown	5.6**	...	5.8**	...	5.2**	...	4.1**	...	3.0**	...
Missing	6.3*	...	4.6*	...	5.4*	...	5.5*	...	4.1**	...
Region										
Northeast	7.0	23.0	7.1	19.5	5.8	12.5	7.1	26.4	5.4*	21.6
South	6.8	18.6	5.4	14.9	4.6*	14.3	5.0*	13.5	3.6	9.9
▶ Midwest	6.0	14.3	6.6	19.6	6.4	16.5	7.7	19.2	3.6	13.1
West	3.6**	23.5	2.7**	9.4	2.9**	9.3	4.6*	12.2	3.4**	13.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-46. Hospital outpatient visits by Medicare beneficiaries for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=11,360)		2003 (N=10,360)		2004 (N=11,720)		2005 (N=12,420)		2006 (N=14,460)		2007 (N=12,860)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	72.7	71.8	64.4	62.8	71.5	68.9	75.3	76.8	89.0	93.2	79.1	84.3
Under 65/65+												
< 65 Years	77.5*	77.5	66.8*	66.8	72.3	72.3	70.2*	70.2	72.1*	72.1	60.7*	60.7
▶ 65+ Years	71.2	71.8	63.7	62.8	71.3	68.9	77.1	76.8	95.1	93.2	86.0	84.3
Age												
▶ 65-69	40.9		42.1		38.8		39.5		47.3		52.7	
70-74	54.0*		46.1*		56.8*		58.7*		82.3*		70.4*	
75-79	79.3*		69.8*		76.3*		88.7*		113.1*		87.8*	
80-84	106.6*		81.6*		113.4*		124.9*		129.3*		120.4*	
85-89	161.0*		139.4*		121.9*		156.6*		185.6*		173.8*	
90-94	128.5**		179.0**		227.1**		204.1**		240.3*		198.2**	
95-97	215.5**		103.8**		202.1**		95.0**		382.6**		139.9**	
98+	132.6**		130.8**		128.7**		...		41.2**		202.0**	
Race/ethnicity												
▶ White	69.9	71.2	60.6	60.2	70.0	66.9	74.3	75.9	87.8	89.1	74.3	77.8
Black	106.1*	97.9	97.6*	90.9	89.1*	93.1	76.2*	98.5	104.1*	145.2	108.8*	163.8
Hispanic	90.5**	116.1	43.5**	49.0	66.2**	132.5	87.6**	62.0	89.8**	131.7	99.8**	98.4
Asian	18.8**	25.2	61.7**	83.8	58.4**	41.6	109.9**	101.7	62.0**	105.2	73.6**	68.9
Other	50.0**	75.0	97.6**	155.0	74.3**	210.4	75.6**	75.0	90.4**	117.9	112.8**	134.6
Unknown	76.0**	...	...	...	0.0**	...	77.9**	...	82.9**	...	175.3**	...
Region												
▶ Northeast	73.1	58.3	75.7	61.2	78.2	56.3	77.5	63.5	106.5	100.7	90.7	88.6
South	41.9*	43.4	42.9*	44.7	42.0*	41.6	41.0*	43.2	43.5*	50.1	57.8*	66.3
Midwest	107.9*	114.1	86.0*	80.4	99.8*	102.8	105.8*	113.4	128.3*	137.4	105.0*	107.7
West	90.9*	87.5	69.3*	79.6	90.1*	93.6	105.3*	110.7	115.5*	116.0	78.6*	84.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-47. Hospital outpatient visits by privately insured individuals for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=879)		2003 (N=987)		2004 (N=972)		2005 (N=1,199)		2006 (N=886)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	20.5	43.8	20.6	51.2	19.9	51.9	23.1	53.1	17.4	48.9
Age										
18-24	10.7*		6.3*		4.3**		5.2*		6.9*	
25-34	6.3*		7.6*		4.6*		8.2*		5.8*	
35-39	6.8*		9.5*		6.0*		7.3*		8.0*	
40-44	12.1*		7.8*		7.9*		6.9*		6.8*	
45-54	17.4*		14.5*		14.3*		15.3*		10.7*	
55-64	41.7*		38.3*		39.6*		41.9*		36.0*	
▶ 65-74	90.5		78.6		83.2		91.1		97.4	
75-84	142.3*		125.1*		146.6*		159.7*		204.6*	
85+	...		672.2*		570.1*		489.3*		196.0*	
Race/ethnicity										
▶ White	21.3	46.5	25.8	68.7	21.9	57.8	25.3	58.6	18.6	48.8
Black	28.2**	40.6	38.4*	69.9	26.2*	54.9	31.8*	73.3	18.8*	56.1
Hispanic	12.4**	28.8	11.9*	24.1	13.6*	36.1	15.5*	32.0	15.1*	42.4
Asian	5.8**	11.7	8.1**	19.2	4.3**	14.1	9.8**	48.6	5.7**	49.5
Other	37.5**	127.0	26.0**	45.0	18.3**	49.2	16.7**	37.8	18.4**	29.8
Unknown	29.0*	...	13.9*	...	19.4*	...	16.8*	...	17.6*	...
Missing	20.0*	...	15.7*	...	16.2*	...	20.5*	...	15.0*	...
Region										
Northeast	18.4*	34.7	19.4*	38.8	16.7*	32.7	15.1*	31.2	12.5*	38.4
South	20.8*	42.2	18.0*	36.5	17.2*	40.9	20.2*	41.7	18.0	51.6
▶ Midwest	24.7	53.4	29.0	79.1	28.5	76.5	31.8	73.6	19.0	55.6
West	10.4*	26.6	9.8*	28.2	11.6*	30.7	19.9*	48.8	16.1*	39.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-48. Hospital outpatient visits for male urinary incontinence, 2002-2007 (merged), 6-year count, number of visits,^a percentage of visits

	6-Year Count	Number of Visits	Percentage of Visits
Primary diagnosis	75,311	142,971,262	0.10%
Any diagnosis	163,525	142,971,262	0.10%

^aTotal number of visits by men over 18 years of age, 2002-2007.

SOURCE: National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-49. Ambulatory surgery center visits by Medicare beneficiaries for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,640)		2003 (N=4,560)		2004 (N=4,600)		2005 (N=4,360)		2006 (N=4,940)		2007 (N=4,120)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	42.5	52.1	43.8	49.4	46.0	55.2	42.6	53.9	47.9	60.5	40.6	49.7
Age												
▶ 65-69	27.1		38.4		28.5		23.6		30.2		35.0	
70-74	50.1*		44.1*		45.7*		49.5*		66.7*		49.0*	
75-79	65.4*		57.8*		77.1*		76.4*		76.8*		53.0*	
80-84	84.7*		66.7*		74.8*		70.2*		60.4*		68.8*	
85-89	62.8**		55.3**		94.0*		96.0*		116.3*		66.6**	
90-94	25.7**		89.5**		62.7**		45.4**		37.6**		44.1**	
95-97	53.9**		...		151.6**		...		...		46.6**	
Race/ethnicity												
▶ White	43.8	53.4	46.3	52.2	48.6	56.7	45.7	57.4	50.7	63.6	42.5	51.9
Black	47.8*	66.2	43.7*	50.2	31.4**	52.6	26.2**	34.7	44.4*	68.5	30.7**	40.9
Hispanic	12.9**	...	6.2**	69.5	42.1**	155.3	46.7**	85.2	12.0**	0	11.7**	36.3
Asian	9.4**	35	...	...	16.7**	67.3	15.7**	33	15.5**	42.1	36.8**	56.4
Other	7.1**	23.8	6.5**	...	31.0**	75.5	5.8**	0	16.9**	30.4	43.0**	39.3
Unknown	76.0**	...	...	...	73.0**	...	77.9**	...	...	...	...	...
Region												
▶ Northeast	41.2	47.6	50.9	52.1	36.9	43.9	45.2	57.8	48.0	60.3	34.2	41.7
South	46.2*	54.9	46.8*	55.5	56.4*	66.6	44.5*	56.1	50.8*	64.9	43.8*	56.5
Midwest	53.2*	67.3	43.5*	45.4	46.9*	54.9	47.7*	57.6	55.1*	68.4	48.4*	55.1
West	19.7**	26.3	29.6*	38.5	31.4*	41.4	28.5*	39.5	31.6*	38.7	30.2*	36.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-50. Ambulatory surgery center visits by privately insured individuals for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=79)		2003 (N=84)		2004 (N=101)		2005 (N=98)		2006 (N=80)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.8	4.9	1.8	4.5	2.1	5.7	1.9	4.4	1.6	4.2
Age										
18-24	0.2**		0.2**		0.2**		0.3**		0.3**	
25-34	0.4**		0.5**		0.7**		0.1**		0.3**	
35-39	0.2**		0.2**		0.5**		0.6**		1.0**	
40-44	1.2**		0.8**		0.6**		0.6**		1.5**	
45-54	0.9**		1.4**		1.4**		1.7**		0.7**	
55-64	3.8**		4.3**		3.6**		4.3**		4.0**	
▶ 65-74	11.9*		11.4*		12.8*		9.1*		8.0*	
75-84	19.7**		12.3**		22.5**		13.2**		18.0**	
85+	...		9.1**		21.6**		13.1**		5.2**	
Race/ethnicity										
▶ White	2.3	5.9	2.1	5.4	2.1	7.2	2.3	5.3	1.7	4.4
Black	...	...	0.8**	6.5	2.7**	22.4	1.0**	8.3	1.6**	11.5
Hispanic	0.6**	7.5	...	...	2.3**	8.0	0.5**	1.9	1.8**	17.3
Asian	1.5**	18.0	...	...	0.7**	24.3	2.0**	15.6	...	...
Other	14.1**	138.8	3.3**	32.5	...	...	...	...	2.0**	...
Unknown	...	...	2.7**	...	2.6**	...	0.3**	...	1.5**	...
Missing	1.7*	...	1.6**	...	1.9**	...	2.0**	...	1.3**	...
Region										
Northeast	1.5*	6.6	2.0*	6.9	1.3**	3.2	1.6*	8.2	1.1*	2.4
South	2.0	5.6	1.7	5.0	2.2	7.3	2.0	4.7	2.1*	6.9
▶ Midwest	2.0*	4.5	1.9	4.5	2.7	7.3	1.8*	4.7	1.3*	3.9
West	1.3**	10.0	1.1**	3.8	0.9**	4.7	1.9**	6.7	0.8**	1.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-51. Nationally representative ambulatory surgery center visits for male urinary incontinence listed as primary diagnosis, count, rate^a

	Count	Rate
Total	8,415	7.9
Age		
45-54	2,360	11.3
55-64	281	1.9
▶ 65-74	1,525	17.9
75-84	2,050	38.5*
85+	2,199	165.4*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 4-52. Physician office visits by Medicare beneficiaries for male urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=322,080)		2003 (N=351,920)		2004 (N=372,420)		2005 (N=412,680)		2006 (N=436,060)		2007 (N=441,940)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,062	2,531	2,189	2,669	2,273	2,761	2,502	3,073	2,685	3,304	2,720	3,387
Under 65/65+												
< 65 Years	747.8*	747.8	803.3*	803.3	853.6*	853.6	929.4*	929.4	951.1*	951.1	939.5*	939.5
▶ 65+ Years	2,496	2,531	2,655	2,669	2,759	2,761	3,058	3,073	3,303	3,304	3,377	3,387
Age												
▶ 65-69	1,204		1,210		1,300		1,437		1,562		1,512	
70-74	1,934*		2,168*		2,206*		2,360*		2,624*		2,664*	
75-79	3,025*		3,126*		3,286*		3,786*		4,031*		4,313*	
80-84	4,238*		4,427*		4,423*		4,805*		5,198*		5,435*	
85-89	5,082*		5,454*		5,695*		6,531*		6,759*		6,703*	
90-94	4,748*		5,623*		6,469*		6,750*		7,127*		6,615*	
95-97	3,556*		4,777*		5,154*		5,318*		6,026*		6,716*	
98+	1,017**		1,308*		858.0**		927.1**		1,276*		1,212*	
Race/ethnicity												
▶ White	2,117	2,566	2,249	2,708	2,334	2,792	2,566	3,103	2,777	3,354	2,803	3,430
Black	1,601*	2,325	1,569*	2,254	1,721*	2,478	2,044*	3,060	2,032*	3,132	2,144*	3,353
Hispanic	1,648*	1,940	1,950*	2,249	2,101*	2,543	2,155*	2,531	2,323*	2,576	2,341*	2,747
Asian	2,013*	1,971	2,267*	2,300	2,151*	2,289	2,582*	2,551	2,721*	2,878	2,744*	2,995
Other	2,257*	3,182	2,543*	3,665	2,403*	3,276	2,291*	3,064	2,253*	3,227	2,298*	3,125
Unknown	4,183*	...	6,010*	...	5,259*	...	3,352*	...	3,728	...	4,382*	...
Region												
▶ Northeast	2,311	2,807	2,507	2,986	2,552	3,093	2,787	3,378	2,975	3,582	2,984	3,655
South	2,099*	2,618	2,237*	2,760	2,333*	2,856	2,594*	3,199	2,863*	3,578	2,948*	3,703
Midwest	1,892*	2,223	1,951*	2,327	2,040*	2,387	2,218*	2,669	2,362*	2,817	2,332*	2,792
West	1,946*	2,464	2,074*	2,605	2,170*	2,717	2,396*	3,032	2,436*	3,100	2,479*	3,237

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-53. Physician office visits by privately insured individuals for male urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=10,845)		2003 (N=12,223)		2004 (N=13,589)		2005 (N=16,542)		2006 (N=15,076)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	253.2	601.8	255.2	663.7	277.7	722.9	318.3	772.7	296.0	863.4
Age										
18-24	57.2*		41.5*		38.7*		49.8*		52.3*	
25-34	70.7*		74.8*		67.8*		74.8*		81.7*	
35-39	92.2*		95.2*		97.0*		102.7*		110.4*	
40-44	117.1*		107.6*		136.3*		129.7*		135.7*	
45-54	192.6*		199.9*		191.9*		209.3*		234.7*	
55-64	519.8*		501.6*		562.8*		585.7*		628.8*	
▶ 65-74	1,225*		1,238		1,298		1,392		1,548	
75-84	2,397*		2,530*		2,800*		3,073*		3,658*	
85+	...		3,091*		3,576*		3,704*		3,585*	
Race/ethnicity										
▶ White	298.1	677.6	307.8	792.4	285.6	752.1	326.9	811.7	319.3	932.8
Black	361.8*	559.3	349.1*	604.9	324.3*	639.0	371.0*	669.2	311.4*	802.7
Hispanic	194.7*	427.7	189.6*	469.9	187.9*	500.3	206.6*	517.4	205.2*	578.4
Asian	219.9*	796.1	289.8*	966.8	272.6*	937.0	279.2*	943.4	205.6*	662.9
Other	206.2*	368.9	250.3*	555.1	257.9*	535.8	382.6*	773.2	260.0*	564.0
Unknown	276.7*	...	278.1*	...	280.0*	...	309.8*	...	307.8*	...
Missing	219.6*	...	188.6*	...	281.7*	...	341.3*	...	250.9*	...
Region										
Northeast	321.5*	670.5	313.5*	740.8	359.5*	822.9	387.5*	894.3	349.8*	938.7
South	232.8*	563.1	243.7*	645.8	260.9*	737.8	307.4	787.6	303.3*	926.8
▶ Midwest	272.0	630.3	273.3	677.2	289.1	691.0	311.9	705.3	248.3	751.6
West	216.9*	606.6	199.7*	636.9	238.8*	720.7	312.4*	809.8	326.0*	850.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-54. Nationally representative physician office visits for male urinary incontinence listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	3,897,712
Age	
40-44	193,569
45-54	798,401
55-64	649,916
65-74	917,412
75-84	959,249
85+	379,165
Race/ethnicity	
White	3,213,076
Black	442,228
Hispanic	242,408
Region	
Northeast	688,831
South	1,602,907
Midwest	629,444
West	976,530

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-55. Physician office visits for male urinary incontinence, 2002-2007 (merged), 6-year count, number of visits,^a percentage of visits, 6-year rate,^b annualized rate^c

	6-Year Count	Number of Visits	Percentage of Visits	6-Year Rate	Annualized Rate
Primary diagnosis	1,955,119	1,726,083,987	0.10%	1,867	311.0
Any diagnosis	4,027,012	1,726,083,987	0.20%	3,845	641.0

^aTotal number of visits by men over 18 years of age, 2002-2007.

^bRate per 100,000 based on the sum of weighted counts in 2002-2007 over the mean estimated base population across the same years. Population estimates from Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US male adult civilian non-institutionalized population.

^cBased on averages calculated using the 6-year rate.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007.

Table 4-56. Emergency room visits by Medicare beneficiaries for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,620)		2003 (N=1,540)		2004 (N=2,020)		2005 (N=1,820)		2006 (N=1,880)		2007 (N=1,740)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.8	19.8	9.6	10.1	12.3	12.4	11.0	11.3	11.6	12.2	10.7	9.4
Under 65/65+												
< 65 Years	9.3**	9.3	6.9**	6.9	7.7**	7.7	7.0**	7.0	7.5**	7.5	12.3**	12.3
▶ 65+ Years	19.2	19.8	10.5	10.1	13.9	12.4	12.5	11.3	13.0	12.2	10.1	9.4
Age												
▶ 65-69	8.3*		5.3*		6.7*		2.6*		6.8*		3.7*	
70-74	14.3**		4.5**		7.8**		9.9**		7.5**		3.4**	
75-79	16.4**		12.0**		14.5**		13.1**		12.7**		9.6**	
80-84	43.7*		16.1**		13.3**		20.2**		23.0**		31.9**	
85-89	46.4**		28.9**		40.6**		27.8**		27.2**		9.5**	
90-94	42.8**		40.7**		78.3**		83.2**		60.1**		44.1**	
95-97	...		51.9**		101.1**		47.5**		47.8**		46.6**	
98+	...		43.6**		128.7**		0.0**		0.0**		...	
Race/ethnicity												
▶ White	14.5	17.0	8.4	9.0	11.7	11.6	11.3	11.4	12.0	13.1	10.2	9.5
Black	33.2**	45.6	21.8**	27.5	17.6**	20.9	8.7**	11.8	11.4**	15.1	12.8**	14.9
Hispanic	19.4**	52.2	0.0**	0.0	18.1**	67.1	23.4**	53.6	0.0**	0.0	11.7**	38.9
Asian	9.4**	38.8	0.0**	0.0	8.3**	43.9	...	...	0.0**	0.0	...	...
Other	28.6**	75.7	13.0**	29.8	12.4**	37.4	5.8**	0.0	11.3**	...	26.8**	50.5
Unknown	152.1**	...	80.1**	...	...	...	...	...	82.9**	...	...	...
Region												
▶ Northeast	14.0*	15.5	8.5*	7.6	11.0*	10.2	11.6*	14.1	14.5*	16.8	11.8*	12.1
South	19.2*	22.6	9.0**	9.6	11.3*	10.4	10.0*	11.3	11.7*	11.9	10.2*	7.7
Midwest	15.3*	19.3	10.5**	11.0	12.4**	13.4	11.3**	7.7	12.5**	14.6	12.7**	13.7
West	16.7**	19.0	10.8**	12.9	16.1**	18.4	12.2**	13.2	6.9**	4.4	8.1**	10.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 4-57. Emergency room visits by privately insured individuals for male urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=115)		2003 (N=135)		2004 (N=81)		2005 (N=119)		2006 (N=62)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.7	6.0	2.8	5.6	1.7	3.6	2.3	5.1	1.2	2.0
Age										
18-24	2.2**		1.8**		1.0**		0.4**		0.7**	
25-34	0.5**		1.6**		0.6**		1.6**		0.5**	
35-39	1.5**		0.8**		1.0**		0.6**		1.9**	
40-44	2.0**		1.3**		1.3**		0.9**		0.5**	
45-54	1.8**		3.0*		0.9**		0.6**		0.6**	
55-64	3.2**		5.0*		3.6*		4.0**		3.0*	
▶ 65-74	11.3*		8.1*		3.1*		10.8*		5.5*	
75-84	29.1**		18.4**		14.2**		20.8**		...	
85+	...		22.9**		25.9**		23.0**		...	
Race/ethnicity										
▶ White	2.7	4.7	2.3	4.3	1.3	3.1	1.9	4.0	0.8*	1.2
Black	...	...	4.8**	26.5	2.7**	11.5	6.1**	28.7	2.2**	8.6
Hispanic	2.4**	24.2	3.1**	17.2	2.8**	8.0	0.7**	15.5	2.2**	6.1
Asian	...	...	1.0**	7.7	0.7**	97.3	...	...	...	...
Other	...	...	...	...	...	...	...	...	4.1**	17.6
Unknown	0.6**	...	4.9**	...	1.6**	...	3.0**	...	0.6**	...
Missing	3.0*	...	3.2*	...	2.5**	...	4.9*	...	2.8**	...
Region										
Northeast	1.1**	6.6	1.3**	9.5	1.1*	5.6	3.6*	13.8	2.0*	...
South	2.2*	5.4	3.4	5.7	2.3*	5.6	2.3	6.3	1.4	3.3
▶ Midwest	4.2	8.6	3.4	7.7	1.3*	3.9	2.6	5.5	1.1*	1.9
West	1.3**	4.2	0.6**	1.0	0.9**	7.3	0.5**	4.3	0.3**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-58. Procedures among privately insured individuals for male urinary incontinence listed as primary diagnosis, count, rate^a

	2002		2003		2004		2005		2006	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	41	1,013	64	1,162	82	1,407	87	1,263	62	976.0
Operation for correction of incontinence	36	890.0	55	998.0	68	1,166	66	958.0	55	866.0
Ambulatory Surgery Center	1	25.0	...	...	1	17.0	...	...	1	16.0
Hospital Outpatient	10	247.0	25	454.0	40	686.0	35	508.0	31	488.0
Inpatient	25	618.0	30	545.0	27	463.0	30	435.0	21	331.0
Physician Office	...	...	...	...	...	...	1	15.0	2	31.0

... Data unavailable.

^aRate per 100,000 based on patients with primary diagnosis of urinary incontinence in the same calendar year.

NOTE: Counts less than 30 should be interpreted with caution.

SOURCE: i3 Claims Database, 2002-2006.

Table 4-59. Procedure use in Medicare beneficiaries for treatment of male urinary incontinence listed as primary diagnosis, 2002-2007 (merged), count,^a rate^b

	Count	Rate
Total	14,500	1,337
Operation for correction of incontinence	11,820	1,090
Ambulatory Surgery Center	5,940	548.0
Hospital Outpatient	680	63.0
Inpatient	4,780	441.0
Physician Office	420	39.0
Revision or repair of prosthetic	2,680	247.0
Ambulatory Surgery Center	1,260	116.0
Hospital Outpatient	260	24.0
Inpatient	960	88.0
Physician Office	200	18.0

^aUnweighted counts multiplied by 20 to arrive at counts in table.

^bRate per 100,000 male Medicare beneficiaries with a primary diagnosis of urinary incontinence.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 4-60. Inpatient stays by privately insured individuals for pediatric urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=88)		2003 (N=81)		2004 (N=94)		2005 (N=75)		2006 (N=107)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.6	2.6	2.2	2.2	2.6	2.6	2.1	2.0	2.9	2.9
Age										
▶ 0-2	3.6*		3.9*		3.4*		3.7*		4.4*	
3-10	2.1*		1.8**		2.4*		2.3*		2.7*	
11-17	2.7*		2.0**		2.4*		1.1**		2.6*	
Race/ethnicity										
▶ White	2.1*	2.1	2.2	2.2	2.3	2.3	1.9	1.8	3.1	3.1
Black	0.9**	2.2	2.0**	2.4	2.5**	2.6	1.7**	1.7	1.2**	2.2
Hispanic	5.1**	4.4	1.3**	2.2	2.5**	2.5	2.7**	2.8	3.4**	3.5
Asian	5.5**	4.7	...	...	3.9**	5.5	...	...	2.7**	5.7
Other	...	...	3.5**	10.7	...	...	5.1**	6.3	2.5**	5.3
Unknown	2.4**	...	2.3**	...	2.6**	...	2.1**	...	0.9**	...
Missing	2.8*	...	2.4*	...	3.6**	...	2.8**	...	3.6**	...
Region										
Northeast	7.1**	7.5	1.7*	1.8	2.3*	2.2	2.3*	2.2	1.6**	1.6
South	2.0*	2.0	2.1	2.1	2.1*	2.2	1.7*	1.7	2.3*	2.3
▶ Midwest	2.5	2.5	2.7	2.7	3.7	3.7	2.4	2.4	5.0	5.0
West	0.9**	0.7	1.5**	1.5	1.3**	1.3	2.0**	1.9	1.3**	1.3
Gender										
Female	2.8*	2.9	2.1*	2.1	2.0*	2.0	1.8*	1.8	2.6*	2.6
▶ Male	2.4	2.4	2.3	2.4	3.2	3.2	2.3	2.3	3.3	3.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-61. Hospital outpatient visits by privately insured individuals for pediatric urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,683)		2003 (N=1,704)		2004 (N=1,695)		2005 (N=2,040)		2006 (N=1,955)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	49.5	48.4	46.3	45.4	46.4	45.7	55.9	55.2	53.8	53.2
Age										
▶ 0-2	6.5		5.9		7.5		8.8		9.7	
3-10	82.4*		73.5*		72.6*		88.7*		84.8*	
11-17	29.6*		31.9*		32.7*		38.6*		37.4*	
Race/ethnicity										
▶ White	58.2	56.6	58.2	56.9	53.3	52.4	65.4	64.5	61.5	60.5
Black	45.0*	43.3	50.3*	49.1	43.4*	42.3	39.2*	38.7	34.6*	34.2
Hispanic	36.0*	35.0	34.0*	33.4	27.3*	26.7	32.5*	31.9	32.7*	32.2
Asian	16.5**	15.8	26.2**	26.7	19.4**	18.8	26.1**	26.8	18.9**	18.6
Other	44.2**	51.9	74.5**	72.8	54.7**	64.6	38.0**	37.8	54.8**	54.7
Unknown	56.7*	...	51.6*	...	39.8*	...	48.1*	...	51.1*	...
Missing	45.5*	...	34.1*	...	39.9*	...	47.5*	...	50.7*	...
Region										
Northeast	34.2*	33.4	28.8*	28.3	40.3*	39.6	33.3*	32.8	45.9*	45.6
South	37.7*	37.0	35.4*	34.8	31.4*	31.0	39.5*	39.2	37.9*	37.6
▶ Midwest	68.9	67.6	70.2	69.1	69.8	68.9	87.5	86.5	85.4	84.4
West	43.7*	42.4	29.8*	28.8	39.2*	38.3	46.0*	45.1	37.1*	36.5
Gender										
Female	55.2*	54.0	50.5*	49.6	50.3*	49.5	68.1*	67.2	64.5*	63.7
▶ Male	43.9	43.0	42.3	41.5	42.8	42.1	44.2	43.7	43.6	43.2
Unknown	286.3**	...	61.8**	...	...	...	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-62. Nationally representative hospital outpatient visits for pediatric urinary incontinence listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	184,966
Age	
0-2	10,576
3-10	98,639
11-17	75,751
Race/ethnicity	
White	140,792
Black	33,882
Hispanic	5,861
Other	4,431
Region	
Northeast	33,242
South	90,555
Midwest	52,613
West	8,556
Gender	
Female	64,100
Male	120,866

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-63. Ambulatory surgery center visits by privately insured individuals for pediatric urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=67)		2003 (N=38)		2004 (N=30)		2005 (N=29)		2006 (N=39)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.0	1.9	1.0	1.0	0.8	0.8	0.8*	0.9	1.1	1.1
Age										
▶ 0-2	0.5*		0.2*		0.5*		...		0.2*	
3-10	2.8*		1.5**		1.2**		1.1*		1.1**	
11-17	1.6**		0.9**		0.5**		0.8**		1.4**	
Race/ethnicity										
▶ White	3.2	3.2	1.5*	1.5	0.7*	0.7	0.9*	1.1	1.3*	1.3
Black	2.8**	6.3	0.7**	1.6	0.5**	1.2	...	...	...	...
Hispanic	...	...	0.4**	0.9	0.6**	1.0	0.3**	0.7	...	...
Asian	1.8**	3.9	...	...	...	...	0.9**	2.9	...	...
Other	4.9**	10.2	...	...	...	...	2.5**	5.4	5.0**	6.2
Unknown	2.4**	...	1.7**	...	0.9**	...	0.4**	...	1.3**	...
Missing	1.2**	...	0.6**	...	1.5**	...	0.9**	...	0.9**	...
Region										
Northeast	0.8**	0.9	0.5**	0.6	0.5**	0.9	0.8*	0.9	0.5**	0.9
South	1.2**	1.5	0.6**	0.7	0.3**	0.3	0.2**	0.2	0.6**	0.8
▶ Midwest	3.5	4.1	2.0*	2.0	1.7*	2.0	1.6*	1.9	2.2*	2.6
West	0.7**	0.7	0.2**	0.5	0.4**	0.8	0.6**	0.7	0.4**	0.5
Gender										
Female	1.7*	2.1	1.2*	1.4	1.0*	0.9	0.6*	0.7	1.0*	1.1
▶ Male	2.1	2.2	0.9*	0.8	0.7*	0.7	1.0*	1.2	1.2*	1.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-64. Nationally representative ambulatory surgery center visits for pediatric^a urinary incontinence listed as primary diagnosis, count, rate^b

	Count	Rate
Total	1,902	2.6

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 4-65. Physician office visits by privately insured individuals for pediatric urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=23,631)		2003 (N=23,429)		2004 (N=23,822)		2005 (N=24,165)		2006 (N=23,301)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	695.2	680.8	637.3	623.7	652.7	640.9	661.8	653.3	641.2	633.2
Age										
▶ 0-2	52.5		47.9		43.3		39.0		42.7	
3-10	1,148*		1,046*		1,065*		1,078*		1,046*	
11-17	442.6*		410.9*		436.1*		454.4*		437.0*	
Race/ethnicity										
▶ White	850.2	827.9	758.0	740.7	722.9	708.6	723.0	712.3	701.0	689.4
Black	600.8*	581.0	512.8*	499.4	426.0*	414.7	476.9*	469.3	496.7*	490.2
Hispanic	501.6*	485.4	461.3*	449.8	421.8*	411.7	413.8*	405.5	392.7*	386.9
Asian	294.4*	278.8	341.2*	331.2	316.1*	309.6	365.7*	357.9	369.2*	366.7
Other	746.8*	747.8	670.2*	663.5	588.9*	576.0	638.4*	644.8	570.1*	572.5
Unknown	691.8*	...	758.2*	...	686.4*	...	668.7*	...	673.5*	...
Missing	622.7*	...	539.7*	...	650.3*	...	683.8*	...	651.8*	...
Region										
Northeast	592.8*	572.2	522.4*	507.9	561.1*	546.7	569.6*	559.2	583.3*	574.4
South	633.5*	622.2	578.7*	567.9	578.2*	569.1	597.5*	592.2	592.4*	587.7
▶ Midwest	818.4	803.1	765.2	751.6	778.2	767.0	778.7	769.8	748.1	739.4
West	622.0*	611.6	568.5*	554.3	644.8*	632.3	646.7*	635.2	594.7*	585.1
Gender										
Female	634.3*	621.0	594.0*	581.5	622.3*	611.0	634.6*	626.3	616.6*	609.1
▶ Male	753.6	738.3	679.0	664.5	682.0	669.9	688.0	679.5	664.7	656.5
Unknown	477.1**	...	247.2**	...	538.8**	...	479.0**	...	625.4**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-66. Nationally representative physician office visits for pediatric urinary incontinence listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	2,412,886
Age	
0-2	49,784
3-10	1,837,734
11-17	525,368
Race/ethnicity	
White	1,893,079
Black	357,613
Hispanic	162,194
Region	
Northeast	64,673
South	1,227,860
Midwest	375,402
West	744,951
Gender	
Female	1,202,799
Male	1,210,087

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-67. Emergency room visits by privately insured individuals for pediatric urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=57)		2003 (N=108)		2004 (N=51)		2005 (N=77)		2006 (N=66)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.7	1.7	2.9	2.9	1.4	1.4	2.1	2.1	1.8	1.8
Age										
▶ 0-2	1.3*		0.3*		0.5*		0.2*		0.8*	
3-10	1.8**		4.7*		1.8**		3.8*		2.6*	
11-17	1.7**		2.0**		1.3**		1.0**		1.3**	
Race/ethnicity										
▶ White	1.4*	1.7	3.1	3.1	1.6	1.6	2.0	2.3	1.2*	1.2
Black	4.7**	10.5	6.1**	7.1	0.5**	3.8	...	...	...	...
Hispanic	0.6**	1.4	3.1**	3.7	0.6**	0.7	1.2**	1.2	3.4**	3.5
Asian	...	...	2.6**	3.4	...	...	4.7**	9.9	...	...
Other	4.9**	26.1	...	...	5.2**	6.5	2.5**	7.5	...	...
Unknown	2.4**	...	1.7**	...	0.9**	...	1.7**	...	4.7**	...
Missing	1.7**	...	2.6*	...	1.7**	...	3.5**	...	2.9**	...
Region										
Northeast	2.3*	3.0	0.2**	1.5	0.8**	0.9	...	...	2.4*	2.5
South	0.9**	1.0	2.8*	2.7	1.1**	1.1	1.4**	1.6	1.2**	1.4
▶ Midwest	2.8	2.7	4.9	5.8	2.0*	2.0	4.0	3.9	3.3	3.2
West	0.7**	0.7	0.2**	0.5	1.3**	3.4	1.4**	1.7	0.2**	0.4
Gender										
Female	1.5*	1.9	2.9	2.9	1.8*	1.8	1.8	2.2	1.6*	1.6
▶ Male	1.8	1.8	2.9	2.9	1.0*	1.0	2.4	2.3	2.0	2.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-68. Nationally representative emergency room visits for pediatric urinary incontinence listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	5,717
Age	
0-2	...
3-10	2,681
11-17	3,036
Race/ethnicity	
White	5,395
Black	322
Hispanic	...
Region	
Northeast	...
South	...
Midwest	2,714
West	3,003
Gender	
Female	5,395
Male	322

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 4-69. Inpatient stays by privately insured individuals for spinal cord injury-related urinary incontinence listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=17)		2003 (N=35)		2004 (N=23)		2005 (N=60)		2006 (N=27)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.2*	0.5	0.4	0.5	0.2*	0.2	0.6	0.6	0.3*	0.3
Age										
18-24	0.3*		0.5*		0.8*		1.5**		0.3*	
25-34	0.0**		0.1**		0.1*		0.2*		0.3*	
35-39	...		0.2**		0.2*		0.2*		0.2*	
40-44	0.1**		0.5**		0.2*		0.4*		0.1*	
45-54	0.1**		0.6**		0.2*		0.7*		0.3*	
55-64	0.1**		0.3**		0.1*		0.7*		0.4*	
▶ 65-74	...		...		0.3*		0.4*		0.3*	
75-84	3.8**		...		...		...		...
Race/ethnicity										
▶ White	0.3*	0.8	0.4*	0.7	0.3*	0.2	0.5	0.3	0.3*	0.3
Black	1.9**	47.1	...	...	0.2**	...	0.4**	3.7	...	...
Hispanic	...	...	...	...	0.3**	...	0.1**	0.7	0.5**	...
Asian	...	...	...	...	...	...	0.3**	3.7	0.3**	1.9
Other	...	...	8.6**	63.1	...	...	1.1**	5.6	...	...
Unknown	...	...	...	...	...	...	0.6**	...	0.3**	...
Missing	0.1**	...	0.4**	...	0.1**	...	1.3**	...	0.2**	...
Region										
Northeast	0.5**	11.6	0.2*	1.6	...	...	0.7**	2.6	0.5**	0.8
South	0.2*	1.0	0.4*	1.0	0.3**	0.3	0.8	0.8	0.3*	0.3
▶ Midwest	0.1*	0.3	0.2*	0.6	0.1*	0.1	0.2*	0.3	0.2*	0.4
West	...	...	0.6**	1.5	0.5**	1.8	0.4**	0.6	0.1**	...
Gender										
Female	0.2**	1.3	0.1**	0.4	0.1**	0.3	0.0**	...	0.1**	0.3
▶ Male	0.3*	0.8	0.6	0.8	0.3*	0.3	1.1	1.2	0.4**	0.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

†Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 4-70. Physician office visits by Medicare beneficiaries for spinal cord injury-related urinary incontinence listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,840)		2003 (N=2,300)		2004 (N=3,060)		2005 (N=2,960)		2006 (N=2,660)		2007 (N=2,780)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.2	1.9	6.3	3.0	8.3	3.4	8.0	4.4	7.3	3.0	7.7	4.5
Under 65/65+												
< 65 Years	18.2*	18.2	19.2*	19.2	26.2*	26.2	21.3*	21.3	22.2*	22.2	19.2*	19.2
▶ 65+ Years	1.8*	1.9	2.9	3.0	3.4	3.4	4.2	4.4	3.0	3.0	4.2	4.5
Age												
▶ 65-69	1.6*		3.8*		4.4*		6.4*		2.0*		4.2*	
70-74	0.6**		2.0**		4.1**		2.1**		2.8**		1.9**	
75-79	5.4**		5.0**		3.7**		5.9**		3.9**		4.1**	
80-84	0.5**		1.9**		1.8**		4.1**		4.6**		8.6**	
85-89	0.9**		0.8**		0.8**		1.6**		1.6**		5.6**	
90-94	...		...		4.0**		...		5.9**		...	
Race/ethnicity												
▶ White	5.3	2.1	6.5	3.3	7.6	3.5	7.3	4.2	7.0	3.0	6.4	3.4
Black	6.3**	4.6	7.2**	3.4	12.5**	2.7	14.6**	15.6	7.2**	11.3	14.7**	20.0
Hispanic	3.0**	...	2.9**	...	14.1**	18.4	13.7**	17.1	16.9**	16.8	30.2**	40.5
Asian	...	...	...	...	...	...	...	...	13.3**	...	...	...
Other	...	...	...	...	15.1**	31.8	5.7**	...	2.8**	...	10.8**	30.8
Unknown	...	...	28.7**	...	27.1**	...	...	...	31.3**	...	33.7**	...
Region												
▶ Northeast	6.2*	2.9	5.6*	3.9	6.9*	2.5	4.5*	.	9.1	6.0	4.6*	4.4
South	4.8*	3.3	6.5*	2.9	7.2*	3.7	7.4*	6.5	7.7*	3.4	7.4*	5.2
Midwest	7.1*	6.4	6.1**	5.2	8.4*	4.5	13.2*	8.5	5.5**	3.4	7.7*	4.4
West	1.7**	1.6	7.0**	4.2	12.0*	8.7	5.7**	4.4	7.1**	1.4	11.7*	9.0
Gender												
Female	2.1**	1.0	3.6*	2.1	4.9*	3.4	4.3*	4.6	4.4*	3.6	5.1*	3.8
▶ Male	9.1	4.3	9.7	4.6	12.5	3.7	12.6	7.2	11.0	3.8	10.8	5.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

**Urologic
Diseases**
in America



CHAPTER 5
Bladder and Upper Tract Urothelial Cancer

Lower Tract Urothelial Cancer
Upper Tract Urothelial Cancer

Table 5-1. Codes used in the diagnosis and management of transitional cell carcinoma (TCC)**Upper Tract****Individuals 40 years or older, with one of the following:***ICD-9 diagnosis codes*

- 189.1 Malignant neoplasm of renal pelvis
- 189.2 Malignant neoplasm of ureter

CPT procedure codes

- 50234 Nephrectomy with total ureterectomy and bladder cuff; through same incision
- 50236 Nephrectomy with total ureterectomy and bladder cuff; through separate incision
- 50548 Laparoscopy, surgical; nephrectomy with total ureterectomy
- 50650 Ureterectomy, with bladder cuff (separate procedure)
- 50220^a Nephrectomy, including partial ureterectomy, any open approach including rib resection
- 50225^a Nephrectomy, including partial ureterectomy, any open approach including rib resection; complicated because of previous surgery on same kidney
- 50230^a Nephrectomy, including partial ureterectomy, any open approach including rib resection; radical, with regional lymphadenectomy and/or vena caval thrombectomy
- 50546^a Laparoscopy, surgical; nephrectomy, including partial ureterectomy

Lower Tract**Individuals 40 years or older, with one of the following:***ICD-9 diagnosis codes*

- 188 Malignant neoplasm of bladder
- 188.0 Malignant neoplasm of trigone of bladder
- 188.1 Malignant neoplasm of dome of bladder
- 188.2 Malignant neoplasm of lateral wall of bladder
- 188.3 Malignant neoplasm of anterior wall of bladder
- 188.4 Malignant neoplasm of posterior wall of bladder
- 188.5 Malignant neoplasm bladder neck
- 188.6 Malignant neoplasm of ureteric orifice
- 188.7 Malignant neoplasm of urachus
- 188.8 Malignant neoplasm of other specified sites of bladder
- 188.9 Malignant neoplasm of bladder part, unspecified
- 189.3 Malignant neoplasm of urethra
- 233.7 Carcinoma in situ of bladder

ICD-9 procedure codes

- 57.4 Transurethral excision or destruction of bladder cancer
- 57.49 Other transurethral excision or destruction of lesion or tissue of bladder
- 57.5 Other excision or destruction of bladder
- 57.59 Open excision or destruction of other lesion or tissue of bladder
- 57.6 Partial cystectomy
- 57.71 Radical cystectomy
- 57.79 Other total cystectomy
- 57.87 Reconstruction of urinary bladder

CPT procedure codes

- 51020 Cystotomy or cystostomy; with fulguration and/or insertion of radioactive material
- 51530 Cystotomy or cystostomy; with fulguration and/or insertion of radioactive material

Continued on next page.

Table 5-1 (continued). Codes used in the diagnosis and management of transitional cell carcinoma (TCC)

51570	Cystectomy; complete
51575	Cystectomy; complete, with bilateral pelvic lymphadenectomy, including external iliac hypogastric, and obturator nodes
51580	Cystectomy; complete, with uretereosigmoidostomy or ureterocutaneous transplantations
51585	Cystectomy; complete, with uretereosigmoidostomy or ureterocutaneous transplantations; with bilateral pelvic lymphadenectomy, including external iliac, hypogastric, and obturator nodes
51590	Cystectomy; complete, with ureteroileal conduit or sigmoid bladder, including intestine anastomosis
51595	Cystectomy; complete, with ureteroileal conduit or sigmoid bladder, including intestine anastomosis with bilateral pelvic lymphadenectomy, including external iliac, hypogastric, and obturator nodes
51596	Cystectomy, complete, with continent diversion, any open technique, using any segment of small and/or large intestine to construct neobladder
51597	Pelvic exenteration, complete, for vesical, prostatic or urethral malignancy, with removal of bladder and ureteral transplantations, with or without hysterectomy and/or abdominoperineal resection of rectum and colon and colostomy, or any combination thereof
51720	Bladder instillation of anticarcinogenic agent (including detention time)
52224	Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) or treatment of MINOR (less than 0.5 cm) lesion(s) with or without biopsy
52234	Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; SMALL bladder tumor(s) (0.5 to 2.0 cm)
52235	Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; MEDIUM bladder tumor(s) (2.0 to 5.0 cm)
52240	Cystourethroscopy, with fulguration (including cryosurgery or laser surgery) and/or resection of; LARGE bladder tumor(s)
52250	Cystourethroscopy with insertion of radioactive substance, with or without biopsy or fulguration

^aMust occur with diagnosis of 189.1 (malignant neoplasm of renal pelvis) or 189.2 (malignant neoplasm of ureter).

Table 5-2. Estimated new bladder cancer cases and deaths in the United States, 2011

	Estimated New Cases	Estimated New Deaths
Total	69,250	14,990
Male	52,020	10,670
Female	17,230	4,320

SOURCE: American Cancer Society. *Cancer Facts & Figures 2011*. Atlanta: American Cancer Society, Inc.

Table 5-3. Incidence rates of bladder cancer, age-adjusted, by race/ethnicity and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis ^a									
1975	19.3	34.4	8.9	20.2	36.4	9.2	10.6	16.3	6.3
1976	19.7	34.4	9.4	20.7	36.7	9.7	12.5	18.2	8.6
1977	19.0	33.4	8.9	20.0	35.6	9.2	13.5	22.7	7.1
1978	20.0	35.4	9.4	21.1	37.9	9.7	11.7	19.4	6.4
1979	20.0	35.4	9.4	21.3	38.2	9.8	10.4	15.6	6.5
1980	20.4	37.1	8.9	21.5	39.8	9.1	13.3	18.2	10.0
1981	20.7	36.4	9.7	21.9	38.8	10.3	11.6	20.7	5.5
1982	20.1	35.8	9.5	21.4	38.3	10.2	12.2	21.8	5.6
1983	20.1	36.0	9.0	21.3	38.7	9.4	12.2	18.7	7.6
1984	20.9	37.7	9.2	22.4	40.9	9.6	11.4	18.8	6.2
1985	20.7	36.4	9.9	22.1	39.3	10.3	13.1	20.3	8.1
1986	21.0	38.0	9.4	22.5	40.8	10.0	12.9	22.2	6.6
1987	21.7	39.5	9.2	23.2	42.8	9.6	13.3	21.8	7.5
1988	20.9	38.1	9.0	22.7	41.9	9.7	11.3	18.0	6.5
1989	21.0	37.4	9.7	22.7	40.9	10.2	11.4	17.6	7.2
1990	21.1	37.5	9.6	22.6	40.8	10.0	12.7	18.6	8.8
1991	20.9	37.6	9.3	22.7	41.3	9.9	12.9	19.7	8.5
1992	21.3	37.5	9.8	23.0	40.7	10.5	12.5	20.8	6.9
1993	21.2	37.6	9.7	22.8	40.6	10.4	14.2	24.4	7.9
1994	20.8	36.9	9.5	22.6	40.3	10.2	12.3	20.0	6.9
1995	20.7	36.2	9.6	22.5	39.5	10.3	11.8	18.1	7.4
1996	20.8	36.7	9.6	22.7	40.1	10.3	12.2	19.8	7.3
1997	21.0	37.1	9.6	22.9	40.6	10.2	12.7	20.0	8.2
1998	21.6	38.5	9.4	23.6	42.2	10.2	11.9	20.3	6.4
1999	21.8	38.2	10.0	23.6	41.6	10.6	14.6	22.6	9.4
2000	21.8	38.8	9.5	23.9	42.4	10.3	13.2	20.3	8.5
2001	21.7	38.4	9.7	24.0	42.3	10.6	11.6	18.5	7.1
2002	21.2	37.1	9.7	23.3	40.6	10.5	12.6	17.9	9.0
2003	21.5	37.6	9.7	23.6	41.3	10.6	12.8	21.0	7.4
2004	21.4	37.7	9.5	23.5	41.4	10.3	13.5	22.3	8.2
2005	21.7	38.3	9.5	23.7	42.0	10.2	13.8	22.7	8.0
2006	21.1	37.3	9.1	23.1	40.9	9.8	11.6	17.7	7.6
2007	21.5	38.3	8.9	23.6	42.0	9.7	12.9	21.0	7.7
2008	20.7	36.4	9.1	22.6	39.6	9.9	12.6	21.9	6.5
1975-2008	20.9	37.2	9.4	22.6	40.5	10.0	12.6	20.1	7.5
Age at Diagnosis, ^b 2004-2008									
All ages	21.1	37.5	9.2	22.9	40.6	9.8	13.1	21.6	7.6
Under 65	5.8	9.1	2.7	6.3	9.8	3.0	3.7	6.0	1.9
65 and over	126.9	233.9	53.8	137.2	253.4	56.9	77.4	129.5	46.6
All ages ^c	12.4	21.1	5.4	13.4	22.9	5.8	7.7	12.6	4.3

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^cRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-4. Incidence rates^a of bladder cancer, age-specific, by race/ethnicity and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Age at Diagnosis									
<1	...	...	...	...	...	...	...	...	...
1-4	...	...	...	...	...	...	...	...	...
5-9	...	...	...	...	...	...	...	...	...
10-14	...	...	...	...	...	...	...	...	...
15-19	0.1	0.1	...	0.1	...	...	...	...	...
20-24	0.2	0.2	0.2	0.2	0.2	0.2	...	...	...
25-29	0.4	0.5	0.2	0.4	0.5	0.3	...	...	...
30-34	0.7	1.0	0.4	0.8	1.1	0.4	...	...	...
35-39	1.5	2.1	0.8	1.6	2.3	0.9	1.0	1.5	...
40-44	3.3	4.8	1.7	3.5	5.1	1.9	1.9	3.3	...
45-49	7.1	10.7	3.6	7.8	11.6	4.0	4.4	6.3	2.8
50-54	14.2	21.6	7.1	15.1	22.6	7.6	11.1	17.6	5.5
55-59	27.4	43.6	12.0	29.9	47.1	13.2	17.6	27.9	9.0
60-64	48.4	77.7	21.5	53.1	84.8	23.5	28.6	46.4	14.5
65-69	78.5	129.7	33.7	85.6	140.7	36.5	54.6	87.9	29.3
70-74	112.2	194.7	45.0	123.2	213.0	48.6	61.4	99.6	34.1
75-79	149.0	267.3	61.9	161.9	290.4	65.7	82.8	132.7	51.0
80-84	174.3	331.4	74.7	186.5	357.3	77.7	107.3	177.3	69.3
85+	171.0	373.8	77.7	180.0	400.8	79.4	117.0	222.3	76.9

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-5. Age-adjusted incidence rates^a and trends^b of bladder cancer, by race/ethnicity and gender

Race/ethnicity	Rate 2004-2008 Rate per 100,000			Trend 1999-2008 AAPC ^c (%)		
	Total	Males	Females	Total	Males	Females
All Races	21.1	37.5	9.2	-0.4	-0.1	-0.9*
White	22.9	40.6	9.8	-0.4	-0.1	-0.8*
White Hispanic ^d	11.8	20.4	5.6	-0.5	-0.7	-0.3
White Non-Hispanic ^d	24.5	43.4	10.4	-0.2	0.1	-0.7*
Black	13.1	21.6	7.6	0.4	0.5	0.2
Asian/Pacific Islander	9.3	16.3	4.0	0.4*	0.8*	0.1
American Indian/Alaska Native ^e	8.3	14.0	3.6	...	...	...
Hispanic ^d	11.6	20.0	5.4	-0.4	-0.6	-0.3

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Trend based on less than 10 cases for at least one year within the time interval.

^aBased on the SEER 17 areas. Rates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 13 areas. Trends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cThe 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^dHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^eIncidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-6. Estimated bladder cancer prevalence counts^a and age-adjusted percents^b in the United States on January 1, 2008 by race/ethnicity and gender

	Count	Percent
All Races	537,428 ^c	0.1203% ^d
Males	398,329 ^c	0.2128% ^d
Females	139,099 ^c	0.0521% ^d
White	500,836 ^c	0.1356% ^d
Males	372,429 ^c	0.2381% ^d
Females	128,407 ^c	0.0586% ^d
Black	19,043 ^c	0.0577% ^d
Males	12,897 ^c	0.0974% ^d
Females	6,146 ^c	0.0319% ^d
Asian/Pacific Islander ^d	...	0.0547% ^d
Males	...	0.0983% ^d
Females	...	0.0228% ^d
Hispanic ^e	...	...
Males	...	...
Females	...	...

... Data unavailable.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bPercentages are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130) by 5-year age groups.

^cStatistics based on the SEER 9 Areas.

^dStatistics based on the SEER 11 Areas and Rural Georgia.

^eStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-7. Estimated bladder cancer prevalence counts^a on January 1, 2008 in the United States, by race/ethnicity and years since diagnosis

Years Since Diagnosis	0 to < 5	5 to < 10	10 to < 15	15 to < 20	20 to < 25	25 to < 30	0 to < 18 ^e	0 to < 33 ^e	≥ 33 ^f	Complete ^g
Race/ethnicity										
All Races ^b	189,650	130,423	87,562	54,145	33,652	18,975	442,780	522,368	15,060	537,428
Males	142,414	97,205	64,930	40,306	24,192	13,434	331,088	388,564	9,765	398,329
Females	47,236	33,218	22,632	13,839	9,460	5,541	111,692	133,804	5,295	139,099
White ^b	175,220	122,390	82,567	51,825	31,957	18,173	413,072	489,067	11,769	500,836
Males	132,507	91,539	61,226	38,582	22,942	12,931	310,059	364,922	7,507	372,429
Females	42,713	30,851	21,341	13,243	9,015	5,242	103,013	124,145	4,262	128,407
Black ^b	7,948	4,594	2,988	1,472	1,025	414	16,636	18,804	239	19,043
Males	5,031	3,008	2,223	1,091	748	246	11,107	12,704	193	12,897
Females	2,917	1,586	765	381	277	168	5,529	6,100	46	6,146
Asian/Pacific Islander ^c	3,223	1,686	1,141	...	...	...	6,470	...	...	...
Males	2,514	1,277	828	...	...	...	4,935	...	...	...
Females	709	409	313	...	...	...	1,535	...	...	...
Hispanic ^d	6,795	3,952	2,510	...	...	...	14,302	...	...	...
Males	5,130	2,937	1,881	...	...	...	10,712	...	...	...
Females	1,665	1,015	629	...	...	...	3,590	...	...	...

... Data unavailable.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bStatistics based on the SEER 9 Areas.

^cStatistics based on the SEER 11 Areas and Rural Georgia.

^dStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

^eMaximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^fCases diagnosed more than 32 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^gComplete prevalence is obtained by summing 0 to <33 and ≥33.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-8. Risk of being diagnosed with bladder cancer in 10, 20 and 30 years, lifetime risk of being diagnosed given alive and cancer-free at current age, by race/ethnicity, both sexes

Current Age	All Races			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	2.41
10	0.00	0.00	0.01	2.43
20	0.00	0.01	0.06	2.44
30	0.01	0.06	0.25	2.46
40	0.05	0.25	0.77	2.48
50	0.20	0.73	1.61	2.50
60	0.57	1.50	2.25	2.44
70	1.07	1.93	...	2.15
80	1.19	...	...	1.49
Lifetime Risk of Being Diagnosed = 2.41		Lifetime Risk of Dying = 0.57		

Current Age	Whites			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	2.60
10	0.00	0.00	0.02	2.63
20	0.00	0.01	0.07	2.64
30	0.01	0.07	0.27	2.66
40	0.05	0.26	0.83	2.68
50	0.22	0.80	1.76	2.69
60	0.62	1.64	2.44	2.63
70	1.17	2.08	...	2.30
80	1.27	...	...	1.57
Lifetime Risk of Being Diagnosed = 2.60		Lifetime Risk of Dying = 0.6		

Current Age	Blacks			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.00	0.00	1.18
10	0.00	0.00	0.01	1.21
20	0.00	0.01	0.04	1.22
30	0.01	0.04	0.16	1.24
40	0.03	0.16	0.45	1.26
50	0.13	0.44	0.85	1.28
60	0.35	0.80	1.18	1.28
70	0.55	1.02	...	1.15
80	0.71	...	...	0.91
Lifetime Risk of Being Diagnosed = 1.18		Lifetime Risk of Dying = 0.39		

... Statistic could not be calculated.

NOTE: A percent of 0.00 represents a value that is below 0.005.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-9. Stage at diagnosis for bladder cancer 2001-2007,^a total case counts, estimated case counts, and percentages

Stage at Diagnosis	All Races		
	All	Males	Females
All Stages	79,277 (100%)	59,333 (100%)	19,944 (100%)
In Situ	40,431 (51%)	30,853 (52%)	9,773 (49%)
Localized	27,747 (35%)	20,767 (35%)	6,980 (35%)
Regional	5,549 (7%)	4,153 (7%)	1,596 (8%)
Distant	3,171 (4%)	1,780 (3%)	997 (5%)
Unstaged	2,378 (3%)	1,780 (3%)	598 (3%)

Stage at Diagnosis	Whites		
	All	Males	Females
All Stages	71,146 (100%)	53,650 (100%)	17,496 (100%)
In Situ	36,284 (51%)	27,898 (52%)	8,758 (50%)
Localized	24,901 (35%)	18,777 (35%)	5,949 (34%)
Regional	4,980 (7%)	3,756 (7%)	1,400 (8%)
Distant	2,846 (4%)	1,610 (3%)	875 (5%)
Unstaged	2,134 (3%)	1,073 (2%)	525 (3%)

Stage at Diagnosis	Blacks		
	All	Males	Females
All Stages	3,827 (100%)	2,438 (100%)	1,389 (100%)
In Situ	1,454 (38%)	1,023 (42%)	431 (31%)
Localized	1,493 (39%)	926 (38%)	569 (41%)
Regional	459 (12%)	244 (10%)	181 (13%)
Distant	306 (8%)	146 (6%)	139 (10%)
Unstaged	153 (4%)	98 (4%)	56 (4%)

^aBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-10. Survival (%) for bladder cancer (invasive and *in situ*), by race, gender, diagnosis year, stage and age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (%)									
Year of Diagnosis									
1960-1963 ^a	...	...	...	53.0	53.0	53.0	24.0	24.0	24.0
1970-1973 ^a	...	...	...	61.0	61.0	60.0	36.0	38.0	27.0
► 1975-1977 ^b	72.5	74.0	68.4	73.5	74.6	70.3	50.3	56.5	38.1 ^c
1978-1980 ^b	74.1	75.3	70.4	74.9	75.7	72.4	54.6	62.7	40.4
1981-1983 ^b	77.0	78.4	73.1	77.7	78.9	74.3	59.7	64.9	47.6 ^c
1984-1986 ^b	76.9	78.3	72.9	77.5	78.7	73.9	59.6	62.6	52.9
1987-1989 ^b	79.2	81.6	72.2	80.0	82.2	73.5	62.5	67.6	52.6
1990-1992 ^b	79.6	82.1	72.2	80.6	83.0	73.4	63.4	66.1	58.8
1993-1995 ^b	80.6	82.4	75.4	81.4	82.8	77.3	60.0	67.0	45.8
1996-2000 ^b	79.4	80.6	76.1	80.3	81.3	77.3	62.6	66.0	55.9
2001-2007 ^b	80.2*	81.8*	75.6*	81.1*	82.4*	77.2*	64.1*	67.9*	55.9*
5-Year Relative Survival (%), 2001-2007^d									
Stage at Diagnosis									
All Stages	78.1	79.9	72.6	78.5	80.1	73.8	64.4	70.3	54.0
In Situ	96.6	96.9	95.7	96.7	96.9	96.2	92.3	95.1	85.9
Localized	70.7	73.0	63.6	70.9	73.0	64.3	61.4	66.5	53.0
Regional	34.6	36.0	30.9	34.4	35.6	31.2	31.6	35.4	25.8
Distant	5.4	5.9	4.4	5.5	6.1	4.2	5.1	3.5	5.4
Unstaged	49.1	53.2	39.9	46.7	51.3	36.1	41.9 ^c	43.5 ^c	37.1 ^c
Age at Diagnosis									
< 45	89.3	89.9	87.9	90.0	90.2	89.4	76.2	77.9	71.4 ^c
45-54	85.0	85.1	84.4	85.6	85.4	86.2	72.3	76.3	60.3 ^c
55-64	84.1	84.6	82.3	84.6	84.9	83.5	69.6	72.6	62.3
65-74	79.6	80.5	76.3	79.9	80.5	78.0	67.9	74.9	54.8
75+	70.8	74.1	62.7	71.5	74.6	63.5	51.8	56.0	46.0
< 65	84.9	85.2	83.6	85.4	85.5	84.9	71.5	74.7	63.1
65+	74.6	77.0	67.8	75.1	77.2	69.0	59.6	66.2	50.2

... Statistic could not be calculated due to fewer than 25 cases during the time period.

► Denotes reference group.

*The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^aBased on End Results data from a series of hospital registries and one population-based registry.

^bSEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2008.

^cThe standard error is between 5 and 10 percentage points.

^dSEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD,

http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-11. Relative survival^a (%) for bladder cancer, by year of diagnosis, all races, males and females

	1975-1979		1980-1984		1985-1989		1990-1994		1995-1999		2000-2004		2005-2009		2010-2014		2015-2019		2020-2024		
	1979	1984	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	87.4	89.2	90.4	90.0	90.1	90.3	90.8	91.0	91.0	90.1	91.7	91.3	90.5	91.4	91.4	90.4	90.9	91.1	90.9	91.5	90.4
2-year	81.1	83.8	85.4	85.8	85.3	85.0	85.9	86.1	87.0	85.8	86.5	86.7	85.3	86.8	86.7	86.1	85.9	86.3	85.6	86.8	
3-year	77.9	80.7	82.4	82.7	82.9	82.2	83.2	84.2	84.3	83.6	83.3	83.7	82.5	83.9	84.8	83.9	83.7	83.8	82.6		
4-year	75.1	78.2	80.2	81.0	81.3	81.3	81.4	81.9	82.1	81.3	81.0	81.8	80.6	81.9	82.7	81.4	81.7	81.7			
5-year	73.2	76.4	78.3	79.9	79.5	79.2	79.8	80.4	81.5	79.7	78.8	79.6	78.5	80.5	81.9	80.2	80.0				
6-year	71.3	74.7	76.7	78.3	78.4	77.7	78.0	78.6	79.5	78.4	77.1	77.8	77.0	79.6	80.4	78.7					
7-year	69.2	73.2	75.2	77.1	76.1	75.7	76.3	76.9	77.7	77.6	75.9	76.7	75.8	78.2	78.7						
8-year	67.7	72.0	73.6	75.1	74.5	74.3	75.3	76.1	76.6	76.0	74.8	75.0	74.7	76.8							
9-year	66.1	70.3	72.4	73.0	73.3	73.4	73.7	75.0	75.0	74.5	73.5	74.0	73.6								
10-year	64.1	69.0	71.1	70.9	72.0	72.1	72.8	74.3	74.1	73.1	72.2	72.4									
11-year	62.3	67.7	70.0	69.1	71.0	70.9	71.4	72.9	73.4	72.0	71.4										
12-year	61.1	66.3	68.5	67.4	70.2	70.2	70.6	71.8	72.3	70.5											
13-year	60.0	65.3	67.2	66.9	69.0	69.4	69.2	71.6	69.9												
14-year	58.7	63.8	65.7	65.5	69.0	68.2	68.3	70.3													
15-year	57.4	62.4	64.4	64.5	66.0	66.1	66.9														
16-year	56.2	60.8	62.9	62.5	65.2	64.9															
17-year	55.2	59.8	62.0	60.8	64.2																
18-year	54.4	58.7	61.0	59.5																	
19-year	53.8	57.8	60.3																		
20-year	52.9	57.3																			

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-12. Age-adjusted mortality rates^a for bladder cancer, by year, race, and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death									
1975	5.5	9.8	2.8	5.6	10.1	2.7	5.0	6.9	3.6
1976	5.6	9.8	2.9	5.6	10.1	2.8	5.3	7.8	3.5
1977	5.5	9.7	2.9	5.6	9.9	2.8	5.2	7.6	3.6
1978	5.4	9.5	2.9	5.5	9.8	2.8	4.9	7.2	3.4
1979	5.3	9.3	2.7	5.3	9.6	2.7	5.0	7.6	3.3
1980	5.2	9.2	2.7	5.2	9.5	2.7	4.7	6.2	3.7
1981	5.1	9.0	2.7	5.1	9.3	2.6	4.9	7.2	3.4
1982	5.0	9.0	2.6	5.0	9.2	2.5	4.9	6.8	3.6
1983	4.9	8.8	2.5	4.9	9.0	2.5	4.7	7.2	3.2
1984	4.7	8.5	2.5	4.8	8.7	2.4	4.7	6.9	3.4
1985	4.7	8.4	2.4	4.7	8.7	2.4	4.5	6.9	3.0
1986	4.5	8.1	2.4	4.6	8.4	2.3	4.3	5.8	3.3
1987	4.4	7.9	2.3	4.5	8.1	2.3	4.4	6.5	3.1
1988	4.4	7.8	2.4	4.5	8.0	2.3	4.3	5.9	3.3
1989	4.5	8.0	2.4	4.5	8.2	2.3	4.6	7.0	3.2
1990	4.5	8.0	2.4	4.6	8.2	2.4	4.4	6.4	3.2
1991	4.4	7.9	2.3	4.5	8.1	2.3	4.4	6.6	3.1
1992	4.5	7.9	2.4	4.5	8.1	2.4	4.4	6.7	3.1
1993	4.5	8.1	2.3	4.6	8.3	2.3	4.2	6.4	2.9
1994	4.5	7.9	2.4	4.5	8.1	2.4	4.3	6.4	3.2
1995	4.4	7.8	2.3	4.5	8.1	2.2	4.1	5.8	3.1
1996	4.4	7.8	2.4	4.5	8.1	2.3	4.2	5.9	3.1
1997	4.4	7.6	2.4	4.5	7.9	2.4	4.0	5.9	3.0
1998	4.4	7.7	2.3	4.5	8.0	2.3	4.0	5.6	3.0
1999	4.4	7.7	2.3	4.5	8.0	2.2	4.0	5.8	3.0
2000	4.3	7.6	2.3	4.5	7.9	2.3	3.7	5.7	2.7
2001	4.3	7.6	2.3	4.5	8.0	2.2	3.7	5.2	2.9
2002	4.4	7.6	2.4	4.5	7.9	2.4	4.0	5.7	3.1
2003	4.3	7.5	2.2	4.4	7.8	2.2	3.8	5.6	2.7
2004	4.4	7.7	2.3	4.6	8.1	2.3	3.7	5.2	2.8
2005	4.4	7.7	2.2	4.5	8.0	2.2	3.8	6.1	2.6
2006	4.4	7.7	2.2	4.5	8.1	2.2	3.9	5.9	2.8
2007	4.4	7.7	2.2	4.6	8.1	2.2	3.8	5.7	2.8
2008	4.4	7.6	2.2	4.6	8.0	2.2	3.4	4.9	2.5
1975-2008	4.6	8.1	2.4	4.7	8.4	2.4	4.3	6.2	3.1
Age at Death									
All ages	4.4	7.7	2.2	4.6	8.0	2.2	3.7	5.5	2.7
Under 65	0.7	1.1	0.4	0.8	1.2	0.4	0.8	1.1	0.5
65 and over	29.5	52.9	15.0	30.7	55.6	15.0	24.2	36.4	17.9
All ages ^b	2.2	3.7	1.1	2.3	3.9	1.1	1.9	2.8	1.4

^aUS Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 5-13. Age-adjusted mortality^a rates^b and trends^c of bladder cancer, by race/ethnicity and gender

Race/ethnicity	Rate 2004-2008 Rate per 100,000			Trend 1999-2008 AAPC ^d (%)		
	Total	Males	Females	Total	Males	Females
All Races	4.4	7.7	2.2	-0.1*	0.1	-0.5*
White	4.6	8.0	2.2	0.1	-0.1	-0.4*
White Hispanic ^e	2.4	3.9	1.3	-0.6	-1.0*	-0.4
White Non-Hispanic ^e	4.7	8.3	2.3	0.5*	0.5*	-0.2
Black	3.7	5.5	2.7	-1.0*	-1.0*	-1.1*
Asian/Pacific Islander	1.7	2.7	0.9	-1.2*	-0.3	-2.3*
American Indian/Alaska Native						
Total U.S.	1.8	2.9	1.1	2.0	...	...
CHSDA ^f Counties	2.1	3.6	1.1	...	...	...
Non-CHSDA ^f Counties	1.5	2.1	1.1	...	...	...
Hispanic ^e	2.3	3.8	1.2	-0.7	-1.0*	-0.5

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Trend based on less than 10 cases for at least one year within the time interval.

^aUS Mortality Files, National Center for Health Statistics, CDC.

^bRates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cTrends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^dThe 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

^eHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^fIncidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

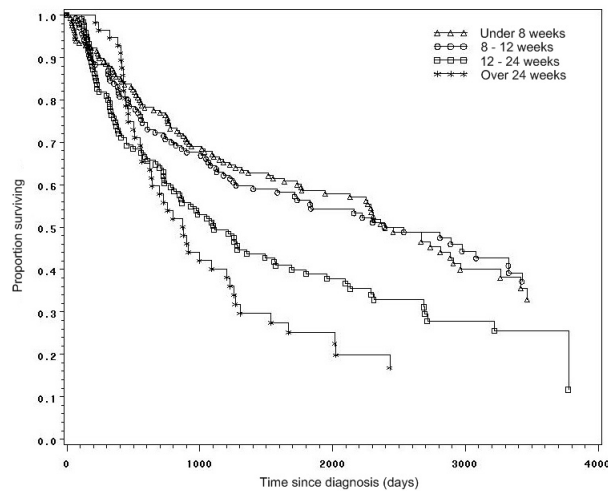


Figure 5-1. Overall survival following diagnosis of muscle-invasive bladder cancer stratified by time between diagnosis and radical cystectomy.

SOURCE: Gore J, Lai J, Setodji C, Litwin M, Saigal C, the Urologic Diseases in America Project. Mortality Increases When Radical Cystectomy is Delayed More Than 12 Weeks: Results from a SEER-Medicare Analysis. *Cancer*. March 2009; 115(5): 988-96. (Copyright 2009 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

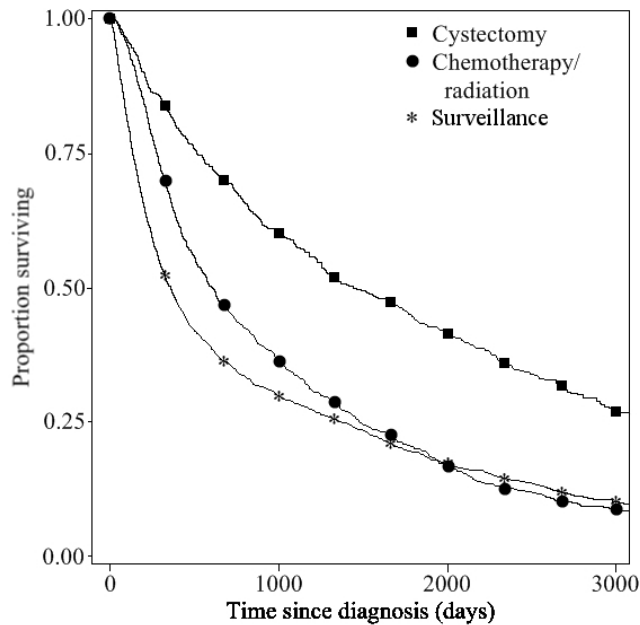


Figure 5-2. Kaplan-Meier unadjusted overall survival curves stratified by treatment received for muscle-invasive bladder cancer (for chemotherapy and/or radiation vs cystectomy, unadjusted 1.8, 95% CI = 1.7 to 1.9; for surveillance vs cystectomy, HR of death = 2.2, 95% CI = 2.0 to 2.3).

SOURCE: Gore J, Litwin M, Lai J, Yano E, Setodji C, Adams J, Madison R, Saigal C, and the Urologic Diseases in America Project. Use of Radical Cystectomy for Patients with Invasive Bladder Cancer. *Journal of the National Cancer Institute*, June 2010, 102(11): 802-11. Reprinted by permission of Oxford University Press.

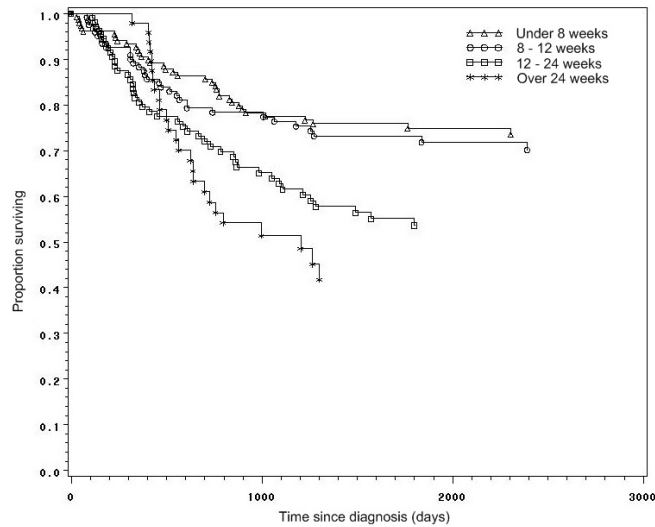


Figure 5-3. Disease-specific survival following diagnosis of muscle-invasive bladder cancer stratified by time between diagnosis and radical cystectomy.

SOURCE: Gore J, Lai J, Setodji C, Litwin M, Saigal C, the Urologic Diseases in America Project. Mortality Increases When Radical Cystectomy is Delayed More Than 12 Weeks: Results from a SEER-Medicare Analysis. *Cancer*. March 2009; 115(5): 988-96. (Copyright 2009 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

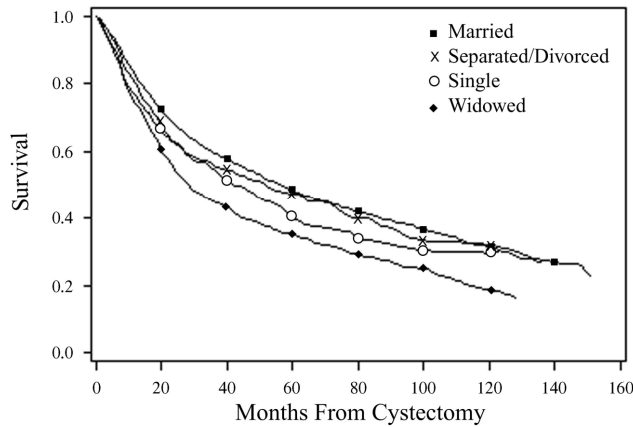


Figure 5-4. Survival following radical cystectomy stratified by marital status.

SOURCE: Gore J, Kwan L, Saigal C, Litwin M. Marriage and Mortality in Bladder Carcinoma. *Cancer*. September 2005; 104(6): 1188-94. (Copyright 2005 American Cancer Society). This material is reproduced with permission of John Wiley & Sons.

Table 5-14. Nationally representative inpatient stays for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=72,757)		2003 (N=69,433)		2004 (N=67,475)		2005 (N=65,392)		2006 (N=66,187)		2007 (N=64,732)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	34.2	55.0	32.1	51.5	31.4	53.4	30.1	50.5	30.1	50.3	29.1	48.5
Age												
40-44	5.1*		5.5*		5.8*		5.4*		5.0*		4.3*	
45-54	13.0*		11.6*		11.2*		10.9*		11.1*		11.4*	
55-64	38.5*		34.8*		34.1*		32.2*		31.8*		32.0*	
▶ 65-74	108.3		101.7		96.8		92.5		91.9		89.1	
75-84	164.2*		154.2*		184.5*		174.2*		174.4*		162.0*	
85+	312.8*		299.1*		294.5*		273.4*		271.2*		262.7*	
Race/ethnicity												
▶ White	25.8	42.1	27.4	40.8	28.5	45.1	27.8	43.2	26.5	41.1	26.0	40.2
Black	15.7*	29.1	17.4*	31.1	16.5*	30.8	13.1*	24.2	15.1*	27.6	14.5*	26.5
Hispanic	†	†	12.3*	28.2	9.7*	23.6	8.1*	19.2	11.9*	27.4	7.6*	17.2
Asian	9.2*	19.2	11.3*	21.1	10.4*	20.0	7.7*	14.8	7.8*	15.0	9.1*	16.4
Other	44.0*	83.1	24.4*	48.9	24.2*	51.4	29.4*	59.0	36.0*	69.3	34.6*	64.2
Region												
Northeast	45.3	68.0	40.1	59.4	42.5	67.9	41.0	66.4	38.5	61.8	39.0	61.7
South	33.2	53.0	31.3	49.8	31.2	52.3	28.1	47.4	30.5	50.7	26.9	44.5
▶ Midwest	34.3	55.0	33.6	54.7	31.4	53.9	30.8	51.2	29.5	49.3	31.0	51.9
West	25.6*	45.4	25.0*	43.1	22.5*	41.2	23.4*	40.8	23.2*	40.5	22.6*	40.0
Gender												
Female	16.9*	26.6	16.4*	25.7	16.2*	26.8	15.9*	26.1	15.3*	24.9	15.5*	25.2
▶ Male	53.0	88.9	49.1	81.7	47.8	83.8	45.3	78.0	45.9	79.1	43.5	74.7

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 5-15. Inpatient stays by Medicare beneficiaries for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=45,040)		2003 (N=43,340)		2004 (N=44,860)		2005 (N=43,280)		2006 (N=39,100)		2007 (N=38,320)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	126.6	151.4	118.8	140.9	121.3	143.7	116.6	138.9	107.6	129.4	105.9	127.7
Under 65/65+												
< 65 Years	23.5*	23.5	28.6*	28.6	27.9*	27.9	24.8*	24.8	22.5*	22.5	24.4*	24.4
▶ 65+ Years	153.0	151.4	142.6	140.9	146.5	143.7	142.5	138.9	132.0	129.4	130.4	127.7
Age												
▶ 65-69	72.3		67.6		74.4		71.3		68.4		68.2	
70-74	122.7*		115.4*		115.3*		117.2*		111.0*		99.1*	
75-79	180.7*		157.7*		169.1*		158.5*		137.9*		141.6*	
80-84	226.8*		217.0*		204.8*		210.3*		205.9*		195.4*	
85-89	257.5*		249.3*		251.3*		225.4*		205.5*		223.9*	
90-94	266.0*		269.9*		301.9*		284.6*		235.5*		241.0*	
95-97	215.1**		180.4**		217.1**		175.1**		239.0**		228.7**	
98+	86.4**		42.8**		53.0**		165.7**		71.6**		102.1**	
Race/ethnicity												
▶ White	135.1	160.3	126.3	147.6	127.2	149.0	121.7	142.9	113.7	134.6	111.1	131.3
Black	75.6*	103.8	80.4*	109.1	92.3*	126.3	92.2*	126.7	78.0*	110.8	84.4*	131.8
Hispanic	60.7**	70.6	61.2**	76.5	73.5**	88.4	79.6**	95.8	59.0**	88.6	57.7**	57.0
Asian	72.7**	51.5	34.1**	42.6	46.5**	61.7	87.4**	144.4	56.5**	56.6	60.2**	56.5
Other	83.0**	120.4	101.0*	153.4	117.9*	146.3	85.6*	113.0	84.1*	111.5	81.2*	139.6
Unknown	347.2**	...	143.4**	...	81.4**	...	58.8**	...	125.1**	...	134.6**	...
Region												
▶ Northeast	164.9	196.2	140.5	165.3	142.7	168.3	145.3	168.5	136.5	162.9	125.8	150.0
South	112.0*	131.5	120.0*	142.3	116.0*	134.5	107.4*	126.5	100.7*	118.7	96.0*	117.4
Midwest	125.9*	154.2	111.9*	133.5	121.9*	147.9	119.5*	144.9	107.7*	129.7	116.7*	138.4
West	115.4*	138.3	100.7*	118.7	107.5*	129.0	100.8*	124.3	90.3*	114.6	90.9*	110.0
Gender												
Female	57.6*	62.1	55.6*	61.1	57.2*	61.7	54.1*	58.4	53.1*	57.1	45.6*	51.1
▶ Male	214.8	278.1	199.1	252.7	201.8	256.6	194.8	249.0	175.0	226.6	180.0	229.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-16. Inpatient stays by privately insured individuals for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,933)		2003 (N=1,941)		2004 (N=2,125)		2005 (N=2,172)		2006 (N=1,580)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	21.9	65.3	19.7	65.3	21.1	67.6	20.4	60.2	15.2	59.4
Age										
40-44	4.5*		5.2*		6.5*		5.0*		4.7*	
45-54	13.8*		13.2*		12.2*		11.8*		11.6*	
55-64	57.5*		45.3*		50.2*		38.4*		36.3*	
▶ 65-74	132.7		126.8		127.7		118.1		115.8	
75-84	260.4*		239.2*		242.9*		217.0*		217.5*	
85+	...		262.1*		289.5*		275.1*		279.8*	
Race/ethnicity										
▶ White	21.5	57.7	22.2	68.9	23.1	75.2	21.9	66.9	16.9	64.5
Black	15.3*	28.6	16.9*	46.9	18.2*	45.0	18.3*	39.3	10.6*	48.5
Hispanic	9.9*	29.5	9.5*	35.9	12.2*	48.0	10.6*	36.0	9.1*	39.6
Asian	8.7**	55.2	5.5**	37.8	13.1*	56.4	5.8**	21.7	4.7**	32.8
Other	12.4**	52.6	17.3*	84.2	22.0**	131.7	15.7**	65.1	14.3**	52.6
Unknown	18.5*	...	22.6*	...	24.2*	...	19.9*	...	15.3*	...
Missing	24.2*	...	18.7*	...	18.5*	...	23.3*	...	14.7*	...
Region										
Northeast	33.5*	87.4	29.3*	91.1	28.4*	86.6	22.9	70.3	19.4*	76.5
South	18.2*	56.9	18.1*	60.0	18.3*	60.1	16.7*	52.2	13.5*	54.4
▶ Midwest	26.1	70.8	21.3	62.9	24.8	69.6	25.2	64.8	15.2	60.3
West	13.1*	48.8	12.6*	71.1	15.7*	69.6	19.2*	63.7	16.9*	56.8
Gender										
Female	10.6*	30.8	10.0*	33.0	11.1*	33.8	9.6*	27.3	8.6*	32.4
▶ Male	33.9	101.1	29.9	98.0	31.7	101.8	31.7	93.2	22.1	82.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-17. Hospital outpatient visits by Medicare beneficiaries for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=23,340)		2003 (N=26,080)		2004 (N=28,640)		2005 (N=29,600)		2006 (N=31,700)		2007 (N=32,360)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	65.6	79.5	71.5	88.2	77.4	92.2	79.8	99.6	87.2	107.2	89.5	113.2
Under 65/65+												
< 65 Years	18.8*	18.8	16.3*	16.3	25.1*	25.1	12.5*	12.5	20.2*	20.2	18.0*	18.0
▶ 65+ Years	77.6	79.5	86.1	88.2	91.5	92.2	98.7	99.6	106.4	107.2	110.9	113.2
Age												
▶ 65-69	37.6		48.1		67.5		73.0		80.3		93.4	
70-74	77.4*		70.7*		102.6*		105.2*		99.8*		97.5*	
75-79	101.0*		104.0*		96.1*		103.7*		141.8*		137.5*	
80-84	123.2*		124.0*		100.1*		140.9*		143.9*		155.4*	
85-89	90.4*		149.8*		115.8*		91.3*		74.5*		92.0*	
90-94	42.2**		83.8*		90.0*		72.6*		95.0*		82.3*	
95-97	30.7**		40.1**		59.2**		107.0**		109.5**		9.9**	
98+	21.6**		53.5**		116.5**		62.1**		10.2**		61.3**	
Race/ethnicity												
▶ White	66.3	80.7	73.1	89.4	75.4	87.8	81.3	99.2	89.4	108.0	94.5	116.8
Black	63.5*	76.5	59.9*	86.6	89.6*	125.9	72.7*	108.0	58.5*	89.6	57.8*	92.2
Hispanic	33.4**	53.1	55.4**	64.9	28.3**	48.1	60.4**	90.2	56.2**	87.4	77.0**	104.3
Asian	56.5**	110.6	37.9**	49.8	103.8**	107.0	67.2**	75.3	106.4*	121.3	63.4**	73.1
Other	79.6**	120.5	97.9*	147.4	117.9*	169.3	74.2**	115.0	151.4*	189.1	67.7**	92.4
Unknown	106.8**	...	143.4**	...	244.3**	...	146.9**	...	93.8**	...	67.3**	...
Region												
▶ Northeast	82.9	100.8	92.3	121.4	120.8	151.8	117.7	143.0	140.5	174.9	133.8	168.4
South	38.8*	46.1	35.0*	43.0	45.7*	51.2	46.9*	60.2	41.4*	51.5	53.6*	68.5
Midwest	86.5*	107.4	98.6*	119.1	89.0*	103.2	86.9*	107.2	104.7*	128.6	108.8*	135.6
West	75.7*	90.7	91.0*	104.3	83.2*	98.2	100.8*	128.5	105.4*	123.5	92.8*	119.1
Gender												
Female	34.3*	41.5	38.2*	46.6	39.9*	45.2	45.3*	54.2	48.2*	55.9	38.0*	46.6
▶ Male	105.7	133.0	113.7	146.1	124.7	155.4	122.8	160.9	135.4	175.9	152.5	201.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-18. Hospital outpatient visits by privately insured individuals for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,604)		2003 (N=8,860)		2004 (N=9,142)		2005 (N=10,206)		2006 (N=7,685)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	97.5	274.8	89.9	279.1	90.9	270.1	95.6	265.2	73.8	249.7
Age										
40-44	29.1*		21.5*		26.3*		24.4*		19.9*	
45-54	80.9*		66.6*		68.2*		66.5*		62.5*	
55-64	272.9*		249.6*		242.6*		215.5*		215.8*	
▶ 65-74	611.2		574.1		566.3		591.9		573.6	
75-84	859.1*		888.9*		869.7*		878.3*		804.5*	
85+	...		877.8*		686.1*		605.2*		489.1*	
Race/ethnicity										
▶ White	106.5	275.6	110.9	333.7	100.5	302.3	104.2	288.0	81.2	268.5
Black	87.3*	164.7	71.4*	147.5	74.6*	158.3	73.7*	155.9	39.6*	139.8
Hispanic	50.5*	140.2	48.5*	161.1	35.3*	127.0	42.4*	147.3	25.8*	115.4
Asian	26.1*	92.9	30.9*	156.4	40.0*	248.6	23.0*	114.6	13.9*	94.1
Other	285.4*	1,173	77.7*	268.8	56.1*	133.9	38.1*	111.2	151.0*	365.2
Unknown	112.1*	...	109.4*	...	86.0*	...	105.8*	...	91.3*	...
Missing	94.1*	...	72.1*	...	97.3*	...	108.2*	...	80.2*	...
Region										
Northeast	138.5*	359.9	122.2*	359.4	124.8*	357.9	109.4*	309.3	102.2*	346.9
South	77.9*	222.9	74.7*	223.8	75.8*	229.3	75.3*	213.8	59.8*	216.1
▶ Midwest	122.9	316.3	115.1	326.4	110.7	290.7	131.4	327.1	86.7	271.6
West	59.3*	231.9	48.2*	251.5	64.8*	268.6	71.1*	215.3	70.2*	217.7
Gender										
Female	49.7*	140.3	45.3*	141.0	49.5*	140.9	52.5*	142.4	39.8*	126.7
▶ Male	148.1	412.6	137.0	418.2	134.6	400.8	141.1	389.0	109.3	358.1
Unknown	139.2**	...	...	...	71.0**	...	63.4**	...	111.8**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-19. Nationally representative hospital outpatient visits for lower tract transitional cell carcinoma listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	242,721
Age	
40-44	11,319
45-54	11,331
55-64	74,871
65-74	62,080
75-84	79,214
85+	3,906
Race/ethnicity	
White	209,838
Black	32,405
Hispanic	478
Region	
Northeast	61,094
South	81,512
Midwest	83,293
West	16,822
Gender	
Female	49,388
Male	193,333

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 5-20. Ambulatory surgery center visits by Medicare beneficiaries for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=73,600)		2003 (N=74,500)		2004 (N=70,380)		2005 (N=68,360)		2006 (N=65,440)		2007 (N=64,480)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	258.0	317	259.0	318.5	250.9	307.6	248.6	310.1	248.5	311.5	246.1	316.5
Age												
▶ 65-69	211.5		192.8		185.1		188.6		197.1		192.1	
70-74	306.6*		305.3*		284.9*		299.0*		291.7*		283.6*	
75-79	380.4*		396.1*		377.1*		382.0*		393.2*		395.4*	
80-84	393.5*		432.7*		439.2*		418.3*		404.9*		457.3*	
85-89	385.3*		364.8*		357.2*		360.3*		363.5*		361.5*	
90-94	232.2*		267.8*		307.9*		359.2*		298.9*		233.2*	
95-97	133.2**		150.3**		286.2**		194.6**		219.1**		129.3**	
98+	10.8**		42.8**		42.4**		41.4**		81.8**		81.7**	
Race/ethnicity												
▶ White	287.1	346.4	284.9	344.4	277.7	335.2	274.4	336.3	274.4	337.8	271.6	342.7
Black	92.2*	134.6	106.0*	148.9	101.5*	141.7	110.6*	156.4	104.2*	149.3	107.1*	161.3
Hispanic	54.6**	67.2	81.6**	106.4	62.2**	90.8	71.4**	86.8	61.8**	76.6	74.2*	93.2
Asian	40.4**	46.5	71.9**	63.3	43.0**	41.3	63.8**	60.5	109.7*	115.6	88.7**	98.9
Other	159.1*	228.9	189.4*	279.7	184.4*	211.5	139.8*	185.2	123.4*	170.1	127.2*	169.9
Unknown	213.7**	...	487.5**	...	352.9**	...	499.6**	...	656.9**	...	673.2**	...
Region												
▶ Northeast	306.4	376.7	313.4	384	316.6	390.3	309.3	388.2	292.5	367.8	309.5	396.6
South	249.5*	307.5	241.3*	297.9	231.4*	279.9	227.1*	280.9	244.1*	305.6	224.7*	289.1
Midwest	296.2*	359.8	296.1*	356.8	284.1*	346.8	282.7*	346	282.0*	349	277.0*	350.7
West	158.3*	194.6	179.1*	225.5	170.1*	212.8	178.8*	231.6	160.0*	205.3	180.3*	237.2
Gender												
Female	130.9*	154.6	129.2*	150.3	130.3*	153.5	126.5*	148.7	122.2*	144.4	120.4*	147.2
▶ Male	420.3	544.7	423.8	552.3	402.8	519.1	401.4	529.2	404.7	535.3	400.2	539.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-21. Ambulatory surgery center visits by privately insured individuals for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=809)		2003 (N=890)		2004 (N=1,018)		2005 (N=1,228)		2006 (N=1,172)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.2	24.1	9.0	26.0	10.1	28.1	11.5	29.9	11.3	37.3
Age										
40-44	3.9*		4.1*		4.2*		3.6*		4.4*	
45-54	8.5*		8.5*		8.2*		10.2*		10.5*	
55-64	30.1*		25.6*		31.8*		29.2*		31.8*	
▶ 65-74	52.4		50.8		48.4		59.4		77.0	
75-84	56.0*		79.7*		92.8*		90.6*		112.1*	
85+	...		49.8*		40.7**		58.6*		123.4*	
Race/ethnicity										
▶ White	11.1	27.1	11.8	32.0	11.0	30.2	12.3	31.4	13.1	42.2
Black	6.2**	15.0	4.9**	10.4	5.6**	13.1	5.9**	15.5	7.9*	28.2
Hispanic	3.9**	11.6	4.3**	13.6	4.8*	15.3	4.9*	15.9	5.2*	22.8
Asian	2.9**	19.5	4.5**	20.2	1.8**	13.5	5.2**	24.2	6.3**	54.3
Other	9.9**	28.6	3.5**	44.0	8.5**	22.7	5.6**	46.8	5.5**	25.3
Unknown	10.3*	...	11.1*	...	14.7*	...	16.4*	...	14.1*	...
Missing	8.4*	...	6.7*	...	10.3*	...	13.0*	...	7.0*	...
Region										
Northeast	9.7*	24.1	10.4*	28.0	12.9*	33.6	12.4*	32.7	13.2*	37.1
South	11.5*	30.8	10.7*	32.5	12.4*	37.5	13.7*	39.6	13.1*	49.5
▶ Midwest	7.8	18.8	7.8	19.4	8.3	19.8	10.1	22.1	8.5	26.7
West	4.9*	18.8	5.3*	24.7	4.5*	17.0	7.2*	22.1	9.7*	29.4
Gender										
Female	4.5*	10.5	4.4*	11.1	5.4*	13.5	6.1*	14.2	6.3*	19.1
▶ Male	14.1	38.0	14.0	41.1	15.1	42.9	17.2	45.8	16.4	53.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-22. Nationally representative ambulatory surgery center visits for lower tract transitional cell carcinoma listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	152,179	69.2	115.6
Age			
40-44	181	0.8*	
45-54	17,627	41.2*	
55-64	37,173	120.0*	
▶ 65-74	39,581	213.3	
75-84	45,314	349.6*	
85+	12,303	308.4*	
Gender			
Female	49,108	43.3*	70.6
▶ Male	103,071	96.9	166.0

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 5-23. Physician office visits by Medicare beneficiaries for lower tract transitional cell carcinoma listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=457,920)		2003 (N=484,260)		2004 (N=476,720)		2005 (N=483,120)		2006 (N=489,440)		2007 (N=493,820)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,287	1,598	1,328	1,649	1,289	1,599	1,302	1,632	1,346	1,698	1,365	1,743
Under 65/65+												
< 65 Years	200.4*	200.4	213.0*	213.0	216.4*	216.4	219.2*	219.2	229.8*	229.8	224.8*	224.8
▶ 65+ Years	1,565	1,598	1,622	1,649	1,578	1,599	1,607	1,632	1,667	1,698	1,707	1,743
Age												
▶ 65-69	903.3		893.5		892.2		880.3		933.5		961.0	
70-74	1,436*		1,431*		1,464*		1,437*		1,464*		1,556*	
75-79	2,075*		2,068*		2,021*		2,018*		2,218*		2,202*	
80-84	2,193*		2,523*		2,283*		2,405*		2,439*		2,576*	
85-89	2,004*		2,053*		1,956*		2,190*		2,147*		2,131*	
90-94	1,180*		1,511*		1,609*		1,688*		1,653*		1,683*	
95-97	911.8*		861.7*		1,046*		1,022*		965.8*		855.3*	
98+	291.6**		181.8**		444.9*		393.5*		450.0*		347.2*	
Race/ethnicity												
▶ White	1,415	1,735	1,461	1,788	1,412	1,723	1,445	1,778	1,485	1,839	1,503	1,881
Black	432.1*	615.5	452.7*	659.5	522.8*	786.4	448.5*	668.5	504.9*	787.9	498.6*	788.3
Hispanic	537.3*	476.9	483.9*	612.6	344.9*	447.0	359.6*	452.3	477.9*	566.5	547.0*	678.1
Asian	569.3*	508.1	571.5*	539.3	443.9*	462.2	655.3*	694.9	614.9*	663.6	874.4*	860.2
Other	909.7*	1,328	1,105*	1,519	1,233*	1,654	830.1*	1,154	984.1*	1,195	931.0*	1,285
Unknown	3,846*	...	3,527*	...	2,877*	...	2,263*	...	2,627*	...	2,491*	...
Region												
▶ Northeast	1,732	2,164	1,803	2,216	1,736	2,139	1,765	2,202	1,832	2,272	1,843	2,345
South	1,221*	1,502	1,276*	1,571	1,234*	1,520	1,251*	1,546	1,330*	1,687	1,296*	1,647
Midwest	1,136*	1,411	1,154*	1,434	1,133*	1,407	1,146*	1,433	1,163*	1,458	1,222*	1,568
West	1,135*	1,419	1,147*	1,463	1,128*	1,421	1,120*	1,465	1,105*	1,417	1,192*	1,533
Gender												
Female	590.5*	694.5	587.7*	694.6	589.4*	686.7	584.4*	688.1	610.9*	732.9	584.1*	719.3
▶ Male	2,178	2,871	2,267	2,978	2,168	2,850	2,199	2,916	2,257	2,990	2,323	3,095

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-24. Physician office visits by privately insured individuals for lower tract transitional cell carcinoma listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=24,397)		2003 (N=26,519)		2004 (N=28,711)		2005 (N=33,498)		2006 (N=27,394)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	276.5	807.8	269.0	856.3	285.4	880.3	313.9	891.1	263.2	985.3
Age										
40-44	54.3*		55.5*		64.2*		51.9*		63.5*	
45-54	188.9*		175.6*		184.2*		193.2*		198.3*	
55-64	770.3*		734.1*		747.4*		732.4*		701.2*	
▶ 65-74	1,876		1,871		1,867		1,838		2,102	
75-84	2,699*		2,886*		3,028*		3,194*		3,624*	
85+	...		2,251*		2,348*		2,379*		2,950*	
Race/ethnicity										
▶ White	338.9	906.5	353.3	1,068	325.5	1,017	350.2	1,009	298.8	1,091
Black	190.3*	364.5	179.2*	392.4	163.1*	379.7	197.8*	419.1	146.2*	576.7
Hispanic	107.3*	313.7	129.1*	430.1	121.0*	448.7	115.1*	394.7	100.9*	418.0
Asian	70.4*	295.7	86.2*	396.1	93.7*	408.2	83.6*	439.2	80.0*	687.8
Other	111.7*	286.2	188.2*	574.2	205.0*	650.9	194.1*	585.1	261.3*	690.5
Unknown	316.3*	...	296.5*	...	311.3*	...	352.4*	...	316.0*	...
Missing	251.4*	...	199.4*	...	266.6*	...	334.1*	...	246.7*	...
Region										
Northeast	367.2*	976.5	364.3*	1,080	364.2*	1,062	351.7	1,016	316.8*	1,179
South	259.4*	762.9	257.1*	806.2	279.7*	907.1	294.2*	887.4	253.2	1,033
▶ Midwest	294.7	791.3	277.5	814.1	287.2	784.3	341.6	862.0	249.2	911.4
West	208.5*	891.4	204.5*	1,045	233.5*	965.1	287.3*	885.4	281.4*	887.1
Gender										
Female	125.7*	371.6	124.5*	400.3	137.0*	409.5	149.6*	420.7	132.9*	484.0
▶ Male	436.1	1,258	421.9	1,317	442.0	1,357	487.0	1,366	399.0	1,418
Unknown	417.6**	...	120.4**	...	354.9**	...	253.5**	...	559.1**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-25. Nationally representative physician office visits for lower tract transitional cell carcinoma listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	4,442,707
Age	
40-44	51,556
45-54	178,487
55-64	953,665
65-74	1,290,250
75-84	1,678,020
85+	290,729
Race/ethnicity	
White	4,139,075
Black	241,003
Hispanic	62,629
Region	
Northeast	1,642,116
South	1,509,952
Midwest	678,182
West	612,457
Gender	
Female	1,197,927
Male	3,244,780

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 5-26. Emergency room visits by Medicare beneficiaries for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,500)		2003 (N=1,640)		2004 (N=1,680)		2005 (N=1,540)		2006 (N=1,060)		2007 (N=1,100)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.2	4.8	4.5	5.2	4.5	5.2	4.1	5.0	2.9	3.5	3.0	3.7
Under 65/65+												
< 65 Years	0.8**	0.8	1.6**	1.6	2.0**	2.0	0.5**	0.5	0.0**	0.0	0.5**	0.5
▶ 65+ Years	5.1	4.8	5.3	5.2	5.2	5.2	5.2	5.0	3.8	3.5	3.8	3.7
Age												
▶ 65-69	1.6*		2.8*		4.2*		3.9*		2.7*		2.2*	
70-74	7.3**		5.2**		3.5**		5.4**		3.7**		3.5**	
75-79	3.7**		6.7**		6.7**		5.2**		4.3**		3.3**	
80-84	6.2**		6.5**		6.4**		8.1**		5.1**		5.2**	
85-89	8.5**		6.7**		6.6**		2.5**		1.6**		6.4**	
90-94	10.6**		10.2**		8.0**		9.8**		7.9**		3.9**	
95-97	20.5**		0.0**		9.9**		0.0**		10.0**		29.8**	
98+	0.0**		0.0**		...		0.0**		...		...
Race/ethnicity												
▶ White	4.8	5.4	4.5	5.0	5.0	5.5	4.3	5.3	3.0	3.6	3.2	3.9
Black	0.6**	1.2	5.5**	9.7	2.7**	5.7	3.8**	4.7	0.6**	1.0	1.7**	1.9
Hispanic	...	...	0.0**	0.0	0.0**	0.0	2.7**	8.7	...	...	2.7**	14.8
Asian	4.0**	9.5	0.0**	0.0	0.0**	0.0	0.0**	0.0	10.0**	11.5	...	...
Other	0.0**	0.0	6.3**	13.1	3.0**	11.9	2.9**	0.0	5.6**	18.5	5.4**	9.7
Unknown	...	...	...	...	...	...	...	...	31.3**	...	...	...
Region												
▶ Northeast	3.4*	4.5	3.1*	2.6	5.3*	6.3	2.8*	3.7	1.7*	2.2	2.6*	3.5
South	3.8**	4.2	4.8*	6.1	3.2**	3.8	3.5**	4.1	3.0**	3.7	2.3**	2.4
Midwest	5.1**	6.2	6.7*	7.7	6.0**	5.9	6.7*	8.2	3.5**	4.1	4.5**	6.0
West	4.9**	4.3	2.0**	2.3	4.5**	5.9	3.5**	3.7	3.2**	3.9	3.2**	3.6
Gender												
Female	1.2**	1.0	1.2**	1.1	2.1**	2.3	1.4**	1.5	1.5**	1.9	1.8**	1.8
▶ Male	8.1	10.2	8.7	10.8	7.6	9.0	7.6	9.8	4.7	6.1	4.6	6.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-27. Emergency room visits by privately insured individuals for lower tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=163)		2003 (N=373)		2004 (N=194)		2005 (N=205)		2006 (N=155)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.8	4.3	3.8	9.2	1.9	5.9	1.9	5.1	1.5	4.4
Age										
40-44	1.5**		2.2**		0.5**		0.4**		0.6**	
45-54	2.4*		2.9*		1.2**		1.4*		1.1**	
55-64	6.3		16.7		5.0*		4.4*		5.8	
▶ 65-74	5.9*		15.1		13.1		16.9		6.1*	
75-84	8.1**		13.8**		20.5*		7.8**		15.3**	
85+	...		17.7**		13.6**		13.2**		8.8**	
Race/ethnicity										
▶ White	1.1	2.8	2.5	5.2	1.4	4.7	1.2	3.1	0.9	3.3
Black	...	...	...	...	1.1**	9.0	0.8**	20.9	0.5**	16.2
Hispanic	0.3**	1.7	3.5**	17.9	3.0**	14.7	4.9*	17.7	4.1*	11.5
Asian	...	...	0.5**	259.7	0.4**	45.2	0.3**	37.1	...	...
Other	...	...	8.6**	29.4	...	...	1.1**	5.6	1.1**	10.5
Unknown	0.3**	...	5.8**	...	2.6**	...	1.6**	...	0.3**	...
Missing	2.8*	...	5.6*	...	3.7*	...	4.8*	...	4.0*	...
Region										
Northeast	8.5*	18.1	6.5*	16.1	2.1*	5.4	1.6*	5.4	0.4**	3.4
South	0.9	2.1	5.2*	11.8	2.6*	8.0	2.7*	7.5	2.6*	8.4
▶ Midwest	1.0*	3.1	2.1	6.5	1.7	5.3	1.7	4.1	1.0*	4.6
West	1.7**	4.5	0.9**	2.6	0.2**	1.6	0.2**	1.6	0.1**	3.1
Gender										
Female	1.0*	2.2	3.4*	7.4	1.6*	5.4	1.2*	3.4	1.0*	3.2
▶ Male	2.7	6.3	4.2	11.0	2.3	6.7	2.7	6.8	2.0	5.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-28. Multilevel multivariable model of factors associated with receipt of radical cystectomy

Variable	OR	(95% CI)	Predictive Margin ^a	(95% CI)
Age, years (vs 66–69)				
70–74	0.83	(0.59, 1.18)	-0.040	(-0.120, 0.036)
75–79	0.40	(0.29, 0.57)	-0.190	(-0.260, -0.120)
≥80	0.10	(0.07, 0.14)	-0.380	(-0.450, -0.320)
Female (vs male)	1.01	(0.79, 1.28)	0.001	(-0.033, 0.034)
Partnered (vs not partnered)	0.94	(0.62, 1.44)	-0.010	(-0.073, 0.053)
Subject ZIP code income quartile (vs 4 [highest])				
1 (lowest)	0.72	(0.50, 1.03)	-0.049	(-0.099, 0.001)
2	0.93	(0.67, 1.29)	-0.010	(-0.058, 0.037)
3	0.75	(0.55, 1.04)	-0.052	(-0.095, -0.010)
Charlson comorbidity index (vs 0–1)				
2	0.48	(0.37, 0.62)	-0.110	(-0.140, -0.076)
≥3	0.25	(0.14, 0.45)	-0.180	(-0.230, -0.130)
High-grade cancer	1.41	(1.01, 1.97)	0.049	(0.006, 0.091)
Travel distance to cystectomy provider, miles (vs 0–4)				
5–19	0.90	(0.69, 1.17)	-0.015	(-0.053, 0.022)
20–49	0.73	(0.48, 1.12)	-0.046	(-0.099, 0.008)
≥50	0.60	(0.37, 0.98)	-0.074	(-0.140, -0.013)
Local population of subject residence (vs metropolitan, >1,000,000 residents) ^b				
Metropolitan, 250,000–1,000,000 residents	0.91	(0.65, 1.28)	-0.016	(-0.059, 0.027)
Metropolitan <250,000 residents	1.10	(0.67, 1.81)	0.012	(-0.055, 0.078)
Rural	1.07	(0.51, 2.24)	0.008	(-0.092, 0.110)
Urologist density quartile (vs 4 [highest]) ^{b,c}				
1 (lowest)	0.89	(0.50, 1.57)	-0.015	(-0.090, 0.061)
2	0.90	(0.62, 1.30)	-0.014	(-0.062, 0.034)
3	1.15	(0.82, 1.61)	0.021	(-0.022, 0.065)
Health professional shortage area ^b	1.02	(0.71, 1.47)	0.003	(-0.045, 0.051)

OR: Odds Ratio.

CI: Confidence Interval.

^aPredictive margin is the difference between the predicted probability of cystectomy for the covariate compared with the reference category estimated from the solutions for random effects in the multilevel multivariable model.^bDerived from linkage of subject ZIP code of residence to the Area Resource File.^cQuartile 1: ≤5 urologists per 100,000 persons; quartile 2: 6–26 urologists per 100,000 persons; quartile 3: 27–53 urologists per 100,000 persons; quartile 4: ≥ 54 urologists per 100,000 persons.SOURCE: Gore J, Litwin M, Lai J, Yano E, Setodji C, Adams J, Madison R, Saigal C, and the Urologic Diseases in America Project. Use of Radical Cystectomy for Patients with Invasive Bladder Cancer. *Journal of the National Cancer Institute*, June 2010, 102(11): 802-11. Reprinted by permission of Oxford University Press.

Table 5-29. Logistic regression models to examine correlates of complication outcomes in patients undergoing cystectomy (adjusted for diversion type)

	Medical complications				Surgical complications				Disposition other than home		Postoperative	
	Any		Respiratory		Any		Urinary		Wound		Death	
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	
Patient characteristics												
Age (years, vs. < 55)												
55-64	1.25 (0.99, 1.58)	3.71 (1.81, 7.62)	1.34 (0.97, 1.86)	0.98 (0.79, 1.23)	1.07 (0.82, 1.39)	1.32 (0.57, 3.06)	1.08 (0.60, 1.97)	1.14 (0.92, 1.41)	2.54 (0.54, 12.0)			
65-74	1.54 (1.18, 2.01)	7.86 (4.01, 15.9)	1.13 (0.78, 1.64)	1.02 (0.81, 1.29)	1.04 (0.78, 1.37)	1.23 (0.56, 2.73)	1.41 (0.68, 2.93)	1.55 (1.23, 1.96)	3.68 (0.82, 16.5)			
≥ 75	2.24 (1.69, 2.97)	12.9 (6.53, 25.5)	1.31 (0.89, 1.94)	1.08 (0.85, 1.37)	1.16 (0.86, 1.56)	1.18 (0.53, 2.61)	1.34 (0.61, 2.95)	2.64 (1.99, 3.40)	7.86 (1.75, 35.4)			
Female gender	1.20 (1.03, 1.40)	...	...	...	0.69 (0.58, 0.83)	...	...	1.31 (1.11, 1.55)	...
Non-white race	0.92 (0.73, 1.17)	0.60 (0.39, 0.92)	0.83 (0.61, 1.12)	...	...	...	...	0.88 (0.69, 1.12)	...
Insurer (vs. private)												
Medicare	1.08 (0.93, 1.26)	1.08 (0.84, 1.39)	1.39 (1.06, 1.84)	1.26 (1.05, 1.53)	1.20 (0.97, 1.48)	...	1.20 (0.71, 2.01)	1.19 (0.98, 1.44)	2.24 (1.04, 4.81)			
Medicaid/Other	1.03 (0.77, 1.38)	1.07 (0.64, 1.79)	1.16 (0.79, 1.68)	0.87 (0.65, 1.17)	0.93 (0.67, 1.29)	...	1.29 (0.58, 2.86)	1.03 (0.79, 1.36)	0.98 (0.20, 4.82)			
Comorbid Conditions												
Congestive heart failure	4.77 (3.54, 6.45)	4.30 (3.27, 5.66)	2.88 (2.16, 3.83)	1.35 (1.06, 1.72)	1.16 (0.89, 1.50)	1.60 (0.76, 3.38)	1.15 (0.64, 2.04)	1.67 (1.20, 2.31)	5.08 (3.20, 8.05)			
Valvular disease	1.51 (1.09, 2.09)	2.40 (1.68, 3.44)	1.25 (0.85, 1.83)	...	1.52 (0.72, 3.24)	...	...	1.31 (0.91, 1.89)	...	
Pulmonary circulation disease	1.65 (0.68, 3.97)	2.33 (0.95, 5.71)	...	...	0.76 (0.54, 1.06)	...	...	...	0.17 (0.02, 1.23)
Peripheral vascular disease	...	1.33 (0.92, 1.91)	...	...	...	...	...	...	...
Paralysis	1.95 (1.13, 3.35)	...	...	1.48 (0.87, 2.52)	...	...	...	...	...
Chronic pulmonary disease	1.65 (1.43, 1.90)	1.34 (1.10, 1.64)	2.62 (2.21, 3.11)	1.17 (1.02, 1.35)	1.16 (0.98, 1.36)	...	1.56 (1.12, 2.18)	1.33 (1.13, 1.57)	1.87 (1.21, 2.88)			
Hypothyroidism	...	...	...	0.82 (0.61, 1.12)	0.62 (0.44, 0.89)	...	...	0.94 (0.70, 1.27)	...
Renal failure	2.15 (0.78, 5.94)	1.56 (0.57, 3.92)	...	...	...	...	...	2.50 (0.96, 6.53)	1.30 (0.26, 6.40)
Liver disease	...	...	3.28 (1.38, 7.78)	...	...	...	...	...	5.67 (0.91, 35.2)
Rheumatoid arthritis/CVD	...	1.48 (0.78, 2.80)	0.38 (0.13, 1.12)	0.54 (0.31, 0.92)	0.55 (0.28, 1.08)	...	...	...	...
Coagulopathy	2.57 (1.67, 3.94)	2.25 (1.38, 3.65)	1.98 (1.25, 3.14)	2.50 (1.69, 3.70)	1.28 (0.85, 1.93)	...	...	...	...
Obesity	1.57 (1.05, 2.34)	0.79 (0.44, 1.41)	2.05 (1.18, 3.57)	0.86 (0.60, 1.24)	0.79 (0.52, 1.21)	...	1.31 (0.59, 2.93)	...	...	
Weight loss	5.57 (3.86, 8.04)	1.80 (1.15, 2.82)	2.96 (2.04, 4.29)	5.40 (3.68, 7.95)	4.75 (3.35, 6.73)	2.00 (0.93, 4.30)	3.30 (2.00, 5.46)	1.76 (1.18, 2.62)	2.12 (1.05, 4.25)			
Deficiency anemia	1.57 (1.23, 1.83)	...	...	0.69 (0.56, 0.85)	...	1.75 (1.01, 3.05)	0.49 (0.26, 0.92)	1.26 (1.02, 1.55)	0.40 (0.15, 1.10)	
Alcohol abuse	1.53 (1.01, 2.32)	...	...	...	...	...	...	...	2.86 (0.89, 9.20)
Psychoses	...	...	1.34 (0.66, 2.71)	...	...	...	...	2.10 (1.09, 4.07)	...
Depression	12.9 (8.15, 20.5)	...	20.1 (5.75, 42.5)	...	0.77 (0.51, 1.16)	...	...	...	...

Continued on next page.

Table 5-29 (continued). Logistic regression models to examine correlates of complication outcomes in patients undergoing cystectomy (adjusted for diversion type)

	Medical complications			Surgical complications			Disposition other than home OR (95% CI)	Postoperative Death OR (95% CI)	
	Any OR (95% CI)	Cardiovascular OR (95% CI)	Respiratory OR (95% CI)	Any OR (95% CI)	Bowel OR (95% CI)	Urinary OR (95% CI)			Wound OR (95% CI)
Provider characteristics									
Hospital type (vs. urban teaching)									
Urban non-teaching	1.11 (0.95, 1.30)	0.91 (0.75, 1.11)	1.12 (0.91, 1.38)	1.23 (1.03, 1.48)	1.14 (0.94, 1.38)	1.59 (1.02, 2.49)	1.33 (0.97, 1.82)	1.18 (0.93, 1.50)	0.84 (0.51, 1.40)
Rural	0.94 (0.69, 1.29)	0.88 (0.63, 1.24)	0.83 (0.55, 1.22)	1.11 (0.87, 1.43)	0.91 (0.66, 1.27)	2.04 (0.89, 4.67)	1.29 (0.74, 2.11)	0.98 (0.72, 1.34)	1.33 (0.68, 2.61)
High volume hospital ^a	0.98 (0.82, 1.16)	...	0.85 (0.69, 1.05)	1.01 (0.84, 1.22)	...	...	...	...	0.59 (0.37, 0.97)

... Data unavailable.

CVD: collagen vascular disease.

OR: Odds Ratio.

^aBased on 90th percentile hospital volume, or greater than 14 cases over the study period.

SOURCE: Gore J, Yu H, Setodji C, Hanley J, Litwin M, Saigal C, and the Urologic Diseases in America Project. Urinary Diversion and Morbidity Following Radical Cystectomy for Bladder Cancer. Cancer. January 2010; 116(2): 331-9. (Copyright 2009 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-30. Analysis of overall and disease-specific survival^a following a diagnosis of muscle-invasive bladder cancer

Treatment group	Overall survival			
	Cox PH	2SRI		
	HR of death (95% CI)	HR of death (95% CI)	2 year survival, % (95% CI)	5 year survival, % (95% CI)
Radical cystectomy	▶ 1.00	▶ 1.00	67.4 (65.0, 69.8)	42.2 (39.1, 45.4)
Chemotherapy or radiation	1.43 (1.27, 1.62)	1.53 (1.28, 1.83)	47.5 (45.2, 49.8)	20.7 (18.7, 22.8)
Surveillance	1.68 (1.50, 1.88)	1.87 (1.59, 2.26)	38.9 (36.9, 41.1)	14.5 (13.0, 16.2)

Treatment group	Disease-specific survival			
	Cox PH	2SRI		
	HR of death (95% CI)	HR of death (95% CI)	2 year survival, % (95% CI)	5 year survival, % (95% CI)
Radical cystectomy	▶ 1.0	▶ 1.0	81.1 (78.8, 83.5)	66.6 (62.9, 70.3)
Chemotherapy or radiation	1.33 (1.11, 1.59)	1.37 (1.01, 1.77)	68.3 (65.7, 71.0)	48.0 (44.5, 51.9)
Surveillance	1.46 (1.23, 1.73)	1.52 (1.16, 1.97)	64.2 (61.8, 66.8)	43.1 (40.0, 46.3)

Cox PH: conventional Cox proportional hazards models.

2SRI: two-stage residual inclusion estimation instrumental variable analysis.

HR: hazard ratio.

CI: confidence interval.

▶ Denotes reference group.

^aOverall and disease-specific survival adjusted for subject age, sex, marital status, Charlson comorbidity index, and cancer grade.

SOURCE: Gore J, Litwin M, Lai J, Yano E, Setodji C, Adams J, Madison R, Saigal C, and the Urologic Diseases in America Project. Use of Radical Cystectomy for Patients with Invasive Bladder Cancer. *Journal of the National Cancer Institute*, June 2010, 102(11): 802-11. Reprinted by permission of Oxford University Press.

Table 5-31. Multivariate analysis of factors associated with continent reconstruction, including provider variables

Variable	OR	(95% CI)
Age (vs 65-69)		
70-74	0.68	(0.54, 0.87)
75-79	0.43	(0.33, 0.55)
80+	0.19	(0.13, 0.27)
Male sex (vs. female)	1.45	(1.15, 1.84)
Race/ethnicity (vs. white)		
African American	0.43	(0.25, 0.76)
Hispanic	0.92	(0.55, 1.53)
Other	1.09	(0.66, 1.80)
Married partner status (vs. not married)	1.13	(0.90, 1.41)
Median income ^a (vs. ≥ \$75,000)		
Less than \$20,000	0.70	(0.16, 3.07)
\$20,000-\$49,999	1.22	(0.81, 1.84)
\$50,000-\$74,000	1.43	(1.01, 2.01)
College educated ^b (vs. < 25%)		
25-40%	1.14	(0.81, 1.61)
At least 40%	1.54	(1.06, 2.23)
Charlson score (vs. 0)		
1-2	0.97	(0.79, 1.19)
At least 3	0.71	(0.51, 0.97)
SEER registry (vs. Los Angeles)		
San Francisco	0.38	(0.26, 0.56)
Connecticut	0.15	(0.11, 0.22)
Detroit	0.16	(0.11, 0.24)
Hawaii	0.10	(0.03, 0.29)
Iowa	0.11	(0.07, 0.17)
New Mexico	0.39	(0.23, 0.66)
Seattle	1.22	(0.88, 1.68)
Utah	0.22	(0.12, 0.40)
Atlanta	1.17	(0.74, 1.86)
San Jose	0.74	(0.48, 1.13)
Year of surgery (vs. 1992-1994)		
1995-1997	1.56	(1.23, 1.97)
1998-2000	1.98	(1.53, 2.54)
Stage at least 3 (vs. 1)	0.85	(0.70, 1.03)
Lymph nodes negative	1.04	(0.84, 1.28)
Hospital type		
Academic (vs. non)	1.43	(1.14, 1.81)
NCI cancer center (vs. non)	5.50	(4.20, 7.22)
High volume hospital (vs. low)	1.49	(1.19, 1.86)

OR: Odds Ratio.

CI: Confidence Interval.

^aBased on subject zip code median income.^bBased on the proportion of persons in the subject's census tract who are at least college educated.SOURCE: Gore J, Saigal C, Hanley J, Schonlau M, Litwin M, and the Urologic Diseases in America Project. Variations in Reconstruction After Radical Cystectomy. *Cancer*, August 2006; 107(4): 729-37. (Copyright 2006 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-32: Patient and provider compliance (on at least one occasion) stratified by year the NCCN guidelines for non-muscle invasive bladder cancer were established

Quality-of-Care Measure	Subjects Compliant (%)			Providers Compliant with ≥1 Patient (%)		
	1992-1997 (N=1,698)	1998-2002 (N=2,847)	p-value	1992-1997 (N=725)	1998-2002 (N=1,272)	p-value
≥8 Cystoscopy	93 (4.6%)	131 (4.7%)	0.89	70 (9.7%)	126 (9.9%)	0.86
≥8 Cytology	98 (5.5%)	143 (4.6%)	0.19	80 (11.0%)	106 (8.3%)	0.04
≥2 Upper tract Image	801 (47.2%)	1,446 (50.8%)	0.18	491 (67.7%)	909 (71.5%)	0.08
Perioperative mitomycin C	48 (2.8%)	92 (3.2%)	0.44	43 (5.9%)	73 (5.7%)	0.86
≥6 Instillations of BCG, 1st dose within 90 days	349 (20.5%)	824 (28.9%)	<0.001	240 (33.1%)	564 (44.3%)	<0.001

NCCN: National Comprehensive Cancer Network.

BCG: Bacillus Calmette-Guerin.

NOTE: Boldface indicates significant p-value.

SOURCE: Chamie K, Saigal CS, Lai J, Hanley JM, Setodji CM, Konety BR, Litwin MS, and the Urologic Diseases in America Project. Compliance with guidelines for patients with bladder cancer: Variation in the delivery of care. Cancer. 2011 Jul; [E-pub ahead of print]. (Copyright 2011 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-33: Progressive relaxation of guidelines depicting the number of subjects in receipt of compliant care and the number of providers who delivered compliant care to at least one patient with high-grade non-muscle-invasive bladder cancer

Compliance criteria	Subjects (N=4,545)	Providers (N=1,536)
	n (%)	n (%)
≥8 Cystoscopy and ≥8 Cytology and ≥6 BCG	19 (0.4)	16 (1.0)
≥8 Cystoscopy and ≥8 Cytology and ≥1 BCG	23 (0.5)	22 (1.4)
≥8 Cystoscopy and ≥4 Cytology and ≥6 BCG	42 (0.9)	40 (2.6)
≥4 Cystoscopy and ≥4 Cytology and ≥6 BCG	597 (13.1)	398 (25.9)
≥4 Cystoscopy and ≥4 Cytology and ≥1 BCG	799 (17.6)	479 (31.2)
≥4 Cystoscopy and ≥1 Cytology and ≥1 BCG	1527 (33.6)	823 (53.6)
≥1 Cystoscopy and ≥1 Cytology and ≥1 BCG	1703 (37.5)	891 (58.0)
≥1 Cystoscopy and ≥1 BCG	2437 (53.6)	1148 (74.7)
≥1 Cystoscopy	4373 (96.2)	1510 (98.3)

BCG: Bacillus Calmette-Guerin.

SOURCE: Chamie K, Saigal CS, Lai J, Hanley JM, Setodji CM, Konety BR, Litwin MS, and the Urologic Diseases in America Project. Compliance with guidelines for patients with bladder cancer: Variation in the delivery of care. Cancer. 2011 Jul; [E-pub ahead of print]. (Copyright 2011 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-34: Mixed-effects model predicting compliance with ≥ 4 cystoscopies, ≥ 4 cytologies, and ≥ 6 instillations of BCG with the first instillation within 90 days of diagnosis of high-grade non-muscle-invasive bladder cancer

Variables	OR	95% CI	Variables	OR	95% CI
Age-group			Region		
▶ 66-69	1.00	...	▶ West	1.00	...
70-74	1.34	(0.93, 1.94)	Midwest	1.28	(0.81, 2.02)
75-79	0.92	(0.63, 1.34)	South	0.87	(0.52, 1.47)
≥ 80	0.44*	(0.30, 0.66)	Northeast	1.13	(0.75, 1.71)
Gender			Year		
▶ Male	1.00	...	▶ 1992–1997	1.00	...
Female	1.24	(0.91, 1.68)	1998–2002	1.55*	(1.17, 2.05)
Race			Surgeon Volume		
▶ White	1.00	...	▶ Low (<4)	1.00	...
Black	0.57	(0.23, 1.45)	Medium (4–11)	0.93	(0.64, 1.36)
Hispanic	0.73	(0.33, 1.61)	High (≥ 12)	0.78	(0.49, 1.24)
Other	0.34*	(0.14, 0.85)	Hospital Volume		
Marital			▶ Low (≤ 10)	1.00	...
▶ Married	1.00	...	Medium (11–25)	0.94	(0.65, 1.35)
Other	0.82	(0.62, 1.08)	High (>25)	1.06	(0.70, 1.61)
Charlson Score			Institution Type		
▶ 0	1.00	...	▶ Non-Academic Non-Cancer Center	1.00	...
1	1.16	(0.87, 1.55)	Academic Non-Cancer Center	1.39	(0.95, 2.03)
2	1.04	(0.63, 1.70)	Academic Cancer Center	2.04	(0.87, 4.79)
≥ 3	0.64	(0.29, 1.41)	Unknown	0.78	(0.43, 1.44)
% Of Subjects in ZIP code ≥ 25 years of age with ≥ 4 years of college education			Grade		
▶ <15%	1.00	...	▶ Poorly Differentiated	1.00	...
15%–25%	0.95	(0.63, 1.43)	Undifferentiated	1.74*	(1.30, 2.32)
25%–35%	0.97	(0.60, 1.56)	Classification		
>35%	1.08	(0.66, 1.79)	▶ Ta	1.00	...
Median ZIP code household income			Tis	2.12	(1.41, 3.20)
▶ <\$35,000	1.00	...	T1	1.56*	(1.19, 2.04)
\$35,000–\$45,000	0.82	(0.52, 1.30)			
\$45,000–\$55,000	1.03	(0.64, 1.66)			
>\$55,000	1.15	(0.68, 1.95)			

BCG: Bacillus Calmette-Guerin.

95% CI: 95% confidence interval.

... Data unavailable.

▶ Denotes reference group.

*Statistically significant variable. $P < 0.05$.SOURCE: Chamie K, Saigal CS, Lai J, Hanley JM, Setodji CM, Konety BR, Litwin MS, and the Urologic Diseases in America Project. Quality of care in patients with bladder cancer: A case report? *Cancer*. 2011 Aug; [E-pub ahead of print]. (Copyright 2011 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-35. Propensity score-adjusted competing-risks regression analysis measuring the association between individual compliance measures and survival for patients with high-grade non-muscle-invasive bladder cancer

Variable	HR	95% CI
Cystoscopy		
▶ <4 Cystoscopies	1.00	...
≥4 Cystoscopies	0.61*	(0.47, 0.79)
Cytology		
▶ <4 Cytologies	1.00	...
≥4 Cytologies	0.55*	(0.39, 0.80)
Upper Tract Imaging		
▶ No upper tract image	1.00	...
≥1 Upper tract image	1.15	(0.77, 1.73)
Perioperative Instillation of Mitomycin C		
▶ No instillation of mitomycin C after any TURBT	1.00	...
At least one instillation of mitomycin C after any TURBT	0.74	(0.34, 1.65)
Postoperative Instillation of BCG		
▶ No instillations, or ≥1 instillation with 1st dose after 90 days	1.00	...
≥1 instillation with 1st dose within 90 days	0.71*	(0.51, 0.98)

HR: Hazard ratio.

95% CI: 95% confidence interval.

TURBT: Transurethral resection of bladder tumor.

BCG: Bacillus Calmette-Guerin.

... Data unavailable.

▶ Denotes reference group.

*Statistically significant variable. $P < 0.05$.

SOURCE: Chamie K, Saigal CS, Lai J, Hanley JM, Setodji CM, Konety BR, Litwin MS, and the Urologic Diseases in America Project. Quality of care in patients with bladder cancer: A case report? *Cancer*. 2011 Aug; [E-pub ahead of print]. (Copyright 2011 American Cancer Society). This material is reproduced with permission of John Wiley & Sons, Inc.

Table 5-36. Physician office visits with claim for urine cytology by Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=26,360)		2003 (N=32,600)		2004 (N=36,340)		2005 (N=39,640)		2006 (N=43,480)		2007 (N=47,420)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	8,748	9,184	10,558	10,812	11,550	11,766	12,390	12,683	13,710	14,112	14,897	15,716
Under 65/65+												
< 65 Years	6,436*	6,436	5,156*	5,156	7,143*	7,143	5,387*	5,387	7,545*	7,545	9,401*	9,401
▶ 65+ Years	8,845	9,184	10,791	10,812	11,756	11,766	12,722	12,683	14,007	14,112	15,163	15,716
Age												
▶ 65-69	9,956		9,730		11,040		11,240		13,231		14,734	
70-74	9,678*		11,507*		11,357*		13,237*		13,890*		17,798*	
75-79	8,703*		10,886*		12,149*		13,896*		14,368*		16,456*	
80-84	8,803*		13,043*		13,462*		15,224*		17,333*		14,525*	
85-89	7,569*		8,895*		11,422*		9,337*		11,888*		14,041*	
90-94	4,118**		5,667*		7,402*		7,806*		6,686*		7,703*	
95-97	12,346**		4,878**		9,783**		...		4,651**		...	
98+	...		...		2,941**		13,514**		5,882**		...	
Race/ethnicity												
▶ White	8,977	9,486	10,878	11,204	11,882	12,230	12,738	13,060	13,994	14,477	15,289	16,235
Black	5,484*	5,615	7,034*	7,360	8,199*	8,771	8,067*	9,012	9,732*	10,711	7,658*	7,657
Hispanic	4,630**	8,103	8,889**	14,675	...	...	2,143**	4,144	2,941**	14,815	4,286**	16,018
Asian	2,299**	...	4,545**	8,653	8,163**	17,971	15,254**	22,218	14,035**	29,851	20,968**	26,741
Other	6,878**	8,027	5,508**	5,459	7,377**	5,752	9,589**	9,445	13,333**	10,856	11,429**	10,031
Unknown	12,500**	...	4,082**	...	18,000**	...	6,897**	...	16,981**	...	29,545**	...
Region												
▶ Northeast	9,992	10,360	12,407	12,778	11,706	11,859	12,966	13,168	15,450	15,077	17,908	18,292
South	9,531*	10,160	11,351*	11,200	12,986*	13,089	14,766*	15,284	15,934*	16,921	17,498*	19,242
Midwest	8,305*	8,767	10,301*	10,848	12,173*	12,452	11,212*	11,208	11,985*	12,204	11,307*	11,739
West	5,432*	5,416	6,024*	6,272	6,664*	6,845	7,682*	8,048	8,170*	8,669	9,467*	9,614
Gender												
Female	7,295*	8,151	8,435*	9,090	10,623*	11,378	10,900*	11,567	11,639*	12,864	12,970*	14,282
▶ Male	9,335	9,497	11,416	11,399	11,925	11,830	12,987	13,097	14,576	14,508	15,655	16,219

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-37. Physician office visits with claim for urine cystoscopy by Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=129,920)		2003 (N=146,120)		2004 (N=153,020)		2005 (N=160,440)		2006 (N=166,960)		2007 (N=168,500)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	43,117	43,895	47,322	47,945	48,636	49,866	50,147	50,923	52,646	53,803	52,934	53,842
Under 65/65+												
< 65 Years	27,228*	27,228	26,250*	26,250	36,143*	36,143	32,597*	32,597	29,492*	29,492	29,700*	29,700
▶ 65+ Years	43,783	43,895	48,233	47,945	49,218	49,866	50,979	50,923	53,761	53,803	54,057	53,842
Age												
▶ 65-69	44,279		45,029		50,938		48,760		49,026		49,477	
70-74	40,899*		47,509*		49,573		52,179*		54,444*		55,522*	
75-79	48,639*		52,081*		49,603		49,221*		56,569*		55,129*	
80-84	44,429*		48,215*		51,166*		57,060*		56,792*		57,382*	
85-89	39,208*		48,023*		46,361*		48,674*		55,366*		54,234*	
90-94	38,627*		44,167*		41,239*		47,128*		37,296*		49,564	
95-97	38,272*		37,805*		29,348**		14,141**		39,535*		18,692**	
98+	6,452**		9,524**		32,353**		24,324**		17,647**		15,385**	
Race/ethnicity												
▶ White	44,391	45,088	48,813	49,414	50,241	51,369	51,774	52,530	53,891	54,942	54,249	55,194
Black	20,000*	21,244	25,382*	26,116	27,818*	30,138	28,512*	30,762	35,684*	40,792	33,784*	37,163
Hispanic	37,037*	41,343	14,815**	28,523	6,923**	26,458	18,571**	18,288	31,618*	46,056	33,571*	26,463
Asian	33,333**	51,221	31,818**	32,823	29,592**	34,471	54,237*	51,396	49,123	49,940	41,129*	47,972
Other	33,862*	38,737	41,525*	38,938	36,885*	38,134	29,224*	31,198	37,143*	34,421	42,041*	40,756
Unknown	37,500**	...	51,020**	...	70,000*	...	51,724	...	58,491*	...	59,091**	...
Region												
▶ Northeast	50,631	51,208	57,253	58,762	56,023	57,363	59,035	60,349	63,451	63,986	57,938	57,991
South	41,623*	42,816	46,015*	46,247	47,217*	47,916	48,962*	49,521	50,000	51,596	52,194*	53,363
Midwest	40,451*	40,806	45,176*	44,958	47,971*	48,822	46,816*	46,763	48,293*	48,794	49,910	50,891
West	38,579*	39,558	37,756*	39,201	40,984*	43,935	43,906*	46,259	48,493*	51,486	51,258*	53,347
Gender												
Female	39,520*	41,152	42,218*	43,421	44,280*	47,010	44,474*	45,790	47,154*	49,437	47,608*	47,930
▶ Male	44,569	44,939	49,386	49,498	50,397	50,711	52,421	52,745	54,941	55,426	55,030	56,100

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-38. Use of neobladder/continent diversion in Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=700)		2003 (N=720)		2004 (N=600)		2005 (N=680)		2006 (N=540)		2007 (N=640)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	232.3	337.3	233.2	262.5	190.7	227.1	212.5	309.2	170.3*	230.2	201.1	257.3
Under 65/65+												
< 65 Years	330.0**	330.0	468.8**	468.8	142.9*	142.9	276.2**	276.2	548.7**	548.7	136.2**	136.2
▶ 65+ Years	228.2	337.3	223.0	262.5	192.9*	227.1	209.5	309.2	152.0*	230.2	204.2	257.3
Age												
▶ 65-69	611.4*		379.1*		298.4*		537.2*		446.4*		402.6*	
70-74	343.4**		315.3**		316.4**		288.5**		191.1**		399.2**	
75-79	106.8**		293.5**		238.2**		181.8**		81.9**		109.7**	
80-84	137.6**		64.9**		63.1**		92.1**		92.2**		119.5**	
85-89	...		58.1**		56.0**		...		...		53.6**	
Race/ethnicity												
▶ White	228.3	319.1	238.1	266.3	172.1*	194.4	210.3	317.5	164.0*	220.2	217.7	276.2
Black	161.3**	961.5	...	...	439.2**	826.5	417.2**	713.7	141.0**	653.6	...	...
Hispanic	...	...	740.7**	4,348	...	...	...	...	...	...	...	...
Other	1,058**	1,998	423.7**	1,429	819.7**	2,667	...	...	952.4**	1,818	...	...
Region												
▶ Northeast	214.9*	723.3	106.3*	298.1	78.4*	195.4	76.6*	153.8	103.2*	266.8	175.6*	272.5
South	204.8**	312.2	287.8**	318.3	192.5**	262.9	176.0**	231.1	122.0**	192.8	193.8**	272.4
Midwest	209.6**	376.8	183.0**	246.2	256.8**	414.8	245.9**	482.6	75.9**	236.7	102.3**	296.6
West	371.4*	528.8	392.8**	533.8	261.3**	447.7	472.1**	647.3	567.9**	711.4	426.4**	617.2
Gender												
Female	115.4**	123.7	135.0**	263.7	176.7*	240.4	109.2**	154.6	107.0**	218.6	155.7**	210.5
▶ Male	279.5	444.9	272.9	295.5	196.4*	239.9	254.0*	393.6	196.7*	256.9	218.9*	297.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-39. Use of transurethral surgery in Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=126,440)		2003 (N=126,780)		2004 (N=113,820)		2005 (N=120,760)		2006 (N=123,180)		2007 (N=123,000)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	41,962	42,099	41,058	41,570	36,177	36,099	37,745	37,640	38,841	38,837	38,640	38,737
Under 65/65+												
< 65 Years	47,690*	47,690	39,375*	39,375	41,429*	41,429	36,464*	36,464	39,643*	39,643	39,101	39,101
▶ 65+ Years	41,722	42,099	41,131	41,570	35,932	36,099	37,805	37,640	38,802	38,837	38,618	38,737
Age												
▶ 65-69	43,319		42,544		37,980		37,190		39,123		38,849	
70-74	42,429*		40,637*		33,660*		37,981*		38,229*		38,390*	
75-79	40,603*		41,756*		36,368*		36,519*		38,924*		38,234*	
80-84	41,231*		40,947*		36,948*		39,748*		37,800*		39,570*	
85-89	42,342*		41,512*		34,658*		37,348		40,671*		39,014*	
90-94	39,804*		35,333*		36,405*		39,470*		38,484*		35,320*	
95-97	44,444*		36,585*		33,696*		33,333*		48,837		39,252*	
98+	22,581**		23,810**		26,471**		29,730**		32,353**		33,333**	
Race/ethnicity												
▶ White	42,201	42,344	41,024	41,352	36,163	36,089	37,611	37,378	38,811	38,767	38,409	38,459
Black	41,935*	40,426	41,437*	42,169	37,628*	36,854	41,029*	42,870	42,313*	41,584	43,994*	45,337
Hispanic	36,111*	42,586	42,222*	48,630	39,231*	43,721	38,571*	35,632	35,294*	40,752	45,000*	42,739
Asian	21,839**	30,209	25,000**	31,495	25,510**	32,914	37,288*	32,029	29,825*	32,135	45,968*	44,364
Other	38,095*	37,371	46,186*	55,155	36,066*	37,845	35,616*	36,277	34,286*	33,927	31,837*	33,005
Unknown	37,500**	...	46,939**	...	34,000**	...	37,931**	...	47,170**	...	31,818**	...
Region												
▶ Northeast	39,511	39,617	39,107	38,941	36,608	37,268	38,259	38,003	40,186	40,730	39,905	40,722
South	43,503*	43,134	42,867*	43,422	36,297*	35,335	38,050*	37,782	41,248*	41,065	38,714*	37,928
Midwest	44,931*	45,658	43,660*	44,287	37,494*	38,104	38,579*	38,660	38,635*	38,685	38,833*	39,315
West	37,094*	37,119	35,530*	36,717	32,927*	32,726	34,678*	34,875	30,887*	30,186	35,991*	36,141
Gender												
Female	41,090*	40,913	40,621*	40,887	35,269*	35,355	38,401*	38,318	39,409*	39,258	39,355*	39,702
▶ Male	42,314	42,647	41,235	41,841	36,544	36,441	37,481	37,363	38,603	38,581	38,359	38,410

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-40. Physician office visits with claim for retrograde pyelogram by Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=1,140)		2003 (N=720)		2004 (N=540)		2005 (N=920)		2006 (N=800)		2007 (N=760)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	378.3	405.5	233.2	255.8	171.6*	235.9	287.6	368.8	252.3	280.8	238.8	277.0
Under 65/65+												
< 65 Years	330.0*	330.0	...	...	...	...	...	...	...	...	...	...
▶ 65+ Years	380.4	405.5	243.3	255.8	179.6*	235.9	301.2	368.8	264.4	280.8	250.3	277.0
Age												
▶ 65-69	480.3*		168.5*		213.1*		413.2*		243.5*		281.8*	
70-74	437.1**		63.1**		...		256.4**		446.0**		365.9**	
75-79	240.3**		533.6**		317.6**		519.5**		218.5**		329.1**	
80-84	653.4**		324.5**		252.2**		245.5**		307.3**		179.3**	
85-89	118.3**		...		112.0**		...		110.1**		107.2**	
Race/ethnicity												
▶ White	363.9	383.1	224.1	236.7	165.2*	221.9	284.9	358.3	259.7	278.5	258.6	299.1
Black	322.6**	2,353	...	...	...	...	...	...	...	...	...	...
Hispanic	1,852**	6,250	1,481**	4,444	1,538**	4,167	1,429**	5,000	...	...	...	...
Other	1,058**	4,255	847.5**	3,077	409.8**	1,333	913.2**	3,774	952.4**	3,636	...	...
Region												
▶ Northeast	483.5*	655.8	53.1*	262.5	235.2*	378.0	229.7*	415.6	154.8*	363.5	100.3*	286.6
South	521.2**	895.9	215.9**	507.5	157.5**	232.5	492.8**	629.6	348.7**	410.3	317.2**	483.8
Midwest	288.2**	368.1	575.2**	847.3	154.1**	347.1	196.7**	329.4	151.7**	240.7	307.0**	375.3
West	...	...	...	...	130.7**	328.4	42.9**	212.8	349.5**	1,735	170.6**	544.2
Gender												
Female	277.0**	309.3	135.0**	612.2	88.3**	251.0	305.8*	539.5	385.1**	522.9	133.5**	254.7
▶ Male	419.2	464.1	272.9	294.3	205.3*	262.1	280.2	341.0	196.7*	214.8	280.2	319.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-41. Use of bladder instillation of anticarcinogenic agents in Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=198,280)		2003 (N=208,900)		2004 (N=210,160)		2005 (N=206,960)		2006 (N=203,940)		2007 (N=200,860)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	65,804	67,647	67,653	69,378	66,798	71,128	64,687	66,719	64,306	66,821	63,100	66,214
Under 65/65+												
< 65 Years	59,901*	59,901	63,125*	63,125	66,286	66,286	58,564*	58,564	46,914*	46,914	51,635*	51,635
▶ 65+ Years	66,051	67,647	67,849	69,378	66,822	71,128	64,977	66,719	65,144	66,821	63,654	66,214
Age												
▶ 65-69	69,782		70,851		79,966		67,851		65,463		69,283	
70-74	72,932*		72,257*		77,412*		73,590*		73,973*		66,999*	
75-79	70,769*		69,584*		69,746*		65,247*		72,767*		69,144*	
80-84	62,689*		69,630*		61,255*		68,324*		61,156*		62,552*	
85-89	51,449*		58,547*		50,896*		49,613		51,238*		55,788*	
90-94	46,863*		45,500*		29,607*		43,299*		42,793*		34,157*	
95-97	37,037*		40,244*		38,043*		42,424*		44,186*		29,907*	
98+	12,903**		...		8,824**		37,838**		26,471**		17,949**	
Race/ethnicity												
▶ White	66,391	68,513	69,230	71,118	68,050	72,185	66,906	68,843	66,068	68,500	64,061	67,033
Black	49,839	47,798	46,177*	48,171	48,170*	53,979	38,665*	44,353	45,980*	49,382	45,796*	50,717
Hispanic	59,259*	60,018	31,111*	44,104	31,538*	70,447	30,000*	35,978	47,794*	48,057	50,000	63,544
Asian	79,310*	52,982	52,273*	60,817	32,653*	25,689	55,085*	87,814	39,474*	39,249	89,516*	106,000
Other	63,492*	61,966	58,475*	63,878	68,852*	61,825	34,247*	38,954	30,952*	40,687	44,490*	45,877
Unknown	100,000*	...	67,347*	...	106,000*	...	41,379**	...	50,943**	...	75,000*	...
Region												
▶ Northeast	62,047	63,680	64,001	66,477	68,278	72,944	64,650	67,316	65,721	69,647	61,901	66,151
South	70,570*	73,942	72,693*	73,475	65,856*	69,685	66,051*	66,859	62,465*	63,913	61,604*	63,218
Midwest	65,654*	67,677	66,405*	67,269	66,615*	71,040	61,692*	65,516	64,223*	66,425	60,169*	64,745
West	60,678*	58,433	63,509*	67,109	66,986*	72,100	66,652*	67,688	66,667*	71,008	73,646*	75,395
Gender												
Female	57,295*	57,985	60,841*	62,155	62,367*	65,626	58,585*	59,449	55,327*	56,793	49,321*	50,229
▶ Male	69,238	72,349	70,408	72,578	68,589	74,139	67,134	69,988	68,059	71,336	68,523	72,904

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-42. Use of ileal conduit in Medicare beneficiaries with bladder cancer, rate,^a age-adjusted rate^b

	2002 (N=3,760)		2003 (N=3,920)		2004 (N=3,580)		2005 (N=4,700)		2006 (N=3,480)		2007 (N=4,360)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,248	1,337	1,270	1,312	1,138	1,215	1,469	1,590	1,097	1,165	1,370	1,405
Under 65/65+												
< 65 Years	1,815**	1,815	2,656**	2,656	1,571**	1,571	1,934**	1,934	2,058**	2,058	2,316**	2,316
▶ 65+ Years	1,224	1,337	1,210	1,312	1,118	1,215	1,447	1,590	1,051	1,165	1,324	1,405
Age												
▶ 65-69	1,703		1,474		1,279		1,860		1,380		1,329	
70-74	1,374*		1,671*		1,582*		1,955*		1,338*		1,929*	
75-79	1,468*		1,147*		1,376*		1,506*		1,256*		1,344*	
80-84	1,066*		1,168*		851.2**		1,381*		921.9*		1,375*	
85-89	414.0**		639.5**		447.9**		552.5**		385.3**		643.1**	
90-94	196.1**		166.7**		151.1**		294.6**		...		436.0**	
Race/ethnicity												
▶ White	1,249	1,351	1,254	1,274	1,108	1,203	1,485	1,605	1,080	1,133	1,347	1,367
Black	1,129**	835.9	1,376**	2,205	1,464**	1,889	973.6**	1,303	1,128**	1,666	2,252**	3,311
Hispanic	925.9**	3,125	1,481**	7,407	769.2**	2,083	1,429**	2,778	1,471**	5,620	714.3**	.
Asian	1,149**	4,000	1,136**	5,000	...	...	4,237**	5,086	877.2**	5,556	806.5**	3,448
Other	529.1**	1,818	1,695**	3,147	2,869**	4,426	913.2**	3,774	2,381**	2,209	1,224**	2,866
Unknown	6,250**	...	2,041**	...	...	...	...	...	...	...	...	...
Region												
▶ Northeast	1,155	1,312	797.0	840.9	783.9	794.9	1,404	1,601	696.4*	758.9	902.9	1,035
South	1,229*	1,389	1,331*	1,362	1,103*	1,150	1,390*	1,520	1,290*	1,380	1,445*	1,421
Midwest	1,362*	1,495	1,490*	1,478	1,387*	1,601	1,672*	1,682	1,163*	1,161	1,714*	1,686
West	1,253**	1,421	1,528*	1,910	1,394*	1,381	1,416*	1,587	1,180**	1,302	1,407*	1,500
Gender												
Female	1,016*	1,026	1,102*	1,064	971.7*	1,105	1,180*	1,167	855.8*	819.5	1,446*	1,368
▶ Male	1,342	1,488	1,337	1,443	1,205	1,279	1,585	1,800	1,198	1,344	1,340	1,451

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals with bladder cancer.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-43. Nationally representative inpatient stays for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,363)		2003 (N=5,185)		2004 (N=5,018)		2005 (N=5,371)		2006 (N=5,320)		2007 (N=5,328)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.5	4.1	2.4	3.8	2.3	4.0	2.5	4.2	2.4	4.0	2.4	4.0
Age												
40-44	0.3		0.4		0.4		0.2		0.2		0.3	
45-54	0.9		1.0		1.1		1.0		0.9		1.0	
55-64	3.5		3.1		2.6		3.3		2.8		2.3	
▶ 65-74	8.8		8.1		8.2		8.3		9.1		8.9	
75-84	12.2*		12.0*		13.8*		14.8*		13.9*		13.7*	
85+	14.9*		12.5*		13.3*		12.8*		13.9*		15.3*	
Race/ethnicity												
▶ White	1.9	3.1	2.1	3.1	2.2	3.5	2.4	3.8	2.2	3.5	2.2	3.5
Black	0.8*	1.4	0.8*	1.5	0.5*	1.0	0.5*	1.2	0.7*	1.6	0.8*	1.5
Hispanic	†	†	0.7*	1.7	0.7*	1.7	0.5*	1.2	0.6*	1.3	0.5*	1.2
Asian	1.2*	3.0	1.4*	6.1	0.6*	1.5	0.6*	2.6	0.8*	1.9	1.1*	2.6
Other	3.0*	7.3	2.0*	5.0	1.8*	4.7	1.8*	5.4	2.9*	7.1	2.1*	9.1
Region												
Northeast	3.2	4.8	2.5	3.7	2.6	4.1	3.1	5.1	2.5	4.1	3.2	5.1
South	2.4	3.9	2.5	4.0	2.4	4.1	2.3	3.8	2.5	4.2	2.4	4.0
▶ Midwest	2.5	4.0	2.5	4.0	2.7	4.5	2.7	4.4	2.6	4.4	2.2	3.7
West	2.1*	3.7	2.0*	3.4	1.7*	3.0	2.0*	3.5	2.0*	4.2	1.8*	3.2
Gender												
Female	1.8	2.8	1.8	2.8	1.8	3.0	1.9	3.0	2.0	3.3	1.9	3.1
▶ Male	3.3	5.5	3.0	5.0	2.9	5.0	3.1	5.4	2.8	4.9	2.9	5.0

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 5-44. Inpatient stays by Medicare beneficiaries for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,700)		2003 (N=2,080)		2004 (N=2,260)		2005 (N=2,620)		2006 (N=2,620)		2007 (N=2,080)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	7.6	9.1	5.7	7.5	6.1	7.4	7.1	8.8	7.2	9.2	5.8	7.6
Under 65/65+												
< 65 Years	1.7**	1.7	0.3**	0.3	1.3**	1.3	1.7**	1.7	1.0**	1.0	1.0**	1.0
▶ 65+ Years	9.1	9.1	7.1	7.5	7.4	7.4	8.6	8.8	9.0	9.2	7.2	7.6
Age												
▶ 65-69	4.4*		4.3*		4.2*		4.4*		4.2*		3.5*	
70-74	10.7*		6.4**		6.5**		6.9**		9.3*		5.4**	
75-79	10.5*		7.0**		10.0*		13.8*		13.9*		8.9**	
80-84	13.8**		12.0**		10.9**		14.9*		10.2**		13.3**	
85-89	8.5**		12.5**		7.4**		6.6**		11.5**		12.8**	
90-94	10.6**		4.1**		12.0**		3.9**		9.9**		2.0**	
95-97	...		...		0.0**		...		...		0.0**	
Race/ethnicity												
▶ White	8.3	9.9	6.1	7.9	6.8	8.0	7.7	9.5	8.0	10.1	6.2	8.0
Black	4.0**	6.3	3.9**	6.6	1.6**	1.8	3.3**	4.5	1.7**	2.8	2.8**	4.6
Hispanic	0.0**	0.0	0.0**	0.0	2.8**	13.7	0.0**	0.0	0.0**	0.0	2.7**	3.6
Asian	0.0**	0.0	7.6**	24.1	3.6**	17.9	3.4**	12.3	3.3**	12.2	9.5**	17.4
Other	6.9**	0.0	0.0**	0.0	0.0**	0.0	8.6**	14.3	11.2**	13.3	2.7**	11.5
Unknown	0.0**	...	0.0**	...	54.3**	...	0.0**	...	...	...	0.0**	...
Region												
▶ Northeast	6.5*	7.8	6.7*	8.5	4.7*	5.6	9.8	13.8	7.4*	10.3	6.9*	8.6
South	8.0*	9.2	5.7*	7.5	7.1*	9.0	5.7*	7.0	6.8*	8.4	5.6*	7.2
Midwest	9.1*	11.3	5.0**	6.5	5.0**	6.1	8.0*	10.4	7.7*	10.1	5.2**	7.2
West	5.6**	7.0	5.7**	7.5	7.1**	7.5	5.7**	7.0	7.1**	8.6	5.7**	8.1
Gender												
Female	5.1*	5.7	3.6*	4.6	3.1*	3.3	5.7*	7.4	5.2*	6.0	4.0*	5.4
▶ Male	10.8	13.8	8.3	11.4	9.9	12.9	8.7	10.9	9.7	13.5	7.9	10.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-45. Inpatient stays by privately insured individuals for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=260)		2003 (N=270)		2004 (N=267)		2005 (N=327)		2006 (N=220)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.9	7.2	2.7	8.2	2.7	7.9	3.1	8.1	2.1	7.2
Age										
40-44	1.5**		1.5**		1.3**		1.2**		0.6**	
45-54	4.0*		2.5*		2.6*		3.1*		2.7*	
55-64	9.5		6.5*		5.2*		6.3*		5.3*	
▶ 65-74	11.0		16.2		16.4		17.4		12.3	
75-84	16.7*		30.3*		29.7*		25.9*		30.6*	
85+	...		11.3**		12.1**		10.8**		6.6**	
Race/ethnicity										
▶ White	2.6	6.0	3.0	8.7	3.0	9.3	3.4	9.2	2.3	8.2
Black	1.4**	6.0	1.3**	4.9	1.1**	2.5	2.9**	7.7	0.9**	3.2
Hispanic	1.5**	8.7	1.0**	5.0	0.8**	2.7	3.8*	11.9	1.1**	4.3
Asian	...	...	...	...	1.4**	8.4	1.0**	12.4	0.3**	3.5
Other	...	...	3.5**	278.9	...	...	3.4**	14.4	1.1**	5.4
Unknown	4.4**	...	3.4**	...	2.8**	...	2.0**	...	3.3**	...
Missing	3.4*	...	2.8*	...	2.9*	...	1.9**	...	2.0**	...
Region										
Northeast	5.4*	12.1	3.4	9.6	4.4*	13.8	3.5	9.9	2.3*	8.7
South	2.9	7.8	3.1	9.8	2.7	7.8	3.0	7.7	2.1	7.9
▶ Midwest	2.3	5.2	2.5	6.8	2.6	7.0	3.2	7.8	2.4	8.2
West	2.5**	5.6	1.7**	5.2	1.3**	7.0	2.5*	8.2	1.6**	5.2
Gender										
Female	2.3*	5.4	2.2*	6.5	1.7*	5.6	2.6*	6.9	1.5*	5.9
▶ Male	3.7	9.0	3.3	10.0	3.6	10.3	3.5	9.2	2.7	8.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-46. Hospital outpatient visits by Medicare beneficiaries for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=640)		2003 (N=700)		2004 (N=1,120)		2005 (N=1,600)		2006 (N=1,920)		2007 (N=1,660)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.8	2.1	1.9	2.4	3.0	3.6	4.3	5.4	5.3	6.8	4.6	5.8
Under 65/65+												
< 65 Years	1.1**	1.1	0.3**	0.3	1.5**	1.5	1.0**	1.0	1.5**	1.5	1.4**	1.4
▶ 65+ Years	2.0*	2.1	2.4	2.4	3.4	3.6	5.2	5.4	6.4	6.8	5.5	5.8
Age												
▶ 65-69	1.6*		1.8*		1.7*		5.1*		4.7*		3.0*	
70-74	1.7**		2.6**		3.2**		5.7**		7.8**		9.8*	
75-79	2.4**		3.3**		5.7**		6.5**		10.0**		8.2**	
80-84	2.9**		3.2**		5.0**		6.3**		4.2**		4.3**	
85-89	2.6**		0.8**		3.3**		1.6**		7.4**		2.4**	
90-94	0.0**		...		0.0**		2.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	1.9*	2.1	2.1	2.5	3.1	4.1	4.5	5.5	5.7	7.3	4.0	5.1
Black	1.1**	2.6	0.6**	1.0	2.7**	0.0	5.4**	11.0	1.1**	0.0	8.5**	19.6
Hispanic	...	...	...	...	...	...	...	...	8.4**	50.5	...	...
Asian	...	...	...	...	...	...	0.0**	0.0	10.0**	36.5	15.8**	46.1
Other	3.5**	12.6	6.3**	63.3	6.0**	10.6	...	...	...	...	5.4**	15.6
Unknown	...	...	...	...	0.0**	...	...	...	...	...	...	...
Region												
▶ Northeast	0.8*	1.2	1.4*	1.9	3.1*	4.0	6.4*	8.6	7.4*	9.9	2.6*	2.9
South	1.7**	1.7	1.1**	1.5	1.9**	2.5	2.6**	3.2	4.0**	4.8	4.4*	5.6
Midwest	2.4**	2.8	3.7**	4.4	4.5**	4.5	6.5*	7.7	8.2*	10.4	7.9*	10.3
West	2.1**	3.5	1.7**	4.0	3.2**	4.2	2.5**	3.2	1.6**	4.0	2.5**	3.5
Gender												
Female	1.1**	1.3	1.4**	1.7	2.9	3.1	4.3	5.3	3.7*	4.4	4.2*	5.0
▶ Male	2.7*	3.2	2.6*	3.4	3.2*	4.4	4.4	5.3	7.3	9.9	5.0	6.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-47. Hospital outpatient visits by privately insured individuals for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=296)		2003 (N=378)		2004 (N=520)		2005 (N=436)		2006 (N=373)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.4	9.7	3.8	10.5	5.2	12.5	4.1	10.1	3.6	12.2
Age										
40-44	0.4**		1.8**		2.4*		2.4*		0.8**	
45-54	3.1*		6.2*		9.3*		5.3*		3.8*	
55-64	8.3*		6.3*		11.2*		7.1*		9.2*	
▶ 65-74	26.4		27.3		22.6		25.1		29.1	
75-84	26.9*		26.6*		28.7*		26.8*		40.8*	
85+	...		6.4**		13.6**		4.8**		15.4**	
Race/ethnicity										
▶ White	3.2	8.8	5.1	13.1	6.6	15.7	4.1	10.1	4.0	13.8
Black	0.5**	4.1	0.6**	2.8	1.1**	2.7	2.1**	8.0	2.3**	5.5
Hispanic	0.9**	5.6	0.6**	7.9	1.3**	5.7	4.5*	16.9	1.4**	5.8
Asian	...	...	0.5**	3.7	3.9**	23.2	1.3**	5.3	1.9**	8.3
Other	...	...	1.7**	139.5	...	...	...	...	...	...
Unknown	2.6**	...	4.3**	...	2.8**	...	3.4**	...	2.7**	...
Missing	3.9*	...	3.2*	...	3.8*	...	5.5*	...	4.4*	...
Region										
Northeast	8.5*	22.1	4.6	11.5	7.2	17.0	3.9	11.0	5.2*	17.3
South	2.3*	7.1	3.7	11.3	3.5*	10.7	4.3	9.8	3.5	12.8
▶ Midwest	3.6	9.5	4.4	10.1	7.9	15.5	4.3	10.0	3.9	13.6
West	1.8**	6.5	1.9**	13.4	2.5*	9.3	3.4*	11.4	2.2*	5.8
Gender										
Female	2.3*	6.8	2.6*	8.1	3.2*	8.1	2.8*	7.0	2.8*	11.7
▶ Male	4.5	12.8	5.2	13.1	7.3	17.1	5.4	13.4	4.4	12.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 5-48. Ambulatory surgery center visits by Medicare beneficiaries for upper tract transitional cell carcinoma listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,480)		2003 (N=1,220)		2004 (N=1,540)		2005 (N=1,560)		2006 (N=1,880)		2007 (N=1,440)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.8	5.3	4.1	4.4	5.5	5.3	5.5	5.3	6.5	6.6	5.0	5.1
Age												
▶ 65-69	1.6*		2.8*		2.7*		3.4*		3.2*		1.7*	
70-74	6.1**		5.2**		6.2**		4.8**		6.2**		4.4**	
75-79	9.1**		7.0**		12.7*		15.5*		14.6*		9.3**	
80-84	9.1**		7.9**		6.8**		6.8**		8.8**		13.3**	
85-89	6.8**		5.9**		9.0**		4.9**		14.7**		8.0**	
90-94	4.2**		2.0**		2.0**		3.9**		5.9**		3.9**	
95-97	...		...		...		...		...		9.9**	
Race/ethnicity												
▶ White	5.5	5.8	4.7	4.9	6.2	5.9	6.1	5.6	7.2	7.3	5.4	5.4
Black	1.1**	3.2	0.6**	1.7	0.5**	4.5	2.2**	4.7	1.7**	12.8	0.6**	1.6
Asian	...	...	0.0**	0.0	...	...	6.7**	27.8	6.6**	26.9	6.3**	34.4
Other	...	...	3.2**	18.5	...	...	2.9**	29.2	5.6**	0.0	13.5**	23.3
Unknown	26.7**	...	...	...	81.4**	...	...	...	62.6**	...	...	...
Region												
▶ Northeast	4.0	5.1	5.0*	6.2	4.4*	7.3	4.7*	5.3	6.6*	10.9	6.6*	8.1
South	4.7*	4.4	3.0**	2.6	6.0*	4.4	6.1*	4.4	7.5*	6.1	3.9**	2.8
Midwest	6.0**	7.5	5.7**	6.8	7.6*	8.8	7.5*	8.9	7.9*	9.3	5.4**	6.5
West	4.5**	5.2	3.3**	2.3	2.3**	1.7	1.9**	2.8	2.2**	2.8	5.4**	7.8
Gender												
Female	4.0*	3.9	2.6**	2.8	3.3*	2.8	4.0*	3.2	5.4*	5.3	4.4*	4.7
▶ Male	5.9	7.2	6.0	6.6	8.2	8.8	7.4	8.3	8.0	8.4	5.8	5.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-49. Nationally representative ambulatory surgery center visits for upper tract transitional cell carcinoma listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	829	0.4	1.7

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 5-50. Physician office visits by Medicare beneficiaries for upper tract transitional cell carcinoma listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=21,720)		2003 (N=19,380)		2004 (N=23,140)		2005 (N=23,480)		2006 (N=25,960)		2007 (N=24,900)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	61.1	76.5	53.1	66.6	62.5	77.7	63.3	81.0	71.4	90.7	68.8	88.0
Under 65/65+												
< 65 Years	9.1*	9.1	11.6*	11.6	16.5*	16.5	13.7*	13.7	16.3*	16.3	17.0*	17.0
▶ 65+ Years	74.3	76.5	64.1	66.6	75.0	77.7	77.2	81.0	87.2	90.7	84.4	88.0
Age												
▶ 65-69	82.5		51.6		60.9		57.6		63.1		60.2	
70-74	76.3*		55.8*		79.0*		77.0*		52.9*		62.2*	
75-79	86.5*		86.0*		91.4*		114.7*		140.7*		126.0*	
80-84	77.8*		81.9*		100.6*		84.7*		112.9*		127.4*	
85-89	39.2*		69.4*		59.9*		79.8*		114.6*		86.4*	
90-94	19.0**		18.4**		18.0**		11.8**		51.5**		37.2**	
95-97	...		20.0**		...		9.7**		39.8**		9.9**	
98+	...		...		...		...		...		10.2**	
Race/ethnicity												
▶ White	66.9	82.0	57.7	71.7	68.7	84.0	69.3	87.5	73.5	92.3	72.6	90.3
Black	23.5*	30.6	19.4*	21.9	20.6*	26.8	14.1**	16.1	46.8*	65.3	36.3*	60.6
Hispanic	39.5**	95.9	35.0**	94.6	11.3**	22.4	16.5**	34.4	22.5**	48.8	46.7**	85.4
Asian	48.5**	107.8	37.9**	129.7	64.4**	215.1	53.8**	156.8	162.9*	634.5	50.7**	80.2
Other	27.7**	36.2	53.7**	66.3	54.4**	69.1	114.1*	175.6	72.9**	82.6	97.4*	171.3
Unknown	...	...	57.4**	...	108.6**	...	...	...	125.1**	...	168.3**	...
Region												
▶ Northeast	58.8	74.9	70.5	89.2	69.7	86.7	92.9	122.1	84.3	106.2	87.7	113.2
South	63.9*	80.1	51.2*	65.0	63.6*	77.5	57.7*	73.3	75.6*	94.2	57.0*	71.9
Midwest	68.7*	82.9	47.9*	56.6	63.1*	77.4	55.2*	68.3	59.6*	77.0	65.9*	85.2
West	45.0*	60.5	45.0*	58.3	50.9*	66.8	54.0*	69.1	64.6*	86.1	78.3*	100.6
Gender												
Female	41.0*	49.5	36.4*	44.2	44.9*	54.6	45.2*	55.5	53.0*	65.0	50.7*	63.3
▶ Male	86.7	113.3	74.4	97.0	84.7	109.6	85.9	115.4	94.2	125.1	91.1	120.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 5-51. Physician office visits by privately insured individuals for upper tract transitional cell carcinoma listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,535)		2003 (N=1,576)		2004 (N=1,802)		2005 (N=1,797)		2006 (N=1,433)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	17.4	43.8	16.0	43.5	17.9	51.5	16.8	43.1	13.8	40.0
Age										
40-44	4.5*		4.3*		4.6*		3.5*		2.7*	
45-54	26.4*		22.8*		20.6*		17.0*		17.6*	
55-64	47.9*		38.9*		42.6*		43.6*		44.5*	
▶ 65-74	105.2		101.7		93.1		82.1		57.2	
75-84	72.3*		108.4*		189.6*		135.9*		144.4*	
85+	...		38.6**		67.9*		59.8*		35.2*	
Race/ethnicity										
▶ White	14.3	32.1	16.9	42.2	20.6	58.4	18.1	46.3	15.4	44.3
Black	6.2**	16.4	7.5**	42.2	10.4*	26.4	12.2*	33.2	5.6**	19.1
Hispanic	11.7*	39.3	9.5*	45.0	10.6*	45.9	13.1*	58.5	6.5*	18.9
Asian	2.2**	8.5	1.5**	6.8	5.3**	31.9	3.9**	15.9	3.1**	11.6
Other	...	...	8.6**	91.5	6.1**	101.3	22.4**	61.8	...	...
Unknown	16.2*	...	26.6*	...	20.9*	...	19.8*	...	15.4*	...
Missing	21.4*	...	16.0*	...	14.3*	...	15.4*	...	15.6*	...
Region										
Northeast	22.2*	55.6	16.1	37.9	15.9	40.4	13.4*	35.1	11.2	34.0
South	16.6	40.6	17.6*	43.5	21.2*	59.1	16.8	41.6	15.9*	49.3
▶ Midwest	16.9	43.7	15.3	43.5	17.2	48.4	15.6	38.8	12.9	37.5
West	17.4*	33.8	12.4*	51.0	10.5*	44.8	22.5*	62.6	11.2*	29.4
Gender										
Female	12.3*	33.3	11.1*	32.2	13.4*	40.2	11.8*	32.6	9.2*	30.6
▶ Male	22.8	54.7	21.2	54.7	22.7	63.2	22.2	54.2	18.6	49.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

**Urologic
Diseases**
in America



CHAPTER 6

Urethral Diseases

Stricture
Hypospadias

Table 6-1. Codes used in the diagnosis and management of urethral diseases**Hypospadias****Males with one or more of the following:***ICD-9 diagnosis codes*

752.6 Hypospadias and epispadias and other penile anomalies

752.61 Hypospadias

*ICD-9 procedure codes*58.45^a Repair of hypospadias and epispadias*CPT procedure codes*

54300 Plastic operation on penis for straightening of chordee (eg, hypospadias), with or without mobilization of urethra

54304 Plastic operation on penis for correction of chordee or for first stage hypospadias repair with or without transplantation of prepuce and/or skin flaps

54308 Urethroplasty for second stage hypospadias repair (including urinary diversion); less than 3 cm

54312 Urethroplasty for second stage hypospadias repair (including urinary diversion); greater than 3 cm

54316 Urethroplasty for second stage hypospadias repair (including urinary diversion) with free skin graft obtained from site other than genitalia

54318 Urethroplasty for third stage hypospadias repair to release penis from scrotum (eg, third stage Cecil repair)

54322 One stage distal hypospadias repair (with or without chordee or circumcision); with simple meatal advancement (eg, Magpi, V-flap)

54324 One stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps (eg, flip-flap, prepuce flap)

54326 One stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps and mobilization of urethra

54328 One stage distal hypospadias repair (with or without chordee or circumcision); with extensive dissection to correct chordee and urethroplasty with local skin flaps, skin graft patch, and/or island flap

54332 One stage proximal penile or penoscrotal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap

54336 One stage perineal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap

54340 Repair of hypospadias complications (i.e., fistula, stricture, diverticula); by closure, incision, or excision, simple

54344 Repair of hypospadias complications (i.e., fistula, stricture, diverticula); requiring mobilization of skin flaps and urethroplasty with flap or patch graft

54348 Repair of hypospadias complications (i.e., fistula, stricture, diverticula); requiring extensive dissection and urethroplasty with, flap, patch or tubed graft (includes urinary diversion)

54352 Repair of hypospadias cripple requiring extensive dissection and excision of previously constructed structures including re-release of chordee and reconstruction of urethra and penis by use of local skin as grafts and island flaps and skin brought in as flaps or grafts

54360 Plastic operation on penis to correct angulation

Female Urethral Stricture**Females with one or more of the following:***ICD-9 diagnosis codes*

598 Urethral stricture

598.0 Urethral stricture due to infection

598.01 Urethral stricture due to diseases classified elsewhere

598.1 Traumatic urethral stricture

598.2 Postoperative urethral stricture

598.8 Other specified causes of urethral stricture

598.9 Urethral stricture

CPT procedure codes

52270 Cystourethroscopy, with internal urethrotomy; female

52276 Cystourethroscopy with direct vision internal urethrotomy

Continued on next page.

Table 6-1 (continued). Codes used in the diagnosis and management of urethral diseases

52281 ^b	Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy, with or without injection procedure for cystography, male or female
52282	Cystourethroscopy, with insertion of urethral stent
52283	Cystourethroscopy, with steroid injection into stricture
52285	Cystourethroscopy for treatment of the female urethral syndrome with any or all of the following: urethral meatotomy, urethral dilation, internal urethrotomy, lysis of urethrovaginal septal fibrosis, lateral incisions of the bladder neck, and fulguration of polyp(s) of urethra, bladder neck, and/or trigone
53430	Urethroplasty, reconstruction of female urethra
53450	Urethromeatoplasty, with mucosal advancement

Male Urethral Stricture**Males with one or more of the following:***ICD-9 diagnosis codes*

598	Urethral stricture
598.0	Urethral stricture due to infection
598.01	Urethral stricture due to diseases classified elsewhere
598.1	Traumatic urethral stricture
598.2	Postoperative urethral stricture
598.8	Other specified causes of urethral stricture
598.9	Urethral stricture

CPT procedure codes

52275	Cystourethroscopy, with internal urethrotomy; male
52276	Cystourethroscopy with direct vision internal urethrotomy
52281 ^b	Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy, with or without injection procedure for cystography, male or female
52282	Cystourethroscopy, with insertion of urethral stent
52283	Cystourethroscopy, with steroid injection into stricture
53000	Urethrotomy or urethrostomy, external (separate procedure); pendulous urethra
53010	Urethrotomy or urethrostomy, external (separate procedure); perineal urethra, external
53020 ^b	Meatotomy, cutting of meatus (separate procedure); except infant
53025 ^b	Meatotomy, cutting of meatus (separate procedure); infant
53400	Urethroplasty; first stage, for fistula, diverticulum, or stricture (eg, Johanssen type)
53405	Urethroplasty; second stage (formation of urethra), including urinary diversion
53410	Urethroplasty; one-stage reconstruction of male anterior urethra
53415	Urethroplasty, transpubic or perineal, one stage, for reconstruction or repair of prostatic or membranous urethra
53420	Urethroplasty, two-stage reconstruction or repair of prostatic or membranous urethra; first stage
53425	Urethroplasty, two-stage reconstruction or repair of prostatic or membranous urethra; second stage
53431	Urethroplasty with tubularization of posterior urethra and/or lower bladder for incontinence (eg, Tenago, Leadbetter procedure)
53450	Urethromeatoplasty, with mucosal advancement
53460	Urethromeatoplasty, with partial excision of distal urethral segment (Richardson type procedure)
53600 ^b	Dilation of urethral stricture by passage of sound or urethral dilator, male; initial
53601 ^b	Dilation of urethral stricture by passage of sound or urethral dilator, male; subsequent
53605 ^b	Dilation of urethral stricture or vesical neck by passage of sound or urethral dilator, male, general or conduction (spinal) anesthesia
53620 ^b	Dilation of urethral stricture by passage of filiform and follower, male; initial
53621 ^b	Dilation of urethral stricture by passage of filiform and follower, male; subsequent
53640 ^b	Passage of filiform and follower for acute vesical retention, male

^aInclude only if patient under 18 years old.^bIncluded in definition of outpatient and physician office visits only.

Table 6-2. Nationally representative inpatient stays for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,084)		2003 (N=4,208)		2004 (N=3,871)		2005 (N=3,433)		2006 (N=4,293)		2007 (N=3,583)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.0	3.9	4.1	4.0	3.7	3.8	3.3	3.3	4.0	4.0	3.3	3.3
Age												
18-24	0.9		1.2		1.6		1.4		1.8		1.4	
25-34	1.7		1.9		1.6		1.8		1.9		1.6	
35-39	2.3		2.9		2.3		1.8		2.3		1.7	
40-44	2.9		1.9		1.8		1.9		3.1		2.0	
45-54	2.6		2.9		2.9		2.0		3.0		2.6	
55-64	3.7		4.8		4.1		3.5		4.6		3.3	
▶ 65-74	9.6		8.4		8.6		6.4		8.6		7.2	
75-84	15.9*		13.7*		15.2*		14.7*		12.8*		11.6*	
85+	30.5*		32.6*		21.3*		19.5*		24.4*		25.3*	
Race/ethnicity												
▶ White	2.3	2.4	2.8	2.8	2.6	2.7	2.4	2.4	2.8	2.8	2.2	2.2
Black	5.3*	5.3	4.9*	4.7	4.7*	4.7	3.5*	3.5	5.5*	5.5	4.0*	4.0
Hispanic	†	†	3.4*	3.3	2.3*	2.3	1.7*	1.7	2.6*	2.6	2.1*	2.0
Asian	1.1*	1.5	1.1*	1.9	1.5*	1.7	0.8*	2.5	1.0*	1.6	1.0*	2.0
Other	11.3*	13.7	5.2*	7.8	2.7*	4.7	3.7*	4.8	7.6*	7.5	7.7*	7.2
Region												
Northeast	4.1	3.9	5.0	4.7	4.5	4.5	3.8	3.8	4.3	4.3	3.4	3.3
South	4.7	4.6	4.3	4.2	4.4	4.4	3.1	3.1	4.8	4.8	3.8	3.8
▶ Midwest	3.6	3.6	3.6	3.6	3.4	3.5	4.1	4.1	2.8	2.8	3.5	3.5
West	3.3*	3.3	3.5*	3.5	2.4*	2.4	2.3*	2.3	3.8*	3.8	2.4*	2.4

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 6-3. Inpatient stays by Medicare beneficiaries for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,520)		2003 (N=1,080)		2004 (N=1,160)		2005 (N=700)		2006 (N=940)		2007 (N=1,020)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.7	9.6	6.7	7.4	7.1	6.8	4.2	4.0	5.8	5.9	6.3	6.3
Under 65/65+												
< 65 Years	8.8**	8.8	3.5**	3.5	6.2**	6.2	5.1**	5.1	3.7**	3.7	5.5**	5.5
▶ 65+ Years	10.0	9.6	7.8	7.4	7.4	6.8	3.9*	4.0	6.5	5.9	6.6	6.3
Age												
▶ 65-69	5.5*		4.3*		4.7*		1.0*		4.2*		5.7*	
70-74	9.1**		3.9**		4.6**		5.3**		6.8**		6.2**	
75-79	7.4**		10.4**		13.7**		4.1**		5.9**		3.5**	
80-84	15.4**		11.1**		6.0**		4.8**		7.3**		8.6**	
85-89	21.8**		15.8**		5.1**		10.1**		7.4**		11.9**	
90-94	42.8**		32.6**		39.2**		7.6**		30.0**		14.7**	
95-97	0.0**		51.9**		0.0**		0.0**		47.8**		46.6**	
98+	44.2**		0.0**		0.0**		0.0**		0.0**		0.0**	
Race/ethnicity												
▶ White	9.3	9.0	5.6	5.9	6.6	5.9	3.6*	3.4	5.3	6.0	5.1	5.6
Black	10.6**	13.6	19.3**	27.7	12.5**	21.4	7.5**	7.3	6.3**	2.5	16.6**	18.7
Hispanic	12.9**	0.0	6.2**	12.6	0.0**	0.0	5.8**	0.0	6.0**	11.0	11.7**	12.9
Asian	18.8**	90.5	0.0**	0.0	8.3**	0.0	7.8**	21.4	23.3**	11.9	0.0**	0.0
Other	7.1**	13.7	0.0**	0.0	6.2**	9.6	11.6**	17.4	11.3**	9.0	5.4**	0.0
Unknown	76.0**	...	0.0**	...	0.0**	...	0.0**	...	0.0**	...	0.0**	...
Region												
▶ Northeast	8.0*	4.9	7.8*	9.1	8.4*	7.9	5.8*	5.5	6.6*	5.6	9.2*	9.3
South	12.9*	14.5	7.0**	8.6	6.0**	7.1	4.1**	4.0	6.3**	6.3	4.4**	4.6
Midwest	7.7**	7.2	5.0**	5.7	6.4**	5.5	3.4**	2.6	6.5**	8.5	4.6**	5.0
West	7.6**	7.5	7.2**	5.8	9.1**	7.1	4.1**	4.2	2.7**	1.7	9.4**	8.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-4. Inpatient stays by privately insured individuals for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=495)		2003 (N=495)		2004 (N=419)		2005 (N=472)		2006 (N=390)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.6	24.7	10.3	24.8	8.6	19.5	9.1	18.7	7.7	18.9
Age										
18-24	4.4**		2.9**		2.1**		1.6**		2.5**	
25-34	5.7*		3.3*		3.1*		3.0*		3.1*	
35-39	4.6**		5.9*		4.8**		4.5**		3.7**	
40-44	5.0**		6.2*		4.7*		5.0*		6.0*	
45-54	9.9*		8.1*		7.8*		8.9*		5.9*	
55-64	20.0*		18.4*		15.0*		16.8*		15.5*	
▶ 65-74	47.6		39.0		26.7		29.9		30.0	
75-84	98.7*		95.6*		68.6*		58.6*		71.8*	
85+	...		132.6**		129.6*		75.5**		82.5**	
Race/ethnicity										
▶ White	11.6	21.1	11.4	25.1	8.4	19.5	9.1	18.6	7.9	20.0
Black	22.3**	43.0	17.6**	44.4	16.4*	33.1	16.2*	31.2	15.1**	31.6
Hispanic	11.8**	42.2	6.5**	21.0	7.9*	18.3	6.5**	13.0	4.0**	8.2
Asian	7.3**	29.3	3.0**	37.2	4.3**	19.8	5.2**	42.8	2.5**	6.9
Other	...	...	3.3**	...	9.1**	30.2	8.4**	21.8	2.0**	79.6
Unknown	12.4**	...	8.9**	...	7.4**	...	8.9*	...	9.9*	...
Missing	11.2*	...	9.7*	...	9.1*	...	9.4*	...	7.1*	...
Region										
Northeast	14.0	27.7	10.6	23.8	8.1	15.9	8.3*	14.6	9.3	20.6
South	11.3	22.9	11.0	24.7	8.5	22.3	8.8*	18.5	7.8	18.8
▶ Midwest	12.2	25.4	10.9	26.7	9.4	19.1	11.3	23.5	7.0	20.1
West	8.6*	23.1	6.3*	17.2	6.9*	16.4	5.8*	9.5	7.2*	15.9

... Data unavailable.

▶ Denotes reference group.

**Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-5. Hospital outpatient visits by Medicare beneficiaries for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,060)		2003 (N=3,700)		2004 (N=4,480)		2005 (N=3,540)		2006 (N=3,580)		2007 (N=3,640)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	19.6	17.2	23.0	22.0	27.3	27.4	21.5	20.1	22.0	21.1	22.4	23.2
Under 65/65+												
< 65 Years	25.8*	25.8	22.3	22.3	24.0*	24.0	19.1*	19.1	21.5	21.5	19.6*	19.6
▶ 65+ Years	17.5	17.2	23.3	22.0	28.5	27.4	22.3	20.1	22.2	21.1	23.4	23.2
Age												
▶ 65-69	10.5*		12.3*		24.8		20.0		22.9		15.7	
70-74	25.4*		24.0*		15.0**		25.7*		13.6**		19.3**	
75-79	13.9**		24.9*		32.1*		14.8**		29.5*		29.5*	
80-84	15.4**		26.0**		29.0**		15.5**		20.5**		39.3*	
85-89	30.0**		39.5**		58.4**		25.3**		14.8**		19.0**	
90-94	42.8**		97.7**		125.3**		120.9**		82.6**		44.1**	
95-97	...		51.9**		0.0**		47.5**		...		46.6**	
Race/ethnicity												
▶ White	17.9	16.0	22.1	20.7	25.8	25.8	19.8	17.9	20.6	17.8	20.0	20.2
Black	29.2**	31.9	24.4**	26.7	30.1**	44.3	36.2**	50.1	35.6**	63.6	39.7*	50.6
Hispanic	38.8**	39.4	37.3**	32.3	90.3**	149.6	29.2**	0.0	29.9**	76.2	17.6**	85.9
Asian	0.0**	0.0	44.1**	86.0	8.3**	44.1	15.7**	33.0	31.0**	22.4	22.1**	80.6
Other	42.9**	56.1	19.5**	66.9	31.0**	39.3	17.4**	66.2	5.6**	69.6	43.0**	68.2
Unknown	...	...	80.1**	...	...	...	0.0**	...	...	...	...	...
Region												
▶ Northeast	23.3	20.0	29.4	25.3	35.6	35.8	25.8	20.7	33.5	27.2	32.2	34.2
South	14.2*	14.4	19.2*	19.1	21.6*	22.3	14.7*	16.2	17.1*	19.4	14.6*	16.4
Midwest	22.5*	18.0	21.0*	17.8	31.1*	25.6	29.5*	24.3	25.1*	20.6	29.0*	26.4
West	23.5*	19.1	27.4*	31.5	25.8*	31.6	20.4*	21.0	16.5**	18.6	20.1*	21.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-6. Hospital outpatient visits by privately insured individuals for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,864)		2003 (N=2,727)		2004 (N=2,818)		2005 (N=2,905)		2006 (N=2,590)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	66.9	113.4	56.9	108.5	57.6	106.0	55.9	100.5	50.8	96.3
Age										
18-24	26.3*		15.8*		17.8*		16.3*		16.9*	
25-34	39.2*		24.4*		31.3*		25.2*		23.5*	
35-39	50.7*		39.0*		38.8*		37.5*		36.5*	
40-44	46.6*		41.5*		40.8*		36.9*		39.8*	
45-54	63.6*		61.2*		57.1*		54.7*		53.1*	
55-64	126.7*		111.5*		103.7*		103.9*		99.9*	
▶ 65-74	209.5		189.8		180.2		168.3		171.0	
75-84	256.6*		251.4*		285.0*		275.9*		220.8*	
85+	...		283.5*		241.8*		164.2*		227.0*	
Race/ethnicity										
▶ White	73.5	121.4	63.8	117.0	60.9	110.9	57.6	102.7	53.7	98.4
Black	109.2*	149.4	84.1*	139.8	80.1*	133.6	72.2*	129.0	57.6*	117.4
Hispanic	71.6*	120.1	61.7*	118.1	49.7*	104.3	50.2*	89.6	45.7*	94.3
Asian	24.8**	38.9	33.3*	83.0	25.0*	54.8	29.4*	64.3	17.7**	46.2
Other	51.5**	160.6	39.0**	79.8	45.7**	104.7	58.5**	115.8	49.1**	151.9
Unknown	72.3*	...	55.9*	...	51.3*	...	52.0*	...	51.4*	...
Missing	60.9*	...	47.6*	...	51.5*	...	53.7*	...	45.6*	...
Region										
Northeast	60.1*	102.9	50.3*	82.0	48.6*	92.3	41.7*	74.0	51.4	101.0
South	70.1	116.1	57.0*	110.1	56.0	104.1	56.6	101.9	52.8	102.1
▶ Midwest	73.9	128.4	65.9	124.0	71.4	122.0	64.1	113.3	51.5	100.9
West	43.7*	66.1	40.4*	87.4	38.7*	81.1	47.7*	83.8	43.6*	73.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-7. Ambulatory surgery center visits by Medicare beneficiaries for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=13,980)		2003 (N=14,040)		2004 (N=13,680)		2005 (N=14,280)		2006 (N=13,440)		2007 (N=13,420)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	119.5	137.9	119.2	139.0	112.9	133.2	120.8	141.8	122.3	145.0	118.7	141.9
Age												
▶ 65-69	77.9		93.3		88.0		109.9		87.4		87.7	
70-74	130.8*		135.0*		123.4*		116.1*		134.1*		141.4*	
75-79	161.9*		167.0*		154.2*		162.7*		180.7*		159.9*	
80-84	204.2*		174.2*		183.4*		208.2*		207.9*		210.0*	
85-89	210.1*		192.1*		193.1*		169.3*		195.5*		185.7*	
90-94	248.5**		244.1*		180.1**		151.2**		210.3**		154.2**	
95-97	53.9**		51.9**		202.1**		189.9**		239.1**		139.9**	
98+	...		...		85.8**		...		0.0**		40.4**	
Race/ethnicity												
▶ White	117.2	135.3	115.7	134.3	112.7	129.7	118.9	139.3	120.9	139.9	114.9*	137.1
Black	157.9*	207.5	145.2*	195.9	129.2*	195.7	161.2*	202.6	149.9*	236.7	176.7*	252.7
Hispanic	77.5**	149.2	161.5**	186.3	90.3**	99.1	93.5**	130.3	131.7**	147.2	111.5**	203.1
Asian	28.2**	47.7	70.6**	129.4	58.4**	69.3	7.8**	21.4	38.8**	66.5	29.4**	28.2
Other	121.4**	98.8	117.1**	131.9	105.3**	169.7	110.5**	173.9	79.1**	106.0	69.8**	109.9
Unknown	304.2**	...	320.5**	...	146.1**	...	233.8**	...	497.1**	...	350.6**	...
Region												
▶ Northeast	136.2	161.4	137.1	163.7	121.5	138.7	133.1	156.5	121.7	139.8	106.5	123.9
South	120.9*	141.0	120.8*	144.0	109.4*	133.0	126.8*	148.2	126.0*	154.9	115.5*	142.1
Midwest	125.8*	137.1	127.5*	139.1	132.9*	149.8	128.9*	145.4	145.4*	162.5	144.7*	165.2
West	87.9*	102.2	83.8*	100.5	83.1*	103.8	83.6*	107.3	83.2*	102.5	103.4*	129.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-8. Ambulatory surgery center visits by privately insured individuals for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=407)		2003 (N=412)		2004 (N=463)		2005 (N=513)		2006 (N=570)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.5	14.6	8.6	14.6	9.5	16.1	9.9	17.1	11.2	21.9
Age										
18-24	4.9**		2.9**		2.5**		3.3**		2.9**	
25-34	5.3*		5.2*		5.7*		4.7*		6.3*	
35-39	8.8*		5.2*		6.9*		7.4*		8.5*	
40-44	7.3*		7.4*		7.3*		6.7*		9.1*	
45-54	10.0*		9.0*		10.8*		9.5*		9.1*	
55-64	16.2*		17.4		16.5*		17.9*		23.2*	
▶ 65-74	24.4		22.2		23.1		27.8		38.6	
75-84	28.0**		31.9**		42.6*		44.4*		61.0*	
85+	...		13.7**		17.3**		36.1**		51.6**	
Race/ethnicity										
▶ White	12.1	18.5	10.5	17.6	9.9	16.2	10.2	17.8	12.3	22.8
Black	20.0**	29.0	11.2**	19.9	9.8**	17.2	12.1**	20.4	15.6**	40.6
Hispanic	9.5**	14.3	10.0**	18.2	11.0*	14.6	8.3*	11.6	11.1*	21.6
Asian	1.5**	18.0	5.0**	31.0	5.0**	7.9	7.8**	44.4	4.4**	12.3
Other	4.7**	31.1	6.5**	32.5	4.6**	...	8.4**	21.8	12.3**	23.0
Unknown	7.4**	...	5.8**	...	8.4**	...	8.0**	...	10.7*	...
Missing	7.5*	...	6.4*	...	8.4*	...	10.0*	...	5.8*	...
Region										
Northeast	9.8	12.2	7.6	12.7	11.2	15.7	8.0	13.1	11.3*	20.9
South	11.2*	17.1	10.1*	18.1	9.2	17.7	11.1	20.1	14.1*	31.0
▶ Midwest	8.5	14.7	7.9	12.9	10.0	16.9	10.2	17.8	8.6	15.1
West	6.0*	10.0	6.3*	12.7	7.6*	12.0	6.7*	10.8	7.5*	13.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-9. Nationally representative ambulatory surgery center visits for male urethral stricture listed as primary diagnosis, count, rate^a

	Count	Rate
Total	34,316	32.3
Age		
25-34	2,249	11.3*
35-39	3,249	31.5*
40-44	1,597	14.5*
45-54	4,667	22.3*
55-64	4,397	29.6*
▶ 65-74	15,494	181.7
75-84	2,663	50.0*

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 6-10. Physician office visits by Medicare beneficiaries for male urethral stricture listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=99,760)		2003 (N=104,500)		2004 (N=107,380)		2005 (N=107,880)		2006 (N=108,740)		2007 (N=108,320)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	638.8	781.5	650.1	804.0	655.5	803.0	654.1	798.6	669.5	822.6	666.7	824.0
Under 65/65+												
< 65 Years	230.3*	230.3	230.5*	230.5	216.0*	216.0	226.3*	226.3	233.2*	233.2	234.2*	234.2
▶ 65+ Years	773.5	781.5	791.1	804.0	805.8	803.0	805.2	798.6	825.1	822.6	826.3	824.0
Age												
▶ 65-69	374.7		408.5		390.1		413.8		405.9		423.2	
70-74	618.2*		587.4*		710.3*		666.9*		706.3*		702.1*	
75-79	969.6*		1,015*		969.4*		1,000*		1,069*		1,018*	
80-84	1,180*		1,238*		1,283*		1,207*		1,203*		1,283*	
85-89	1,629*		1,642*		1,387*		1,422*		1,457*		1,411*	
90-94	1,474*		1,221*		1,699*		1,807*		1,772*		1,630*	
95-97	1,994*		2,285*		1,769*		2,042*		1,483*		1,679*	
98+	132.6**		130.8**		343.2**		590.0**		164.7**		282.8**	
Race/ethnicity												
▶ White	635.6	764.6	642.8	783.4	650.6	783.9	654.1	787.3	658.4	805.9	668.4	818.1
Black	725.6*	1,081	724.6*	1,133	713.7*	1,126	662.1*	1,041	759.4*	1,176	741.4*	1,136
Hispanic	504.0*	751.1	639.8*	786.3	608.0*	712.7	595.8*	644.6	712.3*	713.1	580.9*	601.4
Asian	423.2*	430.6	520.4*	566.0	483.6*	505.5	313.9*	333.1	418.6*	445.9	331.1*	360.7
Other	492.9*	716.6	624.4*	747.2	600.8*	791.2	727.0*	1,082	655.1*	912.2	483.2*	702.3
Unknown	2,129**	...	1,603**	...	2,484*	...	3,352*	...	3,397*	...	2,805*	...
Region												
▶ Northeast	730.4	911.7	799.9	990.2	707.3	859.7	737.2	909.1	792.5	959.1	810.5	1,031
South	659.3*	806.0	686.0*	827.7	701.5*	875.5	712.5*	874.3	738.8*	913.1	705.1*	868.4
Midwest	595.0*	701.5	546.0*	663.9	580.7*	684.1	586.7*	676.0	592.4*	700.6	595.6*	697.4
West	552.2*	696.7	553.8*	750.8	602.8*	754.8	533.2*	688.8	496.3*	653.3	531.9*	689.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-11. Physician office visits by privately insured individuals for male urethral stricture listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,503)		2003 (N=8,869)		2004 (N=9,530)		2005 (N=10,681)		2006 (N=9,152)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	198.5	409.7	185.2	419.2	194.8	430.2	205.5	431.6	179.7	418.4
Age										
18-24	42.9*		39.0*		30.2*		32.0*		32.5*	
25-34	85.9*		67.9*		75.4*		64.4*		64.7*	
35-39	120.2*		100.7*		107.5*		104.7*		102.5*	
40-44	115.7*		122.5*		116.0*		117.1*		120.3*	
45-54	182.3*		163.5*		180.3*		185.5*		174.9*	
55-64	368.6*		352.8*		361.8*		387.6*		380.5*	
▶ 65-74	736.2		730.9		774.1		749.3		739.0	
75-84	1,478*		1,357*		1,424*		1,406*		1,359*	
85+	...		1,834*		1,477*		1,405*		1,264*	
Race/ethnicity										
▶ White	223.1	434.6	209.1	459.0	198.8	428.0	207.0	429.8	191.9	436.5
Black	314.8*	468.4	297.9*	501.7	252.3*	453.1	271.1*	487.1	231.3*	514.8
Hispanic	219.6*	484.0	195.0*	520.8	169.8*	444.4	175.4*	421.9	148.5*	346.0
Asian	122.3*	297.5	169.6*	583.5	140.9*	422.8	127.5*	398.0	106.9*	300.4
Other	201.5*	338.8	139.8*	349.4	203.2*	474.7	196.5*	469.4	180.1*	453.1
Unknown	214.9*	...	209.7*	...	166.6*	...	187.0*	...	170.8*	...
Missing	175.0*	...	145.1*	...	198.1*	...	227.2*	...	143.9*	...
Region										
Northeast	224.5*	421.0	200.7*	413.2	218.0*	437.5	230.0*	461.3	222.0*	495.6
South	208.9*	448.1	194.9*	462.9	204.8*	496.2	214.4*	482.4	189.1*	453.9
▶ Midwest	186.2	372.3	173.3	363.9	179.3	361.1	182.0	355.6	142.5	336.9
West	176.4*	407.2	169.3*	468.1	178.8*	418.0	209.8*	459.1	191.8*	419.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-12. Nationally representative physician office visits for male urethral stricture listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	1,212,859
Age	
40-44	42,882
45-54	75,157
55-64	205,473
65-74	462,739
75-84	313,435
85+	113,173
Race/ethnicity	
White	1,135,916
Black	76,943
Region	
Northeast	285,111
South	378,696
Midwest	292,957
West	256,095

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 6-13. Emergency room visits by Medicare beneficiaries for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,160)		2003 (N=1,220)		2004 (N=1,000)		2005 (N=920)		2006 (N=920)		2007 (N=960)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	7.4	7.9	7.6	8.0	6.1	6.7	5.6	6.9	5.7	6.2	5.9	6.2
Under 65/65+												
< 65 Years	4.1**	4.1	4.5**	4.5	5.3**	5.3	1.9**	1.9	2.8**	2.8	4.1**	4.1
▶ 65+ Years	8.5	7.9	8.6	8.0	6.4	6.7	6.9	6.9	6.7	6.2	6.6	6.2
Age												
▶ 65-69	2.8*		4.8*		4.7*		4.6*		5.2*		6.3*	
70-74	6.5**		8.4**		5.2**		2.6**		8.2**		4.1**	
75-79	14.7**		7.2**		5.6**		5.8**		5.9**		3.5**	
80-84	5.1**		11.1**		7.2**		13.1**		6.0**		8.6**	
85-89	19.1**		15.8**		20.3**		20.2**		4.9**		14.3**	
90-94	42.8**		32.6**		...		22.7**		15.0**		14.7**	
95-97	53.9**		103.8**		...		...		95.6**		93.3**	
98+	...		...		42.9**		...		...		0.0**	
Race/ethnicity												
▶ White	6.6	6.5	6.9	7.1	6.3	7.0	5.3	6.8	5.4	6.1	5.4	5.4
Black	14.6**	27.1	11.6**	12.9	5.0**	5.8	7.5**	9.6	6.3**	6.6	7.7**	11.2
Hispanic	...	...	...	...	6.0**	...	...	...	6.0**	...	5.9**	49.6
Asian	...	...	26.5**	67.0	...	...	...	...	7.8**	...	7.4**	121.8
Other	14.3**	179.5	13.0**	94.5	...	...	17.4**	86.7	5.6**	30.4	16.1**	50.1
Unknown	76.0**	...	...	...	73.0**	...	...	...	82.9**	...	...	...
Region												
▶ Northeast	5.3*	4.8	9.1*	11.0	2.6*	3.6	4.5*	10.5	7.2*	6.5	5.3*	8.4
South	6.9**	7.4	6.1**	5.4	7.2**	7.7	5.6**	6.3	6.0**	7.2	6.0**	5.0
Midwest	10.2**	12.1	10.5**	10.8	9.4**	9.6	7.4**	9.1	4.0**	5.2	6.6**	7.3
West	6.8**	9.4	5.1**	8.0	2.8**	4.3	4.1**	8.1	5.5**	6.5	5.4**	7.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-14. Emergency room visits by privately insured individuals for male urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=100)		2003 (N=124)		2004 (N=63)		2005 (N=58)		2006 (N=64)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.3	3.8	2.6	4.5	1.3	2.7	1.1	2.5	1.3	3.3
Age										
18-24	0.2**		1.1**		0.5**		0.1**		0.3**	
25-34	1.5**		1.1**		0.3**		0.7**		0.2**	
35-39	2.7**		1.3**		1.2**		...		0.2**	
40-44	2.3**		2.1**		0.2**		0.2**		0.3**	
45-54	1.7**		2.6**		1.5*		0.4**		1.0**	
55-64	4.0*		6.3		2.6*		2.5**		3.9**	
▶ 65-74	7.1*		9.8*		3.1*		7.4*		11.6*	
75-84	9.3**		3.7**		10.6**		6.6**		...	
85+	...		4.6**		8.6**		9.9**		...	
Race/ethnicity										
▶ White	2.5	4.2	1.6	2.7	1.0	2.5	0.7*	1.8	0.8*	1.9
Black	3.5**	53.6	7.2**	14.0	4.9**	9.5	3.5**	17.0	9.1**	42.6
Hispanic	...	...	3.4**	15.0	1.0**	9.2	2.8**	27.9	2.4**	10.7
Asian	...	...	...	...	...	...	0.7**	...	...	...
Other	14.1**	69.0	...	...	...	...	...	...	...	...
Unknown	...	...	4.5**	...	0.3**	...	0.3**	...	0.3**	...
Missing	2.5*	...	3.3*	...	2.3**	...	2.2**	...	1.5**	...
Region										
Northeast	3.3*	5.0	3.5*	7.1	0.4**	2.4	...	...	...	...
South	1.9*	3.1	3.0	5.3	1.6	3.5	1.7	4.1	2.3*	7.2
▶ Midwest	3.0	5.2	2.5	4.7	1.7*	3.5	1.3*	3.0	0.7*	0.9
West	1.5**	2.8	0.5**	1.5	0.2**	1.3	...	...	0.1**	1.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-15. Use of retrograde urethrocytography, or injection procedure for urethrogram among male Medicare beneficiaries with urethral stricture, in any setting, rate,^a age-adjusted rate^b

	2002 (N=1,660)		2003 (N=1,760)		2004 (N=1,580)		2005 (N=1,600)		2006 (N=1,440)		2007 (N=1,540)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1,481	2,051	1,497	1,720	1,371	1,852	1,355	1,536	1,255	1,556	1,357	1,727
Age												
▶ 65-69	3,880		1,946*		2,951*		1,443*		2,144*		2,336*	
70-74	900.1**		1,538**		1,809**		1,476**		2,095**		2,028**	
75-79	1,531**		1,564**		1,317**		2,217**		925.2**		1,013**	
80-84	858.8**		2,205**		972.8**		1,042**		702.1**		1,647**	
85-89	1,797**		950.9**		687.3**		1,188**		841.8**		502.5**	
90-94	1,596**		1,554**		...		1,435**		2,597**		952.4**	
Race/ethnicity												
▶ White	1,489	1,908	1,445	1,626	1,368	1,805	1,349	1,486	1,225	1,469	1,252	1,551
Black	1,431**	4,780	1,378**	1,941	1,560**	2,482	1,440**	1,785	1,303**	1,662	2,253**	2,899
Hispanic	2,020**	8,052	5,691**	20,044	...	...	793.7**	5,882	833.3**	8,333	909.1**	5,263
Asian	...	...	1,852**	16,667	...	...	...	...	2,222**	11,111	1,923**	11,111
Other	1,852**	9,091	...	...	2,703**	6,254	2,564**	6,687	1,739**	4,184	1,681**	7,407
Unknown	...	...	...	...	...	...	...	...	4,000**	...	...	...
Region												
▶ Northeast	885.0*	1,346	1,148*	1,097	1,054*	1,356	1,536*	1,726	1,098*	1,240	611.9*	1,310
South	2,083*	3,121	2,033*	2,349	1,264*	1,740	1,177**	1,270	1,568*	2,099	1,642*	2,236
Midwest	857.1**	1,366	831.6**	1,141	1,577**	2,119	1,541**	1,846	827.6**	1,013	1,541**	1,749
West	1,711**	2,461	1,641**	2,397	1,754**	3,121	1,278**	1,940	1,365**	2,106	1,299**	2,324

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for males with urethral stricture.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-16. Male Medicare beneficiaries with a diagnosis of urethral stricture and urinary incontinence in the same year, count,^a percent^b

	2002		2003		2004		2005		2006		2007	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total ^c	18,340	16.4%	19,280	16.4%	20,940	18.2%	21,620	18.3%	21,740	19.0%	22,040	19.4%
Age												
65-69	2,520	15.8%	2,940	15.9%	3,320	18.1%	3,160	16.3%	3,160	17.8%	3,100	17.2%
70-74	3,760	16.9%	3,660	16.6%	3,880	16.7%	3,880	16.8%	3,980	18.1%	4,340	20.0%
75-79	4,120	16.6%	4,340	16.2%	5,080	19.7%	5,340	21.1%	5,220	20.1%	5,080	21.4%
80-84	4,320	20.6%	4,700	22.5%	4,460	21.7%	5,240	24.8%	4,760	23.9%	4,880	23.6%
85-89	2,480	20.3%	2,580	20.4%	3,140	27.0%	2,800	23.8%	3,420	28.8%	3,140	26.3%
90-94	1,020	27.1%	860	22.3%	880	22.4%	940	22.5%	1,020	22.1%	1,280	30.5%
95-97	100	13.9%	180	30.0%	160	30.8%	260	33.3%	140	26.9%	160	20.0%
98+	20	16.7%	20	11.1%	20	11.1%	...	...	40	22.2%	60	33.3%
Race/ethnicity												
White	15,860	16.9%	16,140	16.4%	17,400	18.0%	18,220	18.3%	18,380	19.1%	19,140	20.0%
Black	1,760	14.0%	1,980	15.2%	2,200	17.2%	2,160	17.3%	1,980	16.1%	1,980	17.2%
Hispanic	240	12.1%	460	18.7%	520	25.2%	600	23.8%	540	22.5%	340	15.5%
Asian	200	23.8%	300	27.8%	400	36.4%	180	19.6%	320	35.6%	140	13.5%
Other	220	10.2%	360	15.9%	340	15.3%	340	14.5%	400	17.4%	360	15.1%
Unknown	60	12.5%	40	10.0%	80	14.8%	120	25.0%	120	24.0%	80	16.7%
Region												
Northeast	4,060	18.0%	4,300	17.6%	4,660	20.5%	4,660	19.9%	4,600	19.4%	4,220	18.4%
South	7,380	16.4%	7,440	15.8%	8,140	17.2%	8,600	18.1%	8,600	18.7%	8,960	19.9%
Midwest	4,320	15.4%	4,500	15.6%	4,760	17.1%	5,320	17.8%	5,640	19.4%	5,380	18.8%
West	2,580	15.8%	3,040	17.8%	3,380	19.8%	3,040	17.7%	2,900	18.0%	3,480	20.5%

... Data unavailable.

^aUnweighted counts multiplied by 20 to arrive at counts in the table.

^bPercent of males with urethral stricture who also have a diagnosis of urinary incontinence.

^cPersons of other races, unknown race and ethnicity, and other region are included in the totals.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 6-17. Male Medicare beneficiaries with a diagnosis of urethral stricture and urinary tract infection in the same year, count,^a percent^b

	2002		2003		2004		2005		2006		2007	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Total ^c	54,580	48.7%	57,600	49.0%	56,060	48.7%	57,320	48.5%	56,640	49.4%	57,300	50.5%
Age												
65-69	7,540	47.2%	8,660	46.8%	9,040	49.4%	9,620	49.6%	9,280	52.4%	9,420	52.4%
70-74	11,640	52.4%	11,200	50.7%	11,160	48.1%	11,320	49.1%	11,220	51.1%	11,560	53.3%
75-79	12,740	51.3%	14,080	52.4%	13,220	51.2%	13,240	52.4%	14,020	54.0%	12,280	51.8%
80-84	12,160	58.0%	12,680	60.8%	11,940	58.1%	12,700	60.1%	11,240	56.4%	12,520	60.7%
85-89	7,020	57.4%	7,640	60.5%	7,340	63.1%	6,940	58.9%	7,000	58.9%	7,380	61.8%
90-94	2,860	76.1%	2,780	72.0%	2,780	70.9%	2,860	68.4%	3,300	71.4%	3,260	77.6%
95-97	560	77.8%	460	76.7%	420	80.8%	540	69.2%	440	84.6%	620	77.5%
98+	60	50.0%	100	55.6%	160	88.9%	100	62.5%	140	77.8%	260	144.4%
Race/ethnicity												
White	45,420	48.3%	47,500	48.3%	46,360	48.1%	48,580	48.9%	47,360	49.2%	47,960	50.1%
Black	6,420	51.0%	6,720	51.5%	6,760	52.7%	5,500	44.0%	6,080	49.5%	6,200	53.7%
Hispanic	1,120	56.6%	1,480	60.2%	1,100	53.4%	1,380	54.8%	1,140	47.5%	1,120	50.9%
Asian	620	73.8%	600	55.6%	640	58.2%	520	56.5%	580	64.4%	640	61.5%
Other	860	39.8%	980	43.4%	900	40.5%	1,100	47.0%	1,280	55.7%	1,120	47.1%
Unknown	140	29.2%	320	80.0%	300	55.6%	240	50.0%	200	40.0%	260	54.2%
Region												
Northeast	11,280	49.9%	11,960	49.0%	10,680	46.9%	11,920	50.9%	12,240	51.7%	12,040	52.6%
South	22,000	48.8%	23,400	49.6%	23,920	50.4%	23,220	48.8%	23,420	51.0%	22,300	49.5%
Midwest	12,880	46.0%	13,300	46.1%	13,020	46.7%	13,740	46.0%	13,380	46.1%	14,320	50.1%
West	8,420	51.5%	8,940	52.4%	8,440	49.4%	8,440	49.0%	7,600	47.1%	8,640	51.0%

^aUnweighted counts multiplied by 20 to arrive at counts in the table.

^bPercent of males with urethral stricture who also have a diagnosis of urinary tract infection.

^cPersons of other races, unknown race and ethnicity, and other region are included in the totals.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 6-18. Nationally representative inpatient stays for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=532)		2003 (N=509)		2004 (N=387)		2005 (N=363)		2006 (N=364)		2007 (N=367)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Age												
18-24	†		†		†		†		†		...	
25-34	0.3		0.3		†		†		0.3		†	
35-39	0.3		0.4		†		†		†		†	
40-44	0.5		0.3		†		0.3		0.3		†	
45-54	0.3		0.4		0.3		0.3		0.4		0.4	
55-64	0.5		0.5		0.7		0.4		0.2		0.4	
▶ 65-74	0.8		0.8		0.7		0.4		0.5		0.5	
75-84	1.0*		1.0*		0.6*		0.8*		0.5*		1.0*	
85+	2.2*		†		1.4*		1.5*		†		†	
Race/ethnicity												
▶ White	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Black	†	0.6	0.4*	0.4	0.3*	0.7	†	0.9	†	0.4	0.3*	0.5
Hispanic	†	†	0.3*	1.1	†	0.6	†	0.5	†	0.5	0.3*	0.5
Asian	...	...	†	0.8	†	0.8	...	...	...	...	†	0.7
Other	...	...	†	1.3	...	...	†	1.3	†	4.0	...	...
Region												
Northeast	0.4	0.4	0.6	0.6	0.4	0.7	0.4	0.5	0.3	0.4	0.3	0.5
South	0.6	0.6	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5
▶ Midwest	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.6
West	0.2*	0.4	0.2*	0.4	†	0.3	0.1*	0.2	†	0.3	0.1*	0.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 6-19. Inpatient stays by privately insured individuals for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=204)		2003 (N=178)		2004 (N=137)		2005 (N=172)		2006 (N=114)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.5	7.2	3.5	5.3	2.7	4.0	3.1	5.3	2.1	3.6
Age										
18-24	1.5**		1.3**		1.9**		1.0**		0.1**	
25-34	2.8**		2.9*		1.4**		1.3**		1.3**	
35-39	3.0**		3.3**		2.0**		2.4**		2.2*	
40-44	2.6**		2.2**		2.6*		3.1**		2.0*	
45-54	5.3*		3.9*		3.5		3.6		2.6	
55-64	11.2		5.5*		3.4*		5.5		4.3	
▶ 65-74	11.2*		9.2*		4.6*		5.9*		3.4*	
75-84	6.5**		7.5**		4.5**		12.4**		8.1**	
85+	...		7.4**		13.9**		5.6**		...	
Race/ethnicity										
▶ White	4.9	6.9	3.7	5.4	2.7	3.9	3.3	5.8	2.1	3.4
Black	2.4**	39.6	3.3**	7.0	2.7**	3.7	2.2**	5.7	1.6**	2.5
Hispanic	1.8**	3.5	4.3**	14.5	2.9**	5.3	2.9**	6.8	2.3**	4.6
Asian	1.4**	12.1	2.0**	11.3	0.7**	...	1.3**	5.4	0.6**	3.8
Other	...	...	3.7**	...	5.2**	16.6	...	...	...	...
Unknown	5.1**	...	3.3**	...	2.7**	...	1.6**	...	3.1**	...
Missing	4.6*	...	3.3*	...	2.4**	...	4.0**	...	2.6**	...
Region										
Northeast	3.0*	5.2	2.7*	4.1	1.5**	3.1	1.0**	1.6	1.4*	4.2
South	5.0	8.2	4.5*	7.5	3.0	3.7	3.7	6.2	2.7	4.0
▶ Midwest	4.5	6.9	3.4	4.5	2.9	5.0	3.6	5.7	2.1	3.1
West	4.2**	6.4	1.1**	5.8	1.8**	2.8	2.1**	4.6	1.3**	4.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-20. Hospital outpatient visits by Medicare beneficiaries for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=700)		2003 (N=800)		2004 (N=820)		2005 (N=640)		2006 (N=720)		2007 (N=460)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.5	3.7	3.9	4.6	4.0	4.4	3.1	3.2	3.6	3.7	2.3*	2.2
Under 65/65+												
< 65 Years	3.6*	3.6	0.6**	0.6	3.2**	3.2	2.6**	2.6	3.7*	3.7	2.0*	2.0
▶ 65+ Years	3.5*	3.7	4.6	4.6	4.1	4.4	3.2*	3.2	3.6*	3.7	2.4*	2.2
Age												
▶ 65-69	3.0*		4.8*		3.3*		3.3*		5.2*		1.9*	
70-74	5.8**		6.3**		2.7**		2.7**		4.0**		1.8**	
75-79	2.3**		2.3**		5.7**		4.7**		3.1**		4.5**	
80-84	4.6**		3.0**		1.5**		1.4**		2.2**		0.0**	
85-89	2.5**		7.4**		10.9**		3.7**		2.4**		2.4**	
90-94	0.0**		8.2**		2.7**		5.3**		0.0**		5.3**	
95-97	...		...		12.3**		...		12.6**		12.6**	
Race/ethnicity												
▶ White	3.4*	3.5	3.7	4.2	3.1*	3.5	2.4*	2.6	3.1*	3.1	1.9*	2.1
Black	4.0**	18.4	3.9**	11.0	7.7**	11.6	5.8**	14.9	4.0**	10.1	6.1**	11.4
Hispanic	5.7**	46.8	5.5**	42.8	5.3**	...	5.2**	...	5.3**	32.1	...	...
Asian	...	...	6.6**	28.2	0.0**	0.0	...	...	...	...	...	...
Other	6.7**	24.5	12.3**	25.1	23.6**	46.2	16.8**	36.5	16.7**	51.7	5.5**	...
Unknown	...	...	...	...	43.2**	...	47.2**	...	100.5**	...	...	...
Region												
▶ Northeast	3.9*	5.6	1.9*	2.9	4.4*	3.1	2.0*	1.1	3.0*	3.9	2.0*	3.0
South	3.1**	3.4	4.6**	5.5	2.8**	2.9	2.3**	2.3	2.6**	2.4	1.6**	2.0
Midwest	3.1**	2.7	4.2**	4.0	3.8**	4.9	5.8**	7.9	5.5**	5.6	3.2**	4.5
West	4.5**	5.6	4.3**	10.3	6.6**	14.8	2.4**	5.4	3.6**	10.3	3.0**	5.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-21. Hospital outpatient visits by privately insured individuals for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,248)		2003 (N=1,085)		2004 (N=1,030)		2005 (N=997)		2006 (N=901)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	27.5	36.9	21.4	28.6	20.0	28.5	18.2	24.9	17.0	27.0
Age										
18-24	12.0*		10.5*		12.2*		10.0*		5.8*	
25-34	20.9*		15.8*		11.2*		12.2*		10.7*	
35-39	27.7*		19.8*		14.5*		15.2*		12.9*	
40-44	27.8*		23.4*		22.6*		19.4*		17.0*	
45-54	31.3*		25.3*		24.2*		20.9*		22.0*	
55-64	41.7*		30.5*		31.8		26.1		27.3*	
▶ 65-74	51.9		42.6		38.9		28.0		37.0	
75-84	37.1*		27.2**		30.8*		31.4*		40.3**	
85+	...		17.4**		25.5**		43.3**		34.7**	
Race/ethnicity										
▶ White	28.9	38.4	23.5	29.0	21.0	27.4	19.3	26.3	18.4	28.4
Black	35.3*	57.0	25.1*	39.4	20.7*	34.5	14.4*	18.3	14.7*	25.5
Hispanic	24.7*	37.9	25.4*	49.5	18.2*	31.5	17.1*	21.3	11.6*	25.5
Asian	5.8**	12.1	12.8**	26.9	7.0**	12.9	6.4**	10.8	8.8**	5.5
Other	15.8**	170.6	18.4**	42.7	15.7**	27.9	7.3**	26.6	19.1**	38.4
Unknown	28.7*	...	26.5*	...	19.4*	...	14.6*	...	15.6*	...
Missing	26.9*	...	17.8*	...	19.1*	...	19.9*	...	16.7*	...
Region										
Northeast	15.1*	18.2	14.9*	14.0	10.4*	12.1	12.1*	15.1	11.3*	22.2
South	30.6	39.0	23.5	29.7	23.0	33.1	20.8	26.6	19.1	32.3
▶ Midwest	32.0	42.4	24.2	33.6	23.8	33.7	21.3	30.6	19.0	31.1
West	15.6*	30.7	13.3*	23.4	9.0*	12.6	8.7*	11.7	11.1*	15.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-22. Ambulatory surgery center visits by Medicare beneficiaries for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,520)		2003 (N=4,240)		2004 (N=4,900)		2005 (N=3,780)		2006 (N=3,940)		2007 (N=3,380)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	34.4	35.3	34.9	38.1	39.5	42.1	30.7	31.3	33.9	36.6	30.0	30.9
Age												
▶ 65-69	28.7		37.6		40.6		33.1		39.5		30.2	
70-74	42.4*		36.9*		47.3*		26.9*		44.1*		30.0*	
75-79	37.4*		46.2*		41.9*		38.0*		30.3*		44.6*	
80-84	38.8*		28.9*		40.9*		34.8*		37.5*		20.2**	
85-89	28.5**		39.3*		37.6*		19.5**		26.9**		24.1**	
90-94	11.2**		19.1**		18.8**		21.2**		21.5**		18.7**	
95-97	...		24.8**		12.3**		12.2**		...		25.3**	
98+	14.3**		...		...		...		...		13.7**	
Race/ethnicity												
▶ White	34.7	35.5	34.8	38.4	40.9	43.0	31.6	31.5	35.1	37.2	31.3	32.0
Black	29.2**	29.3	39.1*	35.4	36.4*	44.7	28.8*	35.8	30.8*	40.1	28.5*	34.9
Hispanic	40.1**	53.5	33.0**	44.5	32.0**	50.6	25.9**	48.6	10.6**	64.2	5.2**	...
Asian	28.3**	48.1	6.6**	11.7	6.3**	28.8	...	...	23.3**	110.0	5.6**	29.3
Other	53.6**	61.6	36.8**	61.3	23.6**	39.3	28.0*	47.7	22.3**	56.0	32.7**	50.4
Unknown	...	...	89.3**	...	43.2**	...	94.3**	...	100.5*	...	...	...
Region												
▶ Northeast	20.2	21.5	20.9	24.1	22.4	24.6	22.1	24.3	20.2	20.6	13.2*	12.2
South	41.6*	40.7	43.7*	46.4	49.6*	54.7	37.7*	38.5	45.8*	49.2	36.6*	39.2
Midwest	48.9*	51.9	42.4*	45.4	49.9*	50.4	37.6*	39.5	40.6*	44.9	40.1*	42.1
West	11.0**	12.2	19.2*	23.8	19.9*	20.5	14.2*	14.4	12.1**	13.5	19.7*	17.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-23. Ambulatory surgery center visits by privately insured individuals for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=419)		2003 (N=424)		2004 (N=412)		2005 (N=482)		2006 (N=476)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.2	11.6	8.4	12.0	8.0	10.6	8.8	12.2	9.0	14.1
Age										
18-24	5.4		3.8**		4.9*		2.7**		3.9**	
25-34	6.2		6.4*		5.7*		6.3*		5.4*	
35-39	9.0		6.7*		6.7*		7.0*		5.4*	
40-44	8.1		9.0*		11.1		9.9*		9.6*	
45-54	12.0		10.0*		8.1		10.7*		11.9*	
55-64	16.3*		11.4		10.8		13.5		14.8	
▶ 65-74	7.7*		14.6*		11.8*		15.7		18.5*	
75-84	11.6**		22.5**		13.6**		15.3**		21.0**	
85+	...		5.0**		13.9**		3.8**		11.6**	
Race/ethnicity										
▶ White	10.3	12.5	9.3	13.2	7.9	10.9	9.3	11.7	9.5	13.9
Black	20.1**	29.8	7.1**	12.4	4.2**	6.7	4.7**	7.9	8.1**	16.3
Hispanic	9.7**	16.6	10.1**	15.5	11.5*	17.6	10.5*	16.6	9.1*	15.5
Asian	5.8**	25.6	2.0**	5.7	2.1**	4.2	3.2**	8.9	6.3**	20.7
Other	5.3**	56.9	3.7**	28.6	5.2**	...	4.8**	78.8	14.3**	53.6
Unknown	6.7**	...	9.4**	...	9.5*	...	7.7**	...	8.1**	...
Missing	8.1*	...	7.4*	...	8.3*	...	8.9*	...	7.5*	...
Region										
Northeast	5.4**	8.6	4.6**	8.4	4.2**	6.7	4.6**	7.5	4.8**	7.7
South	13.1*	15.7	10.9*	14.7	9.4	12.5	10.8	13.9	12.1*	19.9
▶ Midwest	8.1	10.2	8.7	13.2	9.8	12.8	10.4	14.8	9.3	14.7
West	2.8**	6.7	2.5**	5.7	2.1**	4.1	2.8**	4.7	2.4**	5.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-24. Nationally representative ambulatory surgery center visits for female urethral stricture listed as primary diagnosis, count, rate^a

	Count	Rate
Total	15,403	13.6
Age		
18-24	359	2.6
25-34	3,823	19.5
35-39	1,380	13.2
40-44	632	5.6
45-54	2,898	13.3
55-64	2,013	12.5
▶ 65-74	1,883	18.8
75-84	1,024	13.4*
85+	1,391	52.3*

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 6-25. Physician office visits by Medicare beneficiaries for female urethral stricture listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=63,640)		2003 (N=63,740)		2004 (N=60,760)		2005 (N=60,960)		2006 (N=56,240)		2007 (N=54,720)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	319.0	354.9	312.5	351.1	294.7	331.6	295.6	338.5	279.7	321.3	274.6	322.7
Under 65/65+												
< 65 Years	158.3*	158.3	142.2*	142.2	163.9*	163.9	147.4*	147.4	128.9*	128.9	112.0*	112.0
▶ 65+ Years	351.5	354.9	348.6	351.1	323.3	331.6	329.6	338.5	315.2	321.3	315.0	322.7
Age												
▶ 65-69	273.7		269.7		242.8		251.6		218.5		203.2	
70-74	345.9*		344.5*		341.1*		322.8*		314.4*		346.6*	
75-79	407.6*		426.6*		368.8*		385.0*		362.8*		387.7*	
80-84	421.2*		410.6*		392.5*		435.4*		419.2*		397.8*	
85-89	367.0*		328.7*		359.1*		346.4*		353.6*		322.8*	
90-94	333.3*		346.7*		241.6*		243.9*		255.3*		248.6*	
95-97	240.4*♦		235.9*♦		196.2*♦		85.7*♦		327.0*♦		265.5*♦	
98+	85.8*♦		28.3*♦		...		41.2*♦		27.2*♦		82.0*♦	
Race/ethnicity												
▶ White	335.7	369.8	330.2	369.8	309.2	345.0	309.4	348.9	299.5	339.7	289.4	336.7
Black	195.3*	226.3	202.1*	214.5	191.4*	217.7	219.5*	291.5	146.0*	187.3	181.9*	233.5
Hispanic	211.8*	239.6	208.7*	272.4	213.2*	229.1	227.9*	199.8	238.5*	334.1	201.7*	263.4
Asian	155.7*♦	196.3	145.9*♦	186.0	219.6*	257.5	252.7*	314.6	186.2*	185.5	194.8*	214.9
Other	375.5*	518.9	300.5*	380.9	336.6*	421.9	195.9*	216.4	217.1*	270.3	240.1*	244.5
Unknown	905.7*♦	...	580.6*♦	...	388.8*♦	...	188.7*♦	...	351.8*♦	...	382.5*♦	...
Region												
▶ Northeast	340.3	371.3	315.7	347.9	311.1	352.5	302.8	345.1	281.8	318.6	296.2	353.9
South	361.2*	401.9	362.8*	400.8	343.8*	382.5	360.2*	408.6	327.9*	376.8	322.6*	373.7
Midwest	260.8*	286.1	250.3*	284.8	225.4*	254.5	216.9*	254.2	214.3*	249.9	208.4*	243.8
West	281.8*	338.1	285.7*	345.7	265.2*	308.3	256.4*	300.5	264.2*	306.0	236.6*	284.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

♦Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-26. Physician office visits by privately insured individuals for female urethral stricture listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,151)		2003 (N=8,272)		2004 (N=8,067)		2005 (N=8,740)		2006 (N=7,216)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	179.6	323.7	163.4	309.6	156.3	297.0	159.7	287.2	135.9	267.4
Age										
18-24	51.3*		44.2*		33.1*		33.8*		26.3*	
25-34	81.7*		70.7*		63.6*		65.1*		54.1*	
35-39	110.9*		96.4*		89.6*		90.8*		88.6*	
40-44	147.8*		139.7*		139.4*		130.9*		125.7*	
45-54	214.5*		198.9*		184.9*		191.2*		173.4*	
55-64	379.6*		327.9*		309.4*		303.5*		277.1*	
▶ 65-74	493.9		464.7		467.2		412.2		397.4	
75-84	562.1*		577.3*		529.2*		562.8*		561.6*	
85+	...		493.5*		519.2*		393.4*		258.1*	
Race/ethnicity										
▶ White	212.2	359.7	187.7	336.4	157.8	299.1	161.5	288.1	142.5	275.9
Black	153.4*	229.0	124.0*	224.9	101.4*	175.3	120.8*	186.4	105.8*	196.3
Hispanic	233.6*	478.0	210.4*	448.5	183.1*	347.0	173.9*	311.3	159.2*	334.4
Asian	98.3*	191.0	127.0*	326.8	98.0*	211.3	130.6*	302.0	101.0*	209.9
Other	211.2*	467.3	99.5**	177.8	112.9*	193.9	109.0*	256.2	98.0*	225.9
Unknown	198.4*	...	181.8*	...	178.9*	...	149.7*	...	134.3*	...
Missing	153.3*	...	131.0*	...	158.5*	...	172.2*	...	111.2*	...
Region										
Northeast	177.6*	307.5	153.7*	283.7	173.3*	313.4	171.7*	307.8	144.7*	288.0
South	210.6*	360.5	200.8*	361.6	181.4*	335.6	193.4*	352.1	163.3*	306.2
▶ Midwest	164.7	301.9	136.4	266.8	136.5	262.4	127.0	219.7	109.9	235.3
West	121.2*	250.8	117.1*	276.3	107.5*	243.1	119.5*	252.1	100.9*	208.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-27. Nationally representative physician office visits for female urethral stricture listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	892,763
Age	
40-44	34,345
45-54	177,612
55-64	160,767
65-74	327,340
75-84	163,725
85+	28,974
Race/ethnicity	
White	790,371
Black	67,273
Hispanic	35,119
Region	
Northeast	134,615
South	544,890
Midwest	156,455
West	56,803

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 6-28. Emergency room visits by privately insured individuals for female urethral stricture listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=40)		2003 (N=155)		2004 (N=92)		2005 (N=72)		2006 (N=74)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.9	1.2	3.1	4.3	1.8	3.4	1.3	2.6	1.4	3.3
Age										
18-24	0.5*		0.7**		...		...		...
25-34	0.5*		1.8**		0.3*		...		0.3**	
35-39	0.9*		2.6*		0.3**		...		0.3**	
40-44	0.9*		2.0**		0.9**		0.5**		...	
45-54	1.2*		5.0		4.3*		2.0*		2.3*	
55-64	1.4*		6.4		5.3*		5.0		5.4*	
▶ 65-74	0.6*		4.3*		...		2.5*		2.1*	
75-84	2.2**		1.9**		0.9**		...		...
85+	...		2.5**		...		...		...
Race/ethnicity										
▶ White	0.5*	1.4	2.5	3.1	1.2	2.7	0.5*	0.9	0.3*	0.9
Black	0.8**	...	3.3**	6.0	1.2**	3.8	3.2**	10.0	1.6**	16.0
Hispanic	0.6**	...	8.2**	14.6	5.9**	16.2	3.4**	12.6	3.7**	13.0
Asian	...	...	1.0**	...	...	...	...	...	1.3**	14.6
Other	...	...	...	...	...	...	...	...	2.4**	23.3
Unknown	...	...	2.0**	...	1.5**	...	1.4**	...	1.4**	...
Missing	1.2**	...	3.4*	...	3.0**	...	3.8**	...	5.3*	...
Region										
Northeast	4.2**	5.8	3.3**	6.3	...	...	0.2*	4.1	...	...
South	0.8**	1.2	5.7*	8.3	3.9*	8.2	2.9*	5.6	3.1*	7.4
▶ Midwest	0.3*	2.0	0.5*	1.3	0.3*	1.0	0.2*	0.9	0.1*	0.5
West	...	...	0.6**	2.3	...	...	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-29. Inpatient stays by privately insured individuals for hypospadias listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=165)		2003 (N=168)		2004 (N=154)		2005 (N=173)		2006 (N=156)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.7	...	2.5	...	2.3	...	2.5	...	2.2	...
Age										
▶ 0-2	37.8		34.4		36.6		42.5		34.6	
3-10	2.6**		2.1**		2.0**		1.3**		2.6**	
11-17	1.3**		0.3**		0.7**		0.4**		0.7**	
18-24	1.5**		1.0**		0.5**		0.3**		0.4**	
25-34	0.9**		1.6**		0.8**		1.0**		0.8**	
35-39	0.2**		1.3**		0.5**		0.3**		0.5**	
40-44	...		0.5**		0.3**		0.3**		0.6**	
45-54	0.3**		0.3**		0.1**		0.4**		...	
55-64	0.8**		0.5**		0.5**		0.6**		0.4**	
65-74	...		1.1**		0.5**		1.3**		1.2**	
75-84	3.1**		2.5**		...		1.9**		...	
Race/ethnicity										
▶ White	3.1	...	3.0	...	2.6	...	2.5	...	2.1	...
Black	6.0**	...	1.6**	...	1.1**	...	3.6**	...	1.9**	...
Hispanic	1.6**	...	2.6**	...	2.3**	...	2.3**	...	2.7**	...
Asian	4.1**	...	1.4**	...	0.5**	...	1.9**	...	2.8**	...
Other	3.1**	...	6.4**	...	1.5**	...	4.3**	...	2.8**	...
Unknown	1.3**	...	3.2**	...	2.1**	...	1.7**	...	2.0**	...
Missing	2.5*	...	1.9*	...	1.5**	...	2.2**	...	2.5**	...
Region										
Northeast	5.0*	...	4.2*	...	3.7**	...	4.1*	...	3.3**	...
South	2.3	...	1.8*	...	1.9	...	2.6	...	2.3	...
▶ Midwest	2.2	...	2.7	...	1.8	...	1.7	...	1.9	...
West	3.8**	...	3.0**	...	3.5*	...	2.4**	...	2.0**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-30. Hospital outpatient visits by privately insured individuals for hypospadias listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,455)		2003 (N=1,537)		2004 (N=1,380)		2005 (N=1,455)		2006 (N=1,539)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	24.2		23.1		20.4		20.6		22.1	
Age										
▶ 0-2	378.0		381.8		359.2		375.4		378.6	
3-10	34.9*		34.1*		26.3*		28.2*		31.4*	
11-17	9.4*		7.0*		5.6*		6.4*		10.2*	
18-24	1.5**		1.6**		1.3**		1.5**		2.2**	
25-34	1.3**		1.4**		0.9**		0.5**		1.5**	
35-39	1.3**		1.0**		1.5**		0.3**		0.6**	
40-44	0.7**		0.5**		0.6**		...		0.3**	
45-54	0.6**		0.7**		0.8**		0.6**		0.7**	
55-64	0.6**		0.5**		0.7**		1.3**		0.1**	
65-74	0.6**		0.5**		...		0.9**		...	
75-84	...		...		...		0.9**		...	
Race/ethnicity										
▶ White	26.6	...	26.2	...	21.8	...	21.6	...	22.5	...
Black	20.3**	...	23.1*	...	12.5*	...	12.3*	...	17.8*	...
Hispanic	22.9*	...	16.9*	...	11.5*	...	15.1*	...	17.3*	...
Asian	24.8**	...	21.7*	...	23.4*	...	18.3*	...	25.5*	...
Other	9.2**	...	25.8**	...	19.9**	...	11.4**	...	46.3*	...
Unknown	21.1*	...	27.6*	...	27.9*	...	19.6*	...	21.8*	...
Missing	23.0*	...	19.6*	...	18.1*	...	23.6*	...	22.6*	...
Region										
Northeast	25.1	...	25.6	...	21.0	...	22.9	...	25.2	...
South	21.1*	...	19.5*	...	17.7*	...	17.2*	...	19.3*	...
▶ Midwest	25.4	...	25.2	...	22.7	...	23.3	...	22.7	...
West	30.3*	...	27.5*	...	23.9*	...	23.7*	...	27.3*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-31. Nationally representative hospital outpatient visits for hypospadias listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	48,510
Age	
0-2	34,433
3-10	4,093
11-17	9,984
Race/ethnicity	
White	35,225
Black	10,546
Hispanic	2,739
Region	
Northeast	2,512
South	23,575
Midwest	18,358
West	4,065

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 6-32. Ambulatory surgery center visits by privately insured individuals for hypospadias listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=251)		2003 (N=263)		2004 (N=265)		2005 (N=256)		2006 (N=274)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.2		3.9		3.9		3.6		3.9	
Age										
0-2	68.7		67.5		70.0		69.6		66.6	
3-10	4.5*		5.2*		5.1*		3.6*		5.7*	
11-17	1.2**		1.1**		1.4**		1.1**		2.2**	
18-24	...		0.6**		...		0.1**		0.3**	
25-34	0.5**		...		...		0.1**		0.1**	
35-39	0.5**		0.3**		0.5**		0.2**		0.2**	
40-44	0.2**		...		...		0.3**		0.2**	
45-54	0.1**		0.1**		...		0.2**		0.2**	
55-64	0.2**		...		...		...		...
▶ 65-74	...		...		...		...		...
Race/ethnicity										
▶ White	5.4	...	4.8	...	4.1	...	3.9	...	4.1	...
Black	3.8**	...	1.0**	...	2.9**	...	1.8**	...	3.9**	...
Hispanic	3.2**	...	1.3**	...	2.0**	...	1.5**	...	2.2**	...
Asian	3.1**	...	2.2**	...	3.1**	...	3.4**	...	4.6**	...
Other	9.2**	...	10.7**	...	6.1**	...	5.7**	...	7.0**	...
Unknown	4.0**	...	6.4**	...	5.6**	...	4.4**	...	4.4**	...
Missing	3.3*	...	3.2*	...	3.8*	...	3.6*	...	3.7*	...
Region										
Northeast	6.3*	...	8.3**	...	8.6*	...	7.3*	...	8.8*	...
South	2.9*	...	2.8**	...	2.3*	...	1.9*	...	2.5*	...
▶ Midwest	4.4	...	4.0*	...	4.5	...	3.8	...	4.0	...
West	6.1*	...	3.8**	...	4.0*	...	5.8*	...	4.5*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-33. Nationally representative ambulatory surgery center visits for hypospadias listed as primary diagnosis, count, rate^a

	Count	Rate
Total	14,568	38.5

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 6-34. Physician office visits by Medicare beneficiaries for hypospadias listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,640)		2003 (N=1,680)		2004 (N=1,440)		2005 (N=1,700)		2006 (N=1,340)		2007 (N=1,040)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	10.5	0.0	10.5	11.1	8.8	10.2	10.3	9.5	8.2	7.7	6.4	6.6
Under 65/65+												
< 65 Years	12.4**	12.4	8.9**	8.9	5.3**	5.3	13.0**	13.0	9.4**	9.4	5.9*	5.9
▶ 65+ Years	9.9	9.8	11.0	11.1	10.0	10.2	9.4	9.5	7.9	7.7	6.6	6.6
Age												
▶ 65-69	6.6*		6.4*		9.3*		7.7*		7.8*		5.2*	
70-74	7.2**		14.9**		10.4**		7.9**		7.5**		6.9**	
75-79	9.8**		14.4**		13.7**		11.5**		5.9**		12.2**	
80-84	20.5**		13.6**		10.9**		8.3**		4.8**		3.7**	
85-89	10.9**		5.3**		2.5**		17.7**		17.3**		2.4**	
90-94	8.6**		...		...		15.1**		22.5**		7.3**	
95-97	107.8**		...		...		...		...		...
Race/ethnicity												
▶ White	11.4	10.7	9.5	9.9	9.7	10.7	10.5	9.0	8.2	8.4	6.9	7.4
Black	4.0**	21.4	10.3**	21.1	6.3**	13.5	12.5**	18.3	8.9**	20.5	5.1**	6.4
Hispanic	6.5**	...	55.9**	159.1	...	...	5.8**	33.0	12.0**	36.4	5.9**	...
Asian	...	...	...	...	...	...	7.8**	39.7	...	...	...	...
Other	14.3**	97.0	6.5**	...	...	...	...	...	...	...	...	...
Unknown	...	...	80.1**	...	...	...	...	...	165.7**	...	...	...
Region												
▶ Northeast	7.3*	12.1	10.4*	12.3	13.6*	15.3	15.5*	6.5	11.2*	9.9	5.9*	11.8
South	9.9*	9.5	7.4**	9.1	9.1**	12.3	10.0*	11.8	8.3**	9.0	7.9**	9.1
Midwest	7.7**	9.3	11.5**	10.1	6.4**	7.1	8.9**	9.8	6.5**	8.4	7.1**	9.6
West	19.7**	15.7	15.9**	18.8	6.3**	13.2	7.5**	18.5	7.6**	11.3	2.7**	5.6

... Data unavailable.

▶ Denotes reference group.

**Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 6-35. Physician office visits by privately insured individuals for hypospadias listed as any diagnosis, rate^a, age-adjusted rate^b

	2002 (N=2,813)		2003 (N=2,972)		2004 (N=2,802)		2005 (N=2,980)		2006 (N=2,795)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	46.7		44.6		41.5		42.2		40.2	
Age										
▶ 0-2	655.7		649.7		639.4		651.0		599.6	
3-10	59.0*		59.1*		54.4*		58.6*		58.3*	
11-17	23.9*		19.1*		13.5*		18.0*		21.1*	
18-24	6.4*		9.5*		8.1*		9.1*		8.3*	
25-34	8.5*		8.4*		7.0*		7.8*		6.6*	
35-39	10.1*		10.5*		6.4*		6.8*		4.3*	
40-44	5.7*		5.4*		7.1*		6.6*		7.9*	
45-54	6.6*		7.2*		5.1*		5.4*		5.3*	
55-64	7.4*		6.4*		7.7*		9.1*		6.6*	
65-74	7.1**		5.4**		5.6**		6.9**		7.4**	
75-84	9.3**		2.5**		9.5**		19.8**		1.8**	
85+	...		9.1**		21.6**		...		...
Race/ethnicity										
▶ White	52.9	...	49.0	...	43.2	...	43.5	...	41.4	...
Black	26.4*	...	28.8*	...	32.3*	...	23.9*	...	29.0*	...
Hispanic	45.5*	...	41.0*	...	32.7*	...	31.6*	...	28.5*	...
Asian	61.0*	...	43.4*	...	44.1*	...	38.0*	...	39.9*	...
Other	61.1**	...	88.0*	...	48.9*	...	37.1**	...	53.3*	...
Unknown	51.5*	...	62.2*	...	50.8*	...	45.1*	...	46.4*	...
Missing	42.2*	...	38.0*	...	36.9*	...	48.0*	...	41.9*	...
Region										
Northeast	68.3*	...	59.4*	...	54.9*	...	57.0*	...	48.9*	...
South	41.0*	...	37.4*	...	35.4*	...	36.1*	...	36.0*	...
▶ Midwest	45.4	...	48.2	...	45.9	...	43.5	...	41.8	...
West	51.7*	...	46.8*	...	39.6*	...	46.9*	...	43.5*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 6-36. Nationally representative physician office visits for hypospadias listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	603,226
Age	
0-2	476,082
3-10	114,083
11-17	13,061
Race/ethnicity	
White	519,249
Black	6,838
Hispanic	77,139
Region	
Northeast	165,867
South	211,721
Midwest	63,306
West	162,332

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 6-37. Nationally representative emergency room visits for hypospadias listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	3,392

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

CHAPTER 7

Perinatal Hydronephrosis

Ureterocele
Ureteropelvic Junction Obstruction
Posterior Urethral Valves
Vesicoureteral Reflux

Table 7-1. Codes used in the diagnosis and management of perinatal hydronephrosis**Vesicoureteral Reflux****Individuals with one or more of the following:***ICD-9 diagnosis codes*

593.7	Vesicoureteral reflux
593.70	Vesicoureteral reflux, unspecified or without reflux nephropathy
593.71	Vesicoureteral reflux with reflux nephropathy, unilateral
593.72	Vesicoureteral reflux with reflux nephropathy, bilateral
593.73	Other vesicoureteral reflux with reflux nephropathy NOS

CPT procedure codes

50660 ^a	Ureterectomy, total, ectopic ureter, combination abdominal, vaginal and/or perineal approach
50780 ^a	Ureteroneocystostomy; anastomosis of single ureter to bladder
50781 ^a	Ureteroneocystostomy
50782	Ureteroneocystostomy; anastomosis of duplicated ureter to bladder
50783	Ureteroneocystostomy; with extensive ureteral tailoring
50785	Ureteroneocystostomy; with vesico-psoas hitch or bladder flap
50947 ^a	Laparoscopy, surgical; ureteroneocystostomy with cystoscopy and ureteral stent placement
50948 ^a	Laparoscopy, surgical; ureteroneocystostomy without cystoscopy and ureteral stent placement
52327	Cystourethroscopy (including ureteral catheterization); with subureteric injection of implant material

Posterior Urethral Valves**Males with one or more of the following:***ICD-9 diagnosis codes*

753.6	Congenital atresia and stenosis of urethra and bladder neck
-------	---

CPT procedure codes

52340	Cystourethroscopy with incision, fulguration, or resection of congenital posterior urethral valves, or congenital obstructive hypertrophic mucosal folds
52400	Cystourethroscopy with incision, fulguration, or resection of congenital posterior urethral valves, or congenital obstructive hypertrophic mucosal folds

Ureterocele**Individuals with one or more of the following:***ICD-9 diagnosis codes*

593.89	Other specified disorders of kidney and ureter
753.23	Congenital ureterocele

CPT procedure codes

50660	Ureterectomy, total, ectopic ureter, combination abdominal, vaginal and/or perineal approach
51535	Cystotomy for excision, incision, or repair of ureterocele
52300	Cystourethroscopy; with resection or fulguration of orthotopic ureterocele(s), unilateral or bilateral
52301	Cystourethroscopy; with resection or fulguration of ectopic ureterocele(s), unilateral or bilateral

Ureteropelvic Junction Obstruction**Individuals with one or more of the following:***ICD-9 diagnosis codes*

753.2	Obstructive defects of renal pelvis and ureter
753.20	Unspecified obstructive defect of renal pelvis and ureter
753.21	Congenital obstruction of ureteropelvic junction

Continued on next page.

Table 7-1 (continued). Codes used in the diagnosis and management of perinatal hydronephrosis

<i>CPT procedure codes</i>	
50400	Pyeloplasty (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting; simple
50405	Pyeloplasty (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting; complicated (congenital kidney abnormality, secondary pyeloplasty, solitary kidney, calyccoplasty)
50540	Symphysiotomy for horseshoe kidney with or without pyeloplasty and/or other plastic procedure, unilateral or bilateral (1 operation)
50544	Laparoscopy, surgical; pyeloplasty
50575	Renal endoscopy through nephrotomy or pyelotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with endopyelotomy (includes cystoscopy, ureteroscopy, dilation of ureter and ureteral pelvic junction, incision of ureteral pelvic junction and insertion of endopyelotomy stent)
50740	Ureteropyelostomy, anastomosis of ureter and renal pelvis
50750	Ureterocalycostomy, anastomosis of ureter and renal calyx
52342	Cystourethroscopy; with treatment of ureteropelvic junction stricture (eg, balloon dilation, laser, electrocautery, and incision)
52346	Cystourethroscopy with ureteroscopy; with treatment of intra-renal stricture (eg, balloon dilation, laser, electrocautery, and incision)

^aInclude only if patient under 30 years old.

Table 7-2. Nationally representative inpatient stays for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,099)		2003 (N=1,711)		2004 (N=1,708)		2005 (N=1,442)		2006 (N=1,418)		2007 (N=1,306)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.0	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6
Age												
18-24	0.6		0.3		0.6		0.3		0.3		0.2	
25-34	0.9		0.6		0.7		0.5		0.5		0.4	
35-39	0.7		0.7		0.5		0.6		0.5		0.4	
40-44	1.0		0.8		0.6		0.4		0.5		0.5	
45-54	0.9		0.8		0.7		0.6		0.5		0.5	
55-64	1.2		0.8		0.8		0.9		0.9		0.8	
▶ 65-74	1.4		1.2		1.2		1.1		1.1		1.0	
75-84	1.5*		1.2*		1.7*		0.9*		1.5*		1.2*	
85+	2.4*		2.7*		2.8*		2.1*		1.6*		1.6*	
Race/ethnicity												
▶ White	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4
Black	0.5*	0.5	0.4*	0.5	0.6*	0.6	0.4*	0.4	0.3*	0.4	0.5*	0.5
Hispanic	†	†	0.4*	0.4	0.5*	0.5	0.5*	0.5	0.3*	0.3	0.2*	0.3
Asian	0.4*	0.8	0.4*	1.0	0.4*	0.5	†	0.5	†	0.3	0.4*	0.6
Other	1.7*	2.4	†	1.7	†	1.5	†	1.3	0.8*	1.1	1.0*	1.4
Region												
Northeast	0.8	0.8	0.6	0.6	0.8	0.8	0.6	0.6	0.7	0.7	0.5	0.5
South	1.2	1.2	0.9	0.9	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.6
▶ Midwest	1.1	1.1	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7
West	0.7*	0.7	0.7*	0.7	0.6*	0.6	0.5*	0.5	0.5*	0.5	0.5*	0.5
Gender												
Female	1.0	1.0	0.7	0.7	0.9	0.9	0.7	0.7	0.8	0.8	0.6	0.6
▶ Male	1.0	1.0	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 7-3. Nationally representative inpatient stays for ureterocele listed as primary diagnosis, count,^a rate,^b percentage of all hospitalizations^c

	2003			2006		
	Count	Rate	Percent	Count	Rate	Percent
Total	645	0.88	0.010%	597	0.81	0.009%
Age						
0-2	421	3.65	0.006%	406	3.31	0.006%
3-10	138	0.43	0.002%	125	0.39	0.002%
11-17	86	0.29	0.001%	66	0.22	0.001%
Race/ethnicity						
White	336	0.77	0.005%	247	0.58	0.004%
Black	†	†	†	†	†	†
Hispanic	100	0.75	0.002%	111	0.75	0.002%
Region						
Northeast	106	0.82	0.002%	134	1.04	0.002%
South	235	0.90	0.004%	216	0.80	0.003%
Midwest	155	0.94	0.002%	126	0.78	0.002%
West	150	0.85	0.002%	121	0.67	0.002%
Gender						
Male	232	0.62	0.004%	240	0.63	0.004%
Female	413	1.15	0.006%	358	0.99	0.005%

† Figure does not meet standard for reliability or precision.

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US civilian non-institutionalized population under age 18.

^cPercent of all hospitalizations in each year within each demographic group.

SOURCE: Healthcare Cost and Utilization Project Kids' Inpatient Database, 2003 and 2006.

Table 7-4. Inpatient stays by privately insured individuals for ureteroceles listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=820)		2003 (N=1,041)		2004 (N=1,077)		2005 (N=1,197)		2006 (N=970)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.7	...	7.7	...	7.9	...	8.4	...	6.9	...
Age										
▶ 0-2	11.5		14.2		14.5		15.1		19.1	
3-10	1.3*		1.2**		1.6**		1.9*		1.5**	
11-17	0.9**		1.7**		1.5**		1.2**		1.5**	
18-24	4.1*		3.7*		3.9*		3.6*		2.7*	
25-34	4.4*		4.6*		5.5*		5.2*		4.6*	
35-39	5.0*		6.1*		6.3*		6.3*		6.0*	
40-44	5.0*		7.3*		5.6*		7.6*		5.5*	
45-54	9.2*		10.3*		10.2*		9.6*		9.0*	
55-64	15.1*		14.8*		14.5*		14.5*		12.5*	
65-74	20.1*		25.7*		25.9*		29.4*		22.0*	
75-84	37.6*		38.3*		42.5*		44.1*		44.2*	
85+	...		72.3*		63.3*		63.4*		41.9**	
Race/ethnicity										
▶ White	6.1	...	8.2	...	7.8	...	8.5	...	7.2	...
Black	11.1*	...	8.8*	...	6.7*	...	8.4*	...	5.1*	...
Hispanic	5.1**	...	6.8*	...	7.4*	...	8.1*	...	5.1*	...
Asian	4.2**	...	6.1**	...	5.4**	...	6.0**	...	6.5**	...
Other	1.6**	...	4.6**	...	8.3**	...	7.0**	...	2.3**	...
Unknown	6.0**	...	7.0*	...	6.4*	...	7.1*	...	8.5*	...
Missing	7.2*	...	7.3*	...	9.5*	...	8.9*	...	7.0*	...
Region										
Northeast	6.5	...	6.9*	...	9.3	...	8.8	...	8.7	...
South	6.6*	...	7.2*	...	7.7	...	8.4*	...	6.5	...
▶ Midwest	7.7	...	9.4	...	8.3	...	9.8	...	7.3	...
West	4.6*	...	5.5*	...	5.9*	...	5.0*	...	6.1*	...
Missing	...	...	...	...	...	...	...	...	...	...
Gender										
Female	7.0*	...	8.2*	...	8.5*	...	8.8*	...	8.0*	...
▶ Male	6.4	...	7.1	...	7.3	...	7.9	...	5.8	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-5. Hospital outpatient visits by Medicare beneficiaries for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=740)		2003 (N=820)		2004 (N=720)		2005 (N=980)		2006 (N=780)		2007 (N=900)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.1	1.9	2.2	2.0	1.9	1.9	2.6	2.5	2.1	2.1	2.5	2.7
Under 65/65+												
< 65 Years	2.5**	2.5	3.4**	3.4	2.5**	2.5	2.9**	2.9	2.7**	2.7	1.4**	1.4
▶ 65+ Years	2.0*	1.9	1.9*	2.0	1.8*	1.9	2.6	2.5	2.0*	2.1	2.8	2.7
Age												
▶ 65-69	1.8*		2.0*		1.0*		1.0*		2.5*		3.2*	
70-74	1.7**		2.0**		1.8**		2.1**		1.2**		2.5**	
75-79	1.4**		1.7**		2.0**		3.8**		1.4**		1.5**	
80-84	3.8**		2.3**		1.8**		4.5**		3.2**		2.9**	
85-89	0.9**		1.7**		4.1**		2.5**		2.5**		4.0**	
90-94	2.1**		2.0**		2.0**		2.0**		0.0**		3.9**	
95-97	...		0.0**		...		9.7**		...		9.9**	
98+	10.8**		...		...		...		...		...
Race/ethnicity												
▶ White	1.8*	1.6	1.9	1.8	1.2*	1.1	1.9*	2.0	2.0	2.1	2.1	2.3
Black	5.2**	5.8	4.4**	2.9	4.9**	5.3	3.3**	2.0	1.1**	1.0	5.1**	6.1
Hispanic	0.0**	0.0	2.9**	8.4	8.5**	10.9	2.7**	0.0	2.8**	0.0	0.0**	0.0
Asian	0.0**	0.0	0.0**	0.0	0.0**	0.0	6.7**	8.7	3.3**	5.0	3.2**	9.0
Other	3.5**	7.0	6.3**	4.9	15.1**	26.8	22.8**	43.3	2.8**	4.9	5.4**	11.3
Unknown	0.0**	...	...	...	...	...	88.2**	...	93.8**	...	33.7*	...
Region												
▶ Northeast	3.4*	2.5	2.8*	2.1	2.2*	2.8	2.8*	2.2	2.9*	2.3	3.4*	3.9
South	1.2**	1.1	2.6**	2.3	0.8**	0.9	1.3**	1.1	1.7**	2.0	1.7**	1.8
Midwest	2.2**	2.3	1.1**	1.1	1.5**	1.1	3.9**	4.3	2.0**	1.8	2.9**	3.8
West	2.4**	2.7	2.7**	2.5	4.9**	4.0	3.8**	3.7	2.6**	2.5	2.5**	2.1
Gender												
Female	1.2**	1.4	1.6**	1.4	1.6**	1.9	2.0**	2.2	1.8**	1.7	3.1*	3.8
▶ Male	3.2*	2.6	3.1*	2.7	2.4*	1.8	3.4*	3.0	2.6*	2.6	1.7*	1.4

... Data unavailable.

▶ Denotes reference group.

**Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 7-6. Hospital outpatient visits by privately insured individuals for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,140)		2003 (N=1,192)		2004 (N=1,235)		2005 (N=1,259)		2006 (N=1,163)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.3		8.8		9.0		8.8		8.3	
Age										
▶ 0-2	19.4		22.4		21.9		21.6		21.8	
3-10	5.7*		4.7*		4.2*		4.5*		3.9*	
11-17	2.5*		2.6*		3.3*		2.8*		4.1*	
18-24	2.8*		4.5*		5.4*		4.5*		5.0*	
25-34	6.9*		6.0*		6.3*		5.4*		5.7*	
35-39	9.3*		9.1*		8.6*		9.6*		6.3*	
40-44	9.6*		6.7*		8.1*		7.1*		6.5*	
45-54	11.9*		9.6*		10.8*		10.6*		9.5*	
55-64	19.2*		17.8*		16.3*		15.5*		15.1*	
65-74	21.6*		27.3*		21.8*		18.4*		21.3	
75-84	19.2*		23.4*		25.1*		28.8*		38.2*	
85+	...		11.3**		10.6**		10.8**		17.6**	
Race/ethnicity										
▶ White	11.0	...	9.9	...	9.4	...	9.0	...	8.9	...
Black	6.0**	...	7.5*	...	7.5*	...	8.1*	...	7.9*	...
Hispanic	8.2*	...	7.5*	...	8.3*	...	7.3*	...	5.6*	...
Asian	5.7**	...	7.2**	...	9.3*	...	4.3**	...	4.7**	...
Other	18.1**	...	10.5**	...	9.1**	...	10.1**	...	3.1**	...
Unknown	8.8*	...	11.5*	...	10.0*	...	8.6*	...	8.7*	...
Missing	8.4*	...	7.5*	...	7.7*	...	10.0*	...	8.1*	...
Region										
Northeast	6.3*	...	7.1*	...	8.8	...	9.1	...	9.0	...
South	9.4*	...	8.3*	...	8.6*	...	7.8*	...	7.3*	...
▶ Midwest	10.7	...	10.7	...	10.2	...	10.6	...	9.8	...
West	8.0*	...	7.2*	...	7.6*	...	7.7*	...	7.6*	...
Gender										
Female	9.6	...	8.7	...	9.5*	...	9.0	...	8.7*	...
▶ Male	9.0	...	8.9	...	8.5	...	8.5	...	7.9	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-7. Nationally representative hospital outpatient visits for ureterocele listed as primary diagnosis, 2002-2007 (merged), 6-year count

6-Year Count	
Total	6,223

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-8. Ambulatory surgery center visits by Medicare beneficiaries for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,120)		2003 (N=1,200)		2004 (N=1,380)		2005 (N=1,020)		2006 (N=1,220)		2007 (N=1,340)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.5	4.0	3.8	4.5	4.5	5.1	3.3	3.9	4.2	4.7	4.0	3.9
Age												
▶ 65-69	3.1*		3.3*		4.4*		4.2*		3.5*		1.7*	
70-74	5.8**		2.6**		6.5**		3.3**		4.0*		4.4**	
75-79	4.4**		8.7**		6.4**		5.2**		4.6**		4.1**	
80-84	4.3**		3.7**		2.3**		3.6**		8.3**		7.6**	
85-89	0.9**		4.2**		4.9**		2.5**		4.1**		2.4**	
90-94	2.1**		4.1**		4.0**		...		2.0**		3.9**	
95-97	...		...		19.7**		...		...		...
Race/ethnicity												
▶ White	3.6	4.1	3.9	4.6	4.9	5.4	3.8	4.3	4.6	5.1	4.5	4.4
Black	2.9**	3.3	3.3**	2.7	1.1*	2.9	1.6**	4.6	1.7**	4.8	1.1**	5.4
Hispanic	3.0**	...	...	...	...	...	...	...	2.8**	21.4	...	...
Asian	8.1**	18.0	3.8**	18.8	3.6**	16.7	...	...	...	...	3.2**	0.0
Other	...	...	6.3**	31.6	6.0**	17.0	...	...	5.6**	...	2.7**	...
Unknown	...	...	28.7**	...	54.3**	...	...	...	...	...	...	...
Region												
▶ Northeast	3.4**	4.0	2.8*	3.7	4.4*	5.5	3.6*	3.7	4.3*	5.3	4.6*	4.8
South	3.1**	3.2	4.0	4.1	4.2*	4.1	3.2**	4.0	4.0**	3.8	4.0**	3.6
Midwest	5.3**	6.0	4.8**	5.6	6.0**	7.6	4.1**	5.1	5.5**	6.9	4.5**	5.5
West	2.1**	2.5	3.3**	4.9	3.2**	4.8	2.2**	4.0	2.6**	5.5	2.5**	3.2
Gender												
Female	2.9**	3.4	3.3*	3.7	4.7	5.1	3.0*	3.3	4.0*	4.2	4.4*	4.3
▶ Male	4.4	4.8	4.5	5.6	4.4	5.0	3.8	5.1	4.4	5.4	3.4*	3.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 7-9. Ambulatory surgery center visits by privately insured individuals for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=41)		2003 (N=63)		2004 (N=61)		2005 (N=72)		2006 (N=75)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.3	...	0.5	...	0.4	...	0.5	...	0.5	...
Age										
▶ 0-2	0.9*	...	1.4*	...	1.5*	...	2.4*	...	2.3*	...
3-10	0.1**	...	0.1**	...	0.2**	...	0.2**	...	...	...
11-17	0.1**	...	0.1**	...	0.1**	...	...	...	0.2**	...
18-24	0.3**	...	0.1**	...	0.2**	...	0.1**	...	0.2**	...
25-34	0.1**	...	0.3**	...	0.3**	...	0.2**	...	0.3**	...
35-39	0.3**	...	0.4**	...	0.1**	...	0.7**	...	0.7**	...
40-44	0.4**	...	0.3**	...	0.6**	...	0.6**	...	1.0**	...
45-54	0.7**	...	0.5**	...	0.7**	...	0.3**	...	0.5**	...
55-64	0.8**	...	1.2**	...	1.0**	...	1.2**	...	0.6**	...
65-74	...	...	1.4**	...	0.5**	...	0.9**	...	1.3**	...
75-84	...	...	2.1**	...	...	...	0.8**	...	0.8**	...
85+	...	...	1.6**	...	...	...	1.2**	...	...	...
Race/ethnicity										
▶ White	0.5*	...	0.7	...	0.4	...	0.5	...	0.6	...
Black	...	...	...	...	0.5**	...	0.2**	...	0.5**	...
Hispanic	...	...	0.1**	...	0.2**	...	0.2**	...	0.4**	...
Asian	...	...	0.4*	...	0.5**	...	0.2**	...	0.5**	...
Other	...	...	...	...	0.8**	...	0.8**	...	...	...
Unknown	...	...	0.2**	...	0.8**	...	1.3**	...	0.9**	...
Missing	0.3**	...	0.4**	...	0.5**	...	0.6**	...	0.4**	...
Region										
Northeast	0.4*	...	0.3*	...	0.3*	...	0.2**	...	0.5*	...
South	0.4*	...	0.7*	...	0.6	...	0.6	...	0.6	...
▶ Midwest	0.3*	...	0.3*	...	0.4*	...	0.6*	...	0.6*	...
West	0.3**	...	0.1**	...	0.2**	...	0.2**	...	0.1**	...
Gender										
Female	0.2**	...	0.4*	...	0.5	...	0.5	...	0.4**	...
▶ Male	0.4*	...	0.5	...	0.4*	...	0.5	...	0.7	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-10. Physician office visits by Medicare beneficiaries for ureterocele listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=15,040)		2003 (N=16,880)		2004 (N=18,100)		2005 (N=19,800)		2006 (N=19,380)		2007 (N=18,500)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	42.3	47.5	46.3	51.6	48.9	54.3	53.3	59.1	53.3	59.1	51.1	57.5
Under 65/65+												
< 65 Years	18.2*	18.2	24.9*	24.9	27.9*	27.9	32.6*	32.6	34.8*	34.8	31.9*	31.9
▶ 65+ Years	48.4	47.5	51.9	51.6	54.6	54.3	59.2	59.1	58.6	59.1	56.9	57.5
Age												
▶ 65-69	37.1		31.9		32.2		45.2		40.5		39.7	
70-74	40.3*		42.5*		49.8*		54.2*		56.6*		50.8*	
75-79	49.7*		59.3*		63.0*		67.5*		56.8*		54.8*	
80-84	69.7*		79.1*		82.4*		73.9*		82.8*		80.3*	
85-89	55.4*		69.4*		65.7*		69.1*		85.1*		92.0*	
90-94	78.1*		71.6*		74.0*		53.0**		71.2*		64.7*	
95-97	102.4**		90.2**		78.9**		184.9**		29.9**		69.6**	
98+	...		10.7**		10.6**		10.4**		20.5**		10.2**	
Race/ethnicity												
▶ White	41.8	47.0	46.9	52.2	50.5	55.2	52.8	58.2	52.5	57.1	50.7	56.3
Black	30.9*	34.0	31.1*	38.2	36.4*	46.9	51.5*	63.4	45.1*	55.0	42.5*	52.4
Hispanic	36.4**	66.9	40.8**	55.0	50.9**	67.7	63.1**	77.0	61.8**	110.8	85.2*	91.6
Asian	80.8**	90.6	64.3**	72.4	46.5**	58.6	40.3**	66.5	73.1**	78.9	95.0*	123.6
Other	100.3**	159.0	85.2**	76.8	48.4**	60.8	91.3*	124.8	95.3**	124.9	40.6**	73.0
Unknown	106.8**	...	143.4**	...	27.1**	...	...	...	156.4**	...	33.7**	...
Region												
▶ Northeast	40.7	43.2	55.8	59.7	49.7	53.7	56.6	63.2	58.6	67.5	58.7	65.4
South	38.7*	43.7	40.7*	44.1	45.5*	50.0	55.2*	60.8	53.2*	57.9	50.1*	59.1
Midwest	39.5*	43.4	34.4*	39.7	39.1*	43.6	42.5*	48.4	38.2*	42.0	47.9*	50.5
West	57.2*	69.7	66.4*	79.5	70.6*	81.8	61.3*	67.8	69.7*	77.3	49.6*	54.2
Gender												
Female	36.7*	41.2	42.4*	44.9	46.3*	50.2	45.9*	45.6	46.0*	48.2	46.8*	49.3
▶ Male	49.4	56.7	51.3	60.9	52.3	60.0	62.7	77.7	62.3	73.7	56.5	68.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 7-11. Physician office visits by privately insured individuals for ureterocele listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,005)		2003 (N=2,287)		2004 (N=2,254)		2005 (N=2,527)		2006 (N=2,488)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.4	...	16.9	...	16.4	...	17.6	...	17.7	...
Age										
▶ 0-2	25.8		23.4		25.6		27.9		35.5	
3-10	9.4*		8.4*		8.9*		7.7*		8.5*	
11-17	3.3*		4.0*		2.8*		3.8*		3.5*	
18-24	8.3*		11.8*		8.2*		8.8*		9.4*	
25-34	15.8*		18.6*		15.6*		15.5*		14.6*	
35-39	17.4*		19.0*		19.6*		17.9*		15.5*	
40-44	17.3*		15.7*		16.6*		18.2*		18.3*	
45-54	18.9*		16.4*		18.5*		18.6*		21.4*	
55-64	29.9*		30.1*		26.9*		30.6*		33.0*	
65-74	34.4*		39.8*		35.6*		45.5*		44.3*	
75-84	46.6*		56.9*		58.9*		60.9*		64.6*	
85+	...		24.1**		49.8*		49.0*		52.9**	
Race/ethnicity										
▶ White	18.1	...	19.1	...	17.1	...	17.6	...	18.1	...
Black	19.9*	...	15.6*	...	12.6*	...	17.6*	...	18.3*	...
Hispanic	14.5*	...	19.6*	...	18.6*	...	16.8*	...	16.9*	...
Asian	18.2*	...	13.0*	...	14.8*	...	15.4*	...	13.8*	...
Other	14.8**	...	25.6**	...	18.3**	...	22.5**	...	13.8**	...
Unknown	12.8*	...	15.9*	...	19.0*	...	14.4*	...	22.3*	...
Missing	15.4	...	14.1*	...	13.2*	...	20.2*	...	15.2*	...
Region										
Northeast	20.7*	...	20.1*	...	20.5*	...	20.7*	...	25.7*	...
South	17.1*	...	18.7*	...	16.8*	...	18.9*	...	18.7*	...
▶ Midwest	15.4	...	14.8	...	15.5	...	16.1	...	14.6	...
West	13.4*	...	13.6*	...	14.0*	...	14.9*	...	15.2*	...
Gender										
Female	16.3*	...	17.1	...	17.4*	...	17.0*	...	18.0	...
▶ Male	16.5	...	16.7	...	15.5	...	18.3	...	17.5	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-12. Nationally representative physician office visits for ureterocele listed as any diagnosis, 2002-2007 (merged), 6-year count

6-Year Count	
Total	5,359

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-13. Emergency room visits by privately insured individuals for ureterocele listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=360)		2003 (N=414)		2004 (N=227)		2005 (N=108)		2006 (N=67)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.9	...	3.1	...	1.7	...	0.8	...	0.5	...
Age										
▶ 0-2	0.2*		0.3*		0.5*		0.2*		0.3*	
3-10	0.3**		0.3**		0.3**		0.1**		0.1**	
11-17	0.5**		0.4**		0.6**		0.3**		0.3**	
18-24	2.4**		2.0**		0.9**		0.4**		0.4**	
25-34	3.8*		2.7*		1.3**		0.6**		0.7**	
35-39	3.9*		2.9*		1.7**		0.7**		0.6**	
40-44	4.1*		2.3**		1.1**		0.7**		0.6**	
45-54	3.6*		3.5*		2.4*		0.9**		0.5**	
55-64	3.2*		4.2*		3.1*		0.8**		0.5**	
65-74	7.4**		30.3*		3.6**		2.4**		0.6**	
75-84	13.3*		7.4**		8.2**		7.0**		1.7**	
85+	...		6.4**		24.1**		3.6**		...	
Race/ethnicity										
▶ White	2.8	...	4.4	...	1.4	...	0.6	...	0.4	...
Black	2.5**	...	3.3**	...	1.7**	...	1.5**	...	0.5**	...
Hispanic	2.2**	...	1.9**	...	1.8**	...	0.8**	...	0.2**	...
Asian	0.5**	...	2.2**	...	0.3**	...	...	...	...	...
Other	4.9**	...	1.2**	...	0.8**	...	...	...	...	...
Unknown	1.9**	...	3.0**	...	2.4**	...	0.9**	...	0.5**	...
Missing	3.2*	...	1.7*	...	2.4*	...	1.4**	...	0.9**	...
Region										
Northeast	1.3**	...	0.7**	...	1.7**	...	1.1*	...	0.3**	...
South	2.5*	...	2.2*	...	1.6*	...	0.6*	...	0.4**	...
▶ Midwest	4.7	...	5.8	...	2.4	...	1.1*	...	0.9	...
West	1.0**	...	0.8**	...	...	...	...	...	0.0**	...
Gender										
Female	2.7	...	3.5*	...	1.8	...	0.8	...	0.7*	...
▶ Male	3.2	...	2.6	...	1.5	...	0.7	...	0.3*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-14. Nationally representative emergency room visits for ureterocele listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	926

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-15. Nationally representative inpatient stays for ureteropelvic junction obstruction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=859)		2003 (N=809)		2004 (N=907)		2005 (N=719)		2006 (N=853)		2007 (N=629)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3
Age												
18-24	0.6		0.6		0.6		0.6		0.7		0.4	
25-34	0.5		0.5		0.5		0.4		0.4		0.4	
35-39	0.4		0.2		0.5		0.2		0.3		0.3	
40-44	0.4		0.3		0.3		0.3		0.3		0.1	
45-54	0.2		0.2		0.3		0.3		0.2		0.2	
55-64	0.3		0.3		0.4		0.2		0.3		0.1	
▶ 65-74	0.5		0.4		0.4		0.2		0.5		0.4	
75-84	0.3*		0.3*		0.4*		0.3*		0.3*		0.4*	
85+	1.4*		†		†		†		†		†	
Race/ethnicity												
▶ White	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2
Black	0.1*	0.4	0.3*	0.3	0.1*	0.2	0.1*	0.3	0.2*	0.3	†	0.2
Hispanic	†	†	0.2*	0.2	0.3*	0.4	0.1*	0.3	0.1*	0.2	0.2*	0.3
Asian	...	...	†	0.4	†	1.0	†	0.5	†	0.7	...	...
Other	†	3.1	...	...	†	1.2	†	1.3	0.8*	1.3	†	1.3
Missing	...	...	...	...	...	...	...	...	...	...	...	...
Region												
Northeast	0.5	0.5	0.4	0.4	0.7	0.7	0.5	0.5	0.5	0.6	0.4	0.4
South	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
▶ Midwest	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.4	0.4	0.2	0.3
West	0.4*	0.4	0.4*	0.4	0.3*	0.3	0.3*	0.4	0.4*	0.4	0.3*	0.3
Gender												
Female	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3
▶ Male	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 7-16. Inpatient stays by privately insured individuals for ureteropelvic junction obstruction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=351)		2003 (N=384)		2004 (N=360)		2005 (N=384)		2006 (N=377)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.9	...	2.8	...	2.6	...	2.7	...	2.7	...
Age										
▶ 0-2	10.9		13.5		13.8		10.8		11.7	
3-10	3.3*		2.2*		2.5*		2.5*		2.9*	
11-17	2.2**		1.9**		1.3**		1.5**		2.0**	
18-24	2.8*		3.8*		2.6*		2.7*		2.2*	
25-34	2.6*		2.7*		1.3*		2.0*		2.1*	
35-39	1.9**		1.7**		2.8*		2.0**		1.7**	
40-44	2.9*		1.3**		1.9**		2.2**		1.9**	
45-54	2.0*		1.8*		1.7*		2.3*		2.0*	
55-64	2.3**		2.7*		2.4*		2.3*		3.4*	
65-74	2.4**		4.9**		3.8**		3.6**		2.6**	
75-84	1.3**		2.1**		6.1**		7.0**		2.5**	
85+	...		3.2**		4.5**		6.0**		4.4**	
Race/ethnicity										
▶ White	2.9	...	3.1	...	2.9	...	2.9	...	2.9	...
Black	2.2**	...	1.1**	...	1.4**	...	2.1**	...	1.5**	...
Hispanic	1.0**	...	2.3**	...	2.0**	...	1.5**	...	2.1**	...
Asian	2.6**	...	2.2**	...	1.8**	...	2.6**	...	1.6**	...
Other	...	...	7.0**	...	3.3**	...	0.8**	...	1.5**	...
Unknown	3.6**	...	3.7**	...	2.3**	...	2.8**	...	2.4**	...
Missing	3.0*	...	2.6*	...	2.3*	...	2.8*	...	3.0*	...
Region										
Northeast	2.8	...	2.4	...	3.4*	...	2.8	...	3.9*	...
South	2.4*	...	2.8	...	2.4	...	2.6	...	2.3	...
▶ Midwest	3.5	...	2.9	...	2.6	...	2.8	...	2.8	...
West	2.8*	...	3.1*	...	2.7*	...	2.6*	...	2.9*	...
Gender										
Female	2.8*	...	2.6*	...	2.2*	...	2.6*	...	2.4*	...
▶ Male	3.0	...	3.1	...	3.0	...	2.8	...	3.0	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-17. Hospital outpatient visits by privately insured individuals for ureteropelvic junction obstruction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=613)		2003 (N=582)		2004 (N=580)		2005 (N=568)		2006 (N=554)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.0		4.3		4.2		4.0		3.9	
Age										
▶ 0-2	21.7		20.3		19.5		18.9		16.7	
3-10	4.7*		4.5*		3.4*		3.6*		4.1*	
11-17	2.4*		2.2*		2.2*		2.0**		2.0**	
18-24	2.5**		3.9*		2.7*		3.7*		3.4*	
25-34	4.9*		3.9*		2.9*		2.4*		2.6*	
35-39	4.2*		2.9*		3.4*		3.4*		3.4*	
40-44	3.6*		2.7*		3.5*		2.7*		2.9*	
45-54	4.3*		3.1*		4.1*		3.8*		3.6*	
55-64	6.5*		4.8*		4.0*		3.3*		4.4*	
65-74	3.9**		4.9**		9.5*		5.4**		6.8**	
75-84	6.4**		6.4**		8.2**		7.4**		4.2**	
85+	...		...		3.0**		10.8**		2.2**	
Race/ethnicity										
▶ White	5.3	...	4.4	...	4.5	...	4.2	...	4.2	...
Black	5.1**	...	2.4**	...	2.6**	...	2.0**	...	3.4**	...
Hispanic	3.5**	...	3.6**	...	3.5*	...	2.9*	...	2.5*	...
Asian	10.4**	...	6.1**	...	4.7**	...	5.3**	...	3.5**	...
Other	4.9**	...	4.6**	...	2.5**	...	0.8**	...	5.3**	...
Unknown	5.4**	...	5.1*	...	3.9*	...	4.1*	...	3.9*	...
Missing	4.8*	...	4.3*	...	4.1*	...	4.2*	...	3.6*	...
Region										
Northeast	4.2	...	4.3	...	4.0	...	4.3	...	5.5*	...
South	5.3	...	4.0*	...	3.8*	...	4.0	...	3.5*	...
▶ Midwest	5.0	...	4.7	...	4.5	...	3.8	...	4.4	...
West	4.9*	...	4.4*	...	5.2*	...	4.0*	...	3.5*	...
Gender										
Female	4.7	...	3.6*	...	3.9*	...	3.7	...	3.7*	...
▶ Male	5.3	...	5.1	...	4.6	...	4.2	...	4.2	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-18. Nationally representative hospital outpatient visits for ureteropelvic junction obstruction listed as primary diagnosis, 2002-2007 (merged), 6-year count

6-Year Count	
Total	10,900

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-19. Ambulatory surgery center visits by Medicare beneficiaries for ureteropelvic junction obstruction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=640)		2003 (N=660)		2004 (N=760)		2005 (N=660)		2006 (N=620)		2007 (N=520)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.4	2.7	2.6	2.8	2.4	2.6	2.5	2.9	2.2	2.6	1.8	2.1
Age												
▶ 65-69	2.4*		1.3*		2.2*		2.0*		1.7*		1.0*	
70-74	2.3**		3.2**		2.1**		3.6**		2.5**		1.9**	
75-79	3.4**		3.3**		3.7**		2.8**		3.6**		2.2**	
80-84	2.9**		2.3**		2.7**		3.2**		3.7**		2.9**	
85-89	2.6**		5.9**		2.5**		4.1**		1.6**		4.0**	
90-94	6.3**		6.1**		2.0**		2.0**		...		3.9**	
Race/ethnicity												
▶ White	2.7	3.1	2.8	3.1	2.6	2.8	2.7	3.3	2.4	2.8	2.0	2.2
Black	0.6**	0.0	1.1**	12.5	0.5**	...	1.6**	3.6	1.1**	1.8	1.1**	3.3
Hispanic	...	...	2.9**	14.7	...	...	...	...	...	...	2.7**	16.4
Asian	...	...	...	...	0.0**	0.0	...	...	3.3**	25.7	...	...
Other	...	...	3.2**	...	6.0**	30.4	...	...	...	...	...	...
Unknown	...	...	...	...	27.1**	...	...	...	...	...	...	...
Region												
▶ Northeast	2.0*	2.9	1.4*	1.6	0.6*	1.6	1.7*	2.1	2.0*	2.4	0.9*	2.0
South	1.6**	1.9	2.7**	3.5	2.9**	3.2	3.3**	3.9	2.4**	3.0	1.4**	1.8
Midwest	4.2**	5.1	2.6**	3.1	3.5**	3.9	2.2**	2.6	2.6**	3.6	1.8**	2.2
West	1.7**	6.4	3.7**	5.7	1.6**	2.8	1.9**	4.3	1.3**	2.7	3.8**	4.8
Gender												
Female	3.3*	3.7	2.8**	2.8	2.7**	2.8	2.7**	3.4	2.4**	2.9	2.3**	2.7
▶ Male	1.2*	1.3	2.2*	3.1	2.0*	2.3	2.2*	2.3	2.0*	3.1	1.2*	1.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 7-20. Ambulatory surgery center visits by privately insured individuals for ureteropelvic junction obstruction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=29)		2003 (N=26)		2004 (N=33)		2005 (N=31)		2006 (N=47)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.2*	...	0.2*	...	0.2	...	0.2	...	0.3	...
Age										
▶ 0-2	0.5*	...	...	...	0.9*	...	1.0*	...	1.2*	...
3-10	...	...	...	...	...	...	0.2**	...	0.2**	...
11-17	0.1**	...	0.1**	...	0.2**	...	0.1**	...	0.3**	...
18-24	0.3**	...	0.3**	...	0.1**	...	0.2**	...	0.1**	...
25-34	0.2**	...	0.2**	...	0.2**	...	0.1**	...	0.0**	...
35-39	0.3**	...	0.3**	...	0.4**	...	0.2**	...	0.1**	...
40-44	0.3**	...	0.2**	...	0.3**	...	0.5**	...	0.5**	...
45-54	0.3**	...	0.1*	...	0.2**	...	0.2**	...	0.4**	...
55-64	0.5**	...	0.3**	...	0.2**	...	0.1**	...	0.5**	...
65-74	...	...	0.3**	...	0.5**	...	0.2**	...	0.6**	...
75-84	1.3**	...	...	...	...	...	...	...	0.8**	...
85+	...	...	...	...	...	...	...	...	2.2**	...
Race/ethnicity										
▶ White	0.4*	...	0.2*	...	0.3*	...	0.2*	...	0.4	...
Black	...	...	...	...	0.3**	...	...	...	0.2**	...
Hispanic	...	...	0.7**	...	0.1**	...	0.2**	...	...	...
Unknown	0.2**	...	0.2**	...	0.1**	...	0.4**	...	0.6**	...
Missing	0.1**	...	0.1**	...	0.2**	...	0.3**	...	0.3**	...
Region										
Northeast	0.1*	...	...	...	0.4*	...	...	...	0.2**	...
South	0.3*	...	0.2*	...	0.2*	...	0.3*	...	0.2**	...
▶ Midwest	0.3*	...	0.2*	...	0.3*	...	0.3*	...	0.6*	...
West	0.2**	...	0.2**	...	0.2**	...	...	...	0.2**	...
Gender										
Female	0.3*	...	0.2*	...	0.2*	...	0.2*	...	0.3*	...
▶ Male	0.2*	...	0.2*	...	0.2*	...	0.2*	...	0.4*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-21. Nationally representative ambulatory surgery center visits for ureteropelvic junction listed as primary diagnosis, count, rate^a

	Count	Rate
Total	138	0.1

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 7-22. Physician office visits by Medicare beneficiaries for ureteropelvic junction obstruction listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,600)		2003 (N=5,200)		2004 (N=5,280)		2005 (N=5,240)		2006 (N=6,680)		2007 (N=6,620)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	12.9	13.3	14.3	16.6	14.3	16.1	14.1	15.8	18.4	20.7	18.3	21.5
Under 65/65+												
< 65 Years	11.6*	11.6	5.8**	5.8	9.1*	9.1	9.1*	9.1	11.6*	11.6	9.6*	9.6
▶ 65+ Years	13.3	13.3	16.5	16.6	15.7	16.1	15.5	15.8	20.3	20.7	20.9	21.5
Age												
▶ 65-69	9.7		11.4		14.2		12.5		17.6		20.7	
70-74	12.5*		16.9*		13.9*		15.9*		16.8*		15.2*	
75-79	15.2*		21.0*		20.1*		17.6*		24.6*		25.2*	
80-84	19.6*		16.7*		19.6*		16.7*		30.5*		21.9*	
85-89	11.9**		20.9**		13.1**		19.7**		15.6**		28.8*	
90-94	14.8**		8.2**		2.0**		5.9**		7.9**		13.7**	
95-97	...		...		...		9.7**		19.9**		29.8**	
98+	10.8**		74.8**		31.8**		51.8**		20.5**		...	
Race/ethnicity												
▶ White	13.4	13.6	15.0	17.2	14.8	16.4	15.4	16.7	19.2	21.7	20.3	23.8
Black	8.0**	9.1	10.0**	13.6	8.1**	17.5	3.3**	4.6	12.3**	15.5	4.5**	8.3
Hispanic	9.1**	47.4	5.8**	26.5	2.8**	...	27.5**	63.8	30.9**	48.4	5.5**	...
Asian	40.4**	76.5	15.1**	75.1	14.3**	71.7	10.1**	15.5	6.6**	14.0	3.2**	13.2
Other	...	...	12.6**	44.8	39.3**	68.5	5.7**	46.0	11.2**	21.6	27.1**	23.9
Unknown	...	...	...	...	...	...	...	...	31.3**	...	...	...
Region												
▶ Northeast	13.3	14.6	13.1	15.6	15.0	18.2	17.6	20.4	19.4	21.9	17.2	21.7
South	14.7*	12.5	17.4*	19.5	17.5*	18.4	15.2*	15.6	24.2*	27.6	21.7*	24.9
Midwest	10.9*	12.9	13.3*	16.2	11.5*	13.9	11.9*	15.1	12.6*	14.3	16.7*	19.1
West	11.5*	14.2	9.7**	12.1	10.0*	12.0	11.1*	12.1	12.5*	13.9	14.2*	17.0
Gender												
Female	12.7*	14.2	17.6*	20.2	17.7*	20.0	17.6*	20.5	22.3*	26.1	23.3*	27.6
▶ Male	13.2	11.9	10.1	11.7	10.0	10.7	9.8	9.4	13.5	13.5	12.2	13.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 7-23. Physician office visits by privately insured individuals for ureteropelvic junction obstruction listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,391)		2003 (N=1,517)		2004 (N=1,586)		2005 (N=1,768)		2006 (N=1,623)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.4	...	11.2	...	11.6	...	12.3	...	11.6	...
Age										
0-2	66.5	...	73.5	...	74.1	...	68.0	...	68.8	...
3-10	12.6*	...	11.8*	...	12.2*	...	13.0*	...	14.3*	...
11-17	5.9*	...	5.4*	...	6.0*	...	6.6*	...	8.4*	...
18-24	5.8*	...	7.7*	...	6.6*	...	9.6*	...	8.2*	...
25-34	9.0*	...	9.1*	...	7.8*	...	10.4*	...	7.4*	...
35-39	9.6*	...	7.0*	...	8.7*	...	10.5*	...	7.4*	...
40-44	6.3*	...	6.4*	...	8.1*	...	6.4*	...	5.3*	...
45-54	7.9*	...	8.4*	...	8.5*	...	9.2*	...	9.2*	...
55-64	11.9*	...	8.2*	...	10.7*	...	10.6*	...	10.2*	...
▶ 65-74	11.6*	...	14.3*	...	11.8*	...	13.1*	...	12.0*	...
75-84	9.8**	...	9.0**	...	16.9*	...	19.4*	...	10.2**	...
85+	...	...	3.2**	...	6.0**	...	16.7**	...	26.4**	...
Race/ethnicity										
▶ White	12.4	...	12.2	...	11.6	...	13.0	...	12.0	...
Black	7.6**	...	5.7**	...	5.4*	...	6.9*	...	5.9*	...
Hispanic	10.8*	...	12.1*	...	11.9*	...	9.8*	...	9.5*	...
Asian	17.1*	...	17.3*	...	23.1*	...	18.5*	...	18.2*	...
Other	6.6**	...	15.1**	...	10.8**	...	16.3**	...	13.0**	...
Unknown	14.3*	...	14.3*	...	11.9*	...	10.2*	...	11.8*	...
Region										
10.5*	...	9.6*	...	11.0*	...	11.9*	...	11.1*	...	
Northeast										
South	16.2*	...	15.9*	...	18.9*	...	16.7*	...	18.5*	...
▶ Midwest	11.1*	...	9.6	...	9.9	...	12.3*	...	10.4*	...
West	9.4	...	10.2	...	9.2	...	9.3	...	9.1	...
Missing	13.8*	...	15.0*	...	17.0*	...	15.9*	...	15.0*	...
Gender										
Female	10.7*	...	10.3*	...	10.6*	...	11.6*	...	10.2*	...
▶ Male	12.0	...	12.1	...	12.5	...	13.0	...	12.9	...
Unknown	93.7**	...	40.5**	...	21.4**	...	59.7**	...	46.8**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-24. Nationally representative physician office visits for ureteropelvic junction obstruction listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	72,524
Age	
40-44	12,682
45-54	14,917
55-64	8,433
65-74	36,492
Race/ethnicity	
White	72,524
Black	...
Hispanic	...
Region	
Northeast	9,878
South	...
Midwest	23,350
West	39,296
Gender	
Female	25,070
Male	47,454

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-25. Nationally representative inpatient stays for posterior urethral valves listed as primary diagnosis, count,^a rate,^b percentage of all hospitalizations^c

	2003			2006		
	Count	Rate	Percent	Count	Rate	Percent
Total	248	0.34	0.004%	254	0.34	0.004%
Age						
0-2	192	1.66	0.003%	187	1.52	0.003%
3-10	† †		†	† †		†
11-17	† †		†	† †		†
Race/ethnicity						
White	83	0.19	0.001%	90	0.21	0.001%
Black	† †		†	† †		†
Hispanic	† †		†	† †		†
Region						
Northeast	† †		†	† †		†
South	103	0.39	0.002%	88	0.33	0.001%
Midwest	53	0.32	0.001%	54	0.33	0.001%
West	† †		†	64	0.35	0.001%

† Figure does not meet standard for reliability or precision.

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US civilian non-institutionalized population under age 18.

^cPercent of all hospitalizations in each year within each demographic group.

SOURCE: Healthcare Cost and Utilization Project Kids' Inpatient Database, 2003 and 2006.

Table 7-26. Hospital outpatient visits by privately insured individuals for posterior urethral valves listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=179)		2003 (N=197)		2004 (N=180)		2005 (N=191)		2006 (N=206)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.3	5.2	5.4	5.3	4.9	4.9	5.2	5.2	5.7	5.6
Age										
▶ 0-2	7.0		6.3		6.1		6.1		5.2	
3-10	7.1*		8.0*		7.0*		7.5*		8.6*	
11-17	2.4*		1.9**		2.2*		2.4*		2.6*	
Race/ethnicity										
▶ White	5.3	5.1	6.3	6.2	5.2	5.1	5.9	5.8	6.3	6.2
Black	3.7**	8.4	5.4**	5.7	2.5**	5.8	1.7**	3.9	3.6**	3.6
Hispanic	2.6**	5.5	1.7**	1.8	4.3**	7.2	2.7**	2.8	3.7**	3.8
Asian	1.8**	3.9	3.9**	5.8	1.9**	2.0	3.7**	3.9	2.7**	5.7
Other	4.9**	26.1	35.5**	52.0	7.8**	7.8	12.7**	15.3	12.4**	19.1
Unknown	7.1**	...	5.8**	...	5.7**	...	6.8**	...	5.1**	...
Missing	5.5*	...	4.2*	...	5.1*	...	4.2**	...	5.5*	...
Region										
Northeast	5.9*	5.9	5.0*	4.7	8.3*	8.0	6.6*	6.4	5.5*	5.3
South	6.1	6.1	6.0	6.0	4.2	4.2	4.7	4.7	5.3	5.3
▶ Midwest	5.1	4.9	5.0	5.0	5.1	5.1	5.4	5.3	5.3	5.3
West	2.6**	2.5	4.6**	4.4	4.1**	3.9	5.6**	5.4	7.5*	7.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-27. Nationally representative hospital outpatient visits for posterior urethral valves listed as primary diagnosis, 2002-2007 (merged), 6-year count

6-Year Count	
Total	59

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-28. Ambulatory surgery center visits by privately insured individuals for posterior urethral valves listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=39)		2003 (N=28)		2004 (N=30)		2005 (N=39)		2006 (N=35)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.1	1.1	0.8*	0.7	0.8	0.8	1.1	1.0	1.0	0.9
Age										
▶ 0-2	0.7*		0.3*		0.2*		0.7*		0.3*	
3-10	1.9**		1.3**		1.4**		1.9*		1.9*	
11-17	0.4**		0.3**		0.4**		0.3**		0.2**	
Race/ethnicity										
▶ White	1.4*	1.4	1.1*	1.1	0.9*	1.0	1.2*	1.2	0.8*	0.8
Black	...	...	1.4**	3.1	...	...	0.6**	1.3	2.4**	5.6
Hispanic	...	...	0.4**	0.9	0.6**	1.0	0.3**	0.7	0.6**	0.9
Asian	...	...	1.3**	2.8	...	...	1.9**	4.0	...	...
Unknown	0.8**	...	...	...	1.3**	...	0.4**	...	1.3**	...
Missing	1.2**	...	0.4**	...	1.0**	...	1.5**	...	1.5**	...
Region										
Northeast	1.1*	1.9	0.5*	1.1	1.8*	2.0	2.5*	2.9	1.8*	3.0
South	1.1*	1.2	0.7*	0.9	0.4**	0.9	0.3**	0.5	0.3**	0.4
▶ Midwest	1.4*	1.3	0.9*	0.9	1.1*	1.3	1.5*	1.4	1.6*	1.6
West	0.7**	1.6	0.7**	1.5	0.6**	0.6	1.2**	1.4	0.8**	1.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-29. Physician office visits by privately insured individuals for posterior urethral valves listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=408)		2003 (N=425)		2004 (N=444)		2005 (N=466)		2006 (N=484)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	12.0	11.8	11.6	11.4	12.2	12.0	12.8	12.6	13.3	13.1
Age										
▶ 0-2	14.2		16.6		17.7		18.6		18.2	
3-10	16.8*		16.1*		17.1*		17.8*		19.0*	
11-17	5.5*		4.3*		4.4*		4.8*		4.9*	
Race/ethnicity										
▶ White	12.6	12.3	13.2	12.9	13.4	13.2	13.1	12.8	13.9	13.6
Black	7.5**	6.5	11.5**	11.5	3.0**	3.5	7.8**	8.1	8.4**	8.5
Hispanic	12.2**	11.7	9.2**	9.2	10.4*	10.8	6.3**	6.5	9.8*	10.2
Asian	12.8**	16.4	2.6**	3.8	2.9**	5.6	9.3**	9.0	9.0**	18.8
Other	24.6**	43.5	28.4**	27.1	18.2**	26.7	27.9**	27.3	19.9**	19.7
Unknown	13.4**	...	13.9**	...	14.9*	...	18.3*	...	13.2*	...
Missing	11.6*	...	9.9*	...	11.8*	...	14.4*	...	15.3*	...
Region										
Northeast	13.6*	12.4	19.1*	18.2	17.9*	17.1	14.2	13.8	16.0	15.4
South	12.6*	12.6	11.1	11.1	10.1*	10.3	11.1*	11.2	12.5*	12.5
▶ Midwest	10.0	9.9	10.2	10.1	13.1	12.9	15.1	14.9	13.3*	13.2
West	14.4*	14.2	10.1*	9.8	11.5*	11.2	11.1*	10.9	13.7*	13.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-30. Nationally representative physician office visits for posterior urethral valves listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	41,138
Age	
0-2	34,915
3-10	...
11-17	6,223
Race/ethnicity	
White	41,138
Black	...
Hispanic	...
Region	
Northeast	6,223
South	34,915
Midwest	...
West	...

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-31. Nationally representative inpatient stays for vesicoureteral reflux listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=520)		2003 (N=448)		2004 (N=375)		2005 (N=485)		2006 (N=347)		2007 (N=263)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3
Age												
18-24	0.6		0.6		0.6		0.6		0.7		0.4	
25-34	0.5		0.5		0.5		0.4		0.4		0.4	
35-39	0.4		0.2		0.5		0.2		0.3		0.3	
40-44	0.4		0.3		0.3		0.3		0.3		0.1	
45-54	0.2		0.2		0.3		0.3		0.2		0.2	
55-64	0.3		0.3		0.4		0.2		0.3		0.1	
▶ 65-74	0.5		0.4		0.4		0.2		0.5		0.4	
75-84	0.3*		0.3*		0.4*		0.3*		0.3*		0.4*	
85+	1.4*		†		†		†		†		†	
Race/ethnicity												
▶ White	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2
Black	0.1*	0.4	0.3*	0.3	0.1*	0.2	0.1*	0.3	0.2*	0.3	†	0.2
Hispanic	†	†	0.2*	0.2	0.3*	0.4	0.1*	0.3	0.1*	0.2	0.2*	0.3
Asian	...	...	†	0.4	†	1.0	†	0.5	†	0.7	...	...
Other	†	3.1	...	...	†	1.2	†	1.3	0.8*	1.3	†	1.3
Missing	...	...	...	...	...	...	...	...	...	...	...	...
Region												
Northeast	0.5	0.5	0.4	0.4	0.7	0.7	0.5	0.5	0.5	0.6	0.4	0.4
South	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
▶ Midwest	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.4	0.4	0.2	0.3
West	0.4*	0.4	0.4*	0.4	0.3*	0.3	0.3*	0.4	0.4*	0.4	0.3*	0.3
Gender												
Female	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.3	0.5	0.5	0.3	0.3
▶ Male	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 7-32. Nationally representative inpatient stays for vesicoureteral reflux listed as primary diagnosis, count,^a rate,^b percentage of all hospitalizations^c

	2003			2006		
	Count	Rate	Percent	Count	Rate	Percent
Total	7,458	10.2	0.11%	5,908	8.0	0.09%
Age						
0-2	2,543	22.0	0.04%	2,302	18.8	0.03%
3-10	4,332	13.5	0.07%	3,232	10.1	0.05%
11-17	583	2.0	0.01%	374	1.3	0.01%
Race/ethnicity						
White	3,757	8.6	0.06%	3,266	7.6	0.05%
Black	150	1.4	0.00%	122	1.1	0.00%
Hispanic	875	6.5	0.01%	657	4.4	0.01%
Other	372	15.2	0.01%	420	16.1	0.01%
Region						
Northeast	1,459	11.2	0.02%	1,210	9.4	0.02%
South	2,266	8.7	0.03%	1,870	7.0	0.03%
Midwest	1,886	11.4	0.03%	1,578	9.7	0.02%
West	1,847	10.5	0.03%	1,250	6.9	0.02%
Gender						
Male	2,022	5.4	0.03%	1,694	4.5	0.03%
Female	5,436	15.2	0.08%	4,214	11.7	0.06%

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US civilian non-institutionalized population under age 18.

^cPercent of all hospitalizations in each year within each demographic group.
SOURCE: Healthcare Cost and Utilization Project Kids' Inpatient Database, 2003 and 2006.

Table 7-33. Inpatient stays by privately insured individuals for vesicoureteral reflux listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=491)		2003 (N=489)		2004 (N=426)		2005 (N=419)		2006 (N=413)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	14.4	14.2	13.3	13.1	11.7	11.6	11.5	11.4	11.4	11.2
Age										
▶ 0-2	33.1		30.3		31.2		28.5		31.0	
3-10	17.8*		16.6*		13.2*		13.8*		12.3*	
11-17	2.7*		2.6*		2.0**		1.9**		2.2*	
Race/ethnicity										
▶ White	19.0	18.8	15.6	15.3	12.7	12.6	12.5	12.3	12.0	11.8
Black	2.8**	6.3	4.1**	7.2	4.5**	4.7	3.9**	4.0	4.2**	7.7
Hispanic	9.6**	15.8	13.1*	13.6	8.3**	13.4	10.7*	11.5	8.9*	9.3
Asian	9.1**	12.9	9.2**	13.3	15.5**	14.2	9.3**	13.5	6.3**	9.0
Other	...	...	3.5**	7.4	5.2**	7.7	5.1**	26.7	10.0**	14.9
Unknown	16.5**	...	22.0*	...	13.6*	...	11.1**	...	14.9*	...
Missing	12.5*	...	11.0*	...	11.1*	...	11.3*	...	12.0*	...
Region										
Northeast	15.8	15.0	11.2	10.5	12.1	11.3	17.0*	16.2	15.5*	14.9
South	14.0	14.1	12.5	12.8	10.8	11.2	10.6	10.9	10.9	11.0
▶ Midwest	14.1	13.9	13.4	13.1	11.9	11.8	9.9	9.8	11.9	11.8
West	15.8*	14.7	17.6*	17.0	13.4*	13.1	13.7*	13.2	8.8*	8.5
Gender										
Female	19.7*	19.3	18.8*	18.5	16.1*	16.0	15.6*	15.5	16.5*	16.3
▶ Male	9.4	9.3	8.0	8.0	7.4	7.4	7.5	7.4	6.5	6.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-34. Hospital outpatient visits by privately insured individuals for vesicoureteral reflux listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,157)		2003 (N=4,313)		2004 (N=4,421)		2005 (N=4,426)		2006 (N=4,202)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	122.3	119.8	117.3	115.8	121.1	120.1	121.2	120.3	115.6	114.1
Age										
▶ 0-2	288.1		263.1		284.9		278.3		268.1	
3-10	151.0*		151.5*		152.8*		155.6*		145.5*	
11-17	18.6*		18.2*		18.6*		18.8*		18.4*	
Race/ethnicity										
▶ White	152.3	150.1	147.8	145.6	136.8	134.4	135.6	133.3	126.2	123.6
Black	44.0*	45.9	36.7*	37.8	36.8*	38.7	43.7*	45.6	54.9*	56.3
Hispanic	116.4*	118.8	115.6*	119.5	98.2*	101.5	91.4*	95.4	86.0*	89.5
Asian	95.1*	84.9	102.4*	91.3	110.5*	99.0	101.4*	92.0	109.0*	98.6
Other	78.6**	116.4	102.8**	95.5	104.2*	155.0	101.3*	96.8	59.7**	58.2
Unknown	126.7*	...	132.8*	...	131.2*	...	136.1*	...	138.3*	...
Missing	107.8*	...	89.9*	...	104.4*	...	105.5*	...	106.7*	...
Region										
Northeast	84.0*	77.8	80.4*	75.4	94.9*	89.6	96.5*	92.5	88.2*	84.6
South	125.3*	126.4	116.2*	118.5	119.8*	122.7	116.3*	118.5	108.0*	108.9
▶ Midwest	134.2	132.0	136.2	134.0	136.3	134.2	139.2	138.1	138.5	136.7
West	110.5*	105.2	99.7*	95.8	107.8*	104.6	112.0*	108.1	108.2*	104.2
Gender										
Female	195.5*	191.6	190.2*	187.5	197.8*	196.1	196.1*	194.8	187.2*	185.0
▶ Male	52.4	51.6	47.4	47.3	47.8	47.7	49.5	49.3	47.2	46.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-35. Nationally representative hospital outpatient visits for vesicoureteral reflux listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	80,942
Age	
0-2	32,210
3-10	46,539
11-17	2,193
Race/ethnicity	
White	71,344
Black	9,007
Hispanic	...
Other	591
Region	
Northeast	4,957
South	64,438
Midwest	6,696
West	4,851
Gender	
Female	51,697
Male	29,245

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-36. Ambulatory surgery center visits by privately insured individuals for vesicoureteral reflux listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=84)		2003 (N=129)		2004 (N=139)		2005 (N=162)		2006 (N=149)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.5	2.4	3.5	3.4	3.8	3.8	4.4	4.4	4.1	4.0
Age										
▶ 0-2	6.5		6.6		8.5		9.5		7.9	
3-10	2.6*		5.3*		5.0*		6.2*		5.4*	
11-17	0.6**		0.2**		0.5**		0.4**		1.0**	
Race/ethnicity										
▶ White	3.2	3.1	5.3	5.2	4.5	4.4	5.0	4.9	4.5	4.4
Black	0.9**	2.1	0.7**	5.0	1.0**	2.4	1.7**	3.0	1.2**	2.8
Hispanic	0.6**	1.4	0.9**	1.7	1.5**	2.6	2.1**	3.5	1.4**	1.5
Asian	5.5**	26.0	1.3**	6.3	3.9**	5.7	2.8**	4.1	5.4**	11.3
Other	...	...	3.5**	7.4	5.2**	7.7	2.5**	5.4	2.5**	5.3
Unknown	3.9**	...	4.6**	...	2.6**	...	5.1**	...	5.5**	...
Missing	2.0*	...	2.1*	...	4.0**	...	4.8**	...	4.4**	...
Region										
Northeast	2.0**	1.6	0.5**	1.1	2.8**	2.7	2.5**	4.2	3.4**	3.3
South	1.2**	1.2	2.1*	2.1	2.9*	4.9	3.2*	3.2	3.0*	3.0
▶ Midwest	4.6	4.6	6.8	6.7	5.7	5.6	7.0	6.9	6.5	6.4
West	0.9**	1.2	1.3**	2.2	2.6**	4.2	3.6**	3.4	2.6**	4.2
Gender										
Female	3.6*	3.5	6.1*	6.0	6.6*	6.6	7.6*	7.6	6.9*	6.8
▶ Male	1.4*	1.4	1.0*	1.0	1.1*	1.1	1.4*	1.4	1.5*	1.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-37. Nationally representative ambulatory surgery center visits for vesicoureteral reflux listed as primary diagnosis, count, rate^a

	Count	Rate
Total	6,486	8.8
Gender		
Female	4,786	13.2
▶ Male	1,700	4.5

▶ Denotes reference group.

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 7-38. Physician office visits by privately insured individuals for vesicoureteral reflux listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=6,336)		2003 (N=6,737)		2004 (N=7,024)		2005 (N=7,136)		2006 (N=6,856)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	186.4	182.9	183.2	181.0	192.5	190.9	195.4	194.1	188.7	186.4
Age										
▶ 0-2	443.7		401.3		437.7		462.2		461.4	
3-10	223.1*		231.6*		239.3*		241.3*		223.5*	
11-17	34.6*		38.1*		39.5*		35.5*		35.7*	
Race/ethnicity										
▶ White	227.4	224.4	218.6	215.7	210.7	207.1	210.5	207.2	199.7	196.0
Black	75.9*	80.2	61.1*	63.9	64.5*	67.2	68.9*	72.9	85.4*	89.1
Hispanic	200.6*	207.9	175.9*	180.5	166.1*	172.2	168.5*	177.7	182.4*	189.2
Asian	155.4*	140.0	139.1*	126.0	179.4*	160.1	186.1*	169.7	175.6*	156.8
Other	157.2*	148.5	177.3*	167.4	218.9*	205.0	169.7*	162.9	166.8*	159.9
Unknown	211.7*	...	214.0*	...	235.2*	...	233.5*	...	215.7*	...
Missing	162.8*	...	155.0*	...	168.2*	...	179.5*	...	172.8*	...
Region										
Northeast	189.1*	175.6	168.3*	158.7	195.4*	186.0	203.5*	194.4	195.5	187.7
South	206.1*	208.4	195.8*	199.4	201.1*	205.9	205.6*	209.8	190.6	192.3
▶ Midwest	174.9	172.1	184.2	181.4	181.6	178.9	181.3	180.0	188.9	186.8
West	154.9*	147.6	152.7*	147.0	191.2*	185.9	193.7*	187.2	178.5*	172.2
Gender										
Female	293.2*	287.7	288.6*	284.7	301.9*	299.2	306.9*	305.3	291.5*	288.5
▶ Male	84.3	83.2	82.5	82.4	87.7	87.8	88.7	88.4	90.4	89.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 7-39. Nationally representative physician office visits for vesicoureteral reflux listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	607,551
Age	
0-2	235,271
3-10	360,083
11-17	12,197
Race/ethnicity	
White	602,192
Black	5,359
Hispanic	...
Region	
Northeast	41,474
South	336,673
Midwest	110,391
West	119,013
Gender	
Female	459,235
Male	148,316

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 7-40. Emergency room visits by privately insured individuals for vesicoureteral reflux listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=12)		2003 (N=57)		2004 (N=43)		2005 (N=30)		2006 (N=33)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.4*	0.6	1.6	1.5	1.2	1.2	0.8	1.4	0.9	1.5
Age										
▶0-2	1.3*		3.2*		4.1*		2.4*		1.8*	
3-10	0.3**		2.1*		0.9**		1.0**		1.4**	
11-17	...		0.2**		0.3**		...		...
Race/ethnicity										
▶ White	0.3*	0.6	1.1*	1.1	0.8*	0.8	0.3*	0.7	0.5*	1.3
Black	...	...	...	...	...	...	...	...	...	...
Hispanic	...	...	4.8**	4.9	5.5**	9.3	4.8**	7.9	4.0**	6.6
Asian	...	...	...	...	...	...	...	...	...	...
Other	...	...	...	...	...	...	...	...	...	...
Unknown	...	...	...	...	0.9**	...	2.6**	...	2.1**	...
Missing	0.5**	...	2.0**	...	0.8**	...	0.2**	...	0.4**	...
Region										
Northeast	...	...	0.5*	3.0	0.3*	0.6	...	...	...	...
South	0.4*	0.6	3.1*	3.1	2.2*	2.3	2.0	3.3	1.7**	2.8
▶ Midwest	0.4*	0.7	0.6*	1.0	0.6*	0.6	...	...	0.6*	1.0
West	0.2**	1.3	...	...	...	...	...	...	...	...
Gender										
Female	0.5**	0.9	2.3*	2.3	1.7*	1.7	1.3**	2.1	1.5**	2.4
▶ Male	0.2*	1.0	0.8*	0.8	0.7*	0.7	0.4*	0.6	0.4*	0.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

**Urologic
Diseases**
in America



CHAPTER 8
Kidney Cancer

Table 8-1. Codes used in the diagnosis and management of kidney cancer**Individuals 35 years or older, with one or more of the following:***ICD-9 diagnosis codes*

189	Malignant neoplasm of kidney and other unspecified organs
189.0	Malignant neoplasm of kidney, except pelvis
189.8	Malignant neoplasm of other specified sites or urinary organs

ICD-9 procedure codes

55.3 ^a	Local excision or destruction of lesion or tissue of kidney
55.4	Partial nephrectomy
55.5	Complete nephrectomy
55.52	Nephrectomy of remaining kidney
55.54	Bilateral nephrectomy

CPT procedure codes

50220 ^a	Nephrectomy, including partial ureterectomy, any open approach including rib resection
50225 ^a	Nephrectomy, including partial ureterectomy, any open approach including rib resection; complicated because of previous surgery on same kidney
50230	Nephrectomy, including partial ureterectomy, any open approach including rib resection; radical, with regional lymphadenectomy and/or vena caval thrombectomy
50240	Nephrectomy, partial
50543	Laparoscopy, surgical; partial nephrectomy
50545	Laparoscopy, surgical; radical nephrectomy (includes removal of Gerota's fascia and surrounding fatty tissue, removal of regional lymph nodes, and adrenalectomy)
50546 ^a	Laparoscopy, surgical; nephrectomy, including partial ureterectomy

^aMust occur with diagnosis of 189.0 (malignant neoplasm of kidney, except pelvis) or 189.8 (malignant neoplasm of other specified sites or urinary organs).**Table 8-2. Estimated new kidney cancer cases and deaths in the United States, 2011**

	Estimated New Cases	Estimated New Deaths
Total	60,920	13,120
Male	37,120	8,270
Female	23,800	4,850

SOURCE: American Cancer Society. *Cancer Facts & Figures 2011* : American Cancer Society, Inc.

Table 8-3. Incidence rates of kidney cancer, age-adjusted, by race/ethnicity and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis ^a									
1975	7.1	10.3	4.5	7.3	10.8	4.6	6.2	8.2	4.3
1976	8.0	11.2	5.5	8.1	11.5	5.6	7.8	11.7	4.7
1977	8.1	11.4	5.5	8.1	11.7	5.5	8.5	11.1	6.4
1978	7.8	11.8	4.8	8.0	12.1	4.9	8.0	11.0	5.7
1979	7.6	11.1	5.1	7.8	11.6	5.1	7.3	8.2	6.3
1980	8.1	11.7	5.4	8.4	12.2	5.6	6.0	8.0	4.4
1981	8.5	12.8	5.3	8.6	13.0	5.3	10.0	15.8	5.8
1982	8.4	11.8	5.7	8.5	12.0	5.9	7.6	11.2	4.9
1983	8.9	13.2	5.7	9.2	13.8	5.8	8.8	13.5	5.5
1984	9.2	13.1	6.2	9.5	13.6	6.3	9.0	12.0	6.9
1985	9.0	13.1	5.8	9.2	13.6	5.9	8.6	11.7	6.2
1986	9.7	13.8	6.6	9.8	14.1	6.7	10.1	15.0	6.6
1987	9.9	14.1	6.7	10.1	14.4	6.9	11.1	15.6	7.5
1988	9.9	14.0	7.0	10.1	14.3	7.0	11.6	15.4	8.8
1989	10.3	14.5	7.2	10.6	15.0	7.2	10.8	15.1	7.8
1990	10.4	14.7	7.1	10.7	15.0	7.5	10.5	15.9	6.6
1991	10.6	15.1	7.2	10.8	15.2	7.4	12.3	18.3	7.8
1992	10.8	15.3	7.4	11.1	15.6	7.7	11.0	16.4	7.2
1993	10.8	14.7	7.6	10.9	14.7	7.7	12.8	17.3	9.4
1994	11.3	15.7	7.9	11.6	16.0	8.0	12.7	18.0	8.7
1995	11.1	15.5	7.7	11.1	15.4	7.7	14.2	21.5	9.2
1996	11.4	15.8	7.9	11.5	16.2	7.8	13.9	17.4	11.3
1997	10.9	15.1	7.6	11.0	15.1	7.7	13.7	19.7	9.4
1998	11.8	16.4	8.2	12.1	16.7	8.4	12.7	17.4	9.0
1999	11.4	16.0	7.8	11.6	16.2	7.9	13.7	18.9	9.9
2000	12.5	17.4	8.6	12.7	18.0	8.5	14.8	19.3	11.9
2001	12.6	17.5	8.6	12.8	17.7	8.8	15.6	23.0	10.3
2002	12.9	17.8	8.9	13.1	18.0	9.1	15.3	22.5	10.3
2003	13.5	18.2	9.7	13.8	18.4	10.1	14.5	21.6	9.2
2004	13.5	18.4	9.6	13.8	18.7	9.8	15.7	22.1	11.0
2005	13.9	19.1	9.6	14.1	19.3	9.8	16.5	24.4	11.0
2006	14.4	18.9	10.7	14.6	19.2	10.8	15.7	20.7	12.0
2007	15.2	20.8	10.5	15.3	20.8	10.7	18.3	25.9	12.7
2008	15.4	20.9	10.8	15.3	20.6	10.8	19.6	28.9	13.3
1975-2008	11.1	15.5	7.6	11.2	15.7	7.7	12.7	18.0	8.9
Age at Diagnosis, ^b 2004-2008									
All ages	14.6	20.0	10.2	15.1	20.5	10.5	16.5	23.3	11.6
Under 65	7.7	10.2	5.4	7.9	10.4	5.6	9.1	12.8	6.0
65 and over	62.3	87.8	43.7	64.3	90.8	44.7	67.6	95.6	50.1
All ages ^c	10.3	13.8	7.2	10.5	14.1	7.4	11.8	16.5	8.1

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^cRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-4. Incidence rates^a of kidney cancer, age-specific, by race/ethnicity and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Age at Diagnosis									
<1	1.4	1.5	1.2	1.5	1.5	1.4	...	...	...
1-4	1.8	1.7	1.9	1.9	1.7	2.0	2.0	2.3	1.6
5-9	0.6	0.4	0.7	0.6	0.5	0.7	0.8	...	1.0
10-14	0.1	...	0.2	0.1	...	0.2	...	...	...
15-19	0.2	0.1	0.2	0.2	...	0.3	...	...	...
20-24	0.4	0.4	0.4	0.4	0.4	0.4	...	...	...
25-29	0.9	0.9	0.9	0.9	0.9	0.9	1.2	1.4	0.9
30-34	2.2	2.4	2.0	2.3	2.4	2.2	2.4	3.4	1.4
35-39	4.0	4.9	3.1	4.1	5.0	3.2	4.6	5.6	3.8
40-44	7.6	9.7	5.5	7.9	9.9	5.8	8.7	11.9	5.8
45-49	12.8	16.9	8.9	13.2	17.2	9.1	14.4	20.0	9.5
50-54	20.4	27.7	13.3	20.8	27.9	13.7	24.6	36.3	14.6
55-59	30.7	41.8	20.2	31.2	42.0	20.7	39.4	56.5	25.4
60-64	43.5	60.0	28.4	45.2	61.6	29.8	49.1	71.3	31.6
65-69	56.3	78.4	36.9	57.5	79.9	37.4	67.4	98.2	44.0
70-74	64.3	87.1	45.7	66.8	90.8	46.8	68.0	86.7	54.7
75-79	70.0	97.6	49.7	72.4	101.3	50.9	78.4	104.9	61.6
80-84	66.1	94.9	47.8	68.8	98.9	49.6	60.2	88.3	44.9
85+	53.9	84.6	39.7	55.2	87.5	40.4	56.9	100.5	40.3

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-5. Age-adjusted incidence rates^a and trends^b of kidney cancer, by race/ethnicity and gender

Race/ethnicity	Rate 2004-2008 Rate per 100,000			Trend 1999-2008 AAPC ^c (%)		
	Total	Males	Females	Total	Males	Females
All Races	14.6	20.0	10.2	3.0*	2.2*	3.1*
White	15.1	20.5	10.5	2.8*	2.2*	2.5*
White Hispanic ^d	14.9	19.8	11.0	2.9*	2.5*	3.1*
White Non-Hispanic ^d	15.1	20.7	10.5	2.7*	2.1*	2.9*
Black	16.5	23.3	11.6	2.5*	2.5*	2.6*
Asian/Pacific Islander	7.7	10.6	5.4	3.1*	2.7*	3.9*
American Indian/Alaska Native ^e	17.6	22.1	13.9	1.2	1.2	...
Hispanic ^d	14.5	19.2	10.7	2.9*	2.7*	3.1*

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Trend based on less than 10 cases for at least one year within the time interval.

^aBased on the SEER 17 areas. Rates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 13 areas. Trends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cThe 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2008.

^dHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^eIncidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-6. Estimated kidney cancer prevalence counts^a and age-adjusted percents^b in the United States on January 1, 2008 by race/ethnicity and gender

	Count	Percent
All Races	296,074 ^c	0.0709% ^d
Males	174,350 ^c	0.0936% ^d
Females	121,724 ^c	0.0521% ^d
White	258,417 ^c	0.0743% ^d
Males	152,158 ^c	0.0978% ^d
Females	106,259 ^c	0.0545% ^d
Black	30,300 ^c	0.0737% ^d
Males	15,965 ^c	0.0957% ^d
Females	14,335 ^c	0.0574% ^d
Asian/Pacific Islander ^d	...	0.0405%
Males	...	0.0559%
Females	...	0.0282%
Hispanic ^e	...	...
Males	...	...
Females	...	...

... Data not available.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bPercentages are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130) by 5-year age groups.

^cStatistics based on the SEER 9 Areas.

^dStatistics based on the SEER 11 Areas and Rural Georgia.

^eStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-7. Estimated kidney cancer prevalence counts^a on January 1, 2008 in the United States, by race/ethnicity and years since diagnosis

Years Since Diagnosis	0 to < 5	5 to < 10	10 to < 15	15 to < 20	20 to < 25	25 to < 30	0 to < 18 ^e	0 to < 33 ^e	≥ 33 ^f	Complete ^g
Race/ethnicity										
All Races ^b	118,656	64,398	40,460	24,125	13,726	7,577	252,095	285,286	10,788	296,074
Males	71,212	37,694	23,736	13,729	8,074	3,970	150,012	168,405	5,945	174,350
Females	47,444	26,704	16,724	10,396	5,652	3,607	102,083	116,881	4,843	121,724
White ^b	101,614	55,395	34,968	21,570	12,294	6,652	216,342	246,063	12,354	258,417
Males	61,102	32,877	20,939	12,429	7,375	3,585	129,807	146,640	5,518	152,158
Females	40,512	22,518	14,029	9,141	4,919	3,067	86,535	99,423	6,836	106,259
Black ^b	11,788	6,679	4,183	2,010	1,160	766	25,594	28,438	1,862	30,300
Males	6,962	3,407	2,063	1,013	523	313	14,111	15,327	638	15,965
Females	4,826	3,272	2,120	997	637	453	11,483	13,111	1,224	14,335
Asian/Pacific Islander ^c	2,946	1,421	698	...	...	...	5,295	...	...	...
Males	1,841	859	440	...	...	...	3,267	...	...	...
Females	1,105	562	258	...	...	...	2,028	...	...	...
Hispanic ^d	10,670	5,375	2,726	...	...	...	19,898	...	...	...
Males	6,216	3,119	1,483	...	...	...	11,396	...	...	...
Females	4,454	2,256	1,243	...	...	...	8,502	...	...	...

... Data not available.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bStatistics based on the SEER 9 Areas.

^cStatistics based on the SEER 11 Areas and Rural Georgia.

^dStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

^eMaximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^fCases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^gComplete prevalence is obtained by summing 0 to <33 and ≥33.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-8. Risk of being diagnosed with kidney cancer in 10, 20 and 30 years, lifetime risk of being diagnosed given alive and cancer-free at current age, by race/ethnicity, both sexes

All Races				
	> 10 years	> 20 years	> 30 years	Eventually
Current Age				
0	0.01	0.01	0.02	1.56
10	0.00	0.01	0.04	1.57
20	0.01	0.04	0.14	1.58
30	0.03	0.14	0.38	1.58
40	0.11	0.35	0.78	1.57
50	0.25	0.69	1.18	1.50
60	0.47	0.98	1.27	1.33
70	0.59	0.92	...	0.99
80	0.46	...	...	0.55
Lifetime Risk of Being Diagnosed = 1.56		Lifetime Risk of Dying = 0.47		
Whites				
	> 10 years	> 20 years	> 30 years	Eventually
Current Age				
0	0.01	0.01	0.02	1.62
10	0.00	0.01	0.04	1.63
20	0.01	0.04	0.15	1.63
30	0.03	0.14	0.39	1.64
40	0.11	0.36	0.80	1.62
50	0.26	0.71	1.22	1.55
60	0.48	1.02	1.32	1.37
70	0.61	0.95	...	1.02
80	0.47	...	...	0.56
Lifetime Risk of Being Diagnosed = 1.62		Lifetime Risk of Dying = 0.48		
Blacks				
	> 10 years	> 20 years	> 30 years	Eventually
Current Age				
0	0.01	0.01	0.02	1.44
10	0.00	0.01	0.05	1.46
20	0.01	0.04	0.15	1.47
30	0.04	0.15	0.42	1.48
40	0.11	0.39	0.83	1.48
50	0.29	0.75	1.18	1.43
60	0.51	0.99	1.22	1.27
70	0.60	0.88	...	0.94
80	0.43	...	...	0.51
Lifetime Risk of Being Diagnosed = 1.44		Lifetime Risk of Dying = 0.39		

... Statistic could not be calculated.

NOTE: A percent of 0.00 represents a value that is below 0.005.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruze SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-9. Stage at diagnosis for kidney cancer 2001-2007,^a total case counts, estimated case counts, and percentages

Stage at Diagnosis	All Races		
	All	Males	Females
All Stages	55,307 (100%)	33,945 (100%)	21,362 (100%)
Localized	33,737 (61%)	20,367 (60%)	13,458(63%)
Regional	9,402 (17%)	6,110 (18%)	3,418 (16%)
Distant	9,955 (18%)	6,449 (19%)	3,418 (16%)
Unstaged	2,212 (4%)	1,358 (4%)	1,068 (5%)
Stage at Diagnosis	Whites		
	All	Males	Females
All Stages	46,494 (100%)	28,609 (100%)	17,885 (100%)
Localized	27,896 (60%)	16,879 (59%)	11,268 (63%)
Regional	8,369 (18%)	5,150 (18%)	2,862 (16%)
Distant	8,369 (18%)	5,436 (19%)	2,862 (16%)
Unstaged	1,860 (4%)	1,144 (4%)	894 (5%)
Stage at Diagnosis	Blacks		
	All	Males	Females
All Stages	5,338 (100%)	3,187 (100%)	2,151 (100%)
Localized	3,468 (65%)	2,040 (64%)	1,463 (68%)
Regional	694 (13%)	414 (13%)	258 (12%)
Distant	961 (18%)	606 (19%)	344 (16%)
Unstaged	214 (4%)	127 (4%)	86 (4%)

^aBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008. National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-10. Survival (%) for kidney cancer, by race, gender, diagnosis year, stage and age

	All Races			Whites			Blacks		
	All	Males	Females	All	Males	Females	All	Males	Females
5-Year Relative Survival (%)									
Year of Diagnosis									
1960-1963 ^a	...	...	...	37.0	36.0	39.0	38.0	38.0	37.0
1970-1973 ^a	...	...	...	46.0	44.0	50.0	44.0	40.0	49.0
► 1975-1977 ^b	50.2	50.3	50.0	49.9	50.2	49.4	49.3	47.9	51.5 ^c
1978-1980 ^b	53.0	52.7	53.4	52.7	52.9	52.2	57.0	51.9	63.4 ^c
1981-1983 ^b	50.2	51.2	48.5	50.1	51.3	47.9	50.7	50.3	51.2
1984-1986 ^b	54.8	55.3	53.8	54.9	55.7	53.7	52.9	49.7	57.8
1987-1989 ^b	56.7	57.1	56.1	57.3	58.1	56.1	54.8	52.7	57.2
1990-1992 ^b	60.3	60.6	59.8	60.8	61.2	60.0	57.2	55.6	58.9
1993-1995 ^b	61.5	61.7	61.3	62.0	62.8	60.8	57.5	54.3	62.0
1996-2000 ^b	63.3	62.7	64.1	63.0	62.8	63.3	65.6	64.2	66.7
2001-2007 ^b	70.9 [*]	70.7 [*]	71.0 [*]	71.0 [*]	70.8 [*]	71.2 [*]	68.4 [*]	68.0 [*]	68.7 [*]
5-Year Relative Survival (%), 2001-2007^d									
Stage at Diagnosis									
All Stages	69.5	69.5	69.4	69.7	69.7	69.8	66.2	66.6	65.6
Localized	90.8	91.1	90.3	91.5	91.6	91.3	85.0	86.1	83.4
Regional	63.3	65.4	59.6	63.8	65.6	60.3	57.9	62.3	50.8
Distant	11.1	11.8	9.8	10.6	11.4	9.0	12.5	12.1	13.0
Unstaged	34.8	36.9	32.3	34.2	36.1	31.7	32.4	35.6 ^c	27.3 ^c
Age at Diagnosis									
< 45	83.3	81.6	85.6	84.6	83.0	87.0	73.0	69.4	77.7
45-54	76.6	74.7	80.4	77.0	74.8	81.3	72.1	71.0	74.3
55-64	71.4	70.3	73.4	71.9	70.7	74.2	67.0	67.0	66.9
65-74	67.8	67.5	68.2	67.8	67.2	68.7	66.5	69.3	62.9
75+	55.3	57.5	53.0	56.3	58.7	53.6	46.1	45.2	46.1
< 65	75.5	73.9	78.5	76.0	74.3	79.3	70.3	69.0	72.6
65+	61.9	63.1	60.2	62.2	63.4	60.6	58.3	61.1	55.4

... Statistic could not be calculated due to fewer than 25 cases during the time period.

► Denotes reference group.

^{*}The difference between 1975-1977 and 2001-2007 is statistically significant ($p < .05$).

^aBased on End Results data from a series of hospital registries and one population-based registry.

^bBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2008.

^cThe standard error is between 5 and 10 percentage points.

^dBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruze SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-11. Relative survival^a (%) for kidney cancer, by year of diagnosis, all races, males and females

	1975- 1980- 1985-																				
	1979	1984	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	69.6	71.2	73.5	76.3	77.1	77.4	76.6	77.0	77.3	77.5	76.9	78.3	78.3	80.2	81.6	80.0	82.1	85.4	84.2	85.2	86.3
2-year	60.7	62.0	65.3	68.3	68.9	69.0	70.8	69.7	69.7	70.7	70.1	71.3	71.9	74.2	74.2	75.0	76.4	79.8	80.1	81.6	
3-year	56.6	57.2	60.9	65.4	64.5	66.1	66.6	67.0	65.4	67.5	66.0	67.8	67.7	69.5	71.0	71.4	73.4	76.6	77.6		
4-year	53.1	54.1	57.9	62.8	62.1	62.9	63.1	64.9	63.4	64.4	63.5	64.8	64.6	67.6	68.3	69.2	71.1	73.7			
5-year	51.0	52.2	55.9	59.9	60.4	60.5	61.1	62.1	61.4	62.6	61.8	63.5	62.4	65.7	66.6	67.5	69.1				
6-year	49.5	49.9	54.0	57.9	58.3	59.0	59.2	60.8	59.4	60.9	59.7	61.6	60.6	64.2	64.9	65.5					
7-year	47.5	48.7	52.4	55.5	57.4	56.5	58.6	59.1	58.0	59.2	58.1	59.7	59.0	62.4	63.2						
8-year	46.3	47.5	51.2	54.7	56.3	55.4	56.9	57.5	56.9	58.6	55.9	58.1	57.3	60.3							
9-year	45.1	46.2	49.8	53.6	54.7	54.1	55.8	56.9	55.5	58.0	54.1	56.9	55.6								
10-year	44.1	45.0	48.1	52.8	52.7	53.2	53.3	54.7	54.4	56.0	53.1	55.8									
11-year	43.2	43.7	46.6	51.7	51.2	51.0	51.8	53.2	52.4	55.1	51.9										
12-year	42.3	42.8	45.5	50.1	50.2	49.8	51.4	51.6	50.7	53.7											
13-year	41.6	42.0	44.5	49.3	49.5	48.3	50.4	50.0	49.3												
14-year	40.6	41.3	43.2	47.8	48.0	47.6	49.0	48.7													
15-year	39.6	41.0	42.3	46.1	48.0	46.7	48.4														
16-year	39.3	40.4	41.3	45.8	46.9	46.1															
17-year	38.8	39.8	40.4	45.0	46.3																
18-year	37.7	39.2	39.5	44.1																	
19-year	36.8	38.2	38.6																		
20-year	36.1	37.4																			

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-12. Age-adjusted mortality rates^a for kidney cancer, by year, race, and gender

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death									
1975	3.6	5.2	2.4	3.7	5.3	2.5	2.8	4.2	1.8
1976	3.6	5.2	2.4	3.7	5.4	2.5	2.9	4.2	1.9
1977	3.7	5.4	2.5	3.8	5.5	2.5	2.9	4.0	2.0
1978	3.7	5.4	2.4	3.8	5.5	2.5	3.2	4.8	1.9
1979	3.6	5.3	2.4	3.7	5.5	2.4	3.0	4.2	2.0
1980	3.7	5.5	2.4	3.8	5.6	2.4	3.0	4.2	2.0
1981	3.7	5.4	2.5	3.8	5.5	2.6	3.2	4.6	2.1
1982	3.9	5.7	2.5	3.9	5.8	2.6	3.4	4.8	2.4
1983	3.9	5.6	2.6	3.9	5.7	2.7	3.3	4.9	2.2
1984	3.9	5.8	2.6	4.0	5.9	2.6	3.5	4.9	2.5
1985	4.0	5.8	2.7	4.0	5.8	2.7	3.8	6.0	2.4
1986	4.1	5.8	2.8	4.1	5.9	2.8	3.7	5.3	2.5
1987	4.1	6.0	2.8	4.2	6.2	2.8	3.7	5.5	2.4
1988	4.0	5.9	2.7	4.1	5.9	2.8	3.8	5.8	2.4
1989	4.2	6.1	2.8	4.2	6.2	2.8	4.0	6.1	2.6
1990	4.2	6.2	2.8	4.2	6.2	2.8	4.2	6.4	2.8
1991	4.3	6.2	3.0	4.3	6.2	3.0	4.3	6.4	3.0
1992	4.3	6.2	2.9	4.4	6.3	2.9	4.0	5.9	2.6
1993	4.2	6.1	2.8	4.2	6.2	2.8	4.1	6.1	2.8
1994	4.3	6.2	2.9	4.3	6.3	2.9	4.2	6.4	2.8
1995	4.3	6.2	3.0	4.4	6.3	3.0	4.4	6.3	3.1
1996	4.3	6.2	2.8	4.3	6.3	2.9	4.2	5.9	2.9
1997	4.3	6.2	2.9	4.3	6.2	2.9	4.3	6.6	2.8
1998	4.3	6.2	2.8	4.3	6.3	2.9	4.0	6.3	2.5
1999	4.1	5.9	2.7	4.1	6.0	2.7	4.2	6.1	2.8
2000	4.2	6.1	2.8	4.3	6.2	2.8	4.1	6.3	2.7
2001	4.3	6.2	2.8	4.3	6.3	2.8	4.3	6.5	2.8
2002	4.2	6.2	2.8	4.3	6.3	2.8	4.1	5.9	2.9
2003	4.2	6.1	2.7	4.3	6.2	2.8	4.1	6.2	2.8
2004	4.1	6.0	2.7	4.2	6.1	2.8	4.0	5.9	2.7
2005	4.1	6.0	2.7	4.2	6.0	2.8	4.1	6.2	2.6
2006	4.0	5.8	2.6	4.1	5.9	2.7	3.9	6.0	2.5
2007	4.0	5.8	2.6	4.1	5.9	2.7	4.1	6.1	2.8
2008	4.0	5.9	2.5	4.1	5.9	2.6	3.9	5.9	2.6
1975-2008	4.1	5.9	2.7	4.1	6.0	2.8	3.9	5.7	2.6
Age at Death									
All ages	4.0	5.9	2.7	4.1	6.0	2.7	4.0	6.0	2.6
Under 65	1.4	2.0	0.8	1.4	2.0	0.8	1.6	2.5	0.9
65 and over	22.2	32.4	15.2	22.7	33.1	15.5	20.6	30.6	14.8
All ages ^b	2.5	3.6	1.6	2.5	3.6	1.6	2.5	3.8	1.6

^aUS Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD,

http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-13. Age-adjusted mortality^a rates^b and trends^c of kidney cancer, by race/ethnicity and gender

Race/ethnicity	Rate 2004-2008 Rate per 100,000			Trend 1999-2008 AAPC ^d (%)		
	Total	Males	Females	Total	Males	Females
All Races	4.0	5.9	2.7	-0.4*	-0.4*	-0.6*
White	4.1	6.0	2.7	-0.4*	-0.4*	-0.6*
White Hispanic ^e	3.7	5.4	2.4	0.1	0.0	0.0
White Non- Hispanic ^e	4.1	6.0	2.7	-0.3*	-0.3*	-0.5*
Black	4.0	6.0	2.6	-0.3	-0.2	-0.5
Asian/Pacific Islander	1.9	2.6	1.2	0.0	0.0	0.2
American Indian/ Alaska Native						
Total U.S.	4.5	6.7	2.8	-0.4	-0.1	-1.7
CHSDA ^f Counties	6.2	8.9	4.1	0.1	-0.1	-0.5
Non-CHSDA ^f Counties	2.6	4.1	1.3	...	...	...
Hispanic ^e	3.6	5.2	2.3	0.1	-0.1	0.0

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Trend based on less than 10 cases for at least one year within the time interval.

^aUS Mortality Files, National Center for Health Statistics, CDC.

^bRates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cTrends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^dThe 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^eHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^fIncidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 8-14. Nationally representative inpatient stays for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=37,296)		2003 (N=36,938)		2004 (N=39,127)		2005 (N=41,084)		2006 (N=43,259)		2007 (N=46,641)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	17.5	25.5	17.1	24.5	18.2	26.6	18.9	27.4	19.7	28.3	20.9	29.9
Age												
35-39	5.0*		4.9*		4.5*		5.5*		5.4*		5.3*	
40-44	8.1*		8.4*		9.1*		9.5*		10.0*		10.6*	
45-54	18.5*		17.1*		17.4*		17.9*		18.9*		21.0*	
55-64	37.4		34.2		36.9		37.7		37.8		38.9	
▶ 65-74	52.6		53.5		55.2		58.3		59.7		63.9	
75-84	41.7*		42.8*		56.5*		54.0*		58.2*		58.9*	
85+	37.7*		32.0*		32.6*		37.3*		37.5*		43.5*	
Race/ethnicity												
▶ White	12.2	18.0	13.9	18.9	15.7	21.7	16.1	22.0	15.5	21.1	16.9	22.8
Black	11.0*	17.7	12.0*	18.7	12.2*	19.1	10.9*	16.9	12.4*	19.1	13.8*	21.0
Hispanic	†	†	9.1*	17.1	7.6*	14.3	8.6*	15.9	10.0*	18.0	9.9*	17.6
Asian	4.5*	7.6	5.0*	7.9	5.1*	9.8	4.7*	7.4	5.5*	8.5	8.2*	12.6
Other	29.6*	47.8	16.6*	28.4	13.5*	23.2	24.4*	41.1	28.1*	45.9	30.6*	49.2
Region												
Northeast	20.1	27.7	16.8	23.1	19.3	27.2	22.1	30.9	19.4	26.9	25.5	35.1
South	18.3	26.8	19.7	28.4	20.4	29.8	18.9	27.5	21.4	30.9	21.8	31.2
▶ Midwest	17.2	24.6	16.6	23.9	19.9	29.2	19.4	28.1	19.6	28.2	20.6	29.4
West	14.2*	21.9	13.7*	20.4	12.2*	18.4	15.7*	23.4	17.2*	25.3	16.2*	23.9
Gender												
Female	13.3	18.9	13.1	18.3	14.4	20.6	14.8	21.0	15.3	21.6	15.6	21.9
▶ Male	22.1	33.0	21.5	31.6	22.4	33.4	23.3	34.4	24.3	35.6	26.7	38.8

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 8-15. Inpatient stays by Medicare beneficiaries for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=9,680)		2003 (N=10,580)		2004 (N=11,020)		2005 (N=11,820)		2006 (N=10,420)		2007 (N=10,240)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	27.2	30.4	29.0	32.7	29.8	33.2	31.8	34.9	28.7	32.8	28.3	32.8
Under 65/65+												
< 65 Years	17.4*	17.4	16.8*	16.8	20.8*	20.8	24.5*	24.5	17.8*	17.8	16.5*	16.5
▶ 65+ Years	29.7	30.4	32.2	32.7	32.2	33.2	33.9	34.9	31.8	32.8	31.8	32.8
Age												
▶ 65-69	27.9		31.1		30.7		32.2		33.6		30.7	
70-74	36.3*		38.4*		37.8*		34.5*		34.2*		39.4*	
75-79	37.8*		37.7*		39.9*		45.8*		40.4*		35.2*	
80-84	27.2*		31.0*		34.1*		34.2*		25.9*		28.0*	
85-89	14.5**		17.6**		15.6**		22.2**		22.1**		26.4*	
90-94	6.3**		18.4**		2.0**		13.7**		15.8**		13.7**	
95-97	0.0**		0.0**		9.9**		0.0**		0.0**		19.9**	
98+	...		0.0**		10.6**		10.4**		0.0**		0.0**	
Race/ethnicity												
▶ White	27.6	30.8	29.0	32.7	29.9	33.8	32.1	35.4	28.1	32.4	28.9	33.1
Black	29.2*	35.3	32.7*	41.1	32.0*	32.6	38.0*	41.9	32.3*	35.2	22.1*	29.4
Hispanic	6.1**	10.5	26.2**	25.4	17.0**	13.0	8.2**	3.0	25.3**	38.8	24.7**	37.5
Asian	20.2**	22.9	7.6**	7.1	7.2**	14.5	10.1**	14.5	16.6**	9.0	19.0**	21.3
Other	31.1**	22.0	28.4**	28.9	48.4**	51.1	31.4**	36.3	42.1**	47.6	43.3**	36.4
Unknown	0.0**	...	57.4**	...	0.0**	...	29.4**	...	93.8**	...	67.3**	...
Region												
▶ Northeast	29.4	32.7	29.3	33.9	27.5	33.4	35.7	39.7	32.0	35.5	34.4	40.8
South	27.6*	31.5	30.0*	33.0	33.1*	36.8	31.4*	33.1	28.4*	32.9	28.0*	31.3
Midwest	25.9*	28.9	29.2*	33.3	30.7*	33.1	29.5*	33.1	28.3*	31.5	24.8*	30.7
West	25.5*	27.8	26.0*	29.9	23.3*	25.1	31.9*	36.0	26.0*	31.1	27.2*	30.7
Gender												
Female	18.0*	19.0	19.9*	22.6	19.8*	22.0	22.0*	23.8	20.0*	22.9	19.1*	21.8
▶ Male	38.9	46.2	40.6	46.5	42.4	48.4	44.1	50.0	39.4	45.6	39.6	47.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 8-16. Inpatient stays by privately insured individuals for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,571)		2003 (N=1,761)		2004 (N=1,844)		2005 (N=2,135)		2006 (N=1,775)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	17.8	40.7	17.9	43.0	18.3	43.6	20.0	45.4	17.1	44.4
Age										
35-39	5.7*		6.2*		5.9*		5.6*		4.0*	
40-44	10.4*		11.2*		11.2*		10.5*		10.7*	
45-54	23.8*		23.7*		23.3*		20.8*		19.8*	
55-64	54.7*		47.7*		46.9*		54.0*		51.1*	
▶ 65-74	77.0		79.2		82.8		90.5		83.7	
75-84	64.6*		96.8*		101.5*		99.6*		112.1*	
85+	...		51.4*		46.7*		56.2*		44.1**	
Race/ethnicity										
▶ White	17.4	36.4	18.2	40.9	20.0	47.2	21.1	47.7	18.2	46.0
Black	16.7*	28.7	16.9*	32.5	16.7*	35.2	21.8*	41.9	14.6*	43.1
Hispanic	8.7**	23.0	8.7*	23.8	10.6*	28.9	14.1*	37.0	10.3*	28.7
Asian	5.1**	46.4	7.0**	24.9	6.7**	22.7	10.7*	32.1	4.7**	25.3
Other	9.9**	30.1	12.1**	122.0	6.1**	15.7	21.3**	50.6	14.3**	33.1
Unknown	22.4*	...	19.4*	...	17.7*	...	18.1*	...	18.1*	...
Missing	19.0*	...	19.3*	...	18.9*	...	20.5*	...	19.3*	...
Region										
Northeast	22.5*	50.9	15.8*	36.8	19.0	47.7	23.7*	56.6	16.7	50.8
South	16.0*	35.9	19.0	45.0	18.0*	42.3	19.8	45.9	17.1	46.5
▶ Midwest	19.7	43.2	18.5	43.2	20.8	46.1	21.1	44.3	18.6	46.5
West	14.9*	37.5	14.3*	41.8	12.9*	36.7	15.6*	37.9	14.1*	32.5
Gender										
Female	13.2*	29.9	12.6*	30.9	12.7*	30.3	14.5*	32.7	12.4*	33.1
▶ Male	22.7	51.7	23.5	55.4	24.3	57.0	25.8	58.4	21.9	54.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 8-17. Hospital outpatient visits by Medicare beneficiaries for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=11,080)		2003 (N=10,660)		2004 (N=12,740)		2005 (N=14,840)		2006 (N=15,500)		2007 (N=20,840)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	31.2	32.3	29.2	34.5	34.4	40.0	40.0	44.7	42.6	45.0	57.6	65.0
Under 65/65+												
< 65 Years	30.4	30.4	12.9*	12.9	19.1*	19.1	26.7*	26.7	39.2*	39.2	39.3*	39.3
▶ 65+ Years	31.3	32.3	33.5	34.5	38.6	40.0	43.7	44.7	43.6	45.0	63.1	65.0
Age												
▶ 65-69	33.9		36.4		53.5		46.4		45.0		93.2	
70-74	38.0*		42.7*		38.9*		48.2*		52.2*		63.2*	
75-79	40.9*		43.3*		43.9*		65.1*		50.0*		57.8*	
80-84	14.3*		18.5*		25.9*		27.9*		42.6*		43.7*	
85-89	23.9**		16.7**		18.9**		15.6**		22.9**		38.4*	
90-94	8.4**		6.1**		2.0**		15.7**		13.9**		19.6**	
95-97	0.0**		...		...		38.9**		0.0**		0.0**	
98+	...		...		0.0**		...		...		...
Race/ethnicity												
▶ White	30.3	31.1	29.0	34.6	32.8	38.0	39.8	45.1	40.5	43.6	58.6	66.4
Black	29.2*	25.5	27.2*	25.8	32.6*	35.4	33.6*	24.5	52.4*	43.3	48.2*	50.1
Hispanic	18.2**	17.7	17.5**	26.8	14.1**	14.7	57.7**	68.8	90.0*	115.1	66.0**	72.4
Asian	60.6**	80.7	30.3**	59.7	21.5**	25.0	40.3**	57.1	13.3**	31.6	9.5**	8.5
Other	79.6**	100.0	66.3**	99.3	160.2*	225.9	65.6**	89.4	61.7**	63.7	92.0*	81.3
Unknown	26.7**	...	0.0**	...	0.0**	...	29.4**	...	62.6**	...	67.3**	...
Region												
▶ Northeast	43.8	49.7	45.2	55.1	41.1	50.7	48.0	57.6	54.0	58.0	79.4	83.3
South	21.8*	18.0	16.7*	19.6	23.0*	27.7	22.5*	24.1	29.3*	29.8	37.0*	40.3
Midwest	35.7*	37.1	41.4*	47.0	47.8*	50.8	58.9*	61.7	58.5*	60.0	78.6*	94.5
West	30.7*	36.9	21.0*	25.3	33.4*	39.1	43.0*	51.1	36.9*	42.2	49.9*	56.8
Gender												
Female	17.8*	19.9	16.5*	18.7	21.3*	24.6	24.5*	25.4	29.5*	30.1	44.9*	48.5
▶ Male	48.2	49.4	45.4	55.8	50.9	60.7	59.3	70.0	58.9	64.5	73.2	86.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 8-18. Hospital outpatient visits by privately insured individuals for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,628)		2003 (N=3,877)		2004 (N=4,608)		2005 (N=5,074)		2006 (N=4,330)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	41.1	93.9	39.3	88.6	45.8	117.9	47.5	106.5	41.6	94.5
Age										
35-39	6.8*		9.3*		9.6*		10.7*		7.7*	
40-44	25.2*		21.4*		17.5*		17.3*		21.8*	
45-54	52.5*		47.8*		47.8*		56.1*		53.4*	
55-64	144.0*		144.7		130.8*		141.2*		141.6*	
▶ 65-74	203.8		152.5		242.2		159.7		165.2	
75-84	78.3*		130.2*		315.2*		281.6*		150.4*	
85+	...		53.1*		116.1*		70.6*		83.7*	
Race/ethnicity										
▶ White	33.3	66.5	39.1	83.4	46.3	107.9	48.3	97.7	45.9	100.5
Black	22.9*	44.0	27.3*	57.3	26.6*	59.0	27.1*	53.0	23.7*	54.5
Hispanic	19.4*	48.4	15.9*	39.6	13.3*	36.3	15.4*	45.2	14.0*	40.6
Asian	8.0**	37.3	4.0**	12.7	5.3**	15.2	41.5*	124.2	33.7*	167.2
Other	12.4**	57.8	8.6**	29.1	11.0**	19.8	39.3*	86.1	48.5*	105.5
Unknown	50.6*	...	66.3*	...	46.5*	...	39.4*	...	33.3*	...
Missing	50.0*	...	42.9*	...	74.6*	...	76.6*	...	50.2*	...
Region										
Northeast	48.5	112.7	36.4*	84.5	39.3*	94.4	47.8*	108.7	46.1*	112.1
South	34.4*	73.0	34.5*	74.7	30.6*	72.0	37.7*	81.8	34.5*	80.7
▶ Midwest	49.8	110.2	53.7	115.5	76.5	187.0	67.6	147.1	52.2	109.4
West	34.0*	103.1	21.8*	65.5	28.8*	79.3	34.8*	74.5	39.1*	87.9
Gender										
Female	23.3*	56.4	26.1*	61.3	33.4*	104.7	35.3*	88.2	25.9*	59.4
▶ Male	60.0	132.2	53.3	116.7	59.0	131.5	60.5	125.3	58.0	128.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 8-19. Nationally representative hospital outpatient visits for kidney cancer listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	217,448
Age	
40-44	1,284
45-54	60,999
55-64	89,281
65-74	40,848
75-84	15,285
85+	9,751
Race/ethnicity	
White	186,727
Black	18,071
Hispanic	11,503
Asian	1,147
Region	
Northeast	29,538
South	104,788
Midwest	78,179
West	4,943
Gender	
Female	81,485
Male	135,963

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 8-20. Ambulatory surgery center visits by Medicare beneficiaries for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,680)		2003 (N=1,760)		2004 (N=2,160)		2005 (N=2,200)		2006 (N=2,200)		2007 (N=2,180)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.4	6.5	5.5	6.4	6.5	7.8	6.5	8.0	7.3	9.0	7.0	8.7
Age												
▶ 65-69	6.3*		7.3*		6.9		5.9*		6.0**		10.0	
70-74	6.1**		6.4**		8.6**		8.7**		10.9*		9.8*	
75-79	8.8**		8.0**		8.0**		10.0**		13.2*		8.2**	
80-84	5.7**		6.0**		8.6**		9.5**		8.3**		8.1**	
85-89	4.3**		1.7**		6.6**		5.8**		5.7**		4.8**	
90-94	6.3**		...		4.0**		5.9**		4.0**		5.9**	
95-97	0.0**		...		...		...		...		...
Race/ethnicity												
▶ White	5.6	6.5	5.5	6.4	6.9	8.2	6.9	8.4	7.6	9.0	7.4	9.0
Black	5.7**	13.2	6.1**	8.6	6.5**	7.8	5.4**	8.1	8.9**	14.3	5.1**	7.8
Hispanic	...	...	...	...	...	...	2.7**	14.0	...	...	8.2**	29.8
Asian	...	...	3.8**	18.8	3.6**	27	3.4**	25.6	3.3**	17	3.2**	16.7
Other	6.9**	34.1	6.3**	14.3	...	...	...	...	0.0**	0.0	2.7**	9.7
Unknown	...	...	28.7**	...	...	...	29.4**	...	...	...	...	...
Region												
▶ Northeast	4.2*	5.5	5.0*	8.5	2.8*	4.7	2.2*	3.9	6.9**	8.5	6.9*	9.6
South	6.3*	8.2	5.7*	6.6	7.2*	8.0	7.9*	9.7	8.7*	10.3	8.9*	11.3
Midwest	6.0**	7.5	7.0*	7.8	8.6*	10.8	9.1*	10.6	6.8*	9.6	6.1**	8.4
West	3.8**	4.4	3.3**	4.8	6.2**	7.5	4.4**	5.8	5.5**	7.5	4.4**	5.2
Gender												
Female	4.9*	5.6	3.2*	3.7	5.1*	6.0	4.2*	4.6	4.8*	5.8	5.3*	6.5
▶ Male	6.0	7.7	8.3	10.1	8.3	10.2	9.5	12.3	10.5	13.2	9.1	11.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 8-21. Ambulatory surgery center visits by privately insured individuals for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=15)		2003 (N=32)		2004 (N=41)		2005 (N=68)		2006 (N=69)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.2*	0.3	0.3	0.6	0.4	0.9	0.6	1.1	0.7	1.2
Age										
35-39	0.1*		0.1*		0.2**		0.6*		0.9*	
40-44	0.1*		0.4*		0.6*		0.4*		0.5*	
45-54	0.2*		0.6*		0.6*		0.9*		1.1*	
55-64	0.7*		0.9*		0.6*		2.2*		1.4*	
▶ 65-74	0.3*		0.3*		1.3*		0.9*		1.3*	
75-84	...		0.5**		3.1**		0.8**		1.7**	
85+	...		1.6**		...		...		...
Race/ethnicity										
▶ White	0.2*	0.3	0.3*	0.6	0.5*	1.0	0.8	1.3	0.7	1.1
Black	...	...	0.6**	4.2	0.2**	2.1	0.4**	1.4	0.7**	2.9
Hispanic	...	...	0.4**	1.3	0.1**	1.7	0.1**	0.7	0.5**	1.8
Asian	...	...	...	...	0.4**	2.1	0.3**	12.5	0.3**	70.6
Other	...	...	...	...	1.2**	6.2	...	...	...	...
Unknown	...	...	0.4**	...	0.6**	...	0.9**	...	1.0**	...
Missing	0.2**	...	0.3**	...	0.3**	...	0.1**	...	0.5**	...
Region										
Northeast	0.5**	1.3	0.4*	1.3	0.1*	0.4	0.3**	2.0	0.4*	1.0
South	0.1*	0.2	0.3*	0.7	0.6**	1.4	0.3**	0.7	0.6*	1.3
▶ Midwest	0.1*	0.4	0.2*	0.6	0.3*	0.8	0.7*	1.3	0.6*	1.2
West	0.3**	0.6	0.8**	1.5	0.5**	1.0	1.8**	3.4	1.0**	1.7
Gender										
Female	0.1**	0.4	0.1**	0.7	0.2**	0.7	0.1**	0.3	0.0**	0.1
▶ Male	0.3*	0.5	0.6*	1.1	0.6	1.3	1.2	2.0	1.3	2.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 8-22. Nationally representative ambulatory surgery center visits for kidney cancer listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	3,026	1.4	4.1
Age			
45-54	258	0.6	
55-64	...	...
▶ 65-74	267	1.4	
75-84	2,501	19.3*	
Gender			
Female	267	0.2	2.7
▶ Male	2,759	2.6	10.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 8-23. Physician office visits by Medicare beneficiaries for kidney cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=155,640)		2003 (N=171,160)		2004 (N=160,900)		2005 (N=166,120)		2006 (N=176,560)		2007 (N=178,400)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	437.6	520.9	469.3	566.1	434.9	514.8	447.6	532.9	485.7	588.1	493.2	588.0
Under 65/65+												
< 65 Years	155.1*	155.1	158.9*	158.9	195.1*	195.1	201.3*	201.3	196.5*	196.5	235.8*	235.8
▶ 65+ Years	509.7	520.9	551.2	566.1	499.7	514.8	516.9	532.9	568.7	588.1	570.4	588.0
Age												
▶ 65-69	443.7		492.4		432.0		432.6		504.4		503.9	
70-74	600.7*		563.5*		516.4*		524.1*		585.9*		633.8*	
75-79	596.3*		693.2*		653.1*		649.0*		675.4*		701.2*	
80-84	578.8*		691.4*		555.7*		636.3*		659.9*		621.8*	
85-89	323.1*		338.8*		399.1*		441.7*		540.3*		440.6*	
90-94	181.5*		175.8*		203.9*		204.2*		231.6*		307.7*	
95-97	92.2**		50.1**		49.3**		253.0**		239.0**		139.2**	
98+	...		...		21.2**		10.4**		10.2**		10.2**	
Race/ethnicity												
▶ White	458.6	543.3	489.1	587.0	452.9	532.9	462.4	547.0	504.0	599.4	517.8	606.4
Black	295.3*	386.6	352.8*	424.4	346.3*	415.8	378.6*	467.7	371.7*	521.2	347.4*	463.7
Hispanic	218.6*	238.0	207.0*	220.7	296.9*	320.6	403.6*	508.8	368.3*	523.3	379.3*	549.8
Asian	161.5*	194.0	151.4*	174.0	118.1*	156.3	201.6*	225.3	305.8*	429.2	278.8*	326.2
Other	702.2*	570.4	612.4*	787.3	450.5*	554.3	387.9*	485.9	504.7*	640.7	449.3*	584.6
Unknown	293.8**	...	1,377*	...	814.3*	...	617.1**	...	875.8**	...	740.5**	...
Region												
▶ Northeast	542.5	639.2	501.3	600.9	435.7	517.1	495.6	587.1	544.5	653.6	565.7	674.6
South	451.5*	539.9	504.4*	610.5	475.5*	565.1	455.8*	543.7	523.5*	636.8	536.3*	643.7
Midwest	407.3*	480.9	445.0*	534.1	429.5*	511.3	439.9*	532.1	450.2*	537.5	437.7*	518.3
West	322.3*	394.4	385.5*	475.3	347.6*	404.3	385.8*	443.2	385.8*	476.6	395.4*	472.4
Gender												
Female	300.8*	355.3	321.0*	379.2	299.6*	345.2	308.1*	360.1	344.1*	408.5	347.9*	402.3
▶ Male	612.3	753.6	657.4	823.5	605.2	744.1	622.0	766.2	661.0	827.5	671.3	831.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 8-24. Physician office visits by privately insured individuals for kidney cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=10,793)		2003 (N=11,925)		2004 (N=13,712)		2005 (N=15,273)		2006 (N=14,570)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	122.3	295.3	121.0	298.5	136.3	323.9	143.1	327.2	140.0	380.9
Age										
35-39	28.5*		28.4*		23.3*		24.9*		26.5*	
40-44	67.4*		68.3*		68.6*		63.5*		63.1*	
45-54	138.1*		138.6*		163.4*		145.2*		159.2*	
55-64	383.2*		385.4*		414.6*		422.8*		432.0*	
▶ 65-74	684.1		503.5		644.5		638.5		738.2	
75-84	451.6*		723.5*		628.8*		727.6*		1,041*	
85+	...		319.9*		322.7*		295.4*		350.3*	
Race/ethnicity										
▶ White	117.9	254.5	139.3	328.4	144.1	340.0	148.1	329.9	147.8	382.7
Black	80.1*	148.3	118.2*	225.4	140.3*	284.7	98.7*	195.0	94.2*	276.7
Hispanic	72.0*	140.0	56.3*	156.2	80.7*	225.4	75.5*	233.2	65.7*	191.9
Asian	31.9*	119.0	51.3*	181.0	47.0*	139.4	72.0*	212.8	106.7*	478.1
Other	22.3**	81.6	32.8**	118.8	37.8*	79.0	139.1*	272.0	72.8*	147.3
Unknown	102.4*	...	149.9*	...	141.0*	...	128.9*	...	124.9*	...
Missing	136.6*	...	109.0*	...	150.8*	...	199.1*	...	187.0*	...
Region										
Northeast	137.8	334.2	120.9*	314.0	119.9*	298.5	140.5*	340.0	120.1*	333.9
South	111.9*	266.3	116.1*	278.3	135.3*	320.8	137.8*	315.5	140.3*	390.7
▶ Midwest	130.9	298.3	133.8	313.5	156.9	349.9	159.5	348.3	145.0	410.1
West	121.1*	368.4	105.2*	324.8	105.8*	287.5	127.0*	292.5	143.5*	351.4
Gender										
Female	68.4*	156.9	75.9*	193.9	86.0*	211.3	97.6*	223.1	85.1*	229.5
▶ Male	179.4	435.6	168.7	405.2	189.5	440.1	191.1	435.0	197.3	522.8
Unknown	139.2**	...	...	...	...	...	31.7**	...	74.5**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 8-25. Nationally representative physician office visits for kidney cancer listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	2,306,372
Age	
40-44	27,147
45-54	213,383
55-64	644,318
65-74	522,311
75-84	556,322
85+	342,891
Race/ethnicity	
White	2,109,471
Black	124,117
Hispanic	72,784
Region	
Northeast	283,818
South	1,108,501
Midwest	598,608
West	315,445
Gender	
Female	864,797
Male	1,441,575

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 8-26. Emergency room visits by privately insured individuals for kidney cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=52)		2003 (N=158)		2004 (N=112)		2005 (N=105)		2006 (N=84)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.6	2.3	1.6	3.4	1.1	2.5	1.0	2.2	0.8	1.8
Age										
35-39	...		0.2**		...		0.2**		0.2**	
40-44	...		0.6**		0.8**		0.3**		0.2**	
45-54	0.7**		1.2**		0.9**		0.9**		1.1**	
55-64	1.6**		9.0*		4.5		3.1*		3.2	
▶ 65-74	7.1*		3.2*		4.9*		5.6*		2.9*	
75-84	...		3.2**		1.5**		3.7**		...	
85+	...		3.2**		6.0**		1.2**		...	
Race/ethnicity										
▶ White	0.5*	1.1	0.7	1.6	0.9	2.6	0.8	2.4	0.7	1.6
Black	...	...	8.4**	18.7	2.0**	4.8	1.0**	2.7	0.9**	2.8
Hispanic	...	...	0.8**	3.4	2.0**	5.5	0.9**	1.9	0.6**	2.6
Asian	...	...	...	...	0.4**	166.9	...	...	...	...
Unknown	0.3**	...	...	...	...	...	...	...	0.3**	...
Missing	0.8*	...	2.6*	...	2.0*	...	2.7*	...	2.1**	...
Region										
Northeast	0.1*	0.6	0.3**	1.6	0.1**	10.6	0.1**	2.1	0.1*	0.4
South	0.5*	1.5	3.1*	6.2	2.0*	4.7	1.8*	4.1	1.6*	3.6
▶ Midwest	0.3*	0.8	0.8*	1.9	0.6*	2.0	0.5*	1.8	0.2*	0.4
West	2.1**	32.9	...	...	0.2**	1.3	...	...	0.3**	0.9
Gender										
Female	0.2**	0.5	1.3*	2.7	1.2	2.7	0.7*	1.5	0.5**	1.0
▶ Male	1.1	4.1	1.9	4.2	1.0	2.8	1.3	3.7	1.1	3.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 8-27. Nationally representative inpatient stays for kidney cancer listed as primary diagnosis with partial nephrectomy performed, rate,^a rate per visit^b

	2002 (N=6,353)		2003 (N=6,862)		2004 (N=7,413)		2005 (N=8,740)		2006 (N=9,340)		2007 (N=12,229)	
	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit	Rate	Rate Per Visit
Total	3.0	17,035	3.2	18,578	3.5	18,945	4.0	21,274	4.2	21,591	5.5	26,218
Age												
35-44	1.4	22,025	1.5	23,103	1.6	23,495	2.4	32,179	2.4	30,249	2.7	34,191
45-54	3.5	18,758	3.7	21,400	3.6	20,382	4.2	23,484	5.1	27,277	6.3	30,077
55-64	7.0	18,714	6.9	20,075	7.8	21,222	9.0	23,897	8.8	23,164	11.2	28,661
65-74	8.8	16,751	9.9	18,572	11.0	19,826	12.3	21,144	12.2	20,413	16.5	25,836
75-84	5.6	13,328	5.9	13,887	7.7	13,664	7.1	13,126	8.2	14,016	11.2	19,003
85+	†	†	†	†	†	†	†	†	†	†	†	†
Race/ethnicity												
White	2.1	17,338	2.7	19,619	3.2	20,244	3.3	20,680	3.3	21,202	4.7	27,839
Black	2.1	18,763	2.2	18,447	2.0	16,498	2.6	24,376	2.9	23,341	3.6	25,658
Hispanic	†	16,011	1.2	13,242	1.4	18,163	1.5	17,501	2.0	19,949	2.4	24,538
Region												
Northeast	3.8	19,115	3.4	20,541	4.3	22,388	5.8	26,298	5.2	26,866	9.3	36,531
South	3.0	16,406	3.7	18,659	3.8	18,703	3.7	19,338	4.4	20,423	5.2	23,818
Midwest	2.9	16,750	3.0	18,402	3.4	17,200	4.0	20,345	3.7	18,888	4.7	22,956
West	2.3	16,074	2.3	16,527	2.2	17,847	3.2	20,231	3.8	21,992	3.6	22,146
Gender												
Male	3.8	17,188	3.9	18,072	4.1	18,368	4.8	20,610	4.9	20,247	6.7	24,948
Female	2.2	16,802	2.5	19,343	2.8	19,786	3.3	22,256	3.6	23,592	4.4	28,259

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic.

^bRate per 100,000 adults 35+ with partial nephrectomy performed is based on estimated number of visits for kidney cancer in Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 8-28. Use of inpatient surgical procedures for kidney cancer, count, percent

Patient-level covariate	Number of Patients (%)				Patient-level covariate	Number of Patients (%)			
	LPN	OPN	LRN	ORN		LPN	OPN	LRN	ORN
Total	43 (0.8)	568 (10.4)	515 (9.4)	4,357 (79.5)	Median census tract income ^{c,d}				
Age at Surgery					<\$35,000	9 (0.7)	120 (9.3)	112 (8.7)	1,050 (81.3)
66-69	12 (1.1)	142 (12.6)	92 (8.2)	880 (78.1)	\$35,000-44,999	8 (0.6)	132 (10.4)	101 (7.9)	1033 (81.1)
70-74	11 (0.7)	183 (10.8)	143 (8.4)	1359 (80.1)	\$45,000-59,999	13 (0.9)	148 (10.2)	154 (10.7)	1128 (78.2)
74-79	7 (0.5)	156 (10.6)	149 (10.1)	1164 (78.8)	≥\$60,000	12 (0.9)	147 (11.3)	132 (10.2)	1005 (77.6)
80-84	9 (1)	68 (7.8)	95 (10.9)	698 (80.3)	Percentage of residents in				
85+	<5 (1.3)	19 (6)	36 (11.4)	256 (81.3)	Census tract with less than a				
Sex ^a					high school education ^e				
Men	13 (0.6)	216 (9.5)	234 (10.3)	1801 (79.6)	>25	8 (0.7)	124 (10.5)	101 (8.6)	944 (80.2)
Women	30 (0.9)	352 (10.9)	281 (8.8)	2556 (79.4)	15.1-25	11 (0.9)	108 (8.9)	114 (9.4)	979 (80.8)
Race/ethnicity					10-15	8 (0.8)	98 (9.9)	107 (10.9)	774 (78.4)
White, Non-Hispanic	39 (0.8)	468 (10.3)	441 (9.7)	3615 (79.2)	<10	12 (0.8)	175 (12.1)	148 (10.2)	1116 (76.9)
White, Hispanic	<5 (0.3)	33 (9.8)	22 (6.6)	279 (83.3)	Tumor size, cm ^{a,f}				
Black	<5 (0.8)	46 (11.6)	32 (8.1)	315 (79.5)	≤4	34 (1.5)	415 (17.7)	260 (11.1)	1631 (69.7)
Other/unknown	<5 (0)	21 (11.1)	20 (10.6)	148 (78.3)	>4	6 (0.2)	112 (3.8)	238 (8)	2604 (88)
Marital Status ^{a,b}					Charlson Index Score				
Married	31 (0.9)	362 (10.8)	312 (9.3)	2648 (79)	0	22 (0.7)	337 (10.4)	319 (9.8)	2573 (79.1)
Not Married	10 (0.5)	184 (9.6)	186 (9.7)	1539 (80.2)	1	11 (0.8)	137 (10.2)	120 (9)	1074 (80)
SEER Registry ^a					≥2	10 (1.1)	94 (10.6)	76 (8.5)	710 (79.8)
Atlanta	<5 (1.8)	12 (7.1)	15 (8.8)	140 (82.4)	Hypertension ^a				
Connecticut	<5 (0.6)	48 (9.6)	50 (10)	400 (79.8)	Yes	25 (0.9)	305 (11.5)	235 (8.8)	2092 (78.8)
Detroit	6 (0.9)	82 (12.3)	57 (8.5)	522 (78.3)	No	18 (0.6)	263 (9.3)	280 (9.9)	2265 (80.2)
Greater California	<5 (0.5)	50 (8.5)	62 (10.5)	476 (80.5)					
Hawaii	<5 (0)	<5 (4.7)	<5 (4.7)	58 (90.6)					
Iowa	<5 (0.2)	48 (9)	25 (4.7)	460 (86.1)					
Kentucky	<5 (0.8)	34 (9.4)	42 (11.5)	285 (78.3)					
Los Angeles	8 (1.5)	79 (14.4)	43 (7.8)	419 (76.3)					
Louisiana	5 (1.5)	29 (9)	43 (13.4)	245 (76.1)					
New Jersey	7 (1)	78 (10.8)	91 (12.5)	549 (75.7)					
New Mexico	<5 (0)	12 (7.1)	10 (6)	146 (86.9)					
Rural Georgia	<5 (0)	<5 (5.9)	<5 (17.7)	13 (76.5)					
San Francisco	<5 (0.5)	30 (15.4)	25 (12.8)	139 (71.3)					
San Jose	<5 (0)	15 (11)	7 (5.1)	115 (83.9)					
Seattle	<5 (0.6)	28 (8.4)	28 (8.4)	276 (82.6)					
Utah	<5 (0.7)	19 (13.1)	11 (7.6)	114 (78.6)					

LPN: Laparoscopic partial nephrectomy.

OPN: Open partial nephrectomy.

LRN: Laparoscopic radical nephrectomy.

ORN: Open radical nephrectomy.

SEER: Surveillance, Epidemiology, and End Results Program.

^aP < .05 (general chi-square test).^bMarital status was unknown for 211 patients.^cInformation on income was missing for 179 patients.^dP < .05 (chi-square test for linear trend).^eInformation on education was missing for 656 patients.^fInformation on tumor size was missing for 183 patients.

SOURCE: Reprinted from Miller DC, Saigal CS, Banerjee M, Hanley J, Litwin MS and the Urologic Diseases in America Project. Diffusion of Surgical Innovation Among Patients With Kidney Cancer. Cancer, April 2008; 112(8): 1708-1717, Copyright 2008 American Cancer Society, with permission from Elsevier.

Table 8-29. National proportion of urology office visits for kidney cancer listed as primary diagnosis, 2002-2007 (merged), count, percent

	Count	Percent
Kidney Cancer	675,979	0.007%

SOURCE: National Ambulatory Medical Care Survey, 2002-2007.

**Urologic
Diseases**
in America



CHAPTER 9

Urinary Tract Stones

Upper Urinary Tract Stones
Lower Urinary Tract Stones

Table 9-1. Codes used in the diagnosis and management of urinary tract stones**Upper Tract****Individuals with one of the following ICD-9 diagnosis codes:**

270.0	Disturbances of amino-acid transport
274.11	Uric acid nephrolithiasis
592.0	Calculus of kidney
592.1	Calculus of ureter
592.9	Urinary calculus, unspecified

Individuals with the following ICD-9 diagnosis code and any one of the following procedure codes, or the procedure code alone:

271.8	Other specified disorders of carbohydrate transport and metabolism
and	
<i>ICD-9 procedure codes</i>	
55.03	Percutaneous nephrostomy without fragmentation
55.04	Percutaneous nephrostomy with fragmentation
55.92	Percutaneous aspiration of kidney (pelvis)
56.0	Transurethral removal of obstruction from ureter and renal pelvis
56.2	Ureterotomy
59.8	Ureteral catheterization
59.95	Ultrasonic fragmentation of urinary stones
98.51	Extracorporeal shockwave lithotripsy (ESWL) of the kidney, ureter and/or bladder

CPT procedure codes

50060	Nephrolithotomy; removal of calculus
50065	Nephrolithotomy; secondary surgical operation for calculus
50070	Nephrolithotomy; complicated by congenital kidney abnormality
50075	Nephrolithotomy; removal of large staghorn calculus filling renal pelvis and calyces (including anatomic pyelolithotomy)
50080	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation, endoscopy, lithotripsy, stenting, or basket extraction; up to 2 cm
50081	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation, endoscopy, lithotripsy, stenting, or basket extraction; over 2 cm
50130	Pyelotomy; with removal of calculus (pyelolithotomy, pelviolithotomy, including coagulum pyelolithotomy)
50135	Pyelotomy; complicated (eg, secondary operation, congenital kidney abnormality)
50561	Renal endoscopy through established nephrostomy or pyelostomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50580	Renal endoscopy through nephrotomy or pyelotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50590	Lithotripsy, extracorporeal shock wave
50610	Ureterolithotomy, upper one-third of ureter
50620	Ureterolithotomy, middle one-third of ureter
50630	Ureterolithotomy, lower one-third of ureter
50945	Laparoscopy, surgical; ureterolithotomy
50961	Ureteral endoscopy through established ureterostomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50980	Ureteral endoscopy through ureterotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
51060	Transvesical ureterolithotomy
51065	Cystotomy, with calculus basket extraction and/or ultrasonic or electrohydraulic fragmentation of ureteral calculus

Continued on next page.

Table 9-1 (continued). Codes used in the diagnosis and management of urinary tract stones

52320	Cystourethroscopy (including ureteral catheterization); with removal of ureteral calculus
52325	Cystourethroscopy (including ureteral catheterization); with fragmentation of ureteral calculus (eg, ultrasonic or electro-hydraulic technique)
52330	Cystourethroscopy (including ureteral catheterization); with manipulation, without removal of ureteral calculus
52351	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic
52352	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included)
52353	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral catheterization is included)

Lower Tract
Individuals with one of the following ICD-9 diagnosis codes:

594.0	Calculus in diverticulum of bladder
594.1	Other calculus in bladder
594.2	Calculus in urethra
594.8	Other lower urinary tract calculus
594.9	Calculus of lower urinary tract, unspecified

Table 9-2. Lifetime prevalence of kidney stones among adult males, 2001-2008 (merged), count, percent

Total Count	Yes		No		Refused to Answer or Don't Know	
	Count	Percent	Count	Percent	Count	Percent
103,595,621	11,802,180	11.39%	91,201,364	88.04%	†	†

† Figure does not meet standard for reliability or precision.

NOTE: The data in this table are based on question KIQ.026: {Have you/Has SP} ever had kidney stones?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 9-3. Lifetime prevalence of kidney stones among adult females, 2001-2008 (merged), count, percent

Total Count	Yes		No		Refused to Answer or Don't Know	
	Count	Percent	Count	Percent	Count	Percent
111,432,613	7,175,344	6.44%	103,994,814	93.33%	†	†

† Figure does not meet standard for reliability or precision.

NOTE: The data in this table are based on question KIQ.026: {Have you/Has SP} ever had kidney stones?

SOURCE: National Health and Nutrition Examination Survey, 2001-2008.

Table 9-4. Nationally representative inpatient stays for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=280,643)		2003 (N=277,143)		2004 (N=275,451)		2005 (N=279,766)		2006 (N=291,489)		2007 (N=286,741)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	131.7	131.7	128.2	128.0	128.3	128.8	128.7	128.7	132.6	132.2	128.7	128.1
Age												
18-24	52.8*		53.4*		48.4*		45.7*		47.0*		43.5*	
25-34	89.6*		87.7*		81.6*		79.4*		80.6*		76.8*	
35-39	108.1*		101.5*		99.6*		101.4*		104.4*		98.2*	
40-44	112.7*		114.1*		110.4*		110.3*		115.6*		109.1*	
45-54	135.6*		136.0*		130.5*		127.8*		133.3*		128.2*	
55-64	180.1		170.7		170.4		170.3		170.1		167.7	
▶ 65-74	227.4		219.2		221.9		225.5		231.6		231.7	
75-84	205.5*		187.7*		248.8*		260.8*		268.2*		260.0*	
85+	255.4*		252.2*		273.2*		274.4*		288.8*		295.0*	
Race/ethnicity												
▶ White	90.0	92.8	99.5	99.3	105.2	105.7	106.9	106.9	108.8	108.5	101.2	100.7
Black	64.3*	65.1	67.6*	67.6	71.3*	71.5	60.5*	60.5	68.0*	67.7	74.1*	73.5
Hispanic	†	†	81.5*	82.3	67.4*	68.2	67.2*	67.2	82.0*	80.9	72.6*	71.6
Asian	38.5*	40.4	47.5*	48.0	39.9*	40.1	39.2*	39.2	38.2*	37.9	45.8*	45.3
Other	244.5*	237.2	133.8*	135.0	135.0*	136.1	162.8*	162.8	190.2*	186.8	170.3*	167.8
Region												
Northeast	150.9	149.2	146.9	146.1	150.3	150.6	160.6	160.6	163.4	163.3	159.1	158.2
South	144.2	144.2	138.8	138.4	138.6	138.6	132.8	132.8	143.3	142.7	133.3	132.3
▶ Midwest	141.1	140.6	146.5	146.9	145.9	146.9	141.6	141.6	143.1	143.0	145.1	144.8
West	85.1*	86.6	76.7*	76.8	76.0*	76.8	83.2*	83.2	79.9*	79.5	81.2*	81.0
Gender												
Female	126.0	125.9	126.4	126.3	129.1	129.2	130.3	130.3	135.9	135.6	133.0	132.5
▶ Male	138.0	138.4	130.1	130.0	127.5	128.5	127.0	127.0	129.1	128.6	124.2	123.4

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 9-5. Inpatient stays by Medicare beneficiaries for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=69,840)		2003 (N=75,560)		2004 (N=76,900)		2005 (N=75,920)		2006 (N=77,260)		2007 (N=72,360)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	196.3	206.2	193.8	214.5	207.9	216.0	204.6	214.5	212.5	223.4	200.0	209.7
Under 65/65+												
< 65 Years	169.5*	169.5	185.2	185.2	185.4	185.4	177*	177.0	185.6*	185.6	171.1*	171.1
▶ 65+ Years	203.2	206.2	213.0	214.5	213.9	216.0	212.3	214.5	220.3	223.4	208.7	209.7
Age												
▶ 65-69	168.7		180.9		171.8		179.0		184.2		172.4	
70-74	200.7*		214.6*		217.4*		207.3*		204.9*		201.3*	
75-79	234.5*		233.1*		236.8*		229.4*		241.4*		218.3*	
80-84	230.7*		241.1*		241.7*		255.3*		267*		261.9*	
85-89	226.8*		229.2*		252.9*		236.9*		269.4*		235.9*	
90-94	181.5*		226.9*		213.9*		210*		223.6*		241*	
95-97	61.5**		110.2**		187.5**		126.5**		139.4**		159.1**	
98+	64.8**		42.8**		63.6**		82.8**		20.5**		61.3**	
Race/ethnicity												
▶ White	201.9	211.8	214.0	223.4	212.6	222.9	212.5	222.6	218.2	228.7	204.0	215.3
Black	168.9*	180.0	148.7*	140.4	179.1*	180.5	177.9*	192.0	172.8*	193.9	179.6*	199.0
Hispanic	182.1*	144.1	183.6*	138.4	158.3*	120.8	129*	105.9	177.1*	158.3	175.9*	134.4
Asian	88.8**	79.4	121.1*	120.0	75.2**	65.3	77.3**	63.6	142.9*	138.2	123.6*	102.3
Other	159.1*	184.9	262*	244.0	281.2*	260.2	148.3*	132.0	238.3*	248.3	205.7*	178.4
Unknown	373.9**	...	573.6**		434.3**	...	470.2**		469.2**		403.9**	
Region												
▶ Northeast	207.1	221.1	232.5	247.3	225.0	234.6	233.4	244.0	249.1	266.9	238.7	251.6
South	205.5*	212.1	216.4*	221.1	210.4*	218.1	205*	212.9	208.6*	211.8	189.1*	195.7
Midwest	208*	223.3	211.4*	217.9	233.3*	241.0	220.6*	233.5	232.9*	253.7	221.5*	239.8
West	143*	147.4	148.7*	153.6	143.8*	151.4	147.3*	155.4	150.7*	155.6	151.6*	149.7
Gender												
Female	163.4*	166.2	172.8*	169.6	180.1*	177.1	179.4*	180.0	188.3*	192.6	179.1*	180.6
▶ Male	238.5	262.5	250.8	276.5	242.8	269.6	236.0	261.7	242.6	264.9	225.7	248.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-6. Inpatient stays by privately insured individuals for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=11,435)		2003 (N=11,241)		2004 (N=12,103)		2005 (N=12,691)		2006 (N=11,616)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	139.7	158.4	138.6	155.5	155.3	181.9	160.3	190.4	160.6	198.6
Age										
18-24	61.4*		59.4*		61.6*		65.1*		72.1*	
25-34	146.3*		135.6*		140.6*		134.6*		127.6*	
35-39	136.2		130.7*		136.9*		143.1*		142.6*	
40-44	149.1*		137.6*		149.9*		151.2*		148.2*	
45-54	145.4*		142.0*		162.7*		165.1*		168.7*	
55-64	152.9*		164.1		186.8		190.7*		218.6	
▶ 65-74	130.6		166.9		196.4		224.5		233.0	
75-84	268.3*		199.4*		265.3*		280.1*		270.5*	
85+	...		140.3*		191.5*		230.2*		262.0*	
Race/ethnicity										
▶ White	130.2	138.9	125.5	137.9	158.4	181.8	167.2	196.0	166.2	200.2
Black	103.7*	122.0	87.2*	114.4	117.9*	154.0	137.3*	173.0	117.0*	149.3
Hispanic	107.4*	116.5	110.1*	121.2	137.5*	157.3	132.6*	161.5	141.5*	200.2
Asian	79.9*	102.1	59.8*	87.0	77.8*	105.2	67.8*	110.2	75.6*	142.5
Other	110.4*	134.6	108.7*	139.6	160.7*	184.7	121.9*	164.0	117.6*	163.1
Unknown	129.8*	...	108.1*		150.0*	...	148.0*	...	152.8*	...
Missing	158.1*	...	201.7*		182.9*	...	180.6*	...	189.3*	...
Region										
Northeast	110.2*	134.5	118.1*	144.3	145.5*	177.8	147.2*	181.2	160.2*	216.0
South	144.7*	157.5	140.9*	151.9	156.3*	181.7	159.5*	190.7	159.9*	201.1
▶ Midwest	159.0	184.1	160.5	180.7	181.8	208.5	194.1	221.8	193.2	228.9
West	92.5*	101.6	92.4*	102.6	98.5*	116.3	103.8*	126.1	106.4*	134.3
Gender										
Female	124.5	121.8	127.5	121.8	148.6	149.7	154.0	157.7	158.0	167.4
▶ Male	154.7*	196.3	150.2*	190.7	162.1*	214.6	166.8*	224.6	163.3*	228.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-7. Hospital outpatient visits by Medicare beneficiaries for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=16,100)		2003 (N=17,580)		2004 (N=18,840)		2005 (N=20,280)		2006 (N=20,360)		2007 (N=20,280)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	45.3	42.5	48.2	41.1	50.9	45.7	54.6	49.4	56.0	47.9	56.1	51.1
Under 65/65+												
< 65 Years	59.2*	59.2	79.3*	79.3	75.2*	75.2	76.3*	76.3	86.9*	86.9	76.2*	76.2
▶ 65+ Years	41.7	42.5	40.0	41.1	44.4	45.7	48.6	49.4	47.2	47.9	50.0	51.1
Age												
▶ 65-69	48.6		54.7		58.2		57.4		57.4		65.2	
70-74	52.8*		47.4*		62.2*		67.4*		61.3*		57.5*	
75-79	42.2*		36.0*		32.5*		47.2*		50.4*		51.9*	
80-84	27.7*		28.2*		27.3*		28.8*		24.5*		35.7*	
85-89	25.6**		20.1**		28.7*		23*		22.1*		20.8**	
90-94	21.1*		10.2*		12.0**		23.6**		33.6**		21.6**	
95-97	...		...		0.0**		9.7**		0.0**		9.9**	
98+	...		...		0.0**		10.4**		0.0**		10.2**	
Race/ethnicity												
▶ White	42.7	41.7	43.4	37.9	46.4	41.6	51.2	45.8	55.6	47.8	55.5	49.9
Black	45.2*	34.7	55.5*	47.3	60.8*	60.6	57.5*	54.2	50.7*	37.4	49.9*	48.2
Hispanic	100.2*	56.5	139.9*	83.5	138.5*	71.7	96.1*	56.7	81.5**	43.0	77.0**	71.1
Asian	44.4**	47.9	26.5**	28.8	35.8**	38.4	77.3**	78.0	43.2**	50.7	28.5**	31.5
Other	107.2*	91.2	157.8*	156.5	117.9*	141.5	128.4*	132.8	84.1*	94.4	113.7*	120.8
Unknown	133.5**	...	86.0**	...	135.7**	...	88.2**	...	93.8**	...	33.7**	...
Region												
▶ Northeast	55.4	46.0	65.8	53.6	71.1	63.3	66.7	55.9	86.6	74.9	77.9	69.1
South	36.1*	34.7	37.7*	30.6	36.3*	33.2	40.3*	36.0	39.2*	32.2	35.4*	32.4
Midwest	47.7*	47.7	46.2*	45.6	53.2*	49.5	61.2*	59.0	60.7*	54.2	68.4*	64.8
West	50.9*	48.3	55.0*	42.8	58*	47.7	63.8*	57.7	52.7*	43.4	60.3*	52.4
Gender												
Female	35.3*	32.8	42.3*	36.8	41.3*	36.6	42.3*	38.1	45.4*	36.3	44.8*	38.6
▶ Male	58.0	55.8	55.7	47.0	63.0	57.6	70.1	64.7	69.2	63.3	69.9	67.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-8. Hospital outpatient visits by privately insured individuals for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=45,757)		2003 (N=49,173)		2004 (N=57,161)		2005 (N=65,905)		2006 (N=67,229)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	518.5	657.0	498.9	648.1	568.3	721.9	617.6	741.4	646.0	864.7
Age										
18-24	219.7*		206.0*		238.1*		266.0*		276.0*	
25-34	403.6*		371.9*		443.5*		481.7*		479.2*	
35-39	488.8*		477.7*		538.1*		610.1*		621.4*	
40-44	546.2*		506.1*		579.4*		651.3*		655.9*	
45-54	637.1*		610.0*		691.7*		756.0		767.9*	
55-64	842.1*		801.1*		853.0		929.1*		958.7*	
▶ 65-74	695.6		756.1		844.7		736.2		1,193.0	
75-84	439.2*		631.0*		714.4*		571.1*		1002.0*	
85+	...		266.9**		322.7**		272.7**		398.8**	
Race/ethnicity										
▶ White	589.9	714.1	594.0	745.6	628.2	773.7	682.3	792.6	712.8	874.1
Black	367.7*	488.1	326.3*	429.1	377.3*	504.5	395.3*	509.5	378.6*	518.2
Hispanic	479.2*	597.7	464.5*	621.5	449.4*	598.1	479.4*	611.1	508.3*	716.9
Asian	319.2**	541.6	282.1**	443.4	280.8*	419.9	304.7*	477.6	290.3*	488.2
Other	466.6**	583.5	542.2**	699.6	560.2**	789.5	573.2**	742.1	548.0**	719.1
Unknown	527.2*	...	508.7*	...	512.5*	...	580.4*	...	598.1*	...
Missing	481.0*	...	410.0*	...	513.1*	...	547.0*	...	606.1*	...
Region										
Northeast	442.2*	610.9	428.5*	621.6	486.4*	677.2	531.7*	701.9	545.6*	756.0
South	573.0*	695.2	545.5*	674.1	619.4*	765.3	666.5*	769.9	686.9	862.1
▶ Midwest	503.9	646.2	487.4	639.7	558.9	700.9	634.4	759.4	691.6	1,015.0
West	446.4*	595.7	436.2*	605.8	495.0*	688.1	501.3*	647.0	517.3*	685.3
Gender										
Female	390.1*	420.9	376.7*	416.3	442.9*	481.2	484.4*	500.0	514.2*	647.1
▶ Male	654.5	902.7	628.3	892.2	700.5	974.3	757.9	998.2	783.5	1,091.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-9. Nationally representative hospital outpatient visits for upper urinary tract stones listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	621,245
Age	
40-44	112,227
45-54	208,798
55-64	167,774
65-74	90,761
75-84	26,079
85+	15,606
Race/ethnicity	
White	536,700
Black	68,690
Other	10,944
Region	
Northeast	88,470
South	245,157
Midwest	191,037
West	96,581
Gender	
Female	239,070
Male	382,175

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 9-10. Ambulatory surgery center visits by Medicare beneficiaries for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=65,000)		2003 (N=70,160)		2004 (N=59,180)		2005 (N=50,200)		2006 (N=49,580)		2007 (N=51,300)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	182.7	198.5	192.4	205.6	144.9	172.3	135.3	143.3	136.4	146.5	141.8	151.8
Under 65/65+												
< 65 Years	135.8*	125.2	153.4*	145.8	128.0*	128.0	121.1*	121.1	114.8*	103.2	119.8*	119.8
▶ 65+ Years	194.7	191.3	202.7	189.5	168.6	172.3	139.2	143.3	142.6	125.0	148.4	151.8
Age												
▶ 65-69	187.8		208.0		172.6		159.0		159.1		164.6	
70-74	205.1*		212.0*		182.6*		166.9*		169.8*		159.7*	
75-79	220.3*		221.7*		195.9*		142.6*		147.2*		166.8*	
80-84	197.2*		200.8*		159.3*		116.2*		130.5*		136.9*	
85-89	171.4*		160.6*		120.7*		90.5*		84.3*		92.0*	
90-94	130.9*		157.4*		94.0*		49.1**		61.4*		88.2*	
95-97	41.0**		50.1**		29.6**		0.0**		...		49.7**	
98+	10.8**		0.0**		10.6**		10.4**		...		...
Race/ethnicity												
▶ White	190.7	206.3	202.5	214.1	168.4	178.4	145.4	151.3	147.8	156.9	154.4	162.6
Black	141.9*	152.3	128.2*	140.4	105.3*	132.2	77.6*	92.7	69.7*	71.4	62.3*	68.2
Hispanic	88.0**	81.7	142.8*	161.6	113.1*	101.6	65.9**	56.7	73.1**	106.0	85.2*	97.2
Asian	72.7**	78.5	83.3**	87.2	43.0**	47.6	30.2**	40.1	49.9**	43.4	50.7**	54.0
Other	183.3*	223.5	198.9*	240.4	196.5*	204.0	142.6*	158.8	100.9*	99.6	124.5*	113.4
Unknown	427.4**	...	286.8**	...	325.7**	...	176.3**	...	312.8**	...	269.3*	...
Region												
▶ Northeast	192.6	212.2	190.7	204.9	164.7	177.6	131.4	133.3	132.3	144.2	140.1	149.0
South	171.1*	183.3	192.8*	203.1	150.0*	160.8	130.0*	134.0	137.9*	148.7	136.3*	145.5
Midwest	220.0*	238.2	233.6*	250.4	199.4*	214.3	175.1*	191.5	162.1*	172.5	176.3*	192.8
West	139.9*	153.6	130.1*	142.5	118.6*	128.3	93.2*	102.6	100.2*	106.9	107.7*	110.8
Gender												
Female	139.4*	144.1	148.1*	151.0	115.8*	118.5	89.5*	87.7	100.7*	102.8	102.4*	99.3
▶ Male	238.1	274.1	248.6	280.3	215.5	244.8	192.5	217.5	180.5	204.3	190.2	220.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-11. Ambulatory surgery center visits by privately insured individuals for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,417)		2003 (N=5,528)		2004 (N=5,477)		2005 (N=5,845)		2006 (N=5,663)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	61.4	80.3	56.1	72.1	54.5	65.1	54.8	71.1	54.4	72.4
Age										
18-24	20.1*		14.5*		13.4*		14.2*		15.6*	
25-34	41.5*		38.4*		35.5*		32.5*		31.8*	
35-39	54.1*		51.8*		50.3*		50.4*		51.2*	
40-44	67.0		57.6		54.1*		58.9		51.8*	
45-54	81.6*		77.5*		77.3*		75.7*		75.1	
55-64	120.8*		106.1*		98.5*		100.6*		97.8*	
▶ 65-74	66.1		60.0		65.4		60.5		76.3	
75-84	27.4*		37.2*		37.9*		42.4*		52.7*	
85+	...		12.9**		16.6**		13.2**		15.4**	
Race/ethnicity										
▶ White	72.0	89.0	66.7	81.7	60.4	76.0	60.5	74.6	61.3	78.4
Black	40.1*	57.7	31.2*	39.2	33.1*	49.5	31.3*	44.7	29.1*	43.1
Hispanic	33.2*	49.3	40.8*	56.5	40.0*	49.6	37.4*	57.4	42.3*	70.3
Asian	37.7*	68.8	33.4*	51.8	28.6*	42.7	33.4*	55.1	29.6*	50.0
Other	72.0**	140.9	46.6**	69.6	54.9*	57.0	57.2*	110.3	45.2*	68.7
Unknown	55.0*	...	55.4*	...	49.4*	...	53.1*	...	55.9*	...
Missing	57.7*	...	48.6*	...	50.0*	...	50.3*	...	41.7*	...
Region										
Northeast	61.9*	86.2	58.8	80.2	53.1*	60.8	48.4*	74.3	48.3*	68.4
South	65.2*	83.3	59.5	75.1	58.4	74.1	57.7*	73.7	58.9*	79.8
▶ Midwest	70.0	91.7	62.4	78.8	60.5	67.7	65.1	83.0	63.2	82.8
West	25.4*	31.2	26.4*	36.2	28.2*	33.3	28.6*	36.3	29.6*	36.8
Gender										
Female	46.6*	52.6	41.8*	45.6	43.4*	45.7	44.4*	53.0	42.7*	46.9
▶ Male	77.1	109.1	71.2	100.3	66.1	85.5	65.6	90.2	66.6	98.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-12. Nationally representative ambulatory surgery center visits for upper urinary tract stones listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	481,626	80.2*	219.1
Age		121.8*	
18-24	22,441	238.4*	
25-34	48,081	195.4*	
35-39	49,526	210.1*	
40-44	43,670	320.7	
45-54	89,935	383.7	
55-64	99,347	379.4*	
▶ 65-74	71,197	206.9*	
75-84	49,176		
85+	8,253	228.6	
Gender		208.9	
Female	259,509		228.6
▶ Male	222,117	191.5*	208.9

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 9-13. Physician office visits by Medicare beneficiaries for upper urinary tract stones listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=274,280)		2003 (N=299,360)		2004 (N=319,480)		2005 (N=336,040)		2006 (N=332,520)		2007 (N=337,300)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	771.1	820.6	820.8	878.2	863.5	920.5	905.4	969.5	914.7	987.0	932.4	1,013.0
Under 65/65+												
< 65 Years	663.0*	663.0	684.9*	684.9	739.2*	739.2	773.9*	773.9	761.4*	761.4	753.8*	753.8
▶ 65+ Years	798.7	820.6	856.6	878.2	897.2	920.5	942.4	969.5	958.7	987.0	986.0	1,013.0
Age												
▶ 65-69	972.7		1,047.0		1,057.0		1,110.0		1,123.0		1,142.0	
70-74	929.7*		967.2*		1057.0*		1125.0*		1158.0*		1179.0*	
75-79	840.2*		915.9*		945.1*		984.9*		978.3*		1067.0*	
80-84	617.5*		654.8*		705.5*		748.4*		789.0*		780.1*	
85-89	431.4*		480.2*		520.6*		543.7*		557.5*		534.2*	
90-94	198.4*		278.0*		271.9*		280.7*		302.8*		437.0*	
95-97	...		220.4**		256.6**		165.4**		199.1**		139.2**	
98+	...		21.4**		63.6**		41.4**		40.9**		102.1**	
Race/ethnicity												
▶ White	814.7	855.4	869.6	915.0	909.7	955.7	964.7	1,015.0	984.0	1,040.0	999.4	1,065.0
Black	409.2*	457.6	426.1*	459.6	496.2*	560.3	496.3*	575.0	434.1*	490.0	481.1*	539.6
Hispanic	573.7*	490.2	448.9*	481.0	638.9*	625.2	568.3*	570.2	632.5*	716.2	607.5*	601.3
Asian	432.0*	378.5	503.4*	498.8	433.2*	446.7	457.0*	439.8	694.6*	690.0	655.8*	741.3
Other	1093.0*	1,134.0	1231.0*	1,369.0	1239.0*	1,240.0	1061.0*	1,088.0	771.0*	865.0	847.1*	919.2
Unknown	1522.0*	...	1893.0*	...	1656.0*	...	1704.0*	...	1470.0*	...	1346.0*	...
Region												
▶ Northeast	818.3	895.6	870.9	950.2	892.9	968.6	928.1	1,013.0	982.1	1,093.0	1,024.0	1,111.0
South	912.5*	967.7	959.3*	1,027.0	1012.0*	1,077.0	1073.0*	1,139.0	1051.0*	1,122.0	1071.0*	1,161.0
Midwest	617.1*	654.2	678.8*	712.9	720.6*	761.1	739.0*	786.8	770.6*	822.3	787.4*	861.3
West	616.3*	653.2	652.3*	707.9	699.3*	760.6	744.8*	819.0	739.8*	816.1	727.6*	804.8
Gender												
Female	533.0*	547.3	572.0*	581.8	617.3*	625.7	644.6*	659.8	666.3*	691.9	687.6*	703.4
▶ Male	1,075.0	1,194.0	1,136.0	1,280.0	1,173.0	1,315.0	1,231.0	1,382.0	1,222.0	1,375.0	1,233.0	1,414.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-14. Physician office visits by privately insured individuals for upper urinary tract stones listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=70,419)		2003 (N=73,951)		2004 (N=79,748)		2005 (N=85,728)		2006 (N=82,813)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	797.9	979.5	750.2	937.1	792.9	999.4	803.3	999.0	795.8	1,035.0
Age										
18-24	312.5*		277.3*		278.8*		279.5*		291.0*	
25-34	628.9*		568.7*		579.4*		575.8*		550.1*	
35-39	803.5*		727.5*		765.9*		793.0*		754.1*	
40-44	855.9*		788.9*		830.8*		861.4*		828.7*	
45-54	1019.0*		952.0		1,022.0		1,016.0		1003.0*	
55-64	1247.0*		1236.0*		1272.0*		1277.0*		1280.0*	
▶ 65-74	945.4		967.6		1,046.0		1,025.0		1,239.0	
75-84	508.4*		617.2*		744.1*		716.9*		854.6*	
85+			287.8*		294.0*		324.1*		363.5*	
Race/ethnicity										
▶ White	920.0	1,080.0	884.9	1,061.0	852.0	1,042.0	859.3	1,033.0	867.4	1,090.0
Black	494.1*	606.9	457.4*	615.0	434.5*	573.8	441.7*	588.6	420.5*	575.4
Hispanic	769.9*	961.4	724.5*	986.7	668.6*	936.3	673.3*	904.0	681.9*	992.5
Asian	626.8*	970.7	596.1*	922.7	539.0*	848.5	562.2*	894.6	479.5*	774.3
Other	886.1*	1,181.0	768.4*	1,009.0	826.3*	1,145.0	749.3*	1,035.0	765.2*	1,051.0
Unknown	814.7*	...	787.3*	...	793.2*	...	789.5*	...	765.9*	...
Missing	726.1*	...	614.8*	...	759.9*	...	792.9*	...	727.4*	...
Region										
Northeast	760.7*	1,001.0	705.3*	942.3	811.3*	1,080.0	820.3*	1,089.0	808.9*	1,138.0
South	919.2*	1,094.0	845.1*	1,023.0	888.9*	1,109.0	896.0*	1,101.0	887.0*	1,131.0
▶ Midwest	714.4	879.0	679.7	849.2	696.7	860.7	721.6	882.9	720.3	921.9
West	658.0*	849.3	654.5*	863.7	691.7*	926.9	685.0*	891.6	668.5*	900.5
Gender										
Female	601.2*	628.4	586.1*	635.3	633.0*	691.1	651.7*	707.3	653.8*	726.8
▶ Male	1,006.0	1,346.0	924.1	1,256.0	961.6	1,325.0	963.2	1,309.0	944.0	1,347.0
Unknown	603.2*	...	331.0*	...	745.2*	...	507.0*	...	484.5*	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-15. Nationally representative physician office visits for upper urinary tract stones listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	6,796,898
Age	
40-44	899,140
45-54	1,860,627
55-64	1,566,632
65-74	1,597,977
75-84	792,610
85+	79,912
Race/ethnicity	
White	6,049,039
Black	425,938
Hispanic	321,921
Region	
Northeast	1,363,189
South	2,719,476
Midwest	1,276,521
West	1,437,712
Gender	
Female	2,678,435
Male	4,118,463

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 9-16. Emergency room visits by Medicare beneficiaries for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=37,480)		2003 (N=42,420)		2004 (N=47,520)		2005 (N=52,460)		2006 (N=53,700)		2007 (N=53,980)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	105.4	95.6	116.3	104.7	128.4	115.6	141.3	122.9	147.7	127.7	149.2	128.3
Under 65/65+												
< 65 Years	155.1*	155.1	169.1*	169.1	185.2*	185.2	218.7*	218.7	228.0*	228.0	229.3*	229.3
▶ 65+ Years	92.7	95.6	102.4	104.7	113.1	115.6	119.5	122.9	124.7	127.7	125.2	128.3
Age												
▶ 65-69	132.1		154.1*		164.0		170.5		169.0		174.1	
70-74	107.6*		118.3*		138.9*		137.2*		158.3*		151.2*	
75-79	83.8*		84.0*		92.8*		111.6*		107.1*		114.9*	
80-84	57.8*		69.9*		71.5*		75.7*		80.1*		79.9*	
85-89	49.4*		35.1*		45.2*		55.1*		60.6*		52.8*	
90-94	16.9**		30.7**		34.0**		23.6**		43.5**		47.0**	
95-97	10.2**		0.0**		9.9**		19.5**		29.9**		0.0**	
98+	...		10.7**		10.6**		20.7**		...		10.2**	
Race/ethnicity												
▶ White	110.9	101.1	119.1	107.3	133.2	119.7	150.6	130.7	157.5	135.1	159.2	137.3
Black	63.0*	46.7	88.2*	72.6	83.6*	77.0	83.5*	67.2	78.6*	53.7	90.1*	62.4
Hispanic	97.1*	42.0	104.9*	54.9	130.1*	60.5	98.8*	66.9	123.7*	85.4	96.2*	42.6
Asian	52.5**	44.1	34.1**	62.6	68.0**	64.0	26.9**	28.3	73.1**	87.2	69.7**	63.6
Other	124.5*	108.6	183.1*	168.3	199.5*	131.9	162.6*	100.7	143*	123.4	143.4*	80.1
Unknown	106.8*	...	458.8**	...	162.9**	...	235.1**	...	375.4**	...	101.0**	...
Region												
▶ Northeast	88.8	80.6	91.2	85.0	101.1	93.1	112.7	98.9	122.5	114.7	121.2	104.0
South	121.6*	105.1	135.6*	116.4	150.7*	130.9	166.2*	137.4	169.2*	137.1	171.7*	141.6
Midwest	106.7*	100.1	107.8*	98.0	124.2*	116.1	138.4*	125.8	144.8*	123.5	152.8*	142.6
West	84.8*	85.0	114.1*	111.8	115.0*	106.5	121.7*	114.6	131.7*	127.8	125.4*	107.5
Gender												
Female	61.5*	54.5	68.0*	57.2	76.0*	62.6	87.6*	73.2	89.3*	74.2	90.9*	71.0
▶ Male	161.4	151.6	177.5	169.0	194.5	186.3	208.6	188.9	220.0	198.0	220.7	202.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-17. Emergency room visits by privately insured individuals for upper urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=15,448)		2003 (N=13,062)		2004 (N=7,610)		2005 (N=4,895)		2006 (N=3,909)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	175.0	180.5	132.5	144.3	75.7	92.4	45.9	60.8	37.6	37.6
Age										
18-24	113.2*		71.9*		39.8*		25.0*		25.8	
25-34	170.6*		125.1*		66.4*		40.2*		36.1*	
35-39	184.8*		141.0		74.8*		45.2*		34.8*	
40-44	197.2*		139.0		74.1*		38.3*		42.1*	
45-54	206.1*		149.3		84.4*		43.7*		40.7*	
55-64	192.9*		176.1*		100.7*		55.6*		50.1*	
▶ 65-74	143.7		146.0		117.9		110.4		28.1	
75-84	92.8*		89.3*		103.5*		96.8*		14.4**	
85+	...		54.7*		63.3*		62.2*		6.6**	
Race/ethnicity										
▶ White	190.0	182.1	145.4	150.8	71.9	83.6	35.8	50.2	26.5	24.5
Black	118.7*	125.1	95.1*	107.3	50.0*	69.6	26.7*	41.4	24.3*	29.2
Hispanic	125.8*	148.2	106.5*	136.4	69.2*	98.3	39.0*	58.3	38.0*	54.0
Asian	64.6*	91.1	54.3*	82.2	29.7*	43.0	17.5*	33.9	15.1*	24.3
Other	126.6*	196.1	134.7*	162.8	57.4*	110.2	19.1**	33.2	29.8**	43.9
Unknown	182.7*	...	143.9*	...	73.1*	...	43.8*	...	33.0*	...
Missing	173.5*	...	126.0*	...	112.6*	...	116.9*	...	108*	...
Region										
Northeast	50.6*	58.7	49.5*	57.1	32.9*	37.2	24.4*	32.5	18.0*	13.3
South	159.2*	158.9	120.1*	131.7	57.3*	80.4	28.2*	53.1	22.1*	28.8
▶ Midwest	275.8	282.9	218.7	228.3	146.7	159.6	99.1	105.8	87.0	79.7
West	62.8*	64.7	28.8*	30.6	4.0*	5.4	2.6*	5.3	3.7*	3.4
Gender										
Female	122.6*	102.9	101.6*	90.4	62.8*	64.2	43.6*	48.3	35.8*	28.2
▶ Male	230.7	263.0	165.3	201.7	89.2	122.0	48.3	73.7	39.4	47.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

♦Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-18. Nationally representative emergency room visits for upper urinary tract stones listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	1,855,929
Age	
40-44	416,084
45-54	715,984
55-64	427,963
65-74	180,818
75-84	110,714
Race/ethnicity	
White	1,745,214
Black	57,013
Hispanic	45,220
Asian	6,936
Region	
Northeast	349,210
South	628,062
Midwest	475,520
West	403,137
Gender	
Female	651,928
Male	1,204,001

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 9-19. Procedures among Medicare beneficiaries for upper urinary tract stones listed as any diagnosis, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	100,260	20,616.0	105,540	20,241.0	111,280	19,919.0	111,520	19,137.0	107,440	18,144.0	102,140	16,965.0
PCNL	15,080	3,101.0	14,320	2,746.0	13,560	2,427.0	11,580	1,987.0	12,860	2,172.0	12,340	2,050.0
Ambulatory Surgery Center	2,820	580.0	2,280	437.0	1,600	286.0	440	76.0	680	115.0	560	93.0
Emergency Room	180	37.0	40	8.0	60	11.0	60	10.0	20	3.0	0	0.0
Hospital Outpatient	240	49.0	260	50.0	160	29.0	20	3.0	100	17.0	60	10.0
Inpatient	11,780	2,422.0	11,640	2,232.0	11,740	2,101.0	11,000	1,888.0	12,040	2,033.0	11,640	1,933.0
Physician Office	60	12.0	100	19.0	0	0.0	60	10.0	20	3.0	80	13.0
ESWL	45,600	9,377.0	49,000	9,397.0	51,600	9,236.0	53,540	9,188.0	48,060	8,116.0	43,180	7,172.0
Ambulatory Surgery Center	20,720	4,261.0	21,140	4,054.0	23,280	4,167.0	23,920	4,105.0	22,440	3,790.0	20,820	3,458.0
Emergency Room	800	165.0	760	146.0	620	111.0	860	148.0	820	138.0	580	96.0
Hospital Outpatient	18,440	3,792.0	20,720	3,974.0	21,360	3,823.0	22,460	3,854.0	19,720	3,330.0	16,980	2,820.0
Inpatient	2,800	576.0	3,180	610.0	3,140	562.0	3,000	515.0	2,340	395.0	2,360	392.0
Physician Office	2,840	584.0	3,200	614.0	3,200	573.0	3,300	566.0	2,740	463.0	2,440	405.0
Ureteroscopy	37,840	7,781.0	40,660	7,798.0	44,600	7,983.0	45,200	7,756.0	45,820	7,738.0	45,780	7,604.0
Ambulatory Surgery Center	20,700	4,256.0	23,020	4,415.0	25,460	4,557.0	26,340	4,520.0	26,960	4,553.0	28,500	4,734.0
Emergency Room	1,580	325.0	1,280	245.0	1,980	354.0	2,320	398.0	2,240	378.0	1,820	302.0
Hospital Outpatient	1,840	378.0	2,000	384.0	2,220	397.0	1,860	319.0	1,760	297.0	1,680	279.0
Inpatient	12,100	2,488.0	13,020	2,497.0	13,220	2,366.0	12,680	2,176.0	13,180	2,226.0	12,000	1,993.0
Physician Office	1,620	333.0	1,340	257.0	1,720	308.0	2,000	343.0	1,680	284.0	1,780	296.0
Open stone surgery	1,740	358.0	1,500	288.0	1,500	268.0	1,180	202.0	700	118.0	820	136.0
Ambulatory Surgery Center	480	99.0	440	84.0	200	36.0	180	31.0	40	7.0	120	20.0
Emergency Room	20	4.0	20	4.0	0	0.0	0	0.0	20	3.0	0	0.0
Hospital Outpatient	120	25.0	20	4.0	20	4.0	40	7.0	0	0.0	0	0.0
Inpatient	1,040	214.0	900	173.0	1,140	204.0	820	141.0	600	101.0	700	116.0
Physician Office	80	16.0	120	23.0	140	25.0	140	24.0	40	7.0	0	0.0
Laparoscopic removal	0	0.0	60	12.0	20	4.0	20	3.0	0	0.0	20	3.0
Ambulatory Surgery Center	0	0.0	60	12.0	20	4.0	20	3.0	0	0.0	0	0.0
Emergency Room	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hospital Outpatient	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inpatient	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	20	3.0
Physician Office	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

PCNL: Percutaneous nephrolithotomy.

ESWL: Extracorporeal shock wave lithotripsy.

^aUnweighted counts multiplied by 20 to arrive at counts in table.^bRate per 100,000 based on number of Medicare beneficiaries with a diagnosis of kidney stones.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 9-20. Procedures among privately insured individuals for upper urinary tract stones listed as any diagnosis, count, rate^a

	2002		2003		2004		2005		2006	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	18,335	26,465.0	24,669	26,569.0	26,490	26,430.0	28,113	25,169.0	26,357	24,185.0
ESWL	10,310	14,881.0	14,308	15,410.0	14,985	14,951.0	15,492	13,870.0	14,412	13,224.0
Ambulatory Surgery Center	2,809	4,055.0	3,631	3,911.0	3,215	3,208.0	3,217	2,880.0	3,246	2,978.0
Hospital Outpatient	6,430	9,281.0	8,590	9,252.0	9,498	9,477.0	10,490	9,392.0	9,846	9,035.0
Inpatient	664	958.0	841	906.0	845	843.0	849	760.0	873	801.0
Physician Office	407	587.0	1,246	1,342.0	1,427	1,424.0	936	838.0	447	410.0
Open stone surgery	183	264.0	202	218.0	220	220.0	224	201.0	199	183.0
Ambulatory Surgery Center	2	3.0	0	0.0	10	10.0	11	10.0	19	17.0
Hospital Outpatient	48	69.0	37	40.0	67	67.0	43	38.0	44	40.0
Inpatient	102	147.0	128	138.0	108	108.0	129	115.0	110	101.0
Physician Office	31	45.0	37	40.0	35	35.0	41	37.0	26	24.0
PCNL	1,061	1,531.0	1,484	1,598.0	1,505	1,502.0	1,538	1,377.0	1,422	1,305.0
Ambulatory Surgery Center	39	56.0	90	97.0	92	92.0	134	120.0	139	128.0
Hospital Outpatient	324	468.0	414	446.0	385	384.0	273	244.0	248	228.0
Inpatient	695	1,003.0	971	1,046.0	1,009	1,007.0	1,111	995.0	1,020	936.0
Physician Office	3	4.0	9	10.0	19	19.0	20	18.0	15	14.0
Ureteroscopy	6,781	9,788.0	8,675	9,343.0	9,780	9,758.0	10,859	9,722.0	10,324	9,473.0
Ambulatory Surgery Center	515	743.0	622	670.0	830	828.0	888	795.0	1,002	919.0
Hospital Outpatient	3,778	5,453.0	4,903	5,281.0	5,608	5,595.0	6,288	5,630.0	6,048	5,550.0
Inpatient	2,423	3,497.0	3,072	3,309.0	3,268	3,261.0	3,614	3,236.0	3,214	2,949.0
Physician Office	65	94.0	78	84.0	74	74.0	69	62.0	60	55.0

ESWL: Extracorporeal shock wave lithotripsy.

PCNL: Percutaneous nephrolithotomy.

^aRate per 100,000 based on member months of enrollment in calendar year.

NOTE: Counts less than 30 should be interpreted with caution.

SOURCE: i3 Claims Database, 2002-2006.

Table 9-21. Nationally representative inpatient stays for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=6,070)		2003 (N=5,329)		2004 (N=5,108)		2005 (N=4,821)		2006 (N=4,750)		2007 (N=4,168)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.8	2.8	2.5	2.4	2.4	2.4	2.2	2.2	2.2	2.2	1.9	1.9
Age												
18-24	0.5		0.7		0.4		0.4		0.3		0.3	
25-34	0.7		0.5		0.5		0.6		0.6		0.5	
35-39	0.6		0.7		0.7		0.5		0.7		0.6	
40-44	0.6		0.7		0.4		0.6		0.6		0.5	
45-54	1.1		1.1		1.0		0.7		0.9		0.8	
55-64	3.1		2.7		2.8		2.4		2.1		1.7	
▶ 65-74	9.7		8.2		7.4		7.4		7.0		5.6	
75-84	11.4*		9.2*		11.9*		11.0*		10.4*		9.3*	
85+	17.3*		14.0*		13.1*		10.8*		11.9*		10.8*	
Race/ethnicity												
▶ White	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.8	1.8	1.5	1.5
Black	1.4*	1.4	1.1*	1.1	1.2*	1.5	0.9*	1.2	1.0*	1.4	1.1*	1.0
Hispanic	†	†	1.6*	1.6	1.1*	1.1	1.1*	1.1	1.7*	2.0	1.1*	1.0
Asian	1.0*	1.8	1.1*	1.4	0.9*	2.3	0.5*	1.2	1.0*	2.0	0.7*	1.0
Other	7.3*	6.9	2.8*	2.7	2.2*	2.5	2.8*	4.0	3.2*	4.0	1.8*	3.5
Region												
Northeast	4.0	3.7	3.4	3.2	3.2	3.2	3.3	3.3	2.9	2.9	2.5	2.4
South	2.7	2.6	2.2	2.1	2.2	2.2	2.0	2.0	2.2	2.2	1.7	1.7
▶ Midwest	2.8	2.7	2.5	2.4	2.4	2.5	1.8	1.8	2.0	2.0	1.9	1.9
West	2.1*	2.1	2.0*	2.0	1.9*	1.9	1.9*	1.9	1.6*	1.6	1.6*	1.6
Gender												
Female	0.6*	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5
▶ Male	5.3	5.1	4.5	4.4	4.3	4.4	3.9	3.9	3.9	3.9	3.3	3.3

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 9-22. Inpatient stays by Medicare beneficiaries for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,800)		2003 (N=1,560)		2004 (N=1,240)		2005 (N=1,340)		2006 (N=1,280)		2007 (N=1,300)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.1	5.7	4.3	4.9	3.4	4.7	3.6	3.9	3.5	4.1	3.6	4.2
Under 65/65+												
< 65 Years	2.5**	2.5	2.4**	2.4	0.8**	1.3	2.5**	2.5	1.5**	1.5	2.2**	2.2
▶ 65+ Years	5.7	5.7	4.8	4.9	4.1	4.7	3.9	3.9	4.1	4.1	4.0	4.2
Age												
▶ 65-69	4.4*		2.3*		2.0*		1.7*		3.0*		2.5*	
70-74	5.8**		3.2**		4.7**		3.9**		5.0**		1.6**	
75-79	7.1**		6.3**		4.0**		4.8**		3.6**		3.3**	
80-84	7.6**		6.5**		5.9**		6.8**		5.6**		8.1**	
85-89	3.4**		10.9**		4.9**		4.1**		4.1**		10.4**	
90-94	4.2**		4.1**		6.0**		5.9**		5.9**		3.9**	
95-97	10.2**		10.0**		9.9**		0.0**		0.0**		0.0**	
98+	0.0**		...		0.0**		0.0**		...		...
Race/ethnicity												
▶ White	5.2	5.7	4.4	5.1	3.6	4.2	3.8	4.2	3.8	4.3	4.1*	4.8
Black	2.9**	3.6	2.8**	4.5	1.6**	3.0	1.6**	2.0	1.1**	0.9	1.1**	1.0
Hispanic	9.1**	17.6	2.9**	7.7	2.8**	4.5	5.5**	5.1	5.6**	11.2	0.0**	0.0
Asian	8.1**	13.3	3.8**	0.0	0.0**	0.0	0.0**	...	0.0**	0.0	0.0**	0.0
Other	3.5**	12.1	9.5**	21.3	3.0**	5.6	5.7**	6.5	5.6**	9.1	2.7**	0.0
Unknown	...	...	0.0**	...	...	...	0.0**	...	0.0**	...	...	...
Region												
▶ Northeast	6.5*	7.9	4.5*	3.4	3.1*	3.4	4.2*	4.9	4.9*	5.8	4.6*	5.5
South	4.5*	4.4	4.0**	4.0	3.3**	4.0	3.6**	3.8	4.0**	5.0	3.4**	3.6
Midwest	4.2**	5.1	5.0**	4.3	3.2**	4.3	3.0**	3.2	2.2**	2.0	3.4**	4.0
West	5.9**	7.2	3.7**	4.3	3.9**	4.3	3.8**	4.3	2.9**	3.2	3.2**	4.1
Gender												
Female	0.3**	0.2	0.3**	0.8	0.5**	0.6	0.4**	0.5	0.7**	0.4	0.4**	0.4
▶ Male	11.1	13.3	9.3	4.0	7.0	10.3	7.6	8.6	7.0	9.0	7.5	9.2

... Data unavailable.

▶ Denotes reference group.

**Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-23. Inpatient stays by privately insured individuals for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=312)		2003 (N=354)		2004 (N=305)		2005 (N=311)		2006 (N=291)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.8	6.3	4.4	6.9	3.9	6.7	3.9	6.2	4.0	7.2
Age										
18-24	1.4**		1.7**		1.2**		1.6**		1.9**	
25-34	2.6*		2.5*		1.2**		1.8**		2.4*	
35-39	1.7**		2.2**		1.5**		1.9**		2.9**	
40-44	2.6**		2.6**		1.3**		2.5**		2.6**	
45-54	2.0*		2.9*		2.0*		3.5*		2.8*	
55-64	5.8*		6.2*		3.4*		5.2*		6.5*	
▶ 65-74	9.6		13.0		5.3*		8.5		12.2	
75-84	23.3*		19.1*		11.4		17.9*		20.9**	
85+	...		11.9**		21.0**		13.4**		18.1**	
Race/ethnicity										
▶ White	3.9	6.3	4.0	6.7	3.6	6.2	4.4	7.4	4.4*	7.8
Black	3.1**	7.9	5.7**	7.3	4.4**	8.6	2.0**	4.0	3.0**	6.3
Hispanic	2.0**	5.9	5.4**	9.7	3.0**	6.2	3.0**	5.5	3.0**	5.6
Asian	2.8**	10.3	1.5**	4.3	2.2**	13.9	2.6*	8.2	3.1**	21.8
Other	2.3**	10.2	8.6**	33.4	3.1**	...	...	...	1.6**	...
Unknown	3.4**	...	3.8**	...	5.2**	...	3.4**	...	3.5**	...
Missing	4.1*	...	5.0*	...	5.8*	...	3.6*	...	3.9*	...
Region										
Northeast	4.8	7.6	5.0	8.4	5.8*	9.7	4.8	10.0	4.9	10.2
South	3.3*	4.4	4.3	6.4	3.5	5.9	3.8	6.2	3.4*	6.8
▶ Midwest	4.3	7.9	4.6	7.5	4.0	6.6	4.2	6.0	4.6	8.0
West	3.4*	6.3	3.1*	5.3	3.0*	6.8	3.1*	4.9	4.1*	5.6
Gender										
Female	2.4	3.2	2.3	2.2	2.5	3.3	2.5	3.0	2.6	3.6
▶ Male	5.3*	9.2	6.6*	11.5	5.4*	10.1	5.4*	9.3	5.5*	10.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-24. Hospital outpatient visits by Medicare beneficiaries for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=800)		2003 (N=1,060)		2004 (N=920)		2005 (N=780)		2006 (N=1,300)		2007 (N=800)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.2	2.2	2.9	3.1	2.5	1.4	2.1	1.5	3.6	3.9	2.2	2.3
Under 65/65+												
< 65 Years	3.3*	3.3	2.9*	2.9	6.4**	6.4	4.2**	4.2	2.5**	2.5	2.2*	2.2
▶ 65+ Years	2.0	2.2	2.9	3.1	1.4	1.4	1.5	1.5	3.9	3.9	2.2	2.3
Age												
▶ 65-69	1.0*		2.5*		1.7*		1.0*		5.0*		3.0*	
70-74	0.9**		2.9**		0.9**		0.9**		3.4**		1.0**	
75-79	3.4**		2.7**		1.3**		0.3**		3.9**		2.6**	
80-84	2.4**		3.2**		2.3**		5.4**		3.2**		2.9**	
85-89	5.1**		5.9**		0.8**		0.8**		3.3**		1.6**	
90-94	0.0**		0.0**		0.0**		2.0**		4.0**		2.0**	
95-97	...		...		9.9**		...		...		...
98+	0.0**		...		...		...		...		...
Race/ethnicity												
▶ White	2.4	2.3	2.5	2.8	2.2	1.2	2.1*	1.3	3.5	3.8	2.4	2.3
Black	1.7**	1.7	3.3**	4.7	3.3**	2.0	1.6**	3.7	1.7**	8.4	1.1**	1.0
Hispanic	0.0**	0.0	14.6**	31.8	5.7**	10.1	0.0**	0.0	8.4**	22.5	0.0**	0.0
Asian	...	...	...	...	3.6**	17.9	3.4**	25.6	3.3**	10.3	...	...
Other	3.5**	17.8	12.6**	17.5	6.0**	7.7	5.7**	10.0	11.2**	41.8	0.0**	0.0
Unknown	...	...	...	...	0.0**	...	0.0**	...	0.0**	...	67.3**	...
Region												
▶ Northeast	2.0*	2.0	6.4*	7.1	4.7*	1.4	1.7*	0.8	4.6*	5.6	2.6*	2.4
South	2.8**	2.4	1.3**	1.3	2.1**	1.3	1.5**	0.9	2.8**	3.1	1.3**	1.0
Midwest	2.2**	2.0	1.7**	2.3	1.9**	2.0	2.4**	2.2	4.0**	4.2	2.7**	3.4
West	1.4**	2.0	4.3**	3.6	1.6**	0.9	3.5**	2.6	3.5**	3.5	3.2**	3.8
Gender												
Female	1.1**	0.9	1.5**	1.6	0.6**	0.1	1.2**	0.8	1.1**	0.8	0.5**	0.4
▶ Male	3.7*	3.9	4.7	5.3	4.9	3.2	3.3	2.5	6.6	8.1	4.3	4.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-25. Hospital outpatient visits by privately insured individuals for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,217)		2003 (N=1,316)		2004 (N=1,396)		2005 (N=1,742)		2006 (N=1,535)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	13.8	23.6	13.4	24.7	13.9	25.0	16.3	28.5	14.8	28.8
Age										
18-24	4.2*		3.7*		4.5*		4.1*		3.5*	
25-34	7.1*		6.8*		7.5*		10.1*		8.4*	
35-39	8.7*		9.3*		9.2*		10.5*		10.9*	
40-44	12.4*		10.7*		9.7*		11.7*		13.2*	
45-54	14.5*		13.1*		14.5*		15.0*		14.8*	
55-64	30.9*		27.0*		26.6*		30.6*		28.0*	
▶ 65-74	40.6		50.3		45.4		40.7		49.1	
75-84	32.5*		46.3*		54.3*		82.3*		71.4*	
85+	...		19.3**		22.6**		19.1**		37.5**	
Race/ethnicity										
▶ White	15.4	24.6	16.5	29.9	15.7	28.6	17.3	27.9	16.4	30.3
Black	7.2**	12.4	8.8**	12.1	8.1*	16.5	9.4*	13.7	8.8*	23.1
Hispanic	12.8*	24.7	14.1*	24.6	10.7*	18.5	10.9*	22.9	12.7*	25.2
Asian	6.5**	16.7	7.5**	17.2	6.7**	14.3	7.8**	21.3	5.0**	15.3
Other	7.4**	17.5	6.9**	25.0	17.1**	55.1	17.9**	26.3	17.6**	35.2
Unknown	20.3*	...	15.3*	...	10.1*	...	24.6*	...	14.3*	...
Missing	12.8*	...	9.9*	...	12.4*	...	14.5*	...	12.0*	...
Region										
Northeast	16.8*	29.5	14.3	31.1	13.4	27.0	13.8*	26.1	17.4*	35.3
South	14.3	23.5	13.5	23.9	15.4*	26.6	16.9	27.2	15.1	28.8
▶ Midwest	13.1	22.5	12.9	21.9	13.3	23.4	17.0	30.8	14.4	28.3
West	11.7*	20.9	13.1*	31.8	10.8*	22.5	15.2*	26.5	12.4*	25.2
Gender										
Female	7.4*	8.4	6.4*	7.6	7.2*	8.9	8.9*	10.4	7.5*	10.5
▶ Male	20.6	39.4	20.8	42.1	20.9	41.6	24.2	47.3	22.3	45.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-26. Ambulatory surgery center visits by Medicare beneficiaries for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,700)		2003 (N=6,040)		2004 (N=6,560)		2005 (N=6,200)		2006 (N=6,840)		2007 (N=5,980)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.0	18.0	16.6	19.1	17.7	19.6	16.7	18.8	18.8	20.5	16.5	19.1
Under 65/65+												
< 65 Years	9.4*	9.4	7.6**	7.6	11.7*	11.7	12.0*	12.0	13.8*	13.8	9.6*	9.6
▶ 65+ Years	17.7	18.0	18.9	19.1	19.4	19.6	18.0	18.8	20.2	20.5	18.6	19.1
Age												
▶ 65-69	13.6		14.4		13.7		15.4		13.7		15.5	
70-74	18.9*		18.0*		23.3*		17.1*		23.3*		17.8*	
75-79	18.6*		22.7*		19.1*		24.1*		23.9*		21.5*	
80-84	27.2*		26.4*		27.3*		23.0*		23.1*		24.7*	
85-89	13.6**		16.7**		17.2**		14.8**		22.1**		18.4**	
90-94	12.7**		16.4**		16.0**		3.9**		21.8**		15.7**	
95-97	...		10.0**		9.9**		...		10.0**		...	
Race/ethnicity												
▶ White	17.8	19.4	17.9	20.4	19.2	21.3	18.1	20.0	20.7	22.2	17.8	20.4
Black	5.2**	9.0	9.4**	12.8	6.0**	10.1	7.1**	10.7	5.0**	8.0	9.1**	12.7
Hispanic	3.0**	12.4	8.7**	27.0	0.0**	0.0	13.7**	17.7	8.4**	15.6	13.7**	27.0
Asian	0.0**	0.0	11.4**	29.9	10.7**	28.9	10.1**	19.3	13.3**	24.6	6.3**	14.7
Other	13.8**	33.1	6.3**	14.3	36.3**	33.5	14.3**	20.1	16.8**	16.7	8.1**	14.3
Unknown	53.4**	...	0.0**	...	27.1**	...	...	...	62.6**	...	33.7**	...
Region												
▶ Northeast	17.3	19.6	18.7	21.2	18.1	20.7	21.2	24.7	20.6	22.3	15.8	19.1
South	15.4*	18.4	14.5*	17.1	15.7*	17.6	14.1*	16.0	16.5*	18.0	16.4*	18.6
Midwest	18.0*	18.3	17.9*	20.0	20.5*	23.1	18.5*	20.5	21.4*	23.9	18.7*	21.9
West	12.9*	14.8	17.0*	20.1	17.8*	17.6	14.9*	15.5	18.3*	18.7	14.5*	16.2
Gender												
Female	4.2*	3.6	4.1*	4.2	3.9*	3.3	4.2*	3.7	5.3*	4.3	5.4*	4.4
▶ Male	31.1	38.1	32.3	39.9	35.2	41.9	32.4	39.1	35.6	42.0	30.2	38.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-27. Ambulatory surgery center visits by privately insured individuals for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=81)		2003 (N=111)		2004 (N=123)		2005 (N=149)		2006 (N=128)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.9	2.0	1.1	2.3	1.2	2.4	1.4	2.7	1.2	3.0
Age										
18-24	0.3**		0.2**		0.2**		0.2**		0.1**	
25-34	0.3**		0.4**		0.3**		0.5**		0.2**	
35-39	0.3**		0.5**		0.4**		0.5**		0.6**	
40-44	0.7**		1.0**		0.8**		0.8**		1.2**	
45-54	0.7**		1.2**		1.2**		1.4*		1.2**	
55-64	2.3**		2.6*		4.0		3.3*		3.3	
▶ 65-74	5.0*		4.6*		4.4*		6.4		3.2*	
75-84	3.8**		4.8**		2.6**		3.7**		10.2**	
85+	...		1.6**		1.5**		4.8**		6.6**	
Race/ethnicity										
▶ White	1.2	2.6	1.2	2.5	1.4	2.7	1.7	3.1	1.3	3.2
Black	...	...	1.3**	4.2	1.4**	8.5	0.8**	2.5	0.5**	1.4
Hispanic	0.3**	11.6	1.7**	4.0	0.3**	1.0	0.6**	1.3	0.9**	3.2
Asian	0.7**	5.9	0.5**	...	0.4**	2.8	...	...	...	...
Other	...	...	...	...	...	...	...	...	1.1**	...
Unknown	0.9**	...	1.5**	...	0.8**	...	1.0**	...	1.4**	...
Missing	0.8*	...	0.9*	...	1.4**	...	1.3**	...	1.5**	...
Region										
Northeast	0.9*	8.0	1.6**	5.4	1.1*	2.1	1.2*	3.8	1.4**	3.8
South	1.0	2.2	1.4*	2.9	1.7*	3.4	1.8*	3.9	1.4*	3.5
▶ Midwest	0.8*	1.6	0.5*	0.9	0.8*	2.3	0.8*	1.6	0.8*	2.1
West	1.1**	2.0	1.3**	3.1	0.8**	2.2	1.6**	2.8	1.2**	3.0
Gender										
Female	0.4**	0.5	0.4**	0.7	0.5**	0.9	0.6**	1.0	0.5**	0.9
▶ Male	1.5	3.6	1.9	4.1	2.0	4.2	2.3	4.6	2.0	5.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-28. Nationally representative ambulatory surgery center visits for lower urinary tract stones listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	14,640	6.7	7.4
Age			
18-24	139	0.5*	
25-34	433	1.1*	
35-39	813	3.9*	
40-44	...	...
45-54	138	0.3*	
55-64	4,662	15.0	
▶ 65-74	6,068	32.7	
75-84	1,443	11.1*	
85+	944	23.7*	
Gender			
Female	2,380	2.1*	5.9
▶ Male	12,260	11.5	18.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 9-29. Physician office visits by Medicare beneficiaries for lower urinary tract stones listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=15,700)		2003 (N=16,780)		2004 (N=17,620)		2005 (N=19,100)		2006 (N=18,080)		2007 (N=18,040)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	44.1	49.0	46.0	52.6	47.6	54.3	51.5	58.6	49.7	58.7	49.9	58.7
Under 65/65+												
< 65 Years	26.5*	26.5	26.8*	26.8	27.7*	27.7	30.9*	30.9	23.9*	23.9	24.4*	24.4
▶ 65+ Years	48.6	49.0	51.1	52.6	53.0	54.3	57.3	58.6	57.1	58.7	57.5	58.7
Age												
▶ 65-69	43.1		43.0		43.4		42.3		45.2		52.5	
70-74	50.8*		48.3*		58.1*		68.0*		62.8*		55.3*	
75-79	52.7*		68.4*		66.6*		65.8*		68.9*		65.2*	
80-84	58.7*		62.5*		61.4*		64.8*		61.1*		64.2*	
85-89	40.1*		41.8*		40.2*		58.4*		61.4*		61.6*	
90-94	40.1**		20.4**		24.0**		35.3**		45.5**		52.9**	
95-97	30.7**		10.0**		29.6**		38.9**		...		9.9**	
98+	10.8**		...		...		10.4**		...		...
Race/ethnicity												
▶ White	46.6	51.1	50.0	56.5	50.8	56.9	54.1	61.2	52.6	61.4	52.4	60.4
Black	24.6*	33.7	21.1*	25.6	16.3*	20.4	27.7*	38.1	25.1*	36.4	28.9*	39.5
Hispanic	9.1**	27.6	23.3**	39.7	36.8**	34.8	52.2**	37.2	45**	57.0	55.0**	60.0
Asian	40.4**	56.8	15.1**	63.9	46.5**	51.9	33.6**	53.1	49.9**	97.0	38**	40.8
Other	69.2**	87.0	47.3**	60.5	78.6**	119.3	65.6**	100.5	47.7**	46.3	51.4**	81.9
Unknown	106.8**		28.7**		81.4**		146.9**	...	125.1**	...	33.7**	...
Region												
▶ Northeast	51.8	60.4	55.5	65.0	52.2	63.4	70.6	82.8	61.1	76.4	61.0	71.0
South	47.4*	52.1	46.6*	52.0	48.0*	52.3	47.4*	53.3	48.9*	56.8	50.6*	59.4
Midwest	35.7*	40.5	38.3*	43.8	38.2*	43.5	38.8*	42.2	39.7*	44.9	35.9*	41.7
West	40.1*	41.6	45*	52.7	55.4*	64.6	57.5*	68.0	53.3*	62.8	55.6*	67.7
Gender												
Female	16.4*	16.7	13.9*	14.0	14.8*	15.0	15.5*	15.2	13.5*	14.1	14.3*	15.1
▶ Male	79.5	94.0	86.7	106.0	88.9	107.7	96.4	117.0	94.6	117.8	93.5	116.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-30. Physician office visits by privately insured individuals for lower urinary tract stones listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,431)		2003 (N=1,427)		2004 (N=1,368)		2005 (N=1,527)		2006 (N=1,470)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.2	28.8	14.5	27.1	13.6	25.0	14.3	26.6	14.1	30.3
Age										
18-24	5.6*		4.7*		4.0*		3.8*		2.4*	
25-34	9.4*		7.2*		6.9*		5.9*		5.7*	
35-39	10.4*		7.3*		9.1*		7.9*		9.9*	
40-44	13.3*		12.0*		9.7*		10.4*		9.7*	
45-54	15.4*		14.6*		14.5*		13.6*		15.1*	
55-64	30.4*		30.8*		26.4*		29.4*		30.0*	
▶ 65-74	57.2		55.7		40.0		45.0		56.6	
75-84	54.7*		46.8*		56.4*		63.4*		73.1*	
85+	...		22.5**		40.7**		29.9**		50.7**	
Race/ethnicity										
▶ White	18.2	30.3	16.4	30.2	14.5	26.7	14.9	28.5	14.6	29.9
Black	13.4**	20.3	12.3*	19.3	8.6*	16.3	11.5*	23.6	7.9*	18.1
Hispanic	16.7*	37.3	17.4*	39.6	13.3*	25.9	11.6*	21.8	11.7*	34.3
Asian	11.6**	36.6	8.0**	24.9	11.0**	24.9	11.0**	34.6	10.7*	32.4
Other	7.4**	12.4	17.3**	37.4	15.9**	39.0	9.0**	26.0	23.2**	42.9
Unknown	25.6*	...	16.2*	...	13.0*	...	12.7*	...	15.1*	...
Missing	14.4*	...	12.0*	...	12.1*	...	15.7*	...	15.1*	...
Region										
Northeast	21.4*	44.6	16.9*	34.6	15.9*	35.1	15.4*	36.3	15.8*	37.8
South	16.4*	29.5	14.7*	28.4	15.0*	27.3	14.0	26.6	13.6	27.9
▶ Midwest	13.9	22.5	13.0	22.8	11.0	18.1	13.0	22.4	13.3	27.4
West	17.6*	26.3	15.2*	27.2	13.3*	30.0	17.4*	30.3	16.3*	33.5
Gender										
Female	9.8*	11.8	7.8*	9.7	7.7*	9.2	8.0*	10.3	7.7*	11.0
▶ Male	23.0	46.2	21.6	45.0	19.9	41.2	20.9	43.2	20.8	48.1
Unknown	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-31. Emergency room visits by Medicare beneficiaries for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=740)		2003 (N=1,100)		2004 (N=900)		2005 (N=940)		2006 (N=1,160)		2007 (N=880)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.1	1.9	3.0	2.7	2.4	2.3	2.5	2.3	3.2	3.4	2.4	2.1
Under 65/65+												
< 65 Years	3.0**	3.0	4.2**	4.2	3.0**	3.0	3.4**	3.4	2.5**	2.5	3.1**	3.1
▶ 65+ Years	1.8*	1.9	2.7	2.7	2.3	2.3	2.3	2.3	3.4	3.4	2.2	2.2
Age												
▶ 65-69	1.8*		3.0*		2.7*		3.2*		6.2*		2.5*	
70-74	1.5**		3.8**		2.9**		1.5**		2.8**		4.1**	
75-79	1.7**		2.3**		2.0**		2.1**		2.1**		0.7**	
80-84	2.4**		2.8**		1.8**		2.3**		2.3**		1.9**	
85-89	2.6**		0.0**		0.8**		2.5**		1.6**		0.0**	
90-94	2.1**		2.0**		2.0**		2.0**		0.0**		3.9**	
95-97	...		...		...		...		10.0**		...	
Race/ethnicity												
▶ White	2.4	2.1	3.3	2.8	2.6	2.5	2.6	2.4	3.3	3.6	2.7	2.4
Black	0.0**	0.0	1.7**	4.6	1.1**	0.0	2.2**	6.7	2.2**	2.4	1.1**	0.0
Hispanic	...	...	2.9**	26.5	0.0**	0.0	5.5**	51.7	2.8**	16.8	...	...
Asian	0.0**	0.0	0.0**	0.0	3.6**	27.0	3.4**	14.6	3.3**	52.0	0.0**	0.0
Other	3.5**	21.0	0.0**	...	3.0**	0.0	0.0**	0.0	2.8**	...	2.7**	...
Unknown	...	...	...	...	...	...	...	...	...	...	...	...
Region												
▶ Northeast	1.4*	2.2	2.2*	3.3	1.4*	1.3	1.1*	1.3	3.4*	3.4	2.3*	4.0
South	2.2**	1.9	4.0**	3.0	3.6**	3.5	2.9**	2.6	3.1**	3.5	2.4**	1.7
Midwest	2.4**	2.1	2.8**	3.5	1.7**	1.9	2.4**	3.2	3.5**	4.0	2.5**	2.3
West	2.1**	3.1	2.0**	2.1	1.9**	4.0	3.5**	3.6	2.6**	3.6	2.5*	2.9
Gender												
Female	0.7**	0.7	1.7**	1.7	1.1**	1.1	1.6**	1.0	1.6**	2.0	0.6**	1.1
▶ Male	3.8	3.5	4.7	4.4	4.2	4.2	3.8	4.1	5.2	5.8	4.7	4.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 9-32. Emergency room visits by privately insured individuals for lower urinary tract stones listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=381)		2003 (N=324)		2004 (N=192)		2005 (N=89)		2006 (N=66)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.3	4.8	3.3	4.2	1.9	3.1	0.8	1.4	0.6	0.9
Age										
18-24	2.1**		1.9**		0.5**		0.2**		0.2*	
25-34	4.1*		2.4*		1.4*		0.6**		0.5*	
35-39	5.8		3.0*		1.3**		0.6**		0.4*	
40-44	4.8		3.6*		2.0**		0.5**		0.3*	
45-54	3.9*		3.7*		1.9*		0.6**		1.0*	
55-64	5.6		5.4		2.9*		1.2**		1.1*	
▶ 65-74	7.1*		5.7*		6.4*		3.9*		0.6*	
75-84	2.1**		2.1**		5.1**		2.9**		0.8**	
85+	...		...		3.0**		1.2**		...	
Race/ethnicity										
▶ White	5.0	4.8	3.5	4.4	1.8	2.7	0.7	1.5	0.4*	0.5
Black	1.9**	3.2	4.5**	8.4	0.9**	3.7	0.6**	1.9	...	...
Hispanic	2.1**	12.3	4.1**	7.9	1.8**	4.0	1.1**	7.4	0.5**	6.7
Asian	2.9**	17.0	2.0**	3.9	0.7**	4.2	0.3**	3.7	0.3**	70.6
Other	...	...	1.7**	...	1.2**	6.2	...	...	...	...
Unknown	2.1*	...	3.4**	...	1.1**	...	0.3**	...	0.3**	...
Missing	4.4*	...	2.9*	...	3.5*	...	2.0*	...	2.5*	...
Region										
Northeast	1.4**	2.1	2.1**	3.3	0.8**	1.0	1.2*	1.4	0.4**	1.4
South	4.7*	5.5	3.4*	4.6	1.5*	3.6	0.6*	1.4	0.4**	0.7
▶ Midwest	5.9	6.3	4.5	5.7	3.6	4.7	1.5	2.2	1.4	1.8
West	1.2**	1.9	1.1**	1.3	0.1**	...	0.1**	0.6	0.1**	0.4
Gender										
Female	2.2*	1.8	2.1*	1.9	1.3*	1.8	0.7	1.0	0.5**	0.6
▶ Male	6.6	7.8	4.6	6.6	2.6	4.6	1.0	1.9	0.8	1.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 9-33. Use of imaging procedures in Medicare beneficiaries for evaluation of urinary tract stones , count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	447,480	96,920.0	497,360	100,266.0	541,580	101,682.0	578,480	104,099.0	581,360	103,096.0	589,140	102,473.0
Intravenous pyelogram	44,520	9,643.0	38,600	7,782.0	32,240	6,053.0	25,820	4,646.0	19,300	3,423.0	13,440	2,338.0
Ambulatory Surgery Center	2,060	446.0	1,220	246.0	940	176.0	960	173.0	860	153.0	460	80.0
Emergency Room	4,660	1,009.0	2,940	593.0	1,840	345.0	940	169.0	660	117.0	340	59.0
Hospital Outpatient	18,440	3,994.0	16,520	3,330.0	14,320	2,689.0	11,380	2,048.0	8,680	1,539.0	6,240	1,085.0
Inpatient	5,720	1,239.0	4,720	952.0	3,640	683.0	3,040	547.0	2,260	401.0	1,580	275.0
Physician Office	13,640	2,954.0	13,200	2,661.0	11,500	2,159.0	9,500	1,710.0	6,840	1,213.0	4,820	838.0
Plain film/KUB	205,060	44,414.0	217,260	43,799.0	230,640	43,303.0	233,880	42,087.0	223,980	39,720.0	214,820	37,365.0
Ambulatory Surgery Center	22,840	4,947.0	23,200	4,677.0	23,520	4,416.0	23,760	4,276.0	21,220	3,763.0	19,580	3,406.0
Emergency Room	13,220	2,863.0	15,820	3,189.0	14,280	2,681.0	15,960	2,872.0	12,880	2,284.0	12,320	2,143.0
Hospital Outpatient	75,000	16,244.0	79,920	16,112.0	87,420	16,413.0	87,380	15,724.0	87,560	15,528.0	84,060	14,621.0
Inpatient	16,960	3,673.0	17,580	3,544.0	16,720	3,139.0	15,860	2,854.0	14,300	2,536.0	13,480	2,345.0
Physician Office	77,040	16,686.0	80,740	16,277.0	88,700	16,654.0	90,920	16,361.0	88,020	15,609.0	85,380	14,851.0
Ultrasound (renal)	79,360	17,189.0	86,300	17,398.0	88,700	16,654.0	94,000	16,916.0	90,340	16,021.0	88,940	15,470.0
Ambulatory Surgery Center	960	208.0	980	198.0	900	169.0	780	140.0	500	89.0	540	94.0
Emergency Room	1,320	286.0	1,360	274.0	1,300	244.0	1,360	245.0	1,120	199.0	1,440	250.0
Hospital Outpatient	17,340	3,756.0	19,660	3,963.0	20,060	3,766.0	19,940	3,588.0	18,920	3,355.0	19,320	3,360.0
Inpatient	15,220	3,297.0	15,420	3,109.0	15,520	2,914.0	17,020	3,063.0	15,880	2,816.0	16,740	2,912.0
Physician Office	44,520	9,643.0	48,880	9,854.0	50,920	9,560.0	54,900	9,879.0	53,920	9,562.0	50,900	8,853.0
Magnetic resonance imaging, abdomen	680	147.0	980	198.0	900	169.0	1,100	198.0	1,180	209.0	1,380	240.0
Ambulatory Surgery Center	0	0.0	60	12.0	20	4.0	20	4.0	100	18.0	20	3.0
Emergency Room	0	0.0	0	0.0	0	0.0	0	0.0	40	7.0	40	7.0
Hospital Outpatient	300	65.0	340	69.0	320	60.0	440	79.0	220	39.0	520	90.0
Inpatient	240	52.0	360	73.0	360	68.0	320	58.0	480	85.0	380	66.0
Physician Office	140	30.0	220	44.0	200	38.0	320	58.0	340	60.0	420	73.0
CT scan abdomen/pelvis	117,860	25,527.0	154,220	31,090.0	189,100	35,504.0	223,680	40,252.0	246,560	43,724.0	270,560	47,060.0
Ambulatory Surgery Center	2,800	606.0	3,240	653.0	3,660	687.0	4,340	781.0	4,160	738.0	4,640	807.0
Emergency Room	33,020	7,152.0	41,200	8,306.0	51,240	9,620.0	59,320	10,675.0	63,440	11,250.0	67,860	11,803.0
Hospital Outpatient	33,600	7,277.0	46,080	9,290.0	57,520	10,799.0	66,140	11,902.0	71,280	12,641.0	76,160	13,247.0
Inpatient	28,740	6,225.0	35,320	7,120.0	41,340	7,762.0	47,500	8,548.0	52,340	9,282.0	57,920	10,074.0
Physician Office	19,700	4,267.0	28,380	5,721.0	35,340	6,635.0	46,380	8,346.0	55,340	9,814.0	63,980	11,129.0

KUB: Kidneys, Ureters, and Bladder X-ray.

^aUnweighted counts multiplied by 20 to arrive at counts in table.^bRate per 100,000 based on number of Medicare beneficiaries with a diagnosis of urinary tract stones.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

**Urologic
Diseases**
in America



CHAPTER 10
Testicular Cancer

Table 10-1. Codes used in the diagnosis and management of testicular cancer**Males with one or more of the following:***ICD-9 diagnosis codes*

186	Malignant neoplasm of testis
186.0	Malignant neoplasm of undescended testis
186.9	Malignant neoplasm of other and unspecified testis

CPT procedure codes

54530	Orchiectomy, radical, for tumor; inguinal approach
54535	Orchiectomy, radical, for tumor; with abdominal exploration

Table 10-2. Estimated new testicular cancer cases and deaths in the United States, 2011

	Estimated New Cases	Estimated New Deaths
Total	8,290	350

SOURCE: American Cancer Society. *Cancer Facts & Figures 2011*. Atlanta: American Cancer Society, Inc.

Table 10-3. Incidence rates^a of testicular cancer, by race/ethnicity and age, age-adjusted

Year of Diagnosis	All Males			White Males			Black Males		
	All	< 50	50+	All	< 50	50+	All	< 50	50+
1975	3.7	4.2	2.4	4.2	4.7	2.7	...	...	...
1976	3.4	4.2	1.5	3.8	4.6	1.7	...	...	...
1977	4.3	5.1	2.2	4.9	5.8	2.4	...	...	...
1978	3.6	4.3	1.8	4.0	4.7	2.1	...	...	...
1979	3.9	4.5	2.2	4.3	5.1	2.3	...	...	...
1980	4.4	5.3	1.9	4.9	6.0	2.1	...	...	...
1981	4.2	5.1	1.9	4.8	5.8	2.1	...	...	...
1982	4.4	5.2	2.3	5.0	6.0	2.4	...	...	...
1983	4.6	5.5	2.2	5.2	6.3	2.4	...	...	...
1984	4.4	5.4	1.9	5.1	6.2	2.1	...	...	...
1985	4.5	5.5	1.8	5.1	6.3	2.1	...	...	...
1986	4.8	5.8	2.2	5.6	6.8	2.4	...	...	...
1987	5.1	6.3	1.9	5.7	7.1	1.9	...	...	...
1988	4.6	5.8	1.5	5.5	6.9	1.7	...	...	...
1989	5.5	6.7	2.2	6.3	7.8	2.5	...	...	...
1990	5.1	6.3	2.0	6.0	7.4	2.3	...	...	...
1991	5.1	6.2	2.1	5.8	7.1	2.3	...	...	...
1992	5.2	6.4	1.8	6.1	7.7	2.0	...	...	...
1993	5.1	6.4	1.7	6.0	7.5	1.9	...	...	...
1994	5.5	6.8	2.1	6.3	7.8	2.3	1.2	1.5	...
1995	4.6	5.6	1.9	5.3	6.5	2.1	1.5	1.9	...
1996	5.3	6.6	1.7	6.2	7.9	1.9	...	...	...
1997	5.4	6.5	2.4	6.3	7.7	2.6	1.3	...	...
1998	5.6	7.1	1.6	6.6	8.4	1.8	1.5	2.0	...
1999	5.5	6.8	1.8	6.3	8.0	2.0	1.6	2.0	...
2000	5.7	7.2	2.0	6.7	8.4	2.3	1.5	1.9	...
2001	5.5	6.8	2.0	6.5	8.1	2.2	1.7	1.8	...
2002	5.7	7.2	2.0	6.9	8.6	2.3	1.4	1.8	...
2003	5.3	6.6	1.8	6.4	8.1	1.9	1.1	...	...
2004	5.9	7.2	2.3	7.2	9.0	2.6	1.0	...	...
2005	5.9	7.4	2.1	7.1	8.9	2.3	1.0	1.3	...
2006	5.5	6.8	2.1	6.6	8.2	2.4	1.6	1.6	...
2007	5.9	7.2	2.3	7.0	8.7	2.6	1.4	1.4	...
2008	5.9	7.1	2.7	7.1	8.6	2.9	1.4	1.6	...
1975-2008	5.1	6.2	2.0	5.9	7.3	2.3	1.1	1.3	0.7

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aBased on the SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-4. Incidence rates^a for testicular cancer, 2004-2008, age-specific and age-adjusted rates, by race/ethnicity

	All Males	White Males	Black Males
Age-Specific Rates			
Age at Diagnosis			
<1	1.0	0.9	...
1-4	0.4	0.4	...
5-9	...	...	...
10-14	0.3	0.3	...
15-19	3.7	4.5	...
20-24	10.1	12.1	1.4
25-29	13.5	16.2	2.2
30-34	13.1	15.7	3.4
35-39	10.9	12.9	2.2
40-44	9.0	10.5	2.4
45-49	6.2	7.2	1.8
50-54	4.6	5.2	1.7
55-59	2.8	3.2	...
60-64	1.7	1.8	...
65-69	1.4	1.6	...
70-74	1.0	1.1	...
75-79	0.9	1.0	...
80-84	1.0	1.1	...
85+	1.3	1.4	...
Age-Adjusted Rates			
Age at Diagnosis/ Death			
All ages	5.5	6.5	1.3
Under 65	6.1	7.2	1.4
65 and over	1.1	1.2	...
All ages ^b	5.2	6.1	1.2

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aBased on the SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-5. Age-adjusted incidence rates^a and trends^b for testicular cancer, by race/ethnicity

Race/ethnicity	Rate 2004-2008 Rate per 100,000	Trend 1999-2008 AAPC ^c (%)
All Races	5.5	1.1*
White	6.5	1.2*
White Hispanic ^d	4.5	2.3*
White Non-Hispanic ^d	7.2	1.4*
Black	1.3	-0.3
Asian/Pacific Islander	1.9	0.9
American Indian/ Alaska Native ^e	3.8	...
Hispanic ^d	4.4	2.4*

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^aBased on the SEER 17 areas. Rates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^bBased on the SEER 13 areas. Trends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cThe 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

^dHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^eIncidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-6. Estimated testicular cancer prevalence counts^a on January 1, 2008 in the United States, by race/ethnicity and years since diagnosis

Years Since Diagnosis	0 to < 5	5 to < 10	10 to < 15	15 to < 20	20 to < 25	25 to < 30	0 to < 18 ^e	0 to < 33 ^e	≥ 33 ^f	Complete ^g
Race/ethnicity										
All Races ^b	39,225	36,242	31,402	28,539	21,720	15,555	126,678	184,341	16,546	200,887
White ^b	36,888	33,945	29,897	27,400	21,006	15,058	119,463	175,171	15,886	191,057
Black ^b	923	1,006	600	372	320	225	2,829	3,687	157	3,844
Asian/Pacific Islander ^c	687	615	477	...	...	...	2,034	...	...	...
Hispanic ^d	4,083	3,121	3,435	...	...	...	10,639	...	...	...

... Data unavailable.

^aUS 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^bStatistics based on the SEER 9 Areas.

^cStatistics based on the SEER 11 Areas and Rural Georgia.

^dStatistics based on NHIA for Hispanic for the SEER 11 Areas and Rural Georgia.

^eMaximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^fCases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et al. 1997, Merrill et al. 2000).

^gComplete prevalence is obtained by summing 0 to <33 and ≥33.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-7. Risk of being diagnosed with testicular cancer in 10, 20 and 30 years, lifetime risk of being diagnosed with cancer given alive and cancer-free at current age, by race/ethnicity

Current Age	All Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.03	0.14	0.37
10	0.02	0.13	0.25	0.37
20	0.11	0.23	0.30	0.35
30	0.12	0.19	0.22	0.25
40	0.07	0.11	0.12	0.13
50	0.04	0.05	0.06	0.06
60	0.01	0.02	0.03	0.03
70	0.01	0.01	...	0.01
80	0.01	...	...	0.01

Lifetime Risk of Being Diagnosed = 0.37 Lifetime Risk of Dying = 0.02

Current Age	White Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.03	0.16	0.44
10	0.03	0.16	0.30	0.44
20	0.13	0.27	0.35	0.42
30	0.14	0.22	0.26	0.29
40	0.08	0.12	0.14	0.15
50	0.04	0.06	0.06	0.07
60	0.02	0.02	0.03	0.03
70	0.01	0.01	...	0.02
80	0.01	...	...	0.01

Lifetime Risk of Being Diagnosed = 0.44 Lifetime Risk of Dying = 0.02

Current Age	Black Males			Eventually
	> 10 years	> 20 years	> 30 years	
0	0.00	0.01	0.03	0.09
10	0.01	0.02	0.05	0.09
20	0.02	0.05	0.06	0.08
30	0.03	0.05	0.06	0.07
40	0.02	0.03	0.03	0.04
50	0.01	0.02	0.02	0.02
60	0.01	0.01	0.01	0.01
70	0.01	0.01	...	0.01
80	0.00	...	...	0.00

Lifetime Risk of Being Diagnosed = 0.09 Lifetime Risk of Dying = 0.01

... Statistic could not be calculated.

NOTE: A percent of 0.00 represents a value that is below 0.005.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-8. Stage at diagnosis for testicular cancer 2001-2007,^a total case counts, estimated case counts, and percentages

Stage at Diagnosis	All Males		
	All	< 50	50+
All Stages	14,025 (100%)	12,661 (100%)	1,364 (100%)
Localized	9,818 (70%)	8,863 (70%)	955 (70%)
Regional	2,384 (17%)	2,152 (17%)	218 (16%)
Distant	1,683 (12%)	1,519 (12%)	150 (11%)
Unstaged	140 (1%)	127 (1%)	41 (3%)

Stage at Diagnosis	White Males		
	All	< 50	50+
All Stages	12,880 (100%)	11,628 (100%)	1,252 (100%)
Localized	9,016 (70%)	8,140 (70%)	876 (70%)
Regional	2,190 (17%)	1,977 (17%)	200 (16%)
Distant	1,417 (11%)	1,279 (11%)	138 (11%)
Unstaged	129 (1%)	116 (1%)	38 (3%)

Stage at Diagnosis	Black Males		
	All	< 50	50+
All Stages	377 (100%)	339 (100%)	38 (100%)
Localized	222 (59%)	203 (60%)	20 (53%)
Regional	79 (21%)	68 (21%)	9 (24%)
Distant	72 (19%)	64 (19%)	6 (16%)
Unstaged	8 (2%)	3 (1%)	3 (8%)

^aBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008. SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-9. Survival (%) for testicular cancer, by race, diagnosis year, stage, and age

	All Males			White Males			Black Males		
	All	< 50	50+	All	< 50	50+	All	< 50	50+
5-Year Relative Survival (%)									
Year of Diagnosis									
1960-1963 ^a	...	...	...	63.0	...	...	...	...	...
1970-1973 ^a	...	...	...	72.0	...	...	...	...	...
▶ 1975-1977 ^b	82.7	83.3	77.7	82.6	83.3	77.4	...	...	...
1978-1980 ^b	88.9	89.5	82.4	89.2	89.8	83.4	73.2 ^c	78.0 ^c	...
1981-1983 ^b	92.2	92.7	86.3	92.4	92.9	86.4	87.7 ^c	84.7 ^c	...
1984-1986 ^b	92.6	93.6	80.5	93.0	94.0	80.7	87.0 ^c	89.4 ^c	...
1987-1989 ^b	95.1	95.0	95.7	95.4	95.3	95.3	88.4 ^c	87.8 ^c	...
1990-1992 ^b	95.8	95.8	93.8	96.2	96.1	94.7	83.5 ^c	...	...
1993-1995 ^b	95.7	96.2	86.6	96.0	96.5	87.8	88.0	89.4	...
1996-2000 ^b	95.7	96.3	88.7	95.9	96.4	88.9	90.6	90.9	...
2001-2007 ^b	96.4 [*]	96.8 [*]	93.0 [*]	97.0 [*]	97.1 [*]	93.9 [*]	85.9	86.8	...
5-Year Relative Survival (%), 2001-2007^d									
Stage at Diagnosis									
All Stages	95.3	95.6	91.8	95.7	95.9	93.0	86.5	87.8	72.5 ^c
Localized	99.0	99.2	96.9	99.1	99.3	97.3	98.5	98.6	...
Regional	96.2	96.0	96.5	96.9	96.5	97.9	84.9	88.4	...
Distant	72.0	73.1	60.2	73.0	74.1	61.3	51.1 ^c	50.8 ^c	...
Unstaged	85.5	91.9	59.0 ^c	87.1	92.4	63.1 ^e	...	...	...
Age at Diagnosis									
<45	95.7	...	...	96.0	...	...	87.8	...	...
45-54	95.6	...	...	96.1	...	...	84.1 ^c	...	...
55-64	90.4	...	...	91.1	...	...	...	...	...
65-74	86.8	...	...	84.8	...	...	...	...	...
75+	58.1 ^e	...	...	67.3 ^e	...	...	...	...	...
<65	95.5	...	...	95.9	...	...	86.6	...	...
65+	78.3 ^c	...	...	81.3 ^c	...	...	...	...	...

... Statistic could not be calculated due to fewer than 25 cases during the time period.

▶ Denotes reference group.

*The difference between 1975-1977 and 2001-2007 is statistically significant (p<.05).

^aBased on End Results data from a series of hospital registries and one population-based registry.

^bBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2008.

^cThe standard error is between 5 and 10 percentage points.

^dBased on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

^eThe standard error is greater than 10 percentage points.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-10. Relative survival^a (%) for testicular cancer, by year of diagnosis, all races

	1975- 1980- 1985-																					
	1979	1984	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Survival Time																						
1-year	93.4	96.1	98.1	98.2	98.5	98.0	96.6	97.7	98.3	97.9	97.4	98.2	96.9	97.9	98.5	98.2	98.5	97.9	98.3	98.9	99.0	
2-year	88.6	92.7	96.1	96.7	97.0	96.7	95.7	96.5	97.4	96.4	95.6	96.6	96.3	96.7	97.4	97.1	96.8	96.5	97.3	98.5		
3-year	86.5	92.1	95.5	96.2	96.1	95.5	95.0	95.9	96.4	95.8	95.1	96.2	95.7	95.9	97.1	96.8	96.5	95.7	97.1			
4-year	85.6	91.5	94.9	96.1	95.7	95.4	94.9	95.9	96.3	95.8	94.8	96.1	95.6	95.9	96.8	96.7	96.3	95.3				
5-year	85.0	91.2	94.7	96.1	95.7	95.3	94.8	95.7	96.3	95.8	94.8	95.8	95.6	95.9	96.5	96.2	96.0					
6-year	84.7	91.0	94.5	95.8	95.5	94.9	94.8	95.7	96.3	95.8	94.7	95.4	95.5	95.9	96.0	96.0						
7-year	84.5	90.7	94.3	95.7	95.4	94.6	94.8	95.5	96.3	95.8	94.7	95.2	95.5	95.9	96.0							
8-year	84.4	90.5	94.0	95.6	95.2	94.0	94.8	94.8	96.3	95.8	94.7	95.2	95.4	95.9								
9-year	84.4	90.1	93.9	95.5	95.0	94.0	94.5	94.8	96.2	95.8	94.7	95.2	95.1									
10-year	83.6	89.9	93.7	95.4	94.7	93.9	94.5	94.8	96.1	95.8	94.7	94.5										
11-year	83.1	89.7	93.6	95.3	94.7	93.8	94.5	94.8	96.1	95.8	94.7											
12-year	82.8	89.7	93.5	94.9	94.5	93.8	94.5	94.7	96.1	95.8												
13-year	82.5	89.3	93.2	94.9	94.5	93.8	94.5	94.6	96.0													
14-year	81.9	88.8	93.0	94.9	94.5	93.6	94.5	94.5														
15-year	81.6	88.5	93.0	94.9	94.4	93.5	94.5															
16-year	81.1	88.0	92.8	94.9	94.4	92.9																
17-year	80.5	87.7	92.6	94.7	94.4																	
18-year	79.9	87.5	92.6	94.7																		
19-year	79.3	87.3	92.4																			
20-year	79.2	86.9																				

^aBased on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-11. Age-adjusted mortality rates^a for testicular cancer, by year, race, and gender

	All Males			White Males			Black Males		
	All	<50	50+	All	<50	50+	All	<50	50+
Year of Death									
1975	0.7	0.8	0.7	0.8	0.8	0.8	0.2	...	...
1976	0.7	0.7	0.7	0.8	0.8	0.7	0.4	0.2	...
1977	0.7	0.7	0.6	0.7	0.7	0.7	0.2	...	...
1978	0.6	0.6	0.5	0.6	0.6	0.6	0.2	0.2	...
1979	0.5	0.5	0.6	0.5	0.5	0.6	0.4	0.3	...
1980	0.5	0.4	0.5	0.5	0.5	0.5	0.2	...	...
1981	0.4	0.4	0.4	0.4	0.4	0.4	0.2	...	...
1982	0.4	0.4	0.4	0.4	0.4	0.4	0.2	...	...
1983	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	...
1984	0.4	0.3	0.4	0.4	0.4	0.4	0.2	...	...
1985	0.4	0.3	0.4	0.4	0.4	0.4	0.2	...	...
1986	0.3	0.3	0.3	0.4	0.4	0.4	0.2	...	...
1987	0.3	0.4	0.3	0.4	0.4	0.3	0.2	0.2	...
1988	0.3	0.3	0.4	0.4	0.3	0.4	0.2	...	...
1989	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	...
1990	0.3	0.3	0.2	0.3	0.3	0.2	...	...	...
1991	0.3	0.3	0.3	0.3	0.3	0.3	0.2	...	...
1992	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.2	...
1993	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	...
1994	0.3	0.3	0.2	0.3	0.3	0.2	0.1	0.1	...
1995	0.2	0.2	0.2	0.3	0.3	0.3	...	...	...
1996	0.3	0.3	0.3	0.3	0.3	0.3	0.1	...	...
1997	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	...
1998	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	...
1999	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1	...
2000	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	...
2001	0.2	0.2	0.3	0.3	0.3	0.3	0.2	...	...
2002	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	...
2003	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.1	...
2004	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	...
2005	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	...
2006	0.3	0.2	0.3	0.3	0.3	0.3	0.1	0.2	...
2007	0.2	0.2	0.2	0.2	0.2	0.3	0.1	...	...
2008	0.2	0.2	0.3	0.3	0.2	0.3	0.1	0.1	...
1975-2008	0.3	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.3
Age at Death									
All ages	0.2	...	...	0.3	...	...	0.1	...	...
Under 65	0.2	...	...	0.3	...	...	0.1	...	...
65 and over	0.3	...	...	0.3	...	...	...	...	...
All ages ^b	0.2	...	...	0.2	...	...	0.1	...	...

... Statistic not shown. Rate based on less than 16 cases for the time interval.

^aUS Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130), unless noted.

^bRates are per 100,000 and are age-adjusted to the International Agency for Research on Cancer (IARC) world standard population.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-12. Age-adjusted mortality^a rates^b and trends^c for testicular cancer, by race/ethnicity

Race/ethnicity	Rate 2004-2008 Rate per 100,000	Trend 1999-2008 AAPC ^d (%)
All Races	0.2	-0.9*
White	0.3	-1.0*
White Hispanic ^e	0.3	0.1
White Non-Hispanic ^e	0.3	-1.0*
Black	0.1	0.5
Asian/Pacific Islander	0.1	...
American Indian/Alaska Native		
Total U.S.	...	...
CHSDA ^f Counties	...	...
Non-CHSDA ^f Counties	...	...
Hispanic ^e	0.3	0.3

The AAPC is the Average Annual Percent Change over the time interval.

*The AAPC is significantly different from zero ($p < .05$).

... Statistic not shown. Trend based on less than 10 cases for at least one year within the time interval.

^aUS Mortality Files, National Center for Health Statistics, CDC.

^bRates are age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^cTrends are based on rates age-adjusted to the 2000 US standard population (19 age groups - Census P25-1130).

^dThe 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

^eHispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

^fIncidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

SOURCE: Howlader N, Noone AM, Krapcho M, Neyman N, Aminou R, Waldron W, Altekruse SF, Kosary CL, Ruhl J, Tatalovich Z, Cho H, Mariotto A, Eisner MP, Lewis DR, Chen HS, Feuer EJ, Cronin KA, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2008, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2008/, based on November 2010 SEER data submission, posted to the SEER web site, 2011.

Table 10-13. Nationally representative inpatient stays for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,755)		2003 (N=1,605)		2004 (N=1,387)		2005 (N=1,608)		2006 (N=1,745)		2007 (N=1,881)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.7	1.7	1.5	1.6	1.3	1.3	1.5	1.6	1.6	1.7	1.7	1.8
Age												
18-24	2.9		2.8		2.2		3.1		3.0		2.9	
25-34	3.1		3.0		2.1		2.7		3.2		4.1	
35-39	2.8		2.4		2.5		1.7		2.1		1.9	
40-44	1.8		1.7		1.8		1.6		1.8		1.3	
45-54	0.8		0.7		0.7		0.9		1.0		0.8	
55-64	†		†		†		0.5		0.4		0.4	
▶ 65-74	0.5		0.4		†		†		†		0.4	
75-84	†		†		†		†		†		†	
85+	†		...		†		...		†		†	
Race/ethnicity												
▶ White	1.1	1.0	1.1	1.1	1.1	1.0	1.2	1.2	1.0	1.1	1.3	1.4
Black	0.8*	1.0	0.4*	0.6	†	0.3	0.5*	0.6	0.5*	0.6	0.5*	1.1
Hispanic	†	†	2.1*	2.3	1.9*	2.2	1.6*	2.3	2.8*	3.2	2.9*	3.0
Asian	†	1.2	†	1.1	†	1.0	†	1.6	1.0*	1.3	0.7*	1.1
Other	6.0*	7.7	3.5*	5.5	†	1.8	5.0*	5.5	2.2*	3.2	3.0*	6.1
Region												
Northeast	1.9	2.2	1.2	1.4	1.4	1.5	1.7	1.9	1.3	1.4	2.7	2.9
South	2.0	2.0	1.7	1.7	1.5	1.5	1.5	1.5	1.9	1.9	1.7	1.7
▶ Midwest	1.5	1.5	1.3	1.3	1.2	1.4	1.5	1.7	1.0	1.1	0.8	1.1
West	1.4*	1.5	1.9*	2.5	1.1*	1.2	1.5*	1.6	2.1*	2.3	1.9*	2.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 10-14. Inpatient stays by privately insured individuals for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=268)		2003 (N=289)		2004 (N=268)		2005 (N=310)		2006 (N=248)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.3	4.9	6.0	3.9	5.5	3.8	6.0	4.6	4.9	4.4
Age										
18-24	8.0		5.5		5.1		6.0		3.9*	
25-34	7.8		8.6*		7.4*		9.0		6.1*	
35-39	7.1		9.4*		8.7*		6.9		4.3*	
40-44	6.2		7.7*		7.0*		6.9		7.3*	
45-54	4.6		3.3		3.8		3.8		5.1	
55-64	3.8*		3.1*		1.8*		3.2*		2.2*	
▶ 65-74	5.4*		2.7*		3.6*		5.6*		2.5*	
75-84	5.2**		2.5**		2.4**		3.8**		3.6**	
85+	...		...		4.3**		6.6**		10.3**	
Race/ethnicity										
▶ White	5.2	3.5	6.2	3.3	5.1	3.8	5.5	4.7	4.2	3.8
Black	3.5**	5.3	1.6**	6.4	4.4**	15.9	2.0**	6.0	1.6**	6.5
Hispanic	4.7**	36.2	6.1**	3.8	6.1**	4.7	5.8**	4.6	4.0**	4.1
Asian	...	...	7.1**	...	2.1**	9.9	1.3**	22.6	1.3**	5.0
Other	4.7**	...	...	...	2.3**	...	2.1**	...	...	...
Unknown	10.5**	...	4.9**	...	1.0**	...	3.2**	...	6.0**	...
Missing	7.2*	...	6.3*	...	9.6*	...	12.4*	...	10.9*	...
Region										
Northeast	7.9	4.8	7.8*	2.9	6.5	5.2	6.4	6.3	6.8*	7.5
South	5.3	4.6	5.8	4.4	4.8	4.1	5.5	5.5	3.9	3.3
▶ Midwest	6.4	4.7	5.6	4.2	5.9	4.2	6.2	3.8	4.9	4.8
West	7.1*	8.5	6.4*	3.3	5.7*	3.1	6.7*	3.2	6.2*	6.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 10-15. Hospital outpatient visits by Medicare beneficiaries for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=700)		2003 (N=1,140)		2004 (N=1,140)		2005 (N=960)		2006 (N=940)		2007 (N=940)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.5	3.1	7.1	3.9	7.0	3.6	5.8	3.8	5.8	3.8	5.8	3.9
Under 65/65+												
< 65 Years	8.3**	8.3	17.3*	17.3	17.2*	17.2	11.6**	11.6	11.7**	11.7	10.0**	10.0
▶ 65+ Years	3.2*	3.1	3.7*	3.9	3.4*	3.6	3.8*	3.8	3.7*	3.8	4.2*	3.9
Age												
▶ 65-69	2.2*		4.8*		4.7*		5.1*		5.2*		3.7*	
70-74	2.0**		1.3**		2.0**		4.6**		2.7**		1.4**	
75-79	8.2**		6.4**		4.0**		0.8**		5.9**		7.0**	
80-84	1.3**		2.5**		2.4**		4.8**		0.0**		4.9**	
85-89	0.0**		...		5.1**		2.5**		2.5**		2.4**	
90-94	8.6**		8.1**		...		0.0**		...		22.0**	
95-97	...		0.0**		...		...		...		...
Race/ethnicity												
▶ White	3.3*	2.1	6.5	3.6	6.1	3.1	4.7	3.2	5.3	3.1	4.7	2.3
Black	15.9**	28.8	12.8**	24.2	13.8**	16.2	15.0**	16.1	12.7**	19.3	17.9**	73.5
Hispanic	6.5**	0.0	6.2**	...	18.1**	179.5	0.0**	...	...	...	0.0**	...
Asian	...	...	8.8**	...	8.3**	0.0	7.8**	...	...	...	...	...
Other	0.0**	0.0	6.5**	75.5	...	...	11.6**	39.4	5.6**	...	5.4**	...
Unknown	...	...	...	...	...	...	0.0**	...	0.0**	...	...	...
Region												
▶ Northeast	6.0*	0.9	7.8*	1.2	9.1*	5.2	6.5*	7.7	9.9*	4.5	7.2*	7.0
South	4.6**	4.9	4.2**	4.4	5.0**	2.1	5.0**	3.8	5.4**	4.9	6.7**	5.6
Midwest	4.1**	3.4	6.5**	4.3	4.4**	2.2	3.9**	1.3	5.0**	2.9	6.6**	2.1
West	3.0**	3.6	13.7**	8.5	12.6**	8.9	9.5**	8.5	3.4**	3.8	1.3**	1.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 10-16. Hospital outpatient visits by privately insured individuals for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,632)		2003 (N=3,678)		2004 (N=3,435)		2005 (N=4,017)		2006 (N=3,979)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	84.8	51.3	76.8	51.9	70.2	48.2	77.3	51.7	78.1	56.4
Age										
18-24	88.7*		52.3*		52.4*		47.4*		55.5*	
25-34	113.8*		92.0*		101.9*		119.3*		115.7*	
35-39	136.1*		139.5*		94.8*		119.9*		96.9*	
40-44	96.6*		102.8*		96.6*		94.9*		101.6*	
45-54	57.2*		66.4*		53.2*		68.3*		70.3*	
55-64	38.5*		29.9*		37.9*		30.9*		34.0*	
▶ 65-74	20.8		20.1		16.4		19.1		25.7	
75-84	16.6**		8.6**		13.0**		15.1**		25.1**	
85+	...		9.1**		13.0**		3.3**		20.6**	
Race/ethnicity										
▶ White	90.5	49.0	88.9	61.0	75.0	51.0	78.7	50.1	79.0	55.0
Black	61.1*	11.5	16.0**	10.3	20.2*	19.5	20.7*	13.5	12.4**	18.3
Hispanic	49.1*	25.4	61.7*	27.6	54.5*	24.2	47.4*	33.2	55.1*	37.9
Asian	30.6**	59.3	27.3**	22.8	42.9*	64.4	34.0*	22.6	20.9*	23.4
Other	98.4**	93.2	117.0*	117.1	70.8*	134.3	75.3*	86.5	71.6*	126.0
Unknown	103.8*	...	77.3*	...	56.2*	...	87.1*	...	86.0*	...
Missing	84.4*	...	70.2*	...	81.8*	...	113.0*	...	121.5*	...
Region										
Northeast	105.6	45.1	96.3	64.7	95.3*	67.0	98.0	79.4	116.4*	77.3
South	68.1*	41.0	59.4*	41.3	56.6*	35.8	57.4*	39.1	59.5*	46.6
▶ Midwest	101.0	63.8	96.9	65.0	84.2	63.9	96.4	63.5	93.9	67.9
West	76.5*	53.5	68.4*	50.7	61.4*	37.4	82.6*	52.4	75.7*	57.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 10-17. Ambulatory surgery center visits by Medicare beneficiaries for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=840)		2003 (N=1,060)		2004 (N=1,000)		2005 (N=920)		2006 (N=720)		2007 (N=860)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.4	5.8	6.6	7.3	6.1	6.7	5.6	6.6	4.4	4.5	5.3	5.4
Under 65/65+												
< 65 Years	5.2*	5.2	4.9**	4.9	5.3**	5.3	2.8**	2.8	4.7*	4.7	5.9**	5.9
▶ 65+ Years	5.4	5.8	7.1	7.3	6.4	6.7	6.6	6.6	4.3*	4.5	5.1	5.4
Age												
▶ 65-69	1.1*		4.8*		4.1*		4.6*		3.1*		2.1*	
70-74	3.9**		7.8**		5.2**		8.6**		4.8**		4.1**	
75-79	8.2**		7.2**		9.6**		6.6**		5.9**		7.8**	
80-84	11.6**		8.7**		9.7**		7.1**		4.8**		7.4**	
85-89	13.6**		13.2**		7.6**		7.6**		4.9**		11.9**	
90-94	...		8.1**		...		7.6**		...		...
Race/ethnicity												
▶ White	5.7	6.1	6.3	6.8	7.1	7.5	6.2	7.0	4.5	4.4	4.5	4.6
Black	5.3**	12.4	9.0**	15.4	1.3**	6.1	3.7**	25.9	3.8**	7.1	3.8**	17.9
Hispanic	...	...	6.2**	33.2	...	...	0.0**	0.0	6.0**	35.3	...	...
Asian	...	...	...	...	...	...	...	...	...	...	22.1**	76.2
Other	...	...	13.0**	44.6	...	...	0.0**	...	5.6**	...	26.8**	30.5
Unknown	...	...	...	...	...	...	...	...	...	...	87.6**	...
Region												
▶ Northeast	9.3*	9.7	5.9*	7.5	3.2*	5.3	7.8*	9.3	4.6*	9.2	9.2*	8.7
South	4.3**	4.7	7.4**	7.8	6.6**	6.8	3.4**	3.5	4.8**	5.5	3.5**	4.2
Midwest	4.6**	11	7.0**	7.4	5.9**	7.4	7.9**	9.1	4.5**	3.3	5.6**	5.8
West	4.5**	7.5	5.1**	7.6	8.4**	9.3	4.8**	7.2	3.4**	4.8	4.7**	7.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 10-18. Ambulatory surgery center visits by privately insured individuals for testicular cancer listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=60)		2003 (N=70)		2004 (N=82)		2005 (N=124)		2006 (N=76)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.4	1.3	1.5	1.0	1.7	1.3	2.4	1.5	1.5	1.4
Age										
18-24	1.6*		1.8*		1.3*		1.8*		0.7*	
25-34	1.1*		1.7*		3.1		4.6*		2.2**	
35-39	2.4*		2.5*		1.2*		3.4**		2.1**	
40-44	1.6*		1.4*		1.4*		2.2**		1.8**	
45-54	1.0*		1.1*		1.3*		1.5**		1.7**	
55-64	1.0*		0.7*		1.3*		1.2**		0.6**	
▶ 65-74	1.8*		0.5*		1.0*		...		...
75-84	...		1.2**		1.2**		0.9*		...	
Race/ethnicity										
▶ White	2.0	1.3	1.9	1.3	1.9	1.7	2.7	1.6	1.5	1.5
Black	1.2**	...	1.6**	32.0	0.5**	...	0.5**	...	2.2**	3.2
Hispanic	...	...	1.1**	2.3	1.0**	1.5	1.4**	1.8	1.1**	...
Asian	...	...	...	...	0.7**	...	3.3**	7.8	0.6**	5.0
Other	...	...	3.3**	...	...	...	...	...	4.1**	16.2
Unknown	0.6**	...	2.2**	...	1.0**	...	2.1**	...	1.5**	...
Missing	1.1**	...	0.9**	...	1.8**	...	1.9**	...	1.3**	...
Region										
Northeast	2.0*	3.4	1.7*	1.3	1.6*	2.1	2.3*	1.5	1.8**	0.8
South	1.5*	1.8	1.2*	0.9	1.7	0.9	2.7*	1.5	1.8*	1.9
▶ Midwest	1.0*	1.4	1.2*	1.6	1.6*	1.8	1.5**	1.5	0.8*	0.8
West	1.6**	2.1	2.7**	1.5	1.9**	2.1	3.5**	3.0	1.8**	1.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 10-19. Nationally representative ambulatory surgery center visits for testicular cancer listed as primary diagnosis, count, rate^a

	Count	Rate
Total	5,942	5.6
Age		
18-24	986	7.0
35-39	831	8.1*
40-44	1,537	13.9*
45-54	2,588	12.3*
55-64	...	...
▶ 65-74	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 10-20. Physician office visits by Medicare beneficiaries for testicular cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=7,100)		2003 (N=9,120)		2004 (N=8,960)		2005 (N=8,160)		2006 (N=8,420)		2007 (N=7,260)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	45.5	31.5	56.7	40.2	54.7	35.1	49.5	34.7	51.8	37.1	44.7	34.2
Under 65/65+												
< 65 Years	87.8*	87.8	106.8*	106.8	113.5*	113.5	93.4*	93.4	94.6*	94.6	74.4*	74.4
▶ 65+ Years	31.5	31.5	39.9	40.2	34.6	35.1	34.0	34.7	36.6	37.1	33.7	34.2
Age												
▶ 65-69	27.6		28.8		30.0		32.3		41.1		29.2	
70-74	41.0*		55.8*		33.9*		40.2*		32.0*		40.0*	
75-79	35.2*		34.5*		38.5*		28.8*		39.7*		37.4*	
80-84	24.4**		54.4*		44.6*		47.6*		30.2**		24.6**	
85-89	21.8**		28.9**		33.0**		20.2**		42.1**		45.2**	
90-94	17.1**		16.3**		23.5**		...		22.5**		22.0**	
95-97	...		...		...		...		47.8**		46.6**	
Race/ethnicity												
▶ White	48.0	32.6	61.9	42.8	61.0	38.0	52.9	35.9	58.0	40.1	46.1	34.2
Black	29.2**	23.0	25.7**	31.3	8.8**	39.6	21.2**	27.9	11.4**	23.8	19.2**	27.9
Hispanic	45.2**	...	49.7**	125.7	66.2**	130.9	75.9**	139.8	59.9**	96.4	46.9**	...
Asian	9.4**	192.3	...	...	...	...	...	...	7.8**	42.1	7.4**	39.0
Other	14.3**	41.3	26.0**	41.7	18.6**	41.3	52.3**	47.9	16.9**	30.4	96.6**	115.1
Unknown	304.2**	...	160.3**	...	292.2**	...	77.9**	...	82.9**	...	525.9**	...
Region												
▶ Northeast	57.8	44.0	53.5	49.0	60.1	42.7	45.2	37.3	47.4	37.7	63.8	45.2
South	45.9*	27.3	69.2*	39.2	66.8*	29.7	57.0*	26.9	60.3*	38.1	38.4*	31.2
Midwest	42.4*	28.5	46.0*	39.1	36.1*	32.0	38.4*	36.1	38.6*	30.0	43.8*	33.3
West	34.8*	31.9	47.7*	39.2	48.2*	46.2	53.0*	49.4	56.4*	49.3	39.6*	34.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 10-21. Physician office visits by privately insured individuals for testicular cancer listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=8,299)		2003 (N=8,686)		2004 (N=9,201)		2005 (N=10,671)		2006 (N=10,958)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	193.7	127.0	181.3	123.0	188.0	120.3	205.4	147.3	215.1	166.3
Age										
18-24	186.8*		137.8*		131.1*		114.6*		135.5*	
25-34	241.0*		238.9*		272.0*		302.1*		292.3*	
35-39	299.4*		277.4*		293.0*		298.4*		263.1*	
40-44	236.9*		224.9*		257.4*		280.3*		292.4*	
45-54	167.8*		164.3*		150.7*		191.2*		219.8*	
55-64	81.6*		73.8*		70.2*		95.4*		103.9*	
▶ 65-74	28.0		52.6		24.6		51.6		73.5	
75-84	17.7**		17.2**		22.5**		21.7**		32.3**	
85+	...		18.3**		25.9**		9.9**		67.1**	
Race/ethnicity										
▶ White	238.2	140.1	219.2	136.4	198.6	125.4	223.6	152.6	223.6	162.2
Black	102.2*	115.4	48.8*	34.5	62.1*	41.6	35.8*	56.9	47.9*	74.7
Hispanic	126.1*	85.7	136.8*	73.7	148.0*	79.8	148.1*	74.7	157.4*	128.9
Asian	103.4*	203.5	38.4*	40.8	50.1*	31.8	73.2*	73.5	50.0*	66.8
Other	112.5**	98.4	87.8**	60.3	84.5*	88.1	150.5*	86.4	174.0*	143.6
Unknown	239.6*	...	224.0*	...	177.0*	...	168.9*	...	253.8*	...
Missing	169.6*	...	154.3*	...	233.9*	...	255.1*	...	288.2*	...
Region										
Northeast	225.6*	164.3	168.5*	131.6	191.4	141.4	229.0*	228.8	249.7*	217.8
South	179.8*	105.5	174.6*	109.8	190.9*	114.5	197.2*	129.6	200.3	155.3
▶ Midwest	192.5	120.6	185.6	144.3	182.7	126.4	184.5	134.1	205.3	149.7
West	215.0*	181.2	205.3*	143.8	188.9*	110.0	257.1*	172.4	252.4*	196.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 10-22. Use of chemotherapy during inpatient hospital stays for testicular cancer listed as primary diagnosis, count, rate,^a rate per visit^b

	2002			2003			2004		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Total	1,866	1.3		1,712	1.2		1,470	1.0	
Infusion of chemotherapy performed	394	0.3	21,088	263	0.2	15,333	231	0.2	15,735
	2005			2006			2007		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Total	1,742	1.2		1,829	1.3		1,989	1.4	
Infusion of chemotherapy performed	401	0.3	23,008	404	0.3	22,089	384	0.3	19,286

^aRate per 100,000 is based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male civilian non-institutionalized population.^bRate per 100,000 male visits with testicular cancer in Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

CHAPTER 11

Urinary Tract Infection

Female Urinary Tract Infection
Male Urinary Tract Infection
Pediatric Urinary Tract Infection

Table 11-1. Codes used in the diagnosis and management of urinary tract infection**Female Urinary Tract Infection****Females 18 years or older with one of the following ICD-9 diagnosis codes:**

Cystitis

112.2	Candidiasis of other urogenital sites
120.0	Schistosoma haematobium
120.9	Schistosomiasis, unspecified
595.0	Acute cystitis
595.1	Chronic interstitial cystitis
595.2	Other chronic cystitis
595.3	Trigonitis
595.89	Other specified types of cystitis
595.9	Cystitis, unspecified
646.6	Infections of genitourinary tract in pregnancy
760.1	Maternal renal and urinary tract diseases affecting fetus or newborn

Pyelonephritis

590.0	Chronic pyelonephritis
590.00	Chronic pyelonephritis without lesion of renal medullary necrosis
590.01	Chronic pyelonephritis with lesion of renal medullary necrosis
590.1	Acute pyelonephritis
590.10	Acute pyelonephritis without lesion of renal medullary necrosis
590.11	Acute pyelonephritis with lesion of renal medullary necrosis
590.2	Renal and perinephric abscess
590.3	Pyeloureteritis cystica
590.8	Other pyelonephritis or pyonephrosis, not specified as acute or chronic
590.9	Infection of kidney, unspecified
593.89	Other specified disorders of kidney and ureter

Other

597.89	Other urethritis
599.0	Urinary tract infection site not specified
646.5	Asymptomatic bacteriuria in pregnancy

Male Urinary Tract Infection**Males 18 years or older with one of the following ICD-9 diagnosis codes:**

Orchitis

016.5	Tuberculosis of other male genital organs
072.0	Mumps orchitis
603.1	Infected hydrocele
604.0	Orchitis, epididymitis and epididymo-orchitis with abscess
604.9	Other orchitis, epididymitis, and epididymo-orchitis, without mention of abscess
604.90	Orchitis and epididymitis, unspecified
604.91	Orchitis and epididymitis in diseases classified elsewhere
604.99	Other orchitis, epididymitis, and epididymo-orchitis, without abscess
608.0	Seminal vesiculitis
608.4	Other inflammatory disorders of male genital organs

Cystitis

112.2	Candidiasis of other urogenital sites
120.0	Schistosoma haematobium

Continued on next page.

Table 11-1 (continued). Codes used in the diagnosis and management of urinary tract infection

120.9	Schistosomiasis, unspecified
595.0	Acute cystitis
595.1	Chronic interstitial cystitis
595.2	Other chronic cystitis
595.3	Trigonitis
595.89	Other specified types of cystitis
595.9	Cystitis, unspecified
Pyelonephritis	
590.0	Chronic pyelonephritis
590.00	Chronic pyelonephritis without lesion of renal medullary necrosis
590.01	Chronic pyelonephritis with lesion of renal medullary necrosis
590.1	Acute pyelonephritis
590.10	Acute pyelonephritis without lesion of renal medullary necrosis
590.11	Acute pyelonephritis with lesion of renal medullary necrosis
590.2	Renal and perinephric abscess
590.3	Pyeloureteritis cystica
590.8	Other pyelonephritis or pyonephrosis, not specified as acute or chronic
590.9	Infection of kidney, unspecified
593.89	Other specified disorders of kidney and ureter
Other	
597.8	Other urethritis
599.0	Urinary tract infection site not specified
607.1	Balanoposthitis
607.2	Other inflammatory disorders of penis

Pediatric Urinary Tract Infection**Individuals under 18 with one of the following ICD-9 diagnosis codes:**

Cystitis	
112.2	Candidiasis of other urogenital sites
595.0	Acute cystitis
595.2	Other chronic cystitis
595.3	Trigonitis
595.89	Other specified types of cystitis
595.9	Cystitis, unspecified
Pyelonephritis	
590.0	Chronic pyelonephritis
590.00	Chronic pyelonephritis without lesion of renal medullary necrosis
590.01	Chronic pyelonephritis with lesion of renal medullary necrosis
590.1	Acute pyelonephritis
590.10	Acute pyelonephritis without lesion of renal medullary necrosis
590.11	Acute pyelonephritis with lesion of renal medullary necrosis
590.2	Renal and perinephric abscess
590.3	Pyeloureteritis cystica
590.8	Other pyelonephritis or pyonephrosis, not specified as acute or chronic
590.9	Infection of kidney, unspecified
593.89	Other specified disorders of kidney and ureter

Continued on next page.

Table 11-1 (continued). Codes used in the diagnosis and management of urinary tract infection

Orchitis	
016.5	Tuberculosis of other male genital organs
072.0	Mumps orchitis
603.1	Infected hydrocele
604.0	Orchitis, epididymitis and epididymo-orchitis with abscess
604.9	Other orchitis, epididymitis, and epididymo-orchitis, without mention of abscess
604.90	Orchitis and epididymitis, unspecified
604.91	Orchitis and epididymitis in diseases classified elsewhere
604.99	Other orchitis, epididymitis, and epididymo-orchitis, without abscess
Other	
599.0	Urinary tract infection site not specified
760.1	Maternal renal and urinary tract diseases affecting fetus or newborn
771.82	Urinary tract infection of newborn

Table 11-2. Nationally representative inpatient stays for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=250,711)		2003 (N=276,412)		2004 (N=282,203)		2005 (N=297,627)		2006 (N=305,525)		2007 (N=307,891)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	225.6	218.1	245.6	237.8	254.3	257.9	264.8	264.8	269.2	267.1	268.0	267.3
Age												
18-24	90.3*		94.5*		90.8*		85.9*		88.3*		81.7*	
25-34	78.1*		82.6*		79.0*		79.6*		78.5*		76.7*	
35-39	68.5*		75.0*		75.8*		74.0*		74.7*		76.8*	
40-44	73.3*		77.2*		73.9*		78.0*		80.4*		74.7*	
45-54	87.6*		92.2*		95.4*		95.1*		95.0*		95.8*	
55-64	147.3*		154.9*		163.9*		165.7*		165.0*		159.5*	
▶ 65-74	351.6		385.5		402.5		406.8		416.7		426.7	
75-84	728.8*		793.5*		1,049*		1,116*		1,131*		1,102*	
85+	2,726*		3,081*		3,120*		3,211*		3,216*		3,367*	
Race/ethnicity												
▶ White	143.3	148.4	178.8	173.0	190.5	193.4	208.0	208.0	212.4	210.2	204.8	203.3
Black	175.8*	180.7	210.3*	211.4	208.1*	216.5	173.6*	173.6	196.6*	196.6	203.0*	205.6
Hispanic	†	†	190.6*	187.1	165.8*	169.0	165.4*	165.4	180.4*	177.1	161.1*	158.0
Asian	71.8*	72.5	90.6*	87.9	90.0*	90.2	69.4*	69.4	81.5*	81.6	91.8*	90.0
Other	376.0*	363.7	248.3*	258.9	278.9*	302.8	312.9*	312.9	330.1*	338.7	328.3*	314.4
Region												
Northeast	221.5	209.5	257.6	243.6	251.6	249.6	257.8	257.8	286.2	282.7	277.4	268.9
South	264.0	250.1	280.0	265.6	298.1	295.9	308.2	308.2	301.0	297.0	292.1	288.9
▶ Midwest	219.2	216.3	242.1	238.0	264.4	270.4	264.2	264.2	275.2	277.4	286.0	292.4
West	173.0*	174.6	182.4*	185.0	175.9*	187.7	201.1*	201.1	196.9*	194.5	203.4*	205.5

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 11-3. Inpatient stays by Medicare beneficiaries for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=112,420)		2003 (N=115,840)		2004 (N=121,020)		2005 (N=122,500)		2006 (N=123,520)		2007 (N=122,940)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	563.4	556.8	567.9	561.2	587.0	580.0	594.0	575.7	614.2	607.8	617.0	610.5
Under 65/65+												
< 65 Years	254.1*	254.1	266.5*	266.5	286.1*	286.1	283.5*	283.5	281.3*	281.3	292.0*	292.0
▶ 65+ Years	626.1	556.8	631.9	561.2	652.8	580.0	665.3	575.7	692.7	607.8	697.8	610.5
Age												
▶ 65-69	166.8		175.8		170.0		192.9		177.1		189.3	
70-74	299.9*		305.0*		339.5*		333.8*		327.6*		333.1*	
75-79	532.0*		548.1*		590.6*		528.6*		588.8*		593.8*	
80-84	891.1*		861.1*		941.3*		915.0*		957.6*		1,002*	
85-89	1,449*		1,466*		1,390*		1,457*		1,597*		1,519*	
90-94	1,972*		1,966*		2,043*		2,222*		2,161*		2,171*	
95-97	2,543*		2,645*		2,514*		3,096*		2,918*		2,579*	
98+	1,629*		1,686*		1,392*		1,606*		1,687*		1,626*	
Race/ethnicity												
▶ White	543.8	537.6	553.9	547.7	573.1	567.4	577.0	556.1	605.7	600.8	612.4	604.4
Black	748.0*	832.7	714.7*	789.9	721.5*	806.0	748.6*	836.5	735.9*	819.9	705.4*	805.9
Hispanic	561.1*	556.6	554.8*	491.5	597.0*	547.8	730.4*	736.4	694.4*	560.7	729.2*	679.9
Asian	297.2*	291.6	324.9*	321.0	288.6*	259.6	358.5*	323.7	273.4*	230.0	345.0*	336.8
Other	610.2*	810.8	588.8*	800.1	696.9*	776.0	571.0*	655.1	501.1*	677.2	496.6*	572.7
Unknown	1,153**	...	848.6**	...	950.3**	...	801.9**	...	1,307**	...	655.7**	...
Region												
▶ Northeast	554.0	543.4	516.7	485.9	588.1	565.1	568.7	533.2	622.7	599.1	671.1	619.5
South	666.8*	642.3	673.7*	657.9	662.6*	636.6	670.1*	644.7	695.5*	689.5	665.5*	664.1
Midwest	501.2*	512.5	546.1*	566.8	560.9*	576.5	589.6*	573.7	611.3*	625.5	627.1*	635.4
West	421.4*	425.9	410.3*	403.9	444.5*	460.9	452.6*	462.7	418.6*	390.1	427.4*	432.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-4. Inpatient stays by privately insured individuals for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,255)		2003 (N=4,772)		2004 (N=4,781)		2005 (N=5,651)		2006 (N=4,158)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	93.7	218.4	94.2	254.0	92.6	257.8	103.3	269.8	78.3	265.3
Age										
18-24	46.0*		43.5*		37.4*		33.1*		36.1*	
25-34	44.4*		41.4*		38.2*		37.6*		40.3*	
35-39	34.9*		43.7*		33.3*		40.3*		41.1*	
40-44	42.7*		44.8*		41.3*		37.7*		35.9*	
45-54	62.1*		61.2*		56.1*		57.6*		56.7*	
55-64	108.9*		108.8*		106.6*		106.4*		107.4*	
▶ 65-74	302.7		310.9		290.4		327.4		272.7	
75-84	1,041*		850.4*		892.8*		911.8*		936.0*	
85+	...		1,694*		1,819*		1,946*		1,976*	
Race/ethnicity										
▶ White	78.3	162.6	95.4	240.5	94.9	273.7	105.2	292.4	81.6	287.4
Black	116.4*	173.2	134.4*	251.7	126.4*	277.0	155.0*	304.5	88.0*	312.4
Hispanic	81.5*	152.4	78.5*	193.9	95.8*	273.9	87.5*	200.5	79.7*	200.1
Asian	50.6*	115.5	32.5*	144.3	37.8*	124.9	32.2*	95.4	37.6*	145.2
Other	105.6**	341.7	77.4**	324.3	28.9**	107.4	99.3*	255.9	55.0*	222.6
Unknown	83.8*	...	104.8*	...	92.7*	...	103.0*	...	74.0*	...
Missing	106.9*	...	93.3*	...	83.9*	...	98.8*	...	70.5*	...
Region										
Northeast	104.0	224.2	90.3*	251.0	93.8*	264.5	90.3*	265.2	79.0	265.5
South	92.3*	215.1	100.1	260.8	96.1*	272.2	101.4*	277.9	80.4	279.1
▶ Midwest	107.1	231.6	105.5	266.6	107.6	271.1	128.0	292.4	79.6	292.3
West	53.1*	156.6	49.0*	160.9	43.1*	138.8	65.1*	187.6	69.4*	210.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-5. Hospital outpatient visits by Medicare beneficiaries for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=190,560)		2003 (N=207,360)		2004 (N=218,260)		2005 (N=233,860)		2006 (N=242,760)		2007 (N=240,160)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	955.1	963.1	1,017	1,028	1,059	1,067	1,134	1,163	1,207	1,233	1,205	1,249
Under 65/65+												
< 65 Years	917.0*	917.0	975.9*	975.9	1,028*	1,028	1,020*	1,020	1,105*	1,105	1,065*	1,065
▶ 65+ Years	962.8	963.1	1,025	1,028	1,065	1,067	1,160	1,163	1,231	1,233	1,240	1,249
Age												
▶ 65-69	780.6		872.0		898.9		951.0		992.5		1,013	
70-74	913.7*		928.8*		1,029*		1,111*		1,208*		1,242*	
75-79	1,040*		1,167*		1,115*		1,257*		1,350*		1,320*	
80-84	1,184*		1,166*		1,201*		1,342*		1,369*		1,416*	
85-89	1,023*		1,120*		1,234*		1,309*		1,405*		1,421*	
90-94	1,067*		1,133*		1,181*		1,265*		1,365*		1,393*	
95-97	822.3*		1,031*		1,079*		1,297*		1,320*		834.3*	
98+	414.5**		255.0**		632.9*		508.0*		802.8*		492.0*	
Race/ethnicity												
▶ White	927.4	946.9	986.5	1,015	1,045	1,062	1,134	1,163	1,220	1,257	1,222	1,276
Black	901.0*	838.8	925.6*	799.0	835.4*	769.4	883.7*	908.6	860.0*	753.9	821.3*	758.6
Hispanic	1,277*	1,169	1,318*	1,263	1,455*	1,173	1,528*	1,561	1,463*	1,291	1,355*	1,356
Asian	304.3*	273.5	358.0*	347.5	376.4*	360.1	276.2*	284.9	395.6*	384.8	445.2*	490.4
Other	3,071*	3,286	3,428*	3,798	3,301*	3,620	2,933*	3,282	2,984*	3,368	3,002*	3,175
Unknown	1,317*	...	1,251**	...	1,512*	...	1,462*	...	1,910*	...	2,022*	...
Region												
▶ Northeast	550.1	505.7	618.3	572.7	614.9	583.2	670.8	650.5	707.0	678.8	758.5	705.2
South	1,038*	1,053	1,064*	1,067	1,069*	1,084	1,120*	1,141	1,171*	1,193	1,111*	1,141
Midwest	1,043*	1,086	1,176*	1,245	1,269*	1,325	1,424*	1,510	1,504*	1,587	1,548*	1,667
West	1,136*	1,151	1,152*	1,173	1,253*	1,237	1,279*	1,310	1,435*	1,461	1,442*	1,524

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-6. Hospital outpatient visits by privately insured individuals for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=32,929)		2003 (N=35,920)		2004 (N=44,967)		2005 (N=55,816)		2006 (N=58,350)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	725.4	689.0	709.3	691.9	871.1	815.8	1,020	960.6	1,099	1,138
Age										
18-24	963.0*		942.8*		1,157*		1,331*		1,401*	
25-34	805.3*		785.3*		951.9*		1,078*		1,147	
35-39	661.3		626.9*		802.7*		942.4*		977.2*	
40-44	555.2*		570.7		717.4		842.0		898.8*	
45-54	572.1*		561.7		718.1		879.0		949.8*	
55-64	708.6*		702.3*		884.7*		1,091*		1,148	
▶ 65-74	661.5		571.6		723.8		851.9		1,166	
75-84	1,219*		875.8*		1,045*		1,043*		1,662*	
85+	...		2,180*		1,335*		1,566*		2,050*	
Race/ethnicity										
▶ White	729.6	709.3	775.1	785.9	909.2	876.6	1,061	1,018	1,145	1,189
Black	773.4*	584.6	777.8*	531.5	897.1*	636.1	1,051*	815.8	1,148*	1,038
Hispanic	825.1*	778.8	854.9*	835.3	909.7*	801.1	1,050*	942.7	1,109*	1,019
Asian	675.3*	502.3	652.8*	658.1	664.2*	559.3	732.9*	656.3	789.6*	693.8
Other	696.8*	555.0	855.1*	870.5	776.9*	730.5	842.8*	712.6	1,074*	1,178
Unknown	677.3*	...	714.7*	...	811.9*	...	985.2*	...	1,075*	...
Missing	718.0*	...	601.5*	...	757.7*	...	885.7*	...	932.4*	...
Region										
Northeast	1,057*	957.6	957.8*	888.8	1,275*	1,138	1,540*	1,450	1,751*	1,703
South	633.8*	571.7	614.3*	537.3	706.6*	623.9	802.3*	718.0	857.9*	879.5
▶ Midwest	651.4	669.6	652.9	716.3	854.9	842.0	1,064	1,012	1,138	1,220
West	948.0*	885.5	954.3*	942.6	1,105*	1,128	1,185*	1,209	1,256*	1,301

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-7. Nationally representative hospital outpatient visits for female urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	2,043,757
Age	
40-44	466,341
45-54	600,336
55-64	302,144
65-74	264,427
75-84	343,799
85+	66,710
Race/ethnicity	
White	1,712,372
Black	256,127
Hispanic	35,798
Asian	21,099
Other	18,361
Region	
Northeast	338,707
South	757,033
Midwest	687,794
West	260,223

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-8. Ambulatory surgery center visits by Medicare beneficiaries for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=16,280)		2003 (N=18,560)		2004 (N=19,240)		2005 (N=19,720)		2006 (N=19,160)		2007 (N=18,660)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	81.6	86.9	91.0	96.2	93.3	96.8	95.6	96.7	95.3	98.3	93.6	98.3
Under 65/65+												
< 65 Years	63.1*	63.1	77.8*	77.8	91.4	91.4	99.7*	99.7	90.8	90.8	88.3*	88.3
▶ 65+ Years	85.3	86.9	93.8	96.2	93.8	96.8	94.7	96.7	96.3	98.3	95.0	98.3
Age												
▶ 65-69	78.2		87.2		81.3		89.0		90.9		85.8	
70-74	79.0*		99.0*		96.3*		88.4*		90.5*		90.0*	
75-79	95.0*		110.6*		111.4*		111.5*		112.1*		116.3*	
80-84	104.9*		94.0*		115.5*		113.0*		99.7*		110.9*	
85-89	83.1*		88.3*		81.3*		81.7*		102.8*		92.7*	
90-94	72.8**		60.1**		48.3**		71.6**		83.3*		58.8**	
95-97	25.3**		62.1**		36.8**		48.9**		37.7**		37.9**	
98+	14.3**		...		...		...		40.8**		13.7**	
Race/ethnicity												
▶ White	85.9	90.6	97.7	102.5	99.8	103.3	101.7	103.0	101.2	104.1	99.2	104.0
Black	57.4*	65.3	53.7*	55.7	53.6*	56.1	58.5*	49.3	60.6*	64.4	54.9*	56.5
Hispanic	68.7**	76.4	27.5**	48.4	58.6**	64.1	62.2**	59.2	74.2**	111.6	82.7**	80.0
Asian	7.1**	34.6	33.1**	29.9	18.8**	27.7	5.9**	28.7	40.7**	48.0	22.3**	42.1
Other	73.8**	76.7	92.0**	126.5	100.4**	98.2	123.2**	139.2	78.0**	50.4	120.1**	105.4
Unknown	123.5**	...	89.3**	...	172.8**	...	235.8**	...	150.8**	...	163.9**	...
Region												
▶ Northeast	87.7	90.4	90.0	93.5	80.3	84.8	75.6	77.0	81.8	84.6	93.0	98.2
South	85.6*	93.2	104.4*	113.1	107.2*	106.7	100.9*	99.4	106.6*	111.1	97.1*	102.9
Midwest	89.3*	94.9	95.6*	98.1	108.3*	115.9	116.3*	119.3	106.2*	110.2	104.2*	109.4
West	51.1*	53.9	52.1*	55.7	52.5*	55.5	75.6*	78.7	68.2*	67.1	70.9*	72.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-9. Ambulatory surgery center visits by privately insured individuals for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=933)		2003 (N=999)		2004 (N=880)		2005 (N=1,015)		2006 (N=1,074)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	20.6	21.3	19.7	20.9	17.0	19.9	18.5	21.6	20.2	25.8
Age										
18-24	19.2*		14.3*		15.1*		12.8*		18.3*	
25-34	16.3*		19.2		15.9*		16.0*		16.7*	
35-39	26.8		19.8		14.0*		17.4*		21.1*	
40-44	21.4*		21.3		16.1*		21.4		18.2*	
45-54	21.5*		21.1		17.1*		19.2		19.6*	
55-64	20.9*		23.1		21.5		23.5		25.2	
▶ 65-74	28.3		21.6		24.1		24.2		30.8	
75-84	12.4**		17.8**		28.9*		27.0*		50.0*	
85+	...		9.9**		9.3**		3.8**		23.1**	
Race/ethnicity										
▶ White	23.6	23.4	23.0	24.4	18.1	20.8	20.5	23.3	22.7	28.6
Black	16.9**	13.4	14.7**	11.0	10.0**	16.2	13.3*	16.3	13.6*	20.1
Hispanic	22.3*	24.9	17.6*	17.3	14.5*	21.8	12.4*	18.8	17.7*	24.1
Asian	17.4**	41.6	20.7**	34.3	14.0**	19.1	7.7**	7.6	12.5**	19.0
Other	21.1**	26.9	40.5**	137.2	28.9**	25.3	14.5**	17.9	26.3**	38.4
Unknown	18.5*	...	20.8*	...	15.8*	...	19.2*	...	19.2*	...
Missing	18.6*	...	15.9*	...	16.8*	...	16.9*	...	14.2*	...
Region										
Northeast	15.9	15.8	10.8*	11.8	11.6	15.1	12.9*	17.4	10.6*	15.2
South	27.8*	28.0	26.7*	27.6	23.6*	28.7	25.2*	29.5	29.3*	38.5
▶ Midwest	16.5	17.0	16.4	16.7	13.7	14.7	16.2	19.5	13.9	16.5
West	12.5*	19.8	13.3*	23.0	8.7*	15.2	7.9*	9.0	13.0*	19.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-10. Nationally representative ambulatory surgery center visits for female urinary tract infection as primary diagnosis, count, rate^a

	Count	Rate
Total	55,628	49.0
Age		
18-24	9,048	65.3
25-34	9,562	48.7
35-39	2,279	21.8
40-44	900	8.0*
45-54	15,832	72.5
55-64	8,447	52.5
▶ 65-74	7,056	70.4
75-84	1,007	13.2*
85+	1,497	56.3*

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 11-11. Physician office visits by Medicare beneficiaries for female urinary tract infection listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=2,514,020)		2003 (N=2,638,980)		2004 (N=2,762,820)		2005 (N=2,814,060)		2006 (N=2,833,800)		2007 (N=2,819,260)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	12,600	13,675	12,938	14,085	13,402	14,643	13,645	14,992	14,092	15,611	14,149	15,814
Under 65/65+												
< 65 Years	8,050*	8,050	8,307*	8,307	8,658*	8,658	8,668*	8,668	8,665*	8,665	8,518*	8,518
▶ 65+ Years	13,521	13,675	13,921	14,085	14,439	14,643	14,789	14,992	15,370	15,611	15,548	15,814
Age												
▶ 65-69	10,824		11,261		11,486		11,580		11,893		11,882	
70-74	13,270*		13,752*		14,204*		14,687*		15,273*		15,493*	
75-79	15,509*		15,642*		16,125*		16,627*		17,194*		17,480*	
80-84	15,868*		16,323*		17,169*		17,653*		18,656*		18,777*	
85-89	14,445*		15,088*		16,293*		16,501*		17,421*		18,000*	
90-94	12,753*		13,020*		13,637*		13,993*		14,412*		14,743*	
95-97	8,994*		9,921*		9,505*		10,768*		10,890*		11,478*	
98+	3,201*		3,768*		4,093*		4,421*		4,259*		4,346*	
Race/ethnicity												
▶ White	12,953	14,029	13,335	14,486	13,891	15,119	14,254	15,578	14,826	16,313	14,891	16,521
Black	8,383*	8,787	8,281*	8,724	8,210*	8,894	8,032*	8,642	7,747*	8,370	7,927*	8,740
Hispanic	14,142*	13,943	14,649*	14,571	14,968*	14,704	15,105*	15,182	16,035*	16,529	14,677*	15,179
Asian	8,845*	9,069	9,879*	10,018	9,699*	10,178	9,891*	10,337	9,460*	9,907	10,467*	11,258
Other	20,306*	24,041	20,534*	22,905	20,364*	22,159	17,091*	18,963	15,869*	18,327	15,635*	18,394
Unknown	25,196*	...	23,761*	...	25,140*	...	27,642*	...	27,739*	...	23,388*	...
Region												
▶ Northeast	9,569	10,575	9,775	10,814	10,417	11,616	10,658	11,854	11,240	12,528	11,117	12,570
South	15,419*	16,656	15,872*	17,135	16,413*	17,811	16,621*	18,118	17,134*	18,950	17,328*	19,285
Midwest	10,726*	11,669	10,894*	11,901	11,235*	12,241	11,593*	12,772	12,067*	13,281	11,874*	13,278
West	12,665*	13,797	13,092*	14,436	13,251*	14,647	13,412*	14,951	13,470*	15,124	13,757*	15,475

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-12. Physician office visits by privately insured individuals for female urinary tract infection listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=363,620)		2003 (N=378,951)		2004 (N=396,502)		2005 (N=430,580)		2006 (N=408,874)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	8,011	8,512	7,483	8,241	7,681	8,788	7,869	9,095	7,700	9,316
Age										
18-24	7,901*		7,006*		6,982*		7,031*		6,915*	
25-34	8,032*		7,395*		7,325*		7,311*		7,260*	
35-39	7,485*		7,058*		7,159*		7,199*		7,169*	
40-44	7,395*		6,945*		7,131*		7,165*		7,175*	
45-54	7,589*		7,121*		7,342*		7,511*		7,436*	
55-64	8,980*		8,603*		8,909*		9,253*		9,112*	
▶ 65-74	9,351		9,188		10,245		10,625		11,055	
75-84	10,762*		10,930*		12,605*		13,340*		15,127*	
85+	...		9,610*		10,650*		11,566*		11,954*	
Race/ethnicity										
▶ White	8,548	9,145	8,321	9,221	7,906	9,122	8,065	9,426	7,939	9,689
Black	7,889*	7,919	7,281*	7,408	6,505*	6,931	6,647*	7,020	6,441*	7,267
Hispanic	9,448*	9,760	8,851*	9,357	8,349*	9,151	8,398*	9,435	8,459*	9,648
Asian	7,147*	7,839	7,235*	8,666	6,518*	7,860	6,534*	8,252	6,197*	7,576
Other	8,404*	9,020	8,540*	10,379	8,005*	9,755	7,604*	9,211	7,546*	9,308
Unknown	7,948*	...	7,680*	...	7,259*	...	7,406*	...	7,332*	...
Missing	7,537*	...	6,250*	...	7,216*	...	7,629*	...	7,070*	...
Region										
Northeast	6,789*	6,953	6,453*	6,769	6,839*	7,458	6,859*	7,672	6,829*	7,824
South	8,958*	9,466	8,392*	9,217	8,576*	10,003	8,813*	10,289	8,601*	10,505
▶ Midwest	7,375	7,876	6,790	7,551	6,910	7,834	6,975	7,952	6,633	8,111
West	7,754*	8,443	7,210*	8,127	7,391*	8,506	7,762*	9,227	7,778*	9,489

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-13. Nationally representative physician office visits for female urinary tract infection listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	29,950,981
Age	
40-44	3,858,931
45-54	8,128,926
55-64	5,082,385
65-74	5,097,644
75-84	5,833,972
85+	1,949,123
Race/ethnicity	
White	25,897,411
Black	2,924,214
Hispanic	1,129,356
Region	
Northeast	4,625,736
South	13,707,751
Midwest	7,093,306
West	4,524,188

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-14. Emergency room visits by Medicare beneficiaries for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=182,640)		2003 (N=192,780)		2004 (N=205,740)		2005 (N=217,800)		2006 (N=226,540)		2007 (N=230,200)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	915.4	868.6	945.1	883.8	998.0	921.9	1,056	1,004	1,127	1,049	1,155	1,063
Under 65/65+												
< 65 Years	1,046*	1,046	1,120*	1,120	1,209*	1,209	1,174*	1,174	1,312*	1,312	1,368*	1,368
▶ 65+ Years	889.0	868.6	907.9	883.8	951.8	921.9	1,029	1,004	1,083	1,049	1,102	1,063
Age												
▶ 65-69	618.3		618.3		637.0		678.4		712.1		708.7	
70-74	674.0*		728.0*		768.8*		827.4*		877.9*		935.7*	
75-79	906.2*		890.3*		958.8*		1,043*		1,088*		1,079*	
80-84	1,174*		1,160*		1,215*		1,300*		1,369*		1,308*	
85-89	1,291*		1,357*		1,358*		1,557*		1,591*		1,692*	
90-94	1,428*		1,551*		1,600*		1,705*		1,843*		1,946*	
95-97	1,366*		1,490*		1,656*		1,664*		1,886*		2,010*	
98+	871.8*		694.1*		1,083*		768.8*		870.9*		1,093*	
Race/ethnicity												
▶ White	854.4	823.7	882.9	840.9	935.4	879.5	1,008	973.4	1,079	1,025	1,117	1,045
Black	1,391*	1,323	1,383*	1,320	1,426*	1,333	1,430*	1,338	1,480*	1,346	1,491*	1,332
Hispanic	1,157*	1,042	1,280*	1,085	1,279*	1,053	1,326*	1,214	1,548*	1,372	1,469*	1,226
Asian	360.9*	339.1	364.6*	371.7	458.0*	439.7	429.0*	443.3	639.9*	583.9	556.5*	568.1
Other	1,355*	1,310	1,570*	1,456	1,665*	1,484	1,472*	1,486	1,292*	1,113	1,239*	1,252
Unknown	1,564*	...	1,608*	...	1,814*	...	1,368**	...	2,412*	...	2,240*	...
Region												
▶ Northeast	642.7	611.2	722.9	687.7	768.7	710.3	812.1	796.1	880.7	847.2	872.8	812.9
South	1,112*	1,037	1,141*	1,040	1,174*	1,066	1,224*	1,138	1,283*	1,161	1,323*	1,177
Midwest	878.4*	859.6	876.2*	833.9	975.9*	908.0	1,061*	996.7	1,141*	1,075	1,195*	1,140
West	845.5*	810.4	860.9*	838.0	892.7*	861.0	948.3*	956.7	1,033*	996.7	1,043*	986.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-15. Emergency room visits by privately insured individuals for female urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=17,347)		2003 (N=14,899)		2004 (N=11,130)		2005 (N=9,466)		2006 (N=6,607)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	382.2	332.0	294.2	310.7	215.6	276.0	173.0	245.7	124.4	94.5
Age										
18-24	767.6*		558.0*		384.1		275.0*		249.7*	
25-34	418.3		303.0*		219.4*		171.1*		151.8*	
35-39	296.0*		214.1*		143.5*		111.5*		104.0	
40-44	248.5*		188.1*		113.0*		84.8*		76.9*	
45-54	228.3*		184.1*		117.9*		75.7*		72.5*	
55-64	238.9*		214.2*		155.5*		116.4*		99.4	
▶ 65-74	393.6		356.2		363.2		344.7		98.7	
75-84	861.7*		708.7*		763.5*		727.1*		111.4*	
85+	...		1,146*		1,275*		1,361*		262.0*	
Race/ethnicity										
▶ White	345.8	297.3	270.3	297.5	178.7	254.3	134.1	225.1	88.3	62.3
Black	664.1*	487.6	561.0*	477.3	390.2*	420.9	267.5*	305.2	149.3*	63.9
Hispanic	367.6*	301.2	321.3*	334.7	244.9*	322.1	167.6*	214.2	151.6*	176.9
Asian	163.4*	192.0	154.6*	170.5	74.9*	125.6	61.8*	109.3	49.5*	44.8
Other	311.5*	273.7	298.6*	227.6	178.5*	220.4	128.4*	179.8	98.0*	89.0
Unknown	306.3*	...	258.9*	...	167.6*	...	129.9*	...	104.3*	...
Missing	408.2*	...	306.5*	...	340.5*	...	374.4*	...	306.4*	...
Region										
Northeast	171.6*	169.6	150.8*	155.5	118.8*	140.6	111.2*	165.5	73.1*	27.6
South	328.1*	307.4	253.6*	293.4	169.7*	269.7	133.6*	257.2	105.8*	102.7
▶ Midwest	608.1	461.4	491.4	440.2	394.3	389.7	319.6	331.6	223.4	162.6
West	120.0*	96.6	46.4*	45.4	15.1*	25.1	22.1*	33.0	28.3*	22.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-16. Nationally representative emergency room visits for female urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	4,213,262
Age	
40-44	609,307
45-54	1,039,244
55-64	531,930
65-74	607,567
75-84	764,612
85+	660,602
Race/ethnicity	
White	3,262,963
Black	802,453
Hispanic	57,291
Asian	14,582
Other	75,973
Region	
Northeast	751,348
South	1,788,980
Midwest	890,990
West	781,944

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-17. Diabetes diagnosis as a comorbidity in adult females hospitalized for urinary tract infection, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	250,711	226.0	276,412	246.0	282,203	254.0	297,627	265.0	305,525	269.0	307,891	268.0
Without diabetes as listed diagnosis	182,368	164.0	199,653	177.0	202,037	182.0	213,300	190.0	217,175	191.0	215,924	188.0
With diabetes as listed diagnosis	68,343	62.0	76,759	68.0	80,166	72.0	84,327	75.0	88,350	78.0	91,967	80.0

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult female civilian non-institutionalized population.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 11-18. Nationally representative inpatient stays for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=126,391)		2003 (N=130,201)		2004 (N=136,037)		2005 (N=141,615)		2006 (N=144,337)		2007 (N=146,828)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	124.0	121.3	125.6	122.5	131.1	133.3	134.9	134.9	135.7	135.6	136.1	136.0
Age												
18-24	14.5*		15.0*		16.8*		18.4*		16.0*		16.6*	
25-34	26.9*		27.9*		29.5*		28.0*		29.1*		29.6*	
35-39	36.8*		38.0*		40.1*		38.6*		35.7*		40.8*	
40-44	47.6*		45.7*		49.8*		45.5*		48.2*		48.4*	
45-54	61.6*		66.6*		68.2*		68.1*		68.3*		65.5*	
55-64	119.1*		116.0*		121.0*		123.0*		120.3*		120.6*	
▶ 65-74	280.5		289.2		290.5		299.4		299.9		313.5	
75-84	632.9*		611.8*		755.9*		760.8*		796.2*		775.7*	
85+	1,851*		1,916*		2,011*		2,097*		2,037*		2,052*	
Race/ethnicity												
▶ White	77.2	82.8	91.4	89.5	97.0	99.4	106.2	106.2	105.2	105.5	103.6	103.8
Black	129.6*	128.7	134.2*	130.0	145.3*	144.7	115.8*	115.8	132.2*	130.9	143.1*	145.6
Hispanic	†	†	87.3*	85.7	69.3*	71.8	74.2*	74.2	84.3*	82.3	71.9*	69.4
Asian	34.8*	36.7	47.7*	45.2	45.2*	43.4	35.6*	35.6	37.1*	37.1	44.6*	39.9
Other	257.1*	249.7	138.6*	143.8	144.6*	153.7	151.2*	151.2	158.1*	144.6	181.0*	165.1
Region												
Northeast	132.4	123.6	141.1	129.7	141.2	137.7	147.5	147.5	158.0	156.4	162.2	159.4
South	139.8	137.1	140.3	136.3	149.1	150.0	149.4	149.4	145.8	144.7	144.0	141.8
▶ Midwest	124.2	124.3	122.3	126.7	135.4	144.5	136.5	136.5	143.4	143.5	140.3	143.4
West	92.2*	93.0	93.4*	92.1	90.9*	94.1	100.7*	100.7	95.2*	96.8	99.6*	101.4

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 11-19. Inpatient stays by Medicare beneficiaries for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=66,160)		2003 (N=67,380)		2004 (N=69,120)		2005 (N=71,260)		2006 (N=70,800)		2007 (N=65,720)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	423.6	456.3	419.2	446.9	422.0	454.6	432.1	465.9	435.9	459.2	404.5	427.9
Under 65/65+												
< 65 Years	276.3*	276.3	285.9*	285.9	272.1*	272.1	259.3*	259.3	277.7*	277.7	245.2*	245.2
▶ 65+ Years	472.2	456.3	463.9	446.9	473.2	454.6	493.1	465.9	492.3	459.2	463.3	427.9
Age												
▶ 65-69	160.3		161.1		168.7		173.0		170.1		165.4	
70-74	297.4*		305.0*		299.6*		312.0*		334.1*		275.2*	
75-79	488.1*		496.9*		492.3*		490.5*		489.6*		448.4*	
80-84	811.5*		807.0*		838.6*		852.0*		798.9*		772.5*	
85-89	1,343*		1,192*		1,227*		1,291*		1,252*		1,216*	
90-94	2,040*		1,847*		1,770*		2,041*		2,238*		2,181*	
95-97	2,532*		2,648*		2,981*		3,276*		2,678*		2,192*	
98+	884.2**		697.5**		1,158**		1,349*		1,153**		1,333*	
Race/ethnicity												
▶ White	402.8	438.2	406.1	434.1	402.9	440.1	415.4	450.9	423.6	447.6	394.3	414.7
Black	628.8*	760.4	548.6*	671.0	570.7*	679.4	605.9*	752.9	572.7*	719.5	534.0*	705.7
Hispanic	529.8*	602.0	422.4*	448.7	505.7*	526.8	438.1*	466.4	460.9*	461.2	393.1*	390.4
Asian	112.9**	90.8	229.3**	185.9	291.8*	251.4	188.3**	158.8	178.3**	139.3	213.3**	194.6
Other	364.3*	355.2	429.3*	440.6	470.7*	417.4	383.8*	428.3	367.1*	308.7	365.1*	408.4
Unknown	1,065**	...	1,042**	...	949.6**	...	1,637**	...	1,906**	...	701.1**	...
Region												
▶ Northeast	441.3	484.2	457.1	487.4	435.1	464.4	463.9	490.1	500.5	530.2	478.6	500.6
South	472.0*	495.4	456.3*	482.2	462.6*	490.8	477.7*	517.2	447.1*	466.7	412.9*	434.9
Midwest	386.5*	435.6	406.0*	433.1	410.7*	445.5	414.4*	444.3	453.6*	469.5	422.9*	437.6
West	347.7*	364.7	312.6*	334.8	333.2*	370.8	324.0*	353.0	319.6*	349.8	286.8*	314.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-20. Inpatient stays by privately insured individuals for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,461)		2003 (N=3,649)		2004 (N=3,790)		2005 (N=4,382)		2006 (N=3,346)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	80.8	196.5	76.2	208.6	77.5	206.4	84.3	209.2	65.7	195.0
Age										
18-24	17.4*		14.5*		17.9*		11.5*		16.1*	
25-34	22.2*		18.0*		18.9*		20.1*		17.9*	
35-39	31.7*		32.1*		32.9*		32.4*		26.8*	
40-44	41.4*		36.7*		31.3*		37.1*		34.3*	
45-54	64.9*		60.7*		58.8*		63.9*		59.7*	
55-64	135.9*		123.2*		124.6*		117.6*		111.1*	
▶ 65-74	335.1		314.0		329.0		318.5		281.3	
75-84	958.7*		879.2*		864.5*		856.0*		798.8*	
85+	...		1,504*		1,425*		1,606*		1,584*	
Race/ethnicity										
▶ White	70.2	152.7	78.4	199.5	78.6	214.8	84.0	217.4	67.0	204.2
Black	159.7*	237.6	129.7*	222.1	127.0*	253.8	138.3*	253.4	100.6*	246.8
Hispanic	70.4*	156.4	72.0*	187.5	65.5*	181.0	66.9*	171.4	49.7*	132.0
Asian	35.0**	121.2	34.3*	84.5	32.9*	101.2	39.2*	124.4	41.1*	148.0
Other	60.9**	244.7	45.5**	120.2	54.8**	142.9	50.2**	94.3	55.3**	143.8
Unknown	85.8*	...	67.1*	...	76.9*	...	88.3*	...	62.4*	...
Missing	87.8*	...	74.3*	...	76.8*	...	92.1*	...	68.5*	...
Region										
Northeast	91.8	202.5	81.2	205.0	82.7	204.5	82.5*	213.1	74.3	220.1
South	83.9	206.5	79.8	213.3	78.4*	215.2	87.4*	224.3	64.5	192.4
▶ Midwest	85.5	199.7	82.9	218.6	87.1	218.7	93.1	214.2	68.2	220.7
West	49.3*	144.9	43.1*	160.3	47.7*	134.7	57.6*	153.1	58.6*	150.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-21. Hospital outpatient visits by Medicare beneficiaries for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=46,540)		2003 (N=49,600)		2004 (N=54,040)		2005 (N=57,620)		2006 (N=60,060)		2007 (N=55,240)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	298.0	293.1	308.6	310.4	329.9	330.9	349.4	356.1	369.8	381.1	340.0	341.7
Under 65/65+												
< 65 Years	314.5*	314.5	296.3*	296.3	317.6*	317.6	327.1*	327.1	345.1*	345.1	312.3*	312.3
▶ 65+ Years	292.6	293.1	312.7	310.4	334.1	330.9	357.2	356.1	378.6	381.1	350.2	341.7
Age												
▶ 65-69	214.5		221.9		200.2		229.0		230.5		245.3	
70-74	241.4*		266.1*		276.8*		295.5*		338.9*		286.9*	
75-79	298.4*		342.7*		391.1*		428.9*		409.4*		418.0*	
80-84	445.5*		370.7*		439.2*		439.1*		479.8*		439.7*	
85-89	464.0*		586.7*		642.7*		684.6*		831.3*		502.2*	
90-94	488.5*		634.8*		728.3*		695.4*		585.8*		800.3*	
95-97	754.3**		726.9**		1,011**		854.7**		1,148**		932.8**	
98+	265.3**		566.7**		471.9**		463.5**		205.8**		525.3**	
Race/ethnicity												
▶ White	271.1	274.7	287.7	293.2	303.1	311.0	332.5	346.2	354.1	371.8	331.5	339.4
Black	416.5*	440.4	370.0*	391.9	381.3*	400.7	423.5*	461.7	389.9*	426.0	297.1*	327.7
Hispanic	394.1*	261.7	323.0*	348.1	590.0*	529.3	368.0*	261.9	610.6*	458.9	534.0*	465.2
Asian	112.9**	92.5	176.4**	233.0	175.1**	155.5	117.7**	103.7	186.1**	133.5	191.3**	163.6
Other	935.8*	888.6	930.1*	976.6	984.8*	972.5	802.6*	800.2	762.4*	914.2	708.8*	597.6
Unknown	684.4**	...	1,202**	...	1,388**	...	857.4**	...	828.5**	...	1,227**	...
Region												
▶ Northeast	208.7	188.5	214.8	207.9	236.6	219.2	242.3	217.7	276.9	264.3	262.9	250.0
South	298.9*	287.1	274.0*	259.0	302.9*	304.4	327.8*	335.7	314.5*	313.2	299.3*	304.0
Midwest	334.3*	358.7	382.0*	395.6	393.4*	399.2	440.0*	468.5	491.2*	535.0	415.2*	432.1
West	343.9*	327.8	384.1*	416.3	401.0*	415.2	383.8*	387.4	420.0*	433.8	405.7*	394.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-22. Hospital outpatient visits by privately insured individuals for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=9,309)		2003 (N=10,349)		2004 (N=12,099)		2005 (N=14,860)		2006 (N=14,646)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	217.3	342.2	216.1	349.1	247.3	375.8	286.0	423.5	287.5	477.1
Age										
18-24	115.4*		129.1*		142.4*		161.8*		187.0*	
25-34	153.4*		147.4*		175.5*		197.1*		198.2*	
35-39	166.9*		167.1*		186.6*		207.9*		211.2*	
40-44	166.2*		164.1*		192.4*		226.3*		231.3*	
45-54	205.7*		210.4*		246.9*		272.1*		274.3*	
55-64	348.0*		329.3*		407.8*		473.8*		459.2*	
▶ 65-74	504.7		536.3		519.0		580.1		750.0	
75-84	955.6*		763.9*		806.6*		853.2*		1,183*	
85+	...		1,431*		937.2*		1,182*		1,300*	
Race/ethnicity										
▶ White	223.3	342.3	229.5	375.4	254.3	398.4	298.2	454.6	296.4	496.9
Black	278.4*	319.7	343.5*	431.4	362.4*	429.2	378.1*	429.4	422.8*	637.5
Hispanic	293.5*	381.5	237.5*	336.7	244.5*	348.9	248.8*	353.4	250.0*	360.5
Asian	134.0*	143.0	168.6*	238.3	143.1*	195.0	149.7*	244.1	182.8*	367.9
Other	173.4*	263.9	230.8*	351.5	200.9*	246.1	234.2*	385.4	255.9*	376.0
Unknown	244.6*	...	228.5*	...	244.1*	...	278.2*	...	285.8*	...
Missing	205.5*	...	188.4*	...	213.7*	...	258.2*	...	256.2*	...
Region										
Northeast	305.8*	479.1	257.3*	392.5	309.7*	463.8	365.6*	546.4	395.8*	665.4
South	209.6*	312.0	200.6*	305.9	227.0*	333.6	247.1*	339.8	253.1*	414.9
▶ Midwest	198.5	322.4	221.5	379.3	251.3	381.2	312.7	465.8	294.3	479.7
West	220.5*	378.0	218.6*	380.4	252.9*	452.8	289.5*	479.2	298.2*	492.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-23. Nationally representative hospital outpatient visits for male urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	454,788
Age	
40-44	55,714
45-54	101,721
55-64	150,172
65-74	65,757
75-84	55,023
85+	26,401
Race/ethnicity	
White	293,815
Black	141,488
Hispanic	18,962
Asian	523
Region	
Northeast	90,365
South	157,892
Midwest	115,282
West	91,249

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-24. Ambulatory surgery center visits by Medicare beneficiaries for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=12,720)		2003 (N=13,720)		2004 (N=13,840)		2005 (N=14,520)		2006 (N=13,320)		2007 (N=12,860)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	81.4	94.0	85.3	97.7	84.5	96.5	88.0	99.2	82.0	95.1	79.1	92.1
Under 65/65+												
< 65 Years	46.5*	46.5	50.5*	50.5	52.2*	52.2	55.8*	55.8	45.9*	45.9	47.5*	47.5
▶ 65+ Years	93.0	94.0	97.1	97.7	95.5	96.5	99.4	99.2	94.9	95.1	90.8	92.1
Age												
▶ 65-69	55.8		65.1		69.3		64.7		56.2		53.2	
70-74	111.9*		97.4*		92.0*		102.2*		86.4*		89.0*	
75-79	104.6*		116.4*		107.6*		138.0*		122.4*		112.1*	
80-84	128.4*		118.6*		125.5*		111.8*		148.7*		135.1*	
85-89	101.0*		139.4*		134.6*		101.1*		106.4*		123.8*	
90-94	60.0**		105.8**		109.6**		113.4**		127.7**		110.1**	
95-97	53.9**		259.6**		101.1**		332.4**		95.6**		...	
98+	...		...		42.9**		42.1**		123.5**		80.8**	
Race/ethnicity												
▶ White	83.7	97.7	89.6	104.0	89.1	101.3	90.5	103.7	87.6	101.1	81.6	94.6
Black	76.9*	85.8	70.7*	66.3	56.4*	67.9	80.0*	86.5	53.3*	57.2	73.0*	101.2
Hispanic	32.3**	57.7	43.5**	41.0	60.2**	109.3	70.1**	55.2	59.9**	86.4	64.5**	139.3
Asian	18.8**	...	...	...	33.4**	29.5	23.5**	47.7	15.5**	269.5	44.1**	67.8
Other	64.3**	38.2	71.5**	76.7	61.9**	97.7	87.2**	82.7	50.8**	42.4	59.1**	35.6
Unknown	456.3**	...	160.3**	...	365.2**	...	155.9**	...	248.6**	...	0.0*	...
Region												
▶ Northeast	91.7	108.3	96.6	110.9	96.3	110.4	100.8	113.1	78.3	91.6	86.1	101.5
South	84.9*	93.8	83.0*	94.3	88.4*	96.7	88.6*	98.7	81.2*	92.0	76.5*	92.1
Midwest	89.5*	107.1	95.0*	106.8	95.4*	111.2	107.8*	122.4	99.7*	112.8	96.3*	107.9
West	50.0*	56.3	64.3*	76.2	47.5*	59.5	46.2*	52.8	63.2*	80.7	55.1*	61.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-25. Ambulatory surgery center visits by privately insured individuals for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=301)		2003 (N=356)		2004 (N=363)		2005 (N=406)		2006 (N=420)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	7.0	11.4	7.4	10.7	7.4	12.2	7.8	10.7	8.2	13.8
Age										
18-24	2.7**		2.9**		3.5**		3.7**		2.9**	
25-34	4.2*		5.2*		3.9*		5.9*		4.7*	
35-39	4.2**		8.0*		5.2*		6.9*		6.9*	
40-44	5.2**		6.6*		7.1*		8.3*		8.6*	
45-54	10.0*		8.9*		8.3*		7.0*		8.3*	
55-64	10.4*		9.4*		11.4*		11.9		14.5*	
▶ 65-74	23.8		16.3		21.6		15.6		23.3	
75-84	12.5**		18.4**		22.5**		16.1**		28.7**	
85+	...		18.3**		21.6**		23.0**		15.5**	
Race/ethnicity										
▶ White	7.1	10.5	7.3	10.9	7.6	13.2	7.6	11.3	7.9	14.0
Black	4.7**	9.2	10.4**	12.2	8.2**	11.8	8.6**	12.5	10.2**	18.7
Hispanic	7.1**	10.7	11.1**	11.1	7.2**	14.8	10.6*	12.4	11.8*	17.1
Asian	10.2**	20.3	10.1**	6.5	5.7**	6.8	7.8**	13.2	6.3**	15.6
Other	4.7**	...	3.3**	22.6	...	...	4.2**	37.2	4.1**	79.6
Unknown	4.9**	...	5.8**	...	7.7**	...	8.6**	...	11.6*	...
Missing	7.2*	...	7.0*	...	7.0*	...	6.6*	...	5.8*	...
Region										
Northeast	5.2*	10.8	3.7*	6.6	3.4*	5.9	3.6**	6.8	5.5	12.0
South	8.9*	13.6	11.6*	16.5	10.9*	19.6	10.7*	15.0	11.4*	18.7
▶ Midwest	5.5	9.4	4.3	6.2	4.5	5.8	6.5	9.1	5.1	8.6
West	6.4*	10.8	4.5**	5.6	6.0*	11.1	5.0*	6.3	7.1*	11.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-26. Nationally representative ambulatory surgery center visits for male urinary tract infection listed as primary diagnosis, count, rate^a

	Count	Rate
Total	25,202	23.7
Age		
25-34	4,174	21.1
35-39	733	7.1
45-54	3,098	14.8
55-64	3,853	25.9
▶ 65-74	3,965	46.5
75-84	9,379	176.0*

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 11-27. Physician office visits by Medicare beneficiaries for male urinary tract infection listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=905,020)		2003 (N=931,400)		2004 (N=954,900)		2005 (N=958,420)		2006 (N=953,820)		2007 (N=928,120)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5,795	6,657	5,794	6,743	5,829	6,795	5,811	6,802	5,872	6,896	5,712	6,719
Under 65/65+												
< 65 Years	3,276*	3,276	3,077*	3,077	3,027*	3,027	3,038*	3,038	2,962*	2,962	2,887*	2,887
▶ 65+ Years	6,626	6,657	6,707	6,743	6,788	6,795	6,790	6,802	6,911	6,896	6,755	6,719
Age												
▶ 65-69	4,239		4,271		4,329		4,260		4,173		4,203	
70-74	6,080*		6,050*		6,023*		5,903*		6,069*		5,974*	
75-79	7,722*		7,760*		8,009*		7,993*		8,207*		7,905*	
80-84	8,948*		9,490*		9,450*		9,556*		9,739*		9,403*	
85-89	10,835*		10,795*		10,705*		11,257*		11,373*		10,766*	
90-94	10,909*		10,726*		12,029*		11,989*		12,948*		12,768*	
95-97	10,345*		9,086*		10,510*		13,010*		11,860*		12,407*	
98+	2,034*		3,313*		3,046*		2,571*		3,211*		3,394*	
Race/ethnicity												
▶ White	5,817	6,641	5,845	6,765	5,867	6,768	5,869	6,810	5,976	6,947	5,815	6,772
Black	5,320*	6,899	5,034*	6,582	5,218*	7,126	5,171*	6,947	4,913*	6,718	4,794*	6,496
Hispanic	6,500*	6,673	6,609*	7,157	6,694*	7,218	6,548*	7,285	6,638*	7,310	6,642*	7,323
Asian	4,712*	4,641	4,746*	4,767	4,277*	4,140	4,701*	4,868	5,070*	5,337	5,459*	5,737
Other	6,565*	8,037	6,738*	8,140	6,615*	8,195	6,037*	7,191	5,540*	6,598	4,725*	5,665
Unknown	14,144*	...	12,740*	...	16,070*	...	12,393*	...	12,262*	...	12,182*	...
Region												
▶ Northeast	5,618	6,639	5,848	7,048	5,868	7,042	6,058	7,313	6,115	7,275	6,079	7,277
South	6,585*	7,515	6,498*	7,476	6,597*	7,620	6,559*	7,636	6,591*	7,690	6,458*	7,544
Midwest	4,969*	5,628	4,849*	5,580	4,856*	5,583	4,809*	5,505	4,900*	5,715	4,681*	5,395
West	5,408*	6,266	5,512*	6,482	5,454*	6,467	5,313*	6,296	5,394*	6,433	5,118*	6,186

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-28. Physician office visits by privately insured individuals for male urinary tract infection listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=87,823)		2003 (N=89,737)		2004 (N=92,798)		2005 (N=101,701)		2006 (N=91,867)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,050	2,984	1,873	2,859	1,896	2,927	1,957	2,966	1,803	2,890
Age										
18-24	982.4*		862.4*		856.8*		869.2*		852.1*	
25-34	1,532*		1,375*		1,340*		1,338*		1,305*	
35-39	1,758*		1,631*		1,608*		1,629*		1,534*	
40-44	1,810*		1,674*		1,632*		1,694*		1,650*	
45-54	2,098*		1,891*		1,926*		1,919*		1,871*	
55-64	3,168*		2,812*		2,847*		2,841*		2,683*	
▶ 65-74	4,425		4,165		4,322		4,372		4,253	
75-84	6,057*		6,272*		6,504*		6,646*		6,832*	
85+	...		6,242*		6,914*		7,490*		6,742*	
Race/ethnicity										
▶ White	2,216	3,146	2,050	3,142	1,887	2,958	1,941	3,003	1,809	2,954
Black	2,834*	3,557	2,467*	3,249	2,189*	3,192	2,296*	3,235	1,987*	3,031
Hispanic	2,845*	3,950	2,491*	3,577	2,256*	3,422	2,146*	3,114	2,070*	3,164
Asian	1,847*	2,662	1,731*	2,398	1,683*	2,591	1,635*	2,389	1,593*	2,593
Other	2,198*	3,118	2,018*	2,794	1,938*	2,846	1,750*	2,450	1,664*	2,253
Unknown	2,074*	...	2,073*	...	1,839*	...	1,853*	...	1,812*	...
Missing	1,836*	...	1,506*	...	1,731*	...	1,957*	...	1,581*	...
Region										
Northeast	2,194*	2,800	2,075*	2,913	2,171*	3,067	2,240*	3,179	2,148*	3,348
South	2,294*	3,366	2,075*	3,156	2,095*	3,359	2,144*	3,403	1,977*	3,244
▶ Midwest	1,793	2,661	1,633	2,538	1,606	2,443	1,668	2,465	1,440	2,302
West	1,813*	2,824	1,625*	2,660	1,684*	2,695	1,777*	2,743	1,734*	2,720

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-29. Nationally representative physician office visits for male urinary tract infection listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	9,330,382
Age	
40-44	1,074,441
45-54	1,600,514
55-64	2,511,295
65-74	1,936,220
75-84	1,842,846
85+	365,066
Race/ethnicity	
White	7,389,184
Black	1,547,878
Hispanic	393,320
Region	
Northeast	1,306,267
South	4,436,890
Midwest	1,941,946
West	1,645,279

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-30. Emergency room visits by Medicare beneficiaries for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=81,280)		2003 (N=86,080)		2004 (N=93,700)		2005 (N=93,720)		2006 (N=94,860)		2007 (N=97,880)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	520.5	504.0	535.5	532.2	572.0	562.0	568.3	563.7	584.0	577.0	602.4	591.5
Under 65/65+												
< 65 Years	540.7*	540.7	533.7	533.7	576.7	576.7	560.4*	560.4	570.4*	570.4	593.9*	593.9
▶ 65+ Years	513.8	504.0	536.1	532.2	570.4	562.0	571.0	563.7	588.9	577.0	605.5	591.5
Age												
▶ 65-69	294.0		308.8		339.4		359.4		325.2		357.5	
70-74	425.6*		442.6*		468.7*		442.6*		462.7*		474.5*	
75-79	573.9*		600.4*		604.7*		628.6*		606.1*		617.0*	
80-84	724.2*		835.4*		781.9*		765.1*		886.0*		881.9*	
85-89	968.9*		941.9*		1,186*		1,175*		1,254*		1,250*	
90-94	1,491*		1,270*		1,425*		1,262*		1,412*		1,645*	
95-97	1,347**		1,090**		1,920*		2,327*		2,965*		1,446*	
98+	486.3**		218.0**		815.1**		842.8**		494.0**		484.8**	
Race/ethnicity												
▶ White	467.4	462.7	493.9	500.6	517.6	516.1	533.7	535.6	546.5	552.5	567.8	569.0
Black	923.3*	948.2	907.0*	961.2	1,011*	1,127	918.2*	1,001	919.4*	980.2	942.4*	995.0
Hispanic	581.5*	643.3	658.4*	689.6	722.4*	689.6	607.5*	540.3	718.3*	682.1	774.6*	736.7
Asian	329.2*	302.0	114.7**	129.1	291.8*	185.4	227.6**	206.3	240.3*	217.4	257.5*	230.4
Other	821.5*	803.3	604.9*	535.3	737.0*	662.7	488.5*	495.0	609.9*	493.7	456.4*	439.7
Unknown	1,825**	...	1,442**	...	1,242**	...	1,403**	...	1,408**	...	2,016**	...
Region												
▶ Northeast	451.3	455.1	460.3	478.1	469.4	459.9	487.2	494.1	505.1	513.7	495.0	486.4
South	576.4*	532.3	606.2*	580.1	663.9*	643.5	656.1*	638.1	666.1*	651.5	661.7*	630.5
Midwest	544.9*	547.2	510.0*	525.5	564.9*	549.8	562.5*	566.3	579.4*	570.2	636.9*	645.2
West	434.8*	426.5	496.0*	495.2	488.3*	511.4	470.7*	470.1	494.9*	494.4	541.3*	545.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 11-31. Emergency room visits by privately insured individuals for male urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,376)		2003 (N=3,758)		2004 (N=2,774)		2005 (N=2,290)		2006 (N=1,046)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	102.2	162.2	78.5	144.4	56.7	131.5	44.1	107.2	20.5	30.0
Age										
18-24	79.2*		53.8*		27.1*		16.8*		20.6*	
25-34	76.8*		54.3*		28.4*		19.2*		14.0*	
35-39	80.5*		55.4*		34.8*		17.2*		16.9*	
40-44	75.7*		58.6*		28.3*		18.5*		18.3*	
45-54	81.5*		58.1*		37.0*		22.0*		18.0*	
55-64	111.9*		100.4*		70.3*		44.0*		30.1	
▶ 65-74	287.5		219.1		210.5		185.3		35.5	
75-84	582.7*		506.4*		536.9*		483.8*		75.4*	
85+	...		745.4*		993.3*		843.9*		98.0**	
Race/ethnicity										
▶ White	90.2	131.1	73.8	129.7	49.9	118.7	35.4	93.5	12.9	16.1
Black	217.3*	258.0	174.5*	263.9	125.9*	230.6	97.9*	172.2	25.3*	27.7
Hispanic	94.7*	144.3	86.2*	171.8	46.3*	113.7	30.3*	69.1	28.6*	62.2
Asian	29.1**	126.6	34.3*	75.8	18.6**	43.7	17.0**	46.5	3.8**	12.0
Other	70.3**	437.4	68.3**	135.9	34.2**	88.1	23.0**	37.3	18.4**	49.8
Unknown	96.3*	...	89.9*	...	57.8*	...	39.9*	...	19.1*	...
Missing	110.2*	...	77.7*	...	81.9*	...	92.9*	...	59.9*	...
Region										
Northeast	45.7*	81.7	36.5*	73.6	30.8*	71.2	29.7*	83.5	7.0*	6.3
South	96.5*	158.9	74.3*	134.8	48.3*	119.2	37.7*	105.9	18.5*	30.3
▶ Midwest	154.4	228.4	124.8	213.2	101.5	203.6	77.9	156.2	37.2	56.9
West	31.1*	38.1	14.3*	20.8	2.3**	5.4	3.4**	9.5	5.2*	5.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-32. Nationally representative emergency room visits for male urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

6-Year Count	
Total	1,779,117
Age	
40-44	229,309
45-54	305,622
55-64	278,554
65-74	323,748
75-84	429,498
85+	212,386
Race/ethnicity	
White	1,445,312
Black	273,612
Hispanic	17,998
Asian	11,120
Other	31,075
Region	
Northeast	359,599
South	674,427
Midwest	410,880
West	334,211

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-33. Nationally representative inpatient stays by adult males for orchitis listed as primary diagnosis, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	12,810	12.6	13,718	13.2	15,619	15.1	16,023	15.3	17,135	16.1	17,503	16.2
Age												
18-24	495	3.6	618	4.5	646	4.6	762	5.4	723	5.1	715	5.0
25-34	1,555	8.1	1,560	8.0	1,820	9.3	2,114	10.7	2,037	10.3	2,075	10.4
35-44	2,590	11.9	2,820	13.0	3,334	15.5	3,286	15.3	3,257	15.2	3,513	16.6
45-54	2,819	14.6	3,161	16.1	3,541	17.6	3,734	18.2	3,900	18.6	4,094	19.2
55-64	1,970	15.9	2,046	15.5	2,492	18.4	2,403	17.1	2,701	18.2	2,603	16.8
65-74	1,540	18.7	1,762	21.3	1,816	21.7	1,797	21.2	2,108	24.7	2,295	26.3
Race/ethnicity												
White	5,670	6.7	6,176	8.4	7,059	9.6	7,404	10.1	7,784	10.5	7,965	10.7
Black	1,891	17.5	2,118	20.0	2,217	20.8	1,856	17.0	2,237	20.1	2,653	23.5
Hispanic	1,211	†	1,599	11.9	1,693	12.4	1,858	13.1	2,253	15.4	2,011	13.1
Asian	†	†	†	†	167	†	†	†	†	†	191	†
Region												
Northeast	2,413	12.1	2,953	14.8	2,805	14.5	2,725	13.9	3,171	16.0	3,169	16.0
South	5,432	15.2	5,607	15.3	6,669	18.0	7,129	18.9	7,464	19.6	7,360	19.0
Midwest	2,952	12.7	2,919	12.5	3,345	14.2	3,272	14.0	3,674	15.5	3,878	16.2
West	2,013	8.7	2,239	9.4	2,800	11.7	2,898	11.9	2,827	11.4	3,071	12.2

† Figure does not meet standard for reliability or precision.

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male civilian non-institutionalized population.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 11-34. Diabetes diagnosis as a comorbidity in adult males hospitalized for urinary tract infection, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Total	126,391	124.0	130,201	125.6	136,037	131.1	141,615	134.9	144,337	135.7	146,828	136.1
Without diabetes as listed diagnosis	92,123	90.4	94,628	91.3	97,697	94.2	100,684	95.9	100,876	94.9	101,376	94.0
With diabetes as listed diagnosis	34,267	33.6	35,574	34.3	38,340	37.0	40,931	39.0	43,461	40.9	45,452	42.1

^aCounts may not sum to total due to rounding.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male civilian non-institutionalized population.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 11-35. Inpatient stays by privately insured individuals for pediatric urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,717)		2003 (N=1,750)		2004 (N=1,570)		2005 (N=1,574)		2006 (N=1,580)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	50.5	50.5	47.6	48.1	43.0	43.5	43.1	43.4	43.5	43.5
Age										
▶ 0-2	165.4		164.2		147.5		144.1		151.5	
3-10	32.2*		27.9*		25.2*		25.6*		24.5*	
11-17	23.1*		22.2*		20.5*		21.3*		19.6*	
Race/ethnicity										
▶ White	44.2	44.6	47.4	47.8	41.2	41.3	39.5	39.4	40.1	39.9
Black	40.3*	43.4	49.6*	53.3	39.8*	42.9	37.5*	39.1	40.6*	43.2
Hispanic	76.5*	81.8	70.3*	74.8	62.6*	66.3	67.6*	72.3	58.5*	62.2
Asian	87.8*	75.8	59.1*	51.7	55.3*	48.3	53.0*	45.5	51.3*	45.7
Other	44.2**	76.2	42.6**	40.4	46.9**	68.7	30.4**	54.3	34.9**	32.7
Unknown	52.7*	...	52.8*	...	48.1*	...	39.6*	...	44.2*	...
Missing	52.0*	...	42.7*	...	35.8*	...	45.1*	...	47.1*	...
Region										
Northeast	58.8*	56.1	48.4	46.6	47.1	45.5	52.3*	50.8	47.8	46.7
South	53.1	54.5	51.7*	53.8	45.0	46.9	43.6	44.9	43.1	43.8
▶ Midwest	48.7	48.5	45.1	45.1	41.1	41.1	41.8	41.9	43.8	43.8
West	40.8*	39.1	40.6*	40.2	38.1*	37.6	37.5*	36.8	41.1*	40.2
Gender										
Female	73.5*	73.4	65.2*	65.7	62.3*	62.9	62.1*	62.5	62.3*	62.4
▶ Male	28.5	28.5	30.7	31.2	24.6	25.0	24.9	25.1	25.4	25.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-36. Hospital outpatient visits by privately insured individuals for pediatric urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=13,956)		2003 (N=14,903)		2004 (N=16,809)		2005 (N=18,810)		2006 (N=18,391)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	410.6	405.8	405.4	401.6	460.6	457.2	515.1	512.4	506.1	502.7
Age										
▶ 0-2	592.9		549.4		592.2		622.3		612.2	
3-10	490.1*		499.2*		569.7*		633.3*		612.9*	
11-17	240.9*		238.6*		283.6*		340.1*		342.0*	
Race/ethnicity										
▶ White	451.5	446.2	460.1	455.4	498.1	492.5	555.7	550.8	549.4	544.0
Black	319.6*	324.2	337.5*	342.1	294.4*	295.1	413.1*	415.9	477.0*	478.0
Hispanic	555.0*	563.2	500.5*	507.7	487.5*	492.2	528.4*	537.8	497.1*	503.8
Asian	458.9*	420.0	389.8*	361.0	414.1*	381.4	388.0*	360.5	399.9*	365.1
Other	466.8*	454.2	375.9*	360.4	370.0*	363.8	420.6*	413.2	375.9*	371.4
Unknown	462.0*	...	494.2*	...	490.1*	...	475.6*	...	510.6*	...
Missing	368.8*	...	323.9*	...	369.3*	...	424.3*	...	377.5*	...
Region										
Northeast	472.4*	459.2	442.0*	430.3	517.6*	508.2	577.5	570.3	638.9*	629.2
South	397.1	398.9	377.0*	379.7	405.8*	409.5	431.4*	434.2	417.2*	418.5
▶ Midwest	398.1	393.3	400.4	395.9	475.4	470.5	570.3	566.5	575.0	570.7
West	441.9*	432.1	483.4*	473.3	556.1*	546.3	587.6*	578.2	521.7*	514.1
Gender										
Female	695.6*	687.5	690.6*	684.0	794.9*	789.1	892.7*	888.3	877.7*	872.4
▶ Male	137.9	137.3	132.4	132.1	140.4	140.3	153.9	153.7	151.1	150.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-37. Nationally representative hospital outpatient visits for pediatric urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	787,215
Age	
0-2	120,529
3-10	369,097
11-17	297,589
Race/ethnicity	
White	566,930
Black	169,932
Hispanic	19,115
Asian	14,308
Other	16,930
Region	
Northeast	169,105
South	186,694
Midwest	291,873
West	139,543
Gender	
Female	667,373
Male	119,842

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-38. Ambulatory surgery center visits by privately insured individuals for pediatric urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=164)		2003 (N=153)		2004 (N=163)		2005 (N=168)		2006 (N=150)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4.8	4.8	4.2	4.1	4.5	4.4	4.6	4.6	4.1	4.1
Age										
▶ 0-2	7.0		6.1		9.7		11.1		7.9	
3-10	5.6*		5.2*		5.0*		4.9*		4.8*	
11-17	3.0*		2.2*		1.7**		1.6**		1.8**	
Race/ethnicity										
▶ White	6.7	6.7	5.7	5.6	5.1	5.0	4.5	4.4	4.6	4.5
Black	...	...	2.7**	2.8	0.5**	3.8	0.6**	1.3	1.2**	2.8
Hispanic	4.5**	3.8	2.6**	2.7	1.5**	2.4	3.3**	3.5	2.9**	3.0
Asian	7.3**	10.4	1.3**	6.3	1.9**	2.5	2.8**	4.1	1.8**	2.6
Other	4.9**	14.9	3.5**	7.4	5.2**	6.5	2.5**	13.3	...	...
Unknown	7.1**	...	5.2**	...	7.4**	...	8.1**	...	7.2**	...
Missing	3.5*	...	2.9*	...	4.5**	...	6.3*	...	3.5**	...
Region										
Northeast	3.1**	2.6	1.0**	1.0	1.8**	2.9	1.0**	1.0	1.0**	2.4
South	2.8*	2.8	3.0*	3.0	2.1*	2.1	2.2*	2.2	2.2*	2.2
▶ Midwest	7.8	7.7	7.1	7.0	9.1	8.9	9.7	9.6	8.9	8.8
West	4.0**	4.3	2.4**	2.4	2.2**	2.1	2.2**	2.2	1.7**	1.7
Gender										
Female	8.7*	8.6	7.2*	7.1	7.6*	7.5	7.8*	7.8	6.4*	6.3
▶ Male	1.2*	1.2	1.3*	1.3	1.5*	1.5	1.6*	1.6	2.0	2.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

†Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-39. Nationally representative ambulatory surgery center visits for pediatric^a urinary tract infection listed as primary diagnosis, count, rate^b

	Count	Rate
Total	6,754	9.1
Gender		
Female	5,479	15.2
▶ Male	1,275	3.4

▶ Denotes reference group.

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 11-40. Physician office visits by privately insured individuals for pediatric urinary tract infection listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=75,123)		2003 (N=73,829)		2004 (N=69,856)		2005 (N=70,050)		2006 (N=67,015)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,210	2,194	2,008	1,994	1,914	1,903	1,918	1,910	1,844	1,836
Age										
▶ 0-2	2,139		1,839		1,770		1,783		1,746	
3-10	2,609*		2,420*		2,290*		2,288*		2,167*	
11-17	1,777*		1,606*		1,548*		1,563*		1,523*	
Race/ethnicity										
▶ White	2,447	2,428	2,266	2,248	2,001	1,988	1,995	1,985	1,925	1,914
Black	1,692*	1,678	1,603*	1,601	1,237*	1,231	1,282*	1,283	1,340*	1,340
Hispanic	2,815*	2,816	2,457*	2,458	2,058*	2,058	2,094*	2,105	2,062*	2,073
Asian	2,105*	2,010	1,833*	1,756	1,666*	1,592	1,615*	1,541	1,500*	1,418
Other	2,039*	2,028	1,979*	1,966	1,686*	1,662	1,763*	1,745	1,710*	1,696
Unknown	2,365*	...	2,157*	...	1,950*	...	1,838*	...	1,821*	...
Missing	2,017*	...	1,670*	...	1,790*	...	1,812*	...	1,628*	...
Region										
Northeast	2,236*	2,190	2,032*	1,994	2,026*	1,992	1,912*	1,888	1,862*	1,841
South	2,424*	2,418	2,157*	2,152	2,011*	2,012	2,050*	2,051	1,975*	1,975
▶ Midwest	1,994	1,981	1,817	1,805	1,725	1,717	1,732	1,726	1,667	1,661
West	2,145*	2,122	2,052*	2,027	2,014*	1,990	1,989*	1,966	1,842*	1,824
Gender										
Female	3,760*	3,732	3,429*	3,402	3,303*	3,283	3,310*	3,296	3,188*	3,175
▶ Male	726.6	723.3	649.0	647.2	583.8	582.8	586.4	585.6	559.1	557.0
Unknown	2,576**	...	1,669**	...	1,778*	...	1,437**	...	1,063**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-41. Nationally representative physician office visits for pediatric urinary tract infection listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	7,263,694
Age	
0-2	1,636,122
3-10	3,562,332
11-17	2,065,240
Race/ethnicity	
White	5,698,564
Black	934,063
Hispanic	631,067
Region	
Northeast	1,563,326
South	2,757,536
Midwest	1,790,276
West	1,152,556
Gender	
Female	5,458,714
Male	1,804,980

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 11-42. Emergency room visits by privately insured individuals for pediatric urinary tract infection listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,560)		2003 (N=4,402)		2004 (N=2,896)		2005 (N=2,361)		2006 (N=2,115)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	163.6	163.4	119.7	119.6	79.3	79.2	64.7	64.5	58.2	58.0
Age										
▶ 0-2	165.6		129.0		82.7		76.7		68.1	
3-10	167.1*		122.9*		84.1*		70.7*		65.7*	
11-17	158.6*		112.3*		72.6*		53.0*		45.6*	
Race/ethnicity										
▶ White	147.1	147.0	107.5	107.4	56.3	56.3	39.3	39.2	36.2	36.1
Black	295.2*	293.8	203.7*	205.6	107.4*	107.6	87.9*	88.8	49.6*	50.2
Hispanic	223.8*	225.4	178.0*	179.8	128.9*	129.7	100.0*	101.5	96.4*	97.5
Asian	80.5*	77.9	56.4*	55.1	34.9*	34.1	38.1*	36.7	26.1**	26.5
Other	196.5*	188.1	127.7*	126.0	86.0*	85.4	48.1**	47.7	47.3**	46.3
Unknown	133.0*	...	116.6*	...	60.8*	...	40.4*	...	35.3*	...
Missing	166.0*	...	119.2*	...	139.7*	...	155.9*	...	141.2*	...
Region										
Northeast	83.7*	84.6	69.5*	69.9	52.4*	52.0	38.6*	38.9	47.0*	46.8
South	132.1*	132.0	98.6*	98.8	55.4*	55.4	40.6*	40.8	47.9*	48.0
▶ Midwest	258.2	258.1	194.9	194.5	146.2	145.9	127.8	127.5	100.0	99.6
West	55.0*	54.3	18.5*	18.7	2.4**	2.3	4.4**	4.4	5.3**	6.3
Gender										
Female	287.0*	286.6	206.2*	205.7	137.3*	136.9	112.8*	112.4	102.3*	101.8
▶ Male	45.6	45.5	37.1	37.3	23.9	24.0	18.7	18.7	16.1	16.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 11-43. Nationally representative emergency room visits for pediatric urinary tract infection listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	2,001,649
Age	
0-2	360,918
3-10	839,464
11-17	801,267
Race/ethnicity	
White	1,513,361
Black	448,416
Hispanic	19,354
Asian	9,350
Other	11,168
Region	
Northeast	256,334
South	952,625
Midwest	424,513
West	368,177
Gender	
Female	1,645,765
Male	355,884

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

CHAPTER 12

Male Reproductive Health

Male Infertility
Erectile Dysfunction
Peyronie's Disease
Vasectomy
Undescended Testes

Table 12-1. Codes used in the diagnosis and management of male reproductive health**Erectile Dysfunction****Males 18 years or older with one or more of the following:***ICD-9 diagnosis codes*

302.7	Psychosexual dysfunction
302.70	Psychosexual dysfunction, unspecified
302.71	Psychosexual dysfunction with inhibited sexual desire
302.72	Psychosexual dysfunction with inhibited sexual excitement
302.74	Psychosexual dysfunction with inhibited male orgasm
607.82	Vascular disorders of penis
607.84	Impotence of organic origin
607.89	Other specified disorders of penis
607.9	Unspecified disorder of penis

ICD-9 procedure codes

64.94	Fitting of external prosthesis of penis
64.95	Insertion or replacement of non-inflatable penile prosthesis
64.96	Removal of internal prosthesis of penis
64.97	Insertion or replacement of inflatable penile prosthesis

CPT procedure codes

37788	Penile revascularization, artery, with or without vein graft
37790	Penile venous occlusive procedure
54115	Removal foreign body from deep penile tissue (eg, plastic implant)
54230	Injection procedure for corpora cavernosography
54231	Dynamic cavernosometry, including intracavernosal injection of vasoactive drugs (eg, papaverine, phentolamine)
54235	Injection of corpora cavernosa with pharmacologic agent(s) (eg, papaverine, phentolamine)
54240	Penile plethysmography
54250	Nocturnal penile tumescence and/or rigidity test
54400	Insertion of penile prosthesis; non-inflatable (semi-rigid)
54401	Insertion of penile prosthesis; inflatable (self-contained)
54405	Insertion of multi-component, inflatable penile prosthesis, including placement of pump, cylinders, and reservoir
54406	Removal of all components of a multi-component, inflatable penile prosthesis without replacement of prosthesis
54408	Repair of component(s) of a multi-component, inflatable penile prosthesis
54410	Removal and replacement of all component(s) of a multi-component, inflatable penile prosthesis at the same operative session
54411	Removal and replacement of all components of a multi-component, inflatable penile prosthesis through an infected field at the same operative session, including irrigation and debridement of infected tissue
54415	Removal of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis, without replacement of prosthesis
54416	Removal and replacement of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis at the same operative session
54417	Removal and replacement of non-inflatable (semi-rigid) or inflatable (self-contained) penile prosthesis through an infected field at the same operative session, including irrigation and debridement of infected tissue

Peyronie's Disease**Males 18 years or older with one or more of the following:***ICD-9 diagnosis codes*

607.81	Balanitis xerotica obliterans, induratio penis plastica
--------	---

ICD-9 procedure codes

64.4 ^a	Repair and plastic operation on penis
64.42 ^a	Release of chordee
64.49	Other repair of penis

CPT procedure codes

54110	Excision of penile plaque (Peyronie's disease)
54111	Excision of penile plaque (Peyronie's disease); with graft to 5 cm in length

Continued on next page.

Table 12-1 (continued). Codes used in the diagnosis and management of male reproductive health

54112	Excision of penile plaque (Peyronie's disease); with graft greater than 5 cm in length
54200	Injection procedure for Peyronie's disease
54205	Injection procedure for Peyronie's disease; with surgical exposure of plaque
54360	Plastic operation on penis to correct angulation

Infertility**Males 18 years or older with one or more of the following:***ICD-9 diagnosis codes*

456.4	Scrotal varices
606	Male infertility
606.0	Azoospermia
606.1	Oligospermia
606.8	Infertility due to extratesticular causes
606.9	Male infertility, unspecified

CPT procedure codes

52347	Cystourethroscopy with transurethral resection or incision of ejaculatory ducts
54500	Biopsy of testis, needle (separate procedure)
54505	Biopsy of testis, incisional (separate procedure)
54900	Epididymovasostomy, anastomosis of epididymis to vas deferens; unilateral
54901	Epididymovasostomy, anastomosis of epididymis to vas deferens; bilateral
55200	Vasotomy, cannulization with or without incision of vas, unilateral or bilateral (separate procedure)
55300	Vasotomy for vasograms, seminal vesiculograms, or epididymograms, unilateral or bilateral
55400	Vasovasostomy, vasovasorrhaphy
55530	Excision of varicocele or ligation of spermatic veins for varicocele; (separate procedure)
55535	Excision of varicocele or ligation of spermatic veins for varicocele; abdominal approach
55540	Excision of varicocele or ligation of spermatic veins for varicocele; with hernia repair
55550	Laparoscopy, surgical, with ligation of spermatic veins for varicocele
55870	Electroejaculation
74440	Vasography, vesiculography, or epididymography, radiological supervision and interpretation

Undescended Testes**Males with one or more of the following:***ICD-9 diagnosis codes*

752.5	Undescended and retractile testis
752.51	Undescended testis
752.52	Retractile testis

ICD-9 procedure codes

62.5 ^b	Orchiopexy
63.53 ^b	Transplantation of spermatic cord

CPT procedure codes

54550	Exploration for undescended testis (inguinal or scrotal area)
54560	Exploration for undescended testis with abdominal exploration
54640	Orchiopexy, inguinal approach, with or without hernia repair
54650	Orchiopexy, abdominal approach, for intra-abdominal testis (eg, Fowler-Stephens)
54690	Laparoscopy, surgical; orchiectomy
54692	Laparoscopy, surgical; orchiopexy for intra-abdominal testis
54699	Unlisted laparoscopy procedure, testis

^aMust occur with diagnosis of 607.84 (impotence of organic origin) or 607.89 (other specified disorders of penis).^bMust occur with diagnosis of 550.XX or 752.XX.

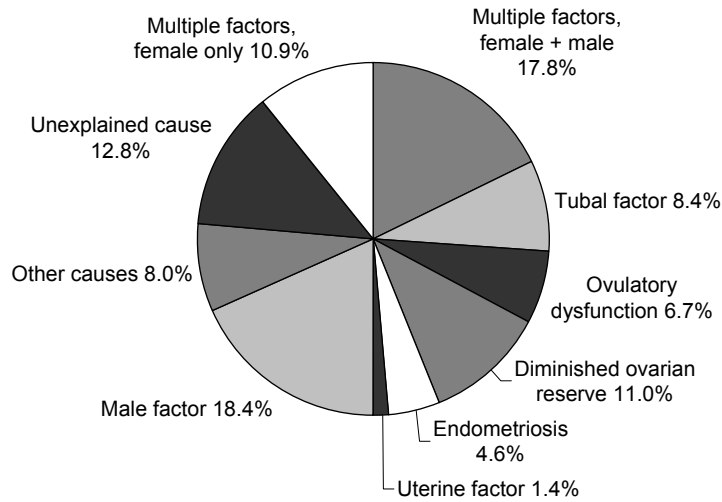


Figure 12-1. Diagnoses among couples who had ART cycles using fresh non-donor eggs or embryos, 2008

SOURCE: Adapted from Centers for Disease Control and Prevention, 2008 Assisted Reproductive Technology (ART) Report.

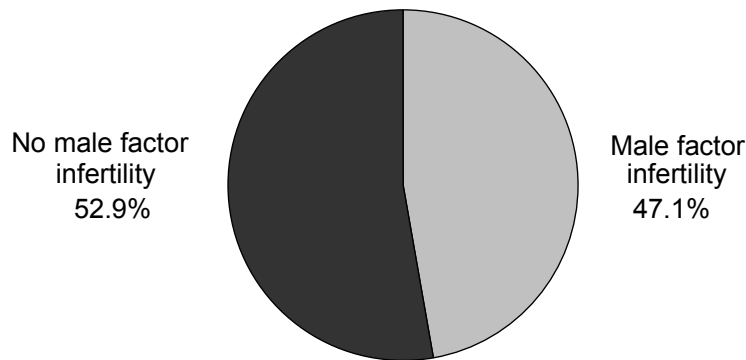


Figure 12-2. Use of ICSI in fresh non-donor cycles among couples with and without diagnoses of male factor infertility, 2008

ICSI: Intracytoplasmic sperm injection.
 NOTE: Based on 67,258 cycles that used IVF with ICSI.
 SOURCE: Adapted from Centers for Disease Control and Prevention, 2008 Assisted Reproductive Technology (ART) Report.

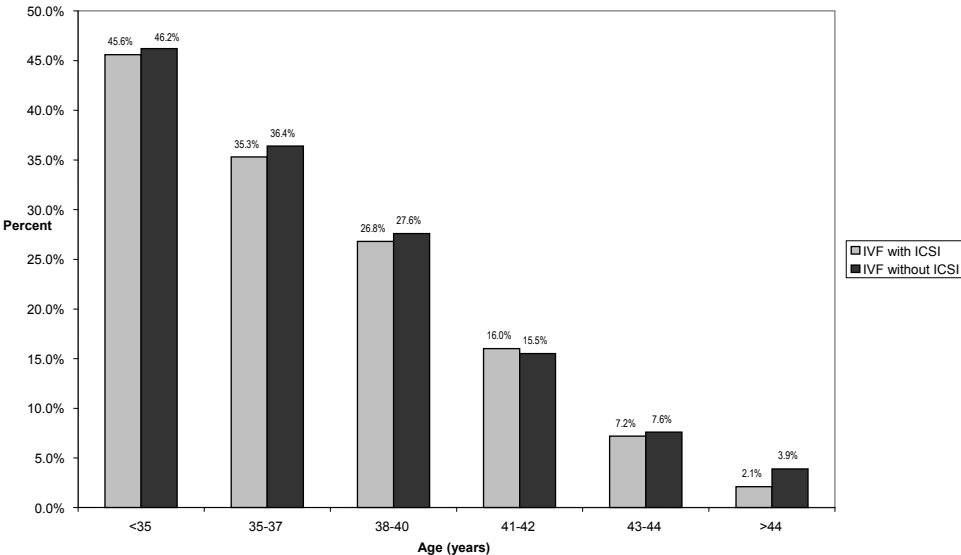


Figure 12-3. Percentages of retrievals that resulted in live births among couples diagnosed with male factor infertility who used IVF with ICSI, compared with couples not diagnosed with male factor infertility who used IVF without ICSI, by age of woman, 2008

ICSI: Intracytoplasmic sperm injection.
NOTE: Cycles using donor sperm and cycles using GIFT or ZIFT are excluded.
SOURCE: Adapted from Centers for Disease Control and Prevention, 2008 Assisted Reproductive Technology (ART) Report.

Table 12-2. Inpatient stays by privately insured individuals for male infertility listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=76)		2003 (N=86)		2004 (N=92)		2005 (N=74)		2006 (N=63)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.8	1.4	1.8	1.0	1.9	0.8	1.4	1.2	1.2	1.0
Age										
18-24	1.3*		1.1*		1.9*		0.4*		1.6*	
25-34	3.0**		3.7*		3.5*		2.5*		1.4*	
35-39	2.0**		2.8*		3.5**		2.3*		1.9*	
40-44	0.9**		1.4*		1.1*		2.0*		1.1*	
45-54	1.8**		0.5*		0.9*		0.5*		0.6*	
55-64	1.4**		0.9*		0.8*		0.6*		1.0*	
▶ 65-74	...		1.1*		0.5*		0.9*		1.2*	
75-84	1.0**		...		...		2.8**		...	
85+	...		4.6**		...		6.6**		5.2**	
Race/ethnicity										
▶ White	1.4*	1.8	1.6	0.9	1.7	0.9	1.4	1.3	1.1	1.0
Black	...	...	0.8**	...	2.2**	5.3	2.0**	77.9	2.2**	3.2
Hispanic	2.4**	...	3.1**	3.7	3.8**	3.1	2.1**	1.8	1.3**	2.1
Asian	1.5**	...	3.0**	7.7	3.6**	16.1	0.7**	3.9	0.6**	5.0
Other	...	...	3.3**	...	...	...	...	...	2.0**	19.0
Unknown	3.1**	...	0.9**	...	1.3**	...	1.5**	...	2.7**	...
Missing	2.0*	...	1.9*	...	1.4**	...	1.3**	...	0.7**	...
Region										
Northeast	3.7**	1.5	4.7**	2.7	4.3**	3.2	2.8**	3.0	2.7**	1.9
South	1.5*	1.9	1.4	1.0	1.8*	1.3	1.3	1.3	1.0*	0.7
▶ Midwest	1.1*	0.9	1.4*	1.0	0.9*	0.8	1.2*	1.5	1.2*	1.0
West	2.9**	4.3	1.4**	0.8	2.3**	...	0.9**	2.3	1.0**	1.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-3. Hospital outpatient visits by privately insured individuals for male infertility listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=5,960)		2003 (N=5,808)		2004 (N=5,031)		2005 (N=4,529)		2006 (N=4,078)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	139.1	47.5	121.3	42.8	102.8	38.6	87.2	32.8	80.1	33.5
Age										
18-24	57.2*		48.0*		45.1*		45.5*		38.0*	
25-34	297.4*		245.9*		213.1*		176.3*		154.9*	
35-39	269.9*		256.1*		205.4*		196.3*		170.4*	
40-44	136.9*		127.0*		117.6*		92.9*		91.4*	
45-54	45.1*		42.8*		36.5*		31.7*		32.2*	
55-64	16.2		15.3*		15.7*		12.9*		12.5	
▶ 65-74	11.3*		7.0*		4.1*		8.2*		12.9*	
75-84	9.3**		4.9**		4.7**		9.4**		12.6**	
85+	...		4.6**		4.3**		3.3**		5.2**	
Race/ethnicity										
▶ White	147.1	40.7	122.8	40.5	100.3	38.7	83.5	29.6	75.3	30.5
Black	66.9*	30.3	84.9*	49.2	47.4*	27.3	50.5*	24.5	57.0*	41.7
Hispanic	101.8*	42.2	92.0*	47.6	71.9*	35.5	59.0*	28.2	56.2*	28.9
Asian	343.7*	223.0	243.4*	87.6	159.5*	108.5	113.8*	61.7	112.6*	66.1
Other	285.8*	158.6	185.3*	92.3	159.8*	98.9	148.4*	112.5	151.5*	114.5
Unknown	198.2*	...	173.9*	...	145.6*	...	104.3*	...	97.3*	...
Missing	126.5*	...	111.8*	...	111.5*	...	117.2*	...	107.1*	...
Region										
Northeast	212.7*	86.9	189.7*	76.6	161.3	77.1	120.1*	51.1	114.8*	50.0
South	94.2*	28.0	67.2*	25.2	55.2*	20.8	51.6*	19.3	48.4*	18.6
▶ Midwest	172.5	54.8	171.8	55.4	154.5	53.3	132.3	42.5	127.8	52.9
West	140.6*	70.0	119.2*	51.2	91.7*	44.2	76.6*	43.2	58.7*	35.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-4. Ambulatory surgery center visits by privately insured individuals for male infertility listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=415)		2003 (N=362)		2004 (N=356)		2005 (N=347)		2006 (N=370)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.7	3.5	7.6	2.9	7.3	2.9	6.7	3.6	7.3	3.4
Age										
18-24	7.3*		5.3		6.0*		4.9*		5.4*	
25-34	21.8*		17.1*		14.7*		12.3*		12.7*	
35-39	13.9*		12.7*		13.2*		12.2*		15.6*	
40-44	7.9*		6.7*		7.4*		7.4*		8.4*	
45-54	3.6*		2.3**		2.6**		3.6*		3.0	
55-64	1.8*		0.7**		1.1*		1.9*		1.1*	
▶ 65-74	0.6*		...		0.5*		1.3*		1.2*	
Race/ethnicity										
▶ White	9.3*	4.1	8.5	3.2	7.2	2.6	6.3	3.4	6.8	3.4
Black	5.9**	...	4.8**	7.1	3.8**	4.6	3.0**	4.7	10.8**	7.0
Hispanic	7.7**	9.8	9.6**	4.0	6.4**	5.1	6.5**	3.0	6.7*	2.9
Asian	11.7**	11.5	11.1**	...	7.9**	6.9	13.1**	13.9	10.8**	10.7
Other	23.4**	...	16.3**	...	11.4**	33.5	25.1**	43.5	12.3**	...
Unknown	11.7**	...	7.2**	...	9.4**	...	7.7**	...	7.2**	...
Missing	9.9*	...	6.0*	...	7.7*	...	6.6*	...	7.9*	...
Region										
Northeast	14.2*	6.6	10.1*	4.1	9.7*	3.5	9.0*	6.4	9.5*	4.5
South	11.9*	5.8	8.4*	4.7	7.8*	3.3	7.2*	3.6	7.8*	3.9
▶ Midwest	5.3	2.6	4.5	1.5	4.7	1.9	3.9	2.2	5.5	2.8
West	10.2*	7.0	10.1*	6.0	9.6*	9.4	9.1*	6.8	7.2*	6.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-5. Nationally representative ambulatory surgery center visits for male infertility listed as primary diagnosis, count, rate^a

	Count	Rate
Total	19,943	18.8
Age		
25-34	12,542	63.3
35-39	4,194	40.6*
40-44	2,161	19.6*
45-54	1,046	5.0*
55-64	...	...
▶ 65-74	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 individuals in the same demographic stratum is based on

2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 12-6. Physician office visits by Medicare beneficiaries for male infertility listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=7,240)		2003 (N=8,400)		2004 (N=7,660)		2005 (N=8,740)		2006 (N=8,580)		2007 (N=8,800)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	46.4	46.7	52.3	50.2	46.8	45.3	53.0	53.1	52.8	51.7	54.2	50.8
Under 65/65+												
< 65 Years	45.4	45.4	59.9*	59.9	53.2*	53.2	55.8*	55.8	59.5*	59.5	63.9*	63.9
▶ 65+ Years	46.7	46.7	49.7	50.2	44.6	45.3	52.0	53.1	50.5	51.7	50.6	50.8
Age												
▶ 65-69	55.3		46.9		46.6		41.1		49.4		51.7	
70-74	50.1*		45.4*		41.8*		55.4*		51.0*		60.7*	
75-79	51.5*		57.8*		45.0*		41.1*		45.6*		39.1*	
80-84	21.8**		60.6*		53.1*		84.5*		71.3*		43.0*	
85-89	35.5**		39.5**		38.1**		68.2**		44.5**		61.9**	
90-94	34.3**		32.6**		15.7**		37.8**		7.5**		51.4**	
95-97	...		51.9**		50.5**		...		...		...
Race/ethnicity												
▶ White	46.8	47.6	50.9	51.3	47.3	48.3	51.3	55.0	53.4	53.9	55.4	54.3
Black	19.9**	38.0	52.7*	29.0	36.4**	21.5	60.0*	42.6	50.8*	50.1	56.3*	38.2
Hispanic	77.5**	48.4	80.7**	84.7	60.2**	36.7	75.9**	68.1	23.9**	40.9	29.3**	62.6
Asian	9.4**	...	44.1**	41.1	33.4**	43.0	23.5**	35.7	23.3**	34.0	7.4**	...
Other	157.2**	233.1	84.6**	178.6	68.1**	65.2	87.2**	53.7	90.4**	51.9	59.1**	45.1
Unknown	76.0**	...	80.1**	...	73.0**	...	77.9**	...	...	...	0.0**	...
Region												
▶ Northeast	73.1	73.6	84.9	85.0	77.6	78.3	78.2	81.5	84.2	76.8	73.6	73.5
South	41.3*	42.7	54.1*	51.0	44.8*	41.5	53.2*	51.8	51.4*	54.2	53.0*	50.5
Midwest	33.7*	36.5	35.0*	32.2	35.1*	34.9	44.3*	40.9	39.6*	35.0	44.3*	35.9
West	46.2*	40.4	36.8*	39.9	34.2*	36.3	38.0*	41.4	41.2*	46.6	49.7*	46.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-7. Physician office visits by privately insured individuals for male infertility listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=16,687)		2003 (N=16,111)		2004 (N=14,781)		2005 (N=14,809)		2006 (N=13,872)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	389.5	171.5	336.4	144.3	302.1	141.5	285.0	138.0	272.3	132.7
Age										
18-24	221.1*		192.7*		194.3*		203.7*		174.0*	
25-34	735.4*		628.7*		538.4*		507.3*		477.2*	
35-39	705.6*		638.2*		580.2*		559.2*		528.5*	
40-44	415.4*		362.8*		337.7*		332.2*		308.9*	
45-54	166.7*		148.8*		148.2*		136.4*		136.7*	
55-64	102.4*		78.3*		80.8*		84.8*		78.8*	
▶ 65-74	64.3		45.5		53.9		46.4		51.5	
75-84	32.2*		31.9**		31.9**		50.1*		46.7**	
85+	...		9.1**		25.9**		26.3**		15.5**	
Race/ethnicity										
▶ White	387.1	161.2	340.2	142.1	285.1	128.5	265.4	123.0	257.8	123.6
Black	305.4*	164.9	280.2*	148.5	229.5*	158.0	222.1*	132.3	253.3*	173.5
Hispanic	469.3*	233.5	405.4*	217.1	340.8*	199.9	307.1*	170.2	282.6*	170.5
Asian	633.6*	261.9	469.5*	219.3	449.3*	251.3	435.5*	218.0	397.9*	179.8
Other	707.6*	462.5	643.5*	400.2	502.2*	348.3	491.3*	398.8	528.2*	323.4
Unknown	521.2*	...	453.8*	...	350.7*	...	321.9*	...	294.7*	...
Missing	367.7*	...	298.6*	...	311.0*	...	322.2*	...	283.9*	...
Region										
Northeast	759.0*	353.7	666.3*	291.8	590.1*	282.9	524.6*	268.5	477.5*	227.9
South	367.7*	155.4	310.1*	133.2	274.9*	124.5	264.2*	119.9	264.5*	128.9
▶ Midwest	321.2	134.0	274.5	115.7	257.4	115.8	243.7	111.1	229.8	110.9
West	336.7*	179.1	294.6*	144.2	251.8*	140.1	251.7*	148.9	229.2*	119.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-8. Emergency room visits by privately insured individuals for male infertility listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=109)		2003 (N=152)		2004 (N=148)		2005 (N=145)		2006 (N=165)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.5	1.5	3.2	2.0	3.0	2.5	2.8	1.9	3.2	2.1
Age										
18-24	3.5*		4.7**		2.7*		0.7*		2.3*	
25-34	4.5		4.4*		4.3		3.7		4.2*	
35-39	3.5*		4.2*		5.3		7.1*		8.0*	
40-44	1.6*		2.7*		2.2*		5.0*		3.9**	
45-54	0.3**		2.3*		1.5**		1.3*		1.7**	
55-64	2.2*		1.0*		1.5**		0.3**		1.4**	
▶ 65-74	1.8*		1.6*		3.6*		1.7*		...	
75-84	3.1**		2.5**		8.3**		1.9**		...	
Race/ethnicity										
▶ White	2.5	1.2	2.2	1.6	2.0	1.5	2.5	2.0	2.1	1.1
Black	1.2**	...	6.4**	14.5	8.2**	30.2	3.0**	7.3	3.2**	3.2
Hispanic	0.6**	...	11.1*	15.1	6.1**	3.4	4.4**	4.3	5.3**	7.4
Asian	...	...	1.0**	7.7	0.7**	...	...	...	3.8**	14.9
Other	...	...	3.3**	...	6.8**	23.0	12.5**	25.0	4.1**	16.2
Unknown	5.6**	...	8.9**	...	2.9**	...	3.2**	...	7.8**	...
Missing	2.6*	...	2.4*	...	4.5*	...	3.0**	...	5.4*	...
Region										
Northeast	1.1**	1.7	2.8*	2.5	2.5*	2.4	3.1*	1.0	2.5*	2.1
South	2.0*	2.2	4.6*	2.5	4.3*	2.8	3.3	2.2	4.5*	3.6
▶ Midwest	3.6	2.5	2.6	2.0	2.4	3.1	2.6	3.1	2.7	1.2
West	2.9**	4.2	...	...	0.6**	1.3	1.5**	5.7	1.0**	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-9. Nationally representative inpatient stays for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=6,937)		2003 (N=6,379)		2004 (N=5,611)		2005 (N=5,918)		2006 (N=6,010)		2007 (N=5,204)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.8	6.9	6.2	6.2	5.4	5.5	5.6	5.6	5.7	5.6	4.8	4.7
Age												
18-24	0.3		†		0.2		†		0.4		†	
25-34	0.6*		0.4*		0.6		0.3*		0.4*		0.2	
35-39	1.3		1.1		0.8		1.0		0.7		0.7	
40-44	2.4		2.0		1.0		1.4		1.1		1.3	
45-54	5.1		5.1		4.2		4.4		3.8		3.3	
55-64	16.0		13.6		12.0		12.5		11.6		10.2	
▶ 65-74	29.2		27.6		23.6		23.7		25.8		20.7	
75-84	15.4*		11.8*		14.5*		15.5*		17.3*		13.6*	
85+	8.5*		9.2*		6.5*		6.3*		3.8*		9.3*	
Race/ethnicity												
▶ White	3.9	4.3	4.1	4.2	3.9	3.9	4.5	5.1	4.1	4.1	3.5	3.9
Black	9.9*	10.3	7.5*	9.4	8.1*	8.2	6.1*	7.3	7.6*	7.6	6.5*	10.0
Hispanic	†	†	4.9*	5.6	3.1*	3.9	3.0*	3.7	3.9*	4.7	3.2*	4.5
Asian	0.7*	1.7	0.9*	2.4	1.1*	1.8	1.2*	3.2	1.4*	3.7	0.6*	1.2
Other	10.3*	17.7	6.0*	10.0	3.7*	5.8	7.5*	12.5	5.0*	13.2	5.7*	10.5
Region												
Northeast	7.2	7.1	6.1	7.2	6.1	6.1	5.3	5.3	5.4	5.2	5.4	6.1
South	7.4	7.4	7.2	7.2	6.3	6.3	7.1	7.1	7.7	7.7	4.5	5.1
▶ Midwest	5.5	5.7	4.9	5.2	4.2	4.4	4.8	4.8	4.1	4.1	4.3	4.9
West	7.0*	7.2	5.8*	6.6	4.7*	5.4	4.5*	5.2	4.3*	4.2	5.4*	5.4

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 12-10. Nationally representative inpatient stays for erectile dysfunction listed as primary diagnosis, by procedure rates for penile implants, count, rate,^a rate per visit^b

	2002			2003			2004		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Prosthesis or IPP	6,572	6.0	94,861	5,894	6.0	92,397	5,256	5.0	93,673
Semi-rigid prosthesis	624	1.0	9,007	559	1.0	8,763	553	1.0	9,856
IPP	5,948	6.0	85,855	5,335	5.0	83,634	4,703	5.0	83,818
	2005			2006			2007		
	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit	Count	Rate	Rate Per Visit
Prosthesis or IPP	5,596	5.0	94,559	5,659	5.0	94,238	4,831	5.0	92,832
Semi-rigid prosthesis	340	0.0	5,745	405	0.0	6,744	322	0.0	6,188
IPP	5,256	5.0	88,814	5,254	5.0	87,494	4,509	4.0	86,645

IPP: Inflatable penile prosthesis.

^aRate per 100,000 is based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US adult male civilian non-institutionalized population.^bRate per 100,000 adult male visits is based on estimated number of visits for erectile dysfunction in Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 12-11. Inpatient stays by Medicare beneficiaries for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,120)		2003 (N=3,920)		2004 (N=3,520)		2005 (N=3,360)		2006 (N=2,720)		2007 (N=2,740)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	26.4	26.2	24.4	24.0	21.5	20.2	20.4	21.2	16.7	16.3	16.9	16.7
Under 65/65+												
< 65 Years	28.4*	28.4	26.7*	26.7	25.4*	25.4	17.2*	17.2	18.7*	18.7	16.0*	16.0
▶ 65+ Years	25.7	26.2	23.6	24.0	20.2	20.2	21.5	21.2	16.0	16.3	17.2	16.7
Age												
▶ 65-69	34.3		26.7		25.9		22.6		10.9*		15.7	
70-74	27.3*		27.9*		23.5*		31.0*		22.5*		23.5*	
75-79	23.7**		21.7**		17.7**		17.3**		16.0**		11.3**	
80-84	14.1**		18.5**		13.3**		14.3**		14.5**		16.0**	
85-89	19.1**		18.4**		7.6**		10.1**		22.3**		16.7**	
90-94	0.0**		0.0**		7.8**		22.7**		7.5**		29.4**	
95-97	0.0**		0.0**		0.0**		0.0**		47.8**		46.6**	
98+	...		...		...		...		0.0**		0.0**	
Race/ethnicity												
▶ White	23.0	24.2	22.0	22.1	18.5	17.8	16.8	17.3	14.9	14.7	15.8	15.5
Black	45.1*	44.7	30.8**	37.3	42.6*	45.2	50.0*	63.9	31.7**	38.3	29.5**	35.1
Hispanic	64.6**	87.1	74.5**	79.4	18.1**	23.9	23.4**	52.9	23.9**	34.3	5.9**	34.2
Asian	...	...	8.8**	...	8.3**	25.9	7.8**	...	0.0**	...	...	...
Other	64.3**	52.0	52.0**	43.5	55.7**	81.3	29.1**	78.9	5.6**	0.0	16.1**	18.6
Unknown	0.0**	...	80.1**	...	73.0**	...	77.9**	...	331.4**	...	175.3**	...
Region												
▶ Northeast	28.6	27.5	17.6*	15.7	18.7*	17.8	12.9*	11.3	13.8*	13.8	14.5*	11.8
South	29.7*	32.0	26.0*	28.0	24.8*	24.9	25.4*	27.7	17.5*	17.5	22.2*	22.3
Midwest	14.8**	11.9	20.5*	17.3	13.3**	10.2	16.7*	18.3	16.5*	16.6	13.2**	12.5
West	33.3*	35.7	33.9*	33.7	28.6*	27.7	22.4*	22.4	18.6**	16.4	12.8**	15.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-12. Inpatient stays by privately insured individuals for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=387)		2003 (N=367)		2004 (N=336)		2005 (N=341)		2006 (N=260)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	9.0	19.9	7.7	16.9	6.9	15.1	6.6	13.8	5.1	11.5
Age										
18-24	0.9**		0.5**		0.8**		1.2**		0.9**	
25-34	2.0**		1.3**		0.7**		0.8**		0.8**	
35-39	1.6**		1.3**		2.8**		1.9**		1.6**	
40-44	3.4**		2.7**		2.7**		3.4**		2.3**	
45-54	9.6*		9.8*		6.2*		4.2*		5.6*	
55-64	28.7*		23.0*		20.3*		19.7*		14.2*	
▶ 65-74	44.6		39.0		42.6		33.8		27.6	
75-84	32.2*		23.3**		20.1**		26.5**		21.5**	
85+	...		13.7**		4.3**		9.9**		10.3**	
Race/ethnicity										
▶ White	8.7	17.3	8.4	17.3	6.8	15.4	6.1	12.9	5.5	12.3
Black	17.6**	39.7	11.2**	29.2	12.0**	23.8	14.6**	26.4	8.6**	17.7
Hispanic	7.1**	27.3	9.6**	23.0	6.9**	21.5	5.3**	13.6	4.0**	14.1
Asian	1.5**	18.0	4.0**	35.9	2.1**	14.3	2.6**	14.3	3.2**	8.3
Other	...	...	9.8**	59.7	9.1**	24.9	6.3**	14.0	4.1**	40.5
Unknown	10.5**	...	8.5**	...	5.8**	...	6.2**	...	3.6**	...
Missing	9.3*	...	6.2*	...	7.2*	...	8.6*	...	4.0**	...
Region										
Northeast	14.2*	28.3	6.9	19.6	8.1*	17.4	8.2*	14.8	5.0*	12.4
South	10.1*	23.2	9.1*	19.5	7.7*	17.4	7.5*	17.1	6.1*	15.8
▶ Midwest	7.5	16.2	6.6	14.5	5.3	10.9	5.1	10.5	4.0	7.6
West	5.3**	11.8	6.1*	17.9	6.8*	19.3	5.6*	12.4	4.2*	9.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-13. Hospital outpatient visits by Medicare beneficiaries for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=21,160)		2003 (N=22,980)		2004 (N=21,440)		2005 (N=19,040)		2006 (N=19,400)		2007 (N=18,240)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	135.5	117.2	143.0	117.6	130.9	108.9	115.4	100.3	119.4	104.9	112.3	100.3
Under 65/65+												
< 65 Years	193.1*	193.1	219.6*	219.6	196.4*	196.4	158.5*	158.5	162.5*	162.5	148.4*	148.4
▶ 65+ Years	116.5	117.2	117.2	117.6	108.5	108.9	100.3	100.3	104.1	104.9	98.9	100.3
Age												
▶ 65-69	152.5		151.5		137.6		118.6		134.2		129.4	
70-74	131.5*		142.1*		137.1*		138.5*		117.0*		119.3*	
75-79	107.9*		94.7*		79.5*		70.7*		99.6*		93.0*	
80-84	44.9*		69.2*		83.3*		82.1*		56.8*		55.3*	
85-89	90.1*		60.5**		38.1**		27.8**		54.4**		30.9**	
90-94	42.8**		32.6**		15.7**		22.7**		30.0**		7.3**	
95-97	...		51.9**		50.5**		...		95.6**		0.0**	
98+	44.2**		...		...		42.1**		...		...
Race/ethnicity												
▶ White	109.3	103.8	118.8	105.7	101.6	90.8	94.5	86.7	100.0	91.1	90.5	85.5
Black	309.1*	231.5	300.6*	218.3	347.5*	295.3	272.3*	238.6	278.1*	254.8	248.4*	235.5
Hispanic	239.1*	244.5	211.2*	217.4	216.7*	185.2	198.6*	248.4	185.6*	194.5	228.8*	148.8
Asian	94.0**	132.7	61.7**	108.5	100.1**	182.0	47.1**	79.3	93.0**	109.1	125.1**	163.9
Other	364.3*	245.1	396.7*	316.6	253.9*	219.7	197.7*	141.4	112.9**	134.9	220.1*	208.0
Unknown	76.0**	...	240.4**	...	146.1**	...	155.9**	...	248.6**	...	175.3**	...
Region												
▶ Northeast	145.6	101.7	144.3	112.0	130.0	99.7	96.3	80.2	124.3	103.2	111.1	89.4
South	111.0*	92.1	114.1*	99.2	99.7*	86.5	91.7*	73.0	98.1*	82.2	92.7*	85.3
Midwest	154.4*	145.8	171.5*	139.4	158.6*	133.2	148.1*	129.4	143.8*	125.5	125.8*	115.9
West	152.3*	148.7	165.3*	163.0	162.1*	141.4	142.0*	137.2	127.2*	125.8	137.0*	121.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-14. Hospital outpatient visits by privately insured individuals for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,244)		2003 (N=3,463)		2004 (N=3,532)		2005 (N=3,847)		2006 (N=3,822)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	75.7	124.2	72.3	117.1	72.2	113.7	74.0	112.0	75.0	122.3
Age										
18-24	20.2*		23.5*		19.7*		25.3*		20.4*	
25-34	35.9*		35.9*		35.8*		40.2*		36.2*	
35-39	43.4*		44.3*		45.3*		41.7*		42.4*	
40-44	52.3*		49.0*		54.8*		58.3*		65.7*	
45-54	100.0*		93.7*		89.6*		82.9*		85.9*	
55-64	192.4		165.8*		168.5		170.5		176.2*	
▶ 65-74	182.7		191.4		169.9		161.0		206.5	
75-84	96.6*		107.9*		108.8*		114.3*		123.9*	
85+	...		100.6**		64.8**		72.2**		46.4**	
Race/ethnicity										
▶ White	82.6	125.4	80.3	120.9	72.5	114.0	75.0	112.7	78.8	126.9
Black	184.4*	268.1	117.7*	186.5	115.0*	165.3	123.2*	170.3	126.4*	214.9
Hispanic	69.2*	130.0	69.7*	134.0	62.0*	101.5	59.9*	100.4	51.5*	90.2
Asian	62.6*	95.9	52.5*	42.6	45.1*	61.0	36.6*	47.8	48.7*	66.5
Other	60.9**	117.2	68.3**	100.3	86.7*	145.7	81.5*	132.7	59.4**	96.2
Unknown	68.6*	...	84.1*	...	82.3*	...	74.7*	...	68.1*	...
Missing	67.9*	...	59.3*	...	65.4*	...	71.0*	...	68.0*	...
Region										
Northeast	84.6	119.1	69.8*	97.9	75.5*	100.0	80.1*	114.5	89.3	129.4
South	67.6*	116.6	58.5*	101.6	60.5*	102.9	63.4*	101.2	61.0*	105.5
▶ Midwest	89.3	150.5	95.9	151.8	90.4	139.2	90.8	131.0	94.5	150.9
West	60.3*	85.6	62.6*	108.4	66.1*	110.8	67.3*	107.3	69.6*	114.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-15. Nationally representative hospital outpatient visits for erectile dysfunction listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	405,431
Age	
40-44	78,016
45-54	155,162
55-64	88,087
65-74	67,401
75-84	11,668
85+	5,097
Race/ethnicity	
White	278,816
Black	112,557
Hispanic	7,487
Other	6,571
Region	
Northeast	78,093
South	139,247
Midwest	161,621
West	26,470

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 12-16. Ambulatory surgery center visits by Medicare beneficiaries for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=3,480)		2003 (N=3,720)		2004 (N=3,480)		2005 (N=3,980)		2006 (N=3,820)		2007 (N=3,680)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	22.3	22.3	23.1	22.8	21.2	23.0	24.1	22.4	23.5	25.5	22.6	25.5
Under 65/65+												
< 65 Years	22.2	22.2	23.2	23.2	17.2*	17.2	28.8*	28.8	18.7*	18.7	16.0*	16.0
▶ 65+ Years	22.3	22.3	23.1	22.8	22.6	23.0	22.5	22.4	25.2	25.5	25.1	25.5
Age												
▶ 65-69	29.3		31.5		33.1		29.8		38.0		27.1	
70-74	28.0*		32.5*		17.6**		29.7*		26.5*		33.1*	
75-79	21.3**		19.3**		22.5**		22.2**		19.4**		26.1*	
80-84	9.0**		6.2**		19.3**		7.1**		14.5**		16.0**	
85-89	5.5**		0.0**		7.6**		0.0**		9.9**		11.9**	
90-94	0.0**		8.1**		0.0**		...		...		7.3**	
95-97	...		...		...		47.5*		...		...
Race/ethnicity												
▶ White	19.7	19.7	20.1	19.9	19.0	20.2	23.0	21.0	21.8	23.9	21.9	24.3
Black	38.5**	60.4	39.8*	57.8	31.4**	42.5	38.7*	40.7	38.1*	55.2	32.0**	51.2
Hispanic	12.9**	16.1	55.9**	69.7	60.2**	111.6	23.4**	52.1	35.9**	48.8	35.2**	78.6
Asian	9.4**	49.3	...	...	8.3**	17.1	7.8**	41.9	...	...	7.4**	...
Other	71.4**	77.2	52.0**	61.9	31.0**	65.1	17.4**	24.2	33.9**	42.4	10.7**	28.8
Unknown	76.0**	...	80.1**	...	73.0**	...	...	...	0.0**	...	...	...
Region												
▶ Northeast	13.3*	15.7	13.7	18.8	10.3*	16.0	11.6	13.9	15.1*	17.4	14.5	17.3
South	30.4*	30.4	26.9*	27.3	23.5*	26.2	32.2*	31.1	28.2*	33.7	27.3*	31.7
Midwest	22.5*	23.6	24.0*	24.7	23.7*	22.9	26.1*	25.0	25.6*	25.0	25.0*	24.7
West	13.6**	19.5	23.8*	32.7	24.4*	31.2	17.0**	21.2	19.2**	23.1	18.1**	24.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-17. Ambulatory surgery center visits by privately insured individuals for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=77)		2003 (N=75)		2004 (N=70)		2005 (N=74)		2006 (N=82)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.8	2.4	1.6	2.4	1.4	1.8	1.4	1.7	1.6	1.9
Age										
18-24	0.9*		0.3**		1.0**		1.0*		1.2*	
25-34	0.8*		0.7*		1.3**		1.2*		1.7*	
35-39	2.0*		1.3*		1.0**		1.0*		1.0*	
40-44	0.9*		0.5*		0.9**		1.4*		1.1*	
45-54	2.1*		2.9*		1.8*		1.7*		1.4*	
55-64	5.0**		3.8*		2.0*		2.2*		3.0*	
▶ 65-74	1.8*		1.6*		3.1*		0.4*		2.5*	
75-84	1.0**		...		1.2**		1.9**		1.8**	
85+	...		...		...		6.6**		...	
Race/ethnicity										
▶ White	2.0	3.3	1.5	2.3	1.4	2.0	1.4	2.0	1.3	1.7
Black	8.2**	12.3	2.4**	18.9	1.6**	5.3	2.5**	7.7	2.7**	3.2
Hispanic	3.0**	3.9	1.5**	4.8	1.8**	4.3	2.5**	3.5	2.4**	4.9
Asian	1.5**	...	...	...	2.1**	...	...	...	1.3**	5.0
Other	...	...	3.3**	15.8	...	...	8.4**	14.0	14.3**	133.2
Unknown	...	...	0.4**	...	0.3**	...	0.9**	...	1.5**	...
Missing	1.5*	...	1.8*	...	1.9**	...	0.6**	...	1.5**	...
Region										
Northeast	2.6**	4.8	1.9*	3.0	1.3*	2.5	1.7*	2.6	1.1*	2.3
South	1.8*	3.2	2.0**	2.9	1.8*	2.5	1.6	2.1	1.7	1.7
▶ Midwest	1.1*	1.9	1.2*	2.3	0.9*	1.2	1.1*	1.4	1.4*	2.4
West	3.1**	5.5	1.0**	2.6	1.5**	1.4	1.2**	2.8	2.0**	4.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-18. Nationally representative ambulatory surgery center visits for erectile dysfunction listed as primary diagnosis, count, rate^a

	Count	Rate
Total	18,489	17.4
Age		
18-24	380	2.7
25-34	3,241	16.3
35-39	829	8.0
40-44	392	3.5
45-54	86	0.4*
55-64	2,219	14.9
▶ 65-74	2,998	35.2
75-84	8,344	156.6*

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 12-19. Physician office visits by Medicare beneficiaries for erectile dysfunction listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=755,680)		2003 (N=811,080)		2004 (N=952,380)		2005 (N=836,160)		2006 (N=841,360)		2007 (N=846,500)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	4,839	5,387	5,046	5,632	5,814	6,546	5,070	5,718	5,180	5,885	5,210	6,004
Under 65/65+												
< 65 Years	3,205*	3,205	3,387*	3,387	3,776*	3,776	3,355*	3,355	3,392*	3,392	3,284*	3,284
▶ 65+ Years	5,377	5,387	5,603	5,632	6,511	6,546	5,676	5,718	5,818	5,885	5,921	6,004
Age												
▶ 65-69	6,429		6,776		7,862		6,719		6,893		6,902	
70-74	6,632*		6,820*		8,031*		7,056*		7,186*		7,444*	
75-79	5,276*		5,420*		6,324*		5,633*		5,915*		6,072*	
80-84	3,302*		3,586*		4,043*		3,570*		3,680*		3,821*	
85-89	1,728*		1,939*		2,157*		1,993*		2,041*		2,049*	
90-94	762.7*		789.4*		1,214*		1,126*		983.9*		991.2*	
95-97	323.3**		311.5**		404.2**		332.4**		430.4**		699.6**	
98+	132.6**		...		...		84.3**		41.2**		121.2**	
Race/ethnicity												
▶ White	4,677	5,213	4,849	5,428	5,580	6,317	4,826	5,463	4,936	5,626	4,977	5,744
Black	6,226*	7,433	6,712*	7,975	7,815*	9,343	7,415*	9,079	7,646*	9,485	7,872*	9,854
Hispanic	4,723*	4,394	4,665*	4,547	5,219*	5,409	4,381*	4,800	4,777*	5,566	4,049*	4,629
Asian	1,956*	2,007	2,249*	2,236	2,501*	2,510	2,809*	3,095	3,241*	3,448	3,097*	3,369
Other	6,329*	7,291	6,959*	7,931	8,225*	8,748	5,676*	6,216	4,851*	5,490	4,811*	5,775
Unknown	15,741*	...	15,064*	...	15,705*	...	14,731*	...	13,587*	...	11,569*	...
Region												
▶ Northeast	4,322	4,788	4,570	5,044	5,403	6,058	4,756	5,349	4,690	5,391	4,769	5,529
South	5,806*	6,481	6,054*	6,796	6,974*	7,922	6,075*	6,946	6,268*	7,184	6,279*	7,318
Midwest	4,109*	4,527	4,314*	4,745	4,878*	5,425	4,222*	4,659	4,312*	4,790	4,424*	4,938
West	4,291*	5,005	4,356*	5,115	4,997*	5,796	4,389*	5,064	4,526*	5,266	4,433*	5,274

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-20. Physician office visits by privately insured individuals for erectile dysfunction listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=105,924)		2003 (N=116,850)		2004 (N=136,550)		2005 (N=132,222)		2006 (N=124,513)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2,473	4,415	2,440	4,352	2,791	4,955	2,544	4,357	2,444	4,328
Age										
18-24	224.4*		208.4*		222.4*		220.1*		222.0*	
25-34	721.1*		697.2*		725.8*		681.2*		677.6*	
35-39	1,277*		1,236*		1,424*		1,272*		1,288*	
40-44	1,930*		1,908*		2,195*		2,025*		2,002*	
45-54	3,652*		3,557*		3,995*		3,532*		3,435*	
55-64	6,601*		6,398*		7,016*		6,130*		6,038*	
▶ 65-74	6,752		6,924		8,051		7,060		7,055	
75-84	3,133*		3,826*		4,893*		4,221*		4,565*	
85+	...		1,216*		1,680*		1,222*		1,202*	
Race/ethnicity										
▶ White	2,873	4,767	2,854	4,822	2,910	5,005	2,597	4,316	2,529	4,361
Black	4,518*	7,007	4,369*	7,144	4,384*	7,608	4,059*	6,819	3,823*	6,918
Hispanic	2,189*	4,168	2,190*	4,355	2,128*	4,329	2,074*	4,182	2,054*	4,258
Asian	1,665*	3,250	1,434*	2,798	1,543*	3,048	1,375*	2,684	1,342*	2,636
Other	2,394*	3,959	2,688*	4,804	2,785*	5,333	2,243*	3,993	2,293*	3,791
Unknown	2,517*	...	2,513*	...	2,589*	...	2,368*	...	2,302*	...
Missing	2,138*	...	1,872*	...	2,560*	...	2,511*	...	2,225*	...
Region										
Northeast	1,917*	3,273	1,777*	3,070	2,057*	3,558	1,972*	3,356	1,961*	3,477
South	2,750*	4,911	2,770*	4,924	3,190*	5,728	2,928*	5,132	2,799*	5,094
▶ Midwest	2,530	4,471	2,485	4,364	2,779	4,818	2,442	4,037	2,325	3,986
West	1,882*	3,681	1,802*	3,588	2,125*	4,074	2,029*	3,608	1,990*	3,549

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-21. Physician office visits by Medicare beneficiaries for erectile dysfunction by procedure use of intracavernosal injection, penile plethysmography, or nocturnal penile tumescence testing, count,^a rate^b

	2002		2003		2004		2005		2006		2007	
	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
Intracavernosal injection	17,400	2,741	17,980	2,619	15,400	1,931	17,860	2,469	15,600	2,116	13,520	1,810
Penile plethysmography	1,160	183.0	1,000	146.0	780	98.0	640	88.0	1,080	147.0	660	88.0
Nocturnal penile tumescence testing	1,440	227.0	1,440	210.0	1,000	125.0	560	77.0	780	106.0	260	35.0

^aUnweighted counts multiplied by 20 to arrive at counts in table.^bRate per 100,000 Medicare beneficiaries 65 years and older with erectile dysfunction.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 12-22. Physician office visits by Medicare beneficiaries for use of penile plethysmography for erectile dysfunction, rate,^a age-adjusted rate^b

	2002 (N=980)		2003 (N=760)		2004 (N=700)		2005 (N=480)		2006 (N=920)		2007 (N=380)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total ^c	187.0	206.0	134.0	141.0	106.0	123.0	81.0*	95.0	152.0	149.0	62.0*	70.0
Age												
▶ 65-69	174.0*		75.0*		64.0*		99.0*		175.0*		69.0*	
70-74	179.0**		206.0**		109.0**		55.0**		132.0**		42.0**	
75-79	192.0**		142.0**		153.0**		135.0**		132.0**		50.0**	
80-84	327.0**		165.0**		214.0**		...		74.0**		144.0**	
85-89	...		...		...		...		257.0**		...	
90-94	...		...		...		...		1,333**		...	
Race/ethnicity												
▶ White	194.0	219.0	140.0	147.0	81.0*	102.0	71.0*	88.0	132.0	133.0	46.0*	52.0
Black	205.0**	270.0	148.0**	335.0	125.0**	231.0	66.0**	151.0	...	...	64.0**	204.0
Hispanic	...	...	...	...	924.0**	1,733	...	...	1,202**	2,201	545.0**	1,980
Asian	...	...	...	...	...	...	...	...	690.0**	2,469	...	...
Other	...	...	...	...	561.0**	663.0	653.0**	1,299	893.0**	1,099	170.0**	386.0
Unknown	...	...	...	...	...	...	...	...	...	...	2,151**	...
Region												
▶ Northeast	273.0*	323.0	335.0*	381.0	179.0*	215.0	290.0*	350.0	532.0*	572.0	112.0*	414.0
South	296.0*	324.0	160.0**	182.0	123.0**	141.0	53.0**	90.0	89.0**	99.0	81.0**	87.0
Midwest	33.0**	103.0	...	...	80.0**	291.0	30.0**	80.0	30.0**	77.0	30.0**	76.0
West	24.0**	69.0	44.0**	124.0	19.0**	61.0	...	...	82.0**	150.0	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 Medicare beneficiaries 65 years and older with erectile dysfunction.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

^cPersons of other races, unknown race and ethnicity, and other region are included in the totals.

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-23. Nationally representative physician office visits for erectile dysfunction listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	15,033,588
Age	
40-44	1,669,410
45-54	4,062,768
55-64	4,366,395
65-74	3,442,135
75-84	1,405,793
85+	87,087
Race/ethnicity	
White	12,147,830
Black	2,379,457
Hispanic	506,301
Region	
Northeast	2,572,851
South	6,627,383
Midwest	3,959,046
West	1,874,308

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 12-24. Emergency room visits by Medicare beneficiaries for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,760)		2003 (N=1,880)		2004 (N=1,920)		2005 (N=2,040)		2006 (N=2,060)		2007 (N=1,740)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	11.3	8.4	11.7	9.3	11.7	8.6	12.4	9.5	12.7	9.0	10.7	6.7
Under 65/65+												
< 65 Years	18.6*	18.6	18.3*	18.3	21.6*	21.6	20.9*	20.9	23.9*	23.9	19.2*	19.2
▶ 65+ Years	8.9	8.4	9.5	9.3	8.4	8.6	9.4	9.5	8.7	9.0	7.6	6.7
Age												
▶ 65-69	4.4*		6.9*		6.7*		6.7*		5.7*		4.2*	
70-74	7.2**		5.2**		5.2**		7.9**		2.0**		8.3**	
75-79	10.6**		11.2**		13.7**		11.5**		11.0**		8.7**	
80-84	11.6**		7.4**		8.4**		10.7**		16.9**		6.1**	
85-89	16.4**		28.9**		12.7**		17.7**		22.3**		7.1**	
90-94	42.8**		40.7**		0.0*		15.1**		15.0**		44.1**	
95-97	0.0**		0.0**		50.5**		0.0**		...		...
98+	...		...		0.0**		0.0**		...		40.4**	
Race/ethnicity												
▶ White	9.8	7.7	10.1	9.2	8.7	6.6	8.8	7.8	9.1	8.5	9.1	5.9
Black	26.5**	18.9	27.0**	13.8	36.4**	27.3	40.0*	26.8	39.4*	18.1	25.6**	15.7
Hispanic	12.9**	32.9	12.4**	10.8	12.0**	36.1	29.2**	63.0	23.9**	0.0	5.9**	20.1
Asian	0.0**	0.0	...	...	8.3**	43.9	7.8**	...	0.0**	0.0	14.7**	...
Other	7.1**	0.0	13.0**	22.3	24.8**	41.3	11.6**	23.4	33.9**	23.8	10.7**	10.7
Unknown	...	...	0.0**	...	...	...	77.9**	...	...	...	0.0**	...
Region												
▶ Northeast	14.0*	10.0	7.8*	4.7	8.4*	9.0	13.6*	8.2	14.5*	8.6	10.5*	3.8
South	11.6*	7.9	14.1*	9.8	10.7*	7.5	12.2*	9.2	17.1*	12.3	9.8*	6.8
Midwest	10.2**	8.1	13.0**	13.4	16.3*	10.4	14.8*	13.6	6.5**	3.8	13.8**	8.7
West	9.1**	8.8	8.7**	7.9	11.2**	8.2	8.2**	5.9	9.6**	9.5	8.7**	6.8

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-25. Emergency room visits by privately insured individuals for erectile dysfunction listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=220)		2003 (N=385)		2004 (N=286)		2005 (N=236)		2006 (N=167)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.1	5.8	8.0	12.7	5.8	10.4	4.5	8.2	3.3	6.1
Age										
18-24	5.1*		4.8*		3.3**		2.7**		1.6**	
25-34	4.5		4.8*		3.0*		1.7**		1.2**	
35-39	4.6*		3.8**		2.8**		3.1**		1.6**	
40-44	7.1		5.0**		3.6**		2.8**		3.1**	
45-54	4.8		10.1		5.9*		3.7*		4.0*	
55-64	3.8*		17.7*		11.3*		7.6*		6.2*	
▶ 65-74	4.8*		8.7*		19.5		16.5		14.7*	
75-84	13.5**		27.0**		18.9**		18.9**		...	
85+	...		32.0**		34.5**		32.8**		10.3**	
Race/ethnicity										
▶ White	3.9	4.7	7.3	11.4	4.2	8.2	2.9	5.6	1.6	3.4
Black	12.9**	17.3	28.0*	56.4	15.8**	26.9	12.1**	16.0	11.3**	19.9
Hispanic	5.3**	3.9	11.1**	21.8	10.2*	19.4	7.4*	15.5	5.3**	10.5
Asian	1.5**	...	2.0**	141.8	2.9**	29.1	2.0**	39.9	2.5**	94.2
Other	4.7**	...	...	...	9.1**	24.9	4.2**	14.0	...	...
Unknown	3.1**	...	4.9**	...	2.3**	...	4.7**	...	1.5**	...
Missing	6.0*	...	7.9*	...	9.9*	...	9.7*	...	9.7*	...
Region										
Northeast	1.5**	3.4	2.2**	9.2	1.4**	3.6	2.6*	5.9	1.1*	2.8
South	3.9*	4.4	12.4*	17.6	10.0*	18.1	7.1*	13.7	5.7*	11.8
▶ Midwest	8.0	8.0	7.1	12.0	3.9	5.9	3.6	5.3	2.1	3.1
West	4.9**	10.0	0.8**	2.4	0.3**	2.1	0.1**	1.1	0.1**	0.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-26. Procedure use among Medicare beneficiaries for erectile dysfunction, by physician specialty, count^a, percent^b

	2002		2003		2004		2005		2006		2007	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Nocturnal penile tumescence testing												
Total	1,840	100%	1,760	100%	1,120	100%	640	100%	580	100%	520	100%
General Practice/Family Medicine	320	17.4%	120	6.8%	120	10.7%	40	6.3%	20	3.4%	0	0.0%
Internal Medicine	140	7.6%	100	5.7%	20	1.8%	0	0.0%	0	0.0%	0	0.0%
Other	300	16.3%	160	9.1%	120	10.7%	100	15.6%	20	3.4%	120	23.1%
Urology	1,080	58.7%	1,380	78.4%	860	76.8%	500	78.1%	540	93.1%	400	76.9%
Intracavernosal injection												
Total	17,080	100%	16,660	100%	14,260	100%	15,560	100%	15,200	100%	13,140	100%
General Practice/Family Medicine	440	2.6%	480	2.9%	720	5.0%	460	3.0%	160	1.1%	180	1.4%
Internal Medicine	380	2.2%	200	1.2%	100	0.7%	140	0.9%	100	0.7%	80	0.6%
Other	1,000	5.9%	1,040	6.2%	740	5.2%	960	6.2%	1,040	6.8%	960	7.3%
Urology	15,260	89.3%	14,940	89.7%	12,700	89.1%	14,000	90.0%	13,900	91.4%	11,920	90.7%
Penile plethysmography												
Total	1,760	100%	1,140	100%	880	100%	560	100%	760	100%	700	100%
General Practice/Family Medicine	500	28.4%	120	10.5%	140	15.9%	60	10.7%	80	10.5%	0	0.0%
Internal Medicine	80	4.5%	40	3.5%	0	0.0%	0	0.0%	40	5.3%	0	0.0%
Other	360	20.5%	260	22.8%	160	18.2%	100	17.9%	80	10.5%	80	11.4%
Urology	820	46.6%	720	63.2%	580	65.9%	400	71.4%	560	73.7%	620	88.6%

^aUnweighted counts multiplied by 20 to arrive at counts in table.

^bPercent of each type of procedure performed by specialty.

NOTE: Counts less than 600 should be interpreted with caution.

SOURCE: Centers for Medicare and Medicaid Services, 5% Carrier and Outpatient Files, 2002-2007.

Table 12-27. Nationally representative inpatient stays for Peyronie's disease listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=847)		2003 (N=785)		2004 (N=1,002)		2005 (N=799)		2006 (N=983)		2007 (N=910)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.8	0.8	0.8	0.8	1.0	1.0	0.8	0.8	0.9	0.9	0.8	0.8
Age												
18-24	0.6		0.7		0.7		0.7		0.7		0.7	
25-34	0.7		0.7		1.0		0.7		1.0		1.0	
35-39	0.8		1.2		1.1		1.0		1.0		0.7	
40-44	0.5		0.5		0.8		0.9		0.9		1.2	
45-54	1.1		0.8		1.0		0.8		0.8		0.7	
55-64	1.0		0.7		1.2		0.9		1.0		0.8	
▶ 65-74	1.4		0.7		1.0		0.5		1.4		0.9	
75-84	0.8*		0.5*		1.0*		†		0.7*		0.8*	
85+	...		†		†		†		†		†	
Race/ethnicity												
▶ White	0.5	0.5	0.4	0.4	0.6	0.7	0.4	0.5	0.5	0.5	0.4	0.5
Black	1.4*	1.5	1.4*	1.5	1.6*	1.7	1.1*	1.2	1.5*	1.6	1.5*	1.5
Hispanic	†	†	0.7*	0.8	0.5*	0.6	0.4*	0.5	0.7*	0.7	0.6*	0.8
Asian	†	1.7	†	0.8	†	0.6	†	0.8	†	0.6	†	1.0
Other	3.6*	4.5	†	1.2	†	1.7	2.5*	3.2	†	2.1	2.7*	3.1
Region												
Northeast	0.9	1.0	0.9	0.9	0.8	0.9	0.6	0.7	1.0	1.0	1.0	1.0
South	1.0	1.0	0.9	0.9	1.2	1.3	0.9	0.9	1.1	1.1	1.0	1.1
▶ Midwest	0.7	0.7	0.5	0.6	0.6	0.7	0.8	0.9	0.8	0.8	0.7	0.7
West	0.7*	0.7	0.6*	0.7	1.0*	1.0	0.6*	0.7	0.8*	0.9	0.6*	0.7

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aRate per 100,000 individuals in the same demographic stratum is based on 2002-2007 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project Nationwide Inpatient Sample, 2002-2007.

Table 12-28. Inpatient stays by privately insured individuals for Peyronie's disease listed as primary diagnosis, rate^a, age-adjusted rate^b

	2002 (N=49)		2003 (N=45)		2004 (N=35)		2005 (N=33)		2006 (N=48)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.1	1.4	0.9	1.5	0.7	1.0	0.6	0.7	0.9*	1.3
Age										
18-24	0.7*		0.3**		0.5*		1.0*		0.4**	
25-34	0.9*		0.4**		0.7*		0.6*		0.6**	
35-39	0.9*		1.2*		0.2**		...		1.6*	
40-44	0.7*		0.2**		0.3**		0.2**		0.6**	
45-54	1.8*		1.3*		0.5**		0.8*		0.8**	
55-64	1.8*		2.3*		2.1*		0.7*		1.4*	
▶ 65-74	0.6*		2.7*		1.5*		1.3*		3.1*	
75-84	...		...		1.2**		0.9**		...	
Race/ethnicity										
▶ White	0.9*	1.6	1.1*	1.7	0.5*	0.8	0.5*	0.8	1.1	1.2
Black	1.2**	...	2.4**	7.4	2.2**	6.7	1.5**	5.8	1.1**	16.7
Hispanic	...	...	1.5**	3.1	0.8**	1.5	0.9**	3.2	0.9**	3.4
Asian	...	...	1.0**	...	1.4**	16.1	...	...	0.6**	5.0
Other	...	...	3.3**	109.2	2.3**	...	...	...	...	...
Unknown	0.6**	...	0.9**	...	1.6**	...	0.9**	...	0.6**	...
Missing	1.5*	...	0.6**	...	0.7**	...	0.8**	...	0.7**	...
Region										
Northeast	1.5*	1.5	1.1*	4.2	0.7*	1.1	1.2*	2.4	0.9*	2.8
South	1.1*	2.1	0.9*	2.3	0.8*	1.4	0.4*	0.9	0.9*	2.8
▶ Midwest	1.2*	1.4	0.8*	1.3	0.5*	2.1	0.7*	1.1	1.3*	1.4
West	0.9**	3.0	1.1**	2.0	0.9**	4.0	0.8**	1.3	0.5**	1.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-29. Hospital outpatient visits by privately insured individuals for Peyronie's disease listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=215)		2003 (N=198)		2004 (N=213)		2005 (N=243)		2006 (N=166)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	5.0	7.9	4.1	6.4	4.4	6.8	4.7	6.7	3.3	5.3
Age										
18-24	2.7**		1.8**		2.7**		1.5**		1.9**	
25-34	3.0**		1.9**		2.3**		3.2*		1.3**	
35-39	2.0**		3.2**		1.7**		3.4**		1.6**	
40-44	3.4**		1.8**		1.9**		2.5**		3.1**	
45-54	4.8*		4.5*		3.9		4.5*		3.9*	
55-64	14.6		11.7		13.6*		11.9		6.5*	
▶ 65-74	12.5*		11.9*		8.7*		10.0*		11.0*	
75-84	4.2**		1.2**		4.7**		5.7**		3.6**	
85+	...		4.6**		17.3**		3.3**		5.2**	
Race/ethnicity										
▶ White	6.2	9.8	5.2	7.7	4.4	7.0	4.8	6.8	3.3	5.0
Black	3.5**	6.7	3.2**	5.1	9.8**	18.5	5.0**	9.1	3.2**	8.7
Hispanic	8.9**	16.9	3.4**	8.1	4.9**	5.9	5.3**	9.6	2.9**	8.8
Asian	10.2**	33.0	1.0**	...	1.4**	8.0	0.7**	7.1	2.5**	14.3
Other	...	...	3.3**	109.2	9.1**	92.1	4.2**	40.3	6.1**	19.0
Unknown	6.8**	...	3.6**	...	5.2**	...	2.7**	...	3.9**	...
Missing	3.7*	...	3.3*	...	2.5**	...	5.6*	...	3.0**	...
Region										
Northeast	4.4**	6.8	3.9*	8.9	4.1*	5.8	3.1**	4.8	4.1*	8.9
South	6.2*	10.2	4.6	8.1	5.7*	9.6	5.0	6.8	2.9	5.2
▶ Midwest	4.1	7.3	4.3	7.2	3.2	5.2	5.5	8.6	2.7	4.2
West	3.8**	5.3	2.4**	2.1	2.6**	5.7	3.2**	5.2	4.7*	7.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-30. Ambulatory surgery center visits by privately insured individuals for Peyronie's disease listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=44)		2003 (N=28)		2004 (N=25)		2005 (N=34)		2006 (N=42)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.0	1.7	0.6*	1.1	0.5*	1.1	0.7	1.2	0.8	1.4
Age										
18-24	0.5*		0.2*		0.3*		0.1**		0.3**	
25-34	0.7*		0.1**		0.2*		0.3**		0.5**	
35-39	0.2**		0.5**		...		0.6**		0.3**	
40-44	0.5*		0.2**		...		0.2**		0.3**	
45-54	1.4*		1.7**		1.0*		0.7**		1.1*	
55-64	3.2*		0.9**		1.5*		1.5*		2.3*	
▶ 65-74	1.8*		...		0.5*		3.0*		1.8*	
Race/ethnicity										
▶ White	1.1*	2.0	0.5*	0.8	0.5*	1.3	0.6*	1.3	0.9*	1.7
Black	...	...	...	...	1.6**	3.4	...	...	0.5**	...
Hispanic	0.6**	...	...	...	0.8**	2.1	1.2**	2.9	1.1**	3.7
Asian	...	...	...	...	...	...	0.7**	5.1	...	...
Unknown	1.9**	...	0.4**	...	0.3**	...	0.3**	...	0.6**	...
Missing	1.1**	...	0.8**	...	0.3**	...	0.8**	...	0.8**	...
Region										
Northeast	0.9*	6.0	0.6*	0.9	0.5*	0.9	0.7*	1.6	0.4*	1.6
South	1.6**	3.9	1.0**	1.8	0.6**	1.6	0.6*	1.2	1.0*	1.4
▶ Midwest	0.3*	1.7	0.2*	0.6	0.2*	1.2	0.6*	1.7	0.7*	1.5
West	0.9**	1.5	0.2**	0.8	0.9**	2.5	0.9**	2.1	1.0**	3.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-31. Nationally representative ambulatory surgery center visits for Peyronie's disease listed as primary diagnosis, count, rate,^a age-adjusted rate^b

	Count	Rate	Age-Adjusted Rate
Total	671	0.6	2.7

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 12-32. Physician office visits by Medicare beneficiaries for Peyronie's disease listed as any diagnosis, rate^a, age-adjusted rate^b

	2002 (N=9,620)		2003 (N=8,000)		2004 (N=6,860)		2005 (N=5,980)		2006 (N=6,460)		2007 (N=5,900)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	61.6	68.4	49.8	59.1	41.9	48.9	36.3	42.3	39.8	47.3	36.3	43.1
Under 65/65+												
< 65 Years	42.9*	42.9	23.2*	23.2	23.5*	23.5	20.0*	20.0	18.7*	18.7	19.6*	19.6
▶ 65+ Years	67.8	68.4	58.7	59.1	48.2	48.9	42.0	42.3	47.3	47.3	42.5	43.1
Age												
▶ 65-69	73.0		64.0		47.6		42.1		35.4		38.6	
70-74	70.9*		57.1*		58.1*		46.8*		68.7*		51.7*	
75-79	78.5*		62.6*		50.6*		49.3*		46.4*		37.4*	
80-84	47.5*		45.7*		38.6*		32.1**		37.5*		52.8*	
85-89	54.6**		60.5**		40.6**		30.3**		49.5**		33.3**	
90-94	34.3**		40.7**		15.7**		30.2**		60.1**		22.0**	
95-97	...		103.8**		...		...		...		...
Race/ethnicity												
▶ White	62.8	69.0	52.6	61.4	44.0	50.5	37.2	43.4	41.3	48.4	38.7	45.2
Black	27.9**	38.1	24.4**	29.2	21.3**	33.7	25.0**	41.1	34.3**	45.3	32.0**	46.3
Hispanic	103.4**	169.7	37.3**	176.7	24.1**	41.2	35.0**	83.8	35.9**	49.2	5.9**	...
Asian	84.6**	444.0	79.4**	414.2	...	...	15.7**	...	...	...	...	...
Other	100.0**	81.7	45.5**	111.4	80.5**	79.5	58.2**	57.5	33.9**	55.5	5.4**	18.6
Unknown	304.2**	...	...	...	292.2**	...	155.9**	...	82.9**	...	262.9**	...
Region												
▶ Northeast	65.8	75.8	53.5	65.5	38.8	43.1	40.1	47.9	44.1	53.2	32.9	40.4
South	68.4*	76.6	58.6*	68.1	43.0*	53.5	42.9*	51.4	42.8*	52.2	42.2*	53.1
Midwest	48.6*	49.4	37.0*	47.0	40.5*	52.2	29.5*	33.3	38.1*	46.5	39.2*	39.0
West	60.6*	71.3	44.0*	51.0	44.7*	40.2	27.2*	30.4	30.9*	32.0	23.5*	30.9

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 600, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Centers for Medicare and Medicaid Services, 5% Standard Analytical Claims Files.

Table 12-33. Physician office visits by privately insured individuals for Peyronie's disease listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,505)		2003 (N=1,535)		2004 (N=1,551)		2005 (N=1,852)		2006 (N=1,710)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	35.1	58.2	32.0	51.3	31.7	48.7	35.6	55.1	33.6	55.5
Age										
18-24	12.9*		8.1*		6.7*		5.2*		7.9*	
25-34	11.0*		13.8*		14.4*		15.5*		13.1*	
35-39	17.4*		14.2*		16.2*		18.0*		14.0*	
40-44	24.1*		20.2*		21.2*		23.1		18.4*	
45-54	53.0*		45.9*		49.8		51.5		45.0*	
55-64	95.0*		91.5*		77.4*		91.1*		91.9	
▶ 65-74	73.8		61.8		49.8		59.4		81.5	
75-84	29.1**		18.4**		31.9**		35.9*		44.9**	
85+	...		36.6**		21.6**		49.3**		20.6**	
Race/ethnicity										
▶ White	41.6	63.8	38.3	58.3	33.4	53.1	37.9	60.0	34.7	59.5
Black	38.8*	58.1	30.4*	51.5	19.6*	44.0	25.7*	44.8	27.4*	43.0
Hispanic	36.1*	47.3	31.8*	51.0	31.5*	41.9	40.5*	61.8	40.2*	61.8
Asian	17.5**	56.1	19.2**	41.3	20.7**	30.5	24.2*	38.4	12.0**	12.4
Other	4.7**	...	22.8**	50.5	13.7**	135.2	64.8*	137.3	43.0**	116.0
Unknown	56.8*	...	34.4*	...	30.7*	...	26.0*	...	30.5*	...
Missing	29.3*	...	25.1*	...	31.1*	...	28.8*	...	30.7*	...
Region										
Northeast	37.4*	57.7	25.3	41.8	25.7	40.0	29.0*	39.4	30.6	51.7
South	38.4*	68.1	36.4*	58.4	38.8*	57.7	35.3*	55.6	35.8	61.4
▶ Midwest	31.2	48.2	28.7	46.4	27.0	42.1	43.6	65.5	34.4	50.1
West	33.3*	60.5	31.9*	53.7	24.2*	43.7	25.1*	43.3	28.0*	49.1

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-34. Percentage of women aged 15-44 years by current contraceptive status and method

Contraceptive status and method	Year of Survey			
	1982	1995	2002	2006-2008
Total	55.7%	64.2%	61.9%	61.8%
Female Sterilization	12.9%	17.8%	16.7%	16.7%
Vasectomy	6.1%	7.0%	5.7%	6.1%
Pill	15.6%	17.3%	18.9%	17.3%
Implant, Lunelle™, or patch ^a	...	0.9%	0.8%	0.7%
3-month injectable (Depo-Provera™)	...	1.9%	3.3%	2.0%
Contraceptive ring	...	...	...	1.5%
Intrauterine device (IUD)	4.0%	0.5%	1.3%	3.4%
Diaphragm	4.5%	1.2%	0.2%	†
Condom	6.7%	13.1%	11.1%	10.0%
Periodic abstinence—calendar rhythm	1.8%	1.3%	0.7%	0.5%
Periodic abstinence—natural family planning	0.3%	0.2%	0.2%	0.1%
Withdrawal	1.1%	2.0%	2.5%	3.2%
Other methods ^b	2.7%	1.1%	0.6%	0.2%

... Data unavailable.

† Figure does not meet standard for reliability or precision.

^a1995 percentage only includes Norplant™ implant.

^bIncludes emergency contraception, female condom or vaginal pouch, foam, cervical cap, Today™ sponge, suppository or insert, jelly or cream (without diaphragm), and other methods.

NOTE: Percentages may not add to 100 due to rounding.

SOURCE: CDC/NCHS, National Survey of Family Growth, Use of Contraception in the United States: 1982-2008, Table 4. Number of women aged 15-44 years and percent distribution by current contraceptive status and method: United States, 1982-2008.

Table 12-35. Percentage of women whose current husband, or cohabiting male partner has had a vasectomy

	Percent
Total ^a	6.2%
Age	
15-24	0.3%
25-29	2.9%
30-34	5.4%
35-39	11.6%
40-44	14.5%
Race/ethnicity	
White, Non-Hispanic	8.2%
Black, Non-Hispanic	1.3%
Hispanic, or Latina	2.8%
Region	
Northeast	5.1%
South	5.2%
Midwest	7.9%
West	6.6%

^aIncludes women of other or multiple race and origin groups, not shown separately.

Notes: Percentages do not add to total who reported "any sterilizing operation" because some women reported more than one sterilizing operation.

SOURCE: CDC/NCHS, Fertility, Family Planning and Reproductive Health of U.S. Women Data from the 2002 survey of Family Growth, Table 70. Number of women aged 15-44 years of age and percentage who have had a sterilizing operation by type of operation and percentage whose current husband or cohabiting partner has had a vasectomy, by selected characteristics: United States, 2002.

Table 12-36. Number of women 15-44 years of age whose husbands, or cohabiting male partners have had a vasectomy, by percent for main reasons, percent by specific reasons for operation

Total Count ^a	2,073
Main reason	Percent
Woman had all the children she wanted	47%
Husband or cohabiting partner had all the children he wanted	36.4%
Medical reasons	5.0%
Problems with other methods of birth control	0.5%
Other reason	11.1%
Specific Reason	
Woman had all the children she wanted	89.7%
Husband or cohabiting partner had all the children he wanted	93.6%
Any medical reasons	13.0%
Medical problems with female organs	...
Pregnancy would be dangerous to woman's health	8.2%
Would probably lose a pregnancy	2.4%
Would probably have an unhealthy child	0.5%
Husband or cohabiting partner had a health problem	...
Other medical reason	3.4%
Any problems with birth control methods	16.2%
Any health-related problems with birth control methods	5.2%

... Data unavailable.

^aTotal number is in thousands.

NOTE: Percentages do not add to total who reported "any sterilizing operation" because some women reported more than one sterilizing operation.

SOURCE: CDC/NCHS, National Survey of Family Growth, Use of Contraception in the United States: 1982-2008, Table 73. Number of women 15-44 years of age who have had (or whose husbands or cohabiting partners have had) sterilizing operations in January 1997 or later, percentage who cited the specified reasons for their operations, and percent distribution by main reason, according to selected characteristics: United States, 2002.

Table 12-37. Inpatient stays by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=51)		2003 (N=47)		2004 (N=53)		2005 (N=56)		2006 (N=42)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	1.2	1.0	1.0	0.6	1.1	0.9	1.1	0.6	0.8	0.6
Age										
18-24	0.9*		1.8*		1.6*		2.2*		1.9*	
25-34	2.1*		1.7**		1.8**		1.5*		0.9*	
35-39	0.9*		0.8**		1.0**		1.3*		0.8*	
40-44	2.0*		0.6**		0.8**		0.8*		0.2*	
45-54	0.3**		0.6**		0.8**		0.6*		0.6*	
55-64	0.8*		0.5**		0.5**		0.4*		0.6*	
▶ 65-74	1.8*		...		...		0.9*		0.6*	
75-84	...		...		2.4**		...		1.8**	
Race/ethnicity										
▶ White	1.2*	1.6	0.9*	0.7	0.8*	0.4	1.0*	0.7	0.9	0.6
Black	1.2**	9.4	2.4**	6.4	1.6**	3.4	2.0**	4.3	1.1**	2.5
Hispanic	0.6**	...	1.9**	...	1.8**	3.5	0.9**	4.0	0.7**	57.7
Asian	4.4**	...	...	...	1.4**	...	2.0**	...	...	...
Other	...	...	...	...	4.6**	...	2.1**	...	2.0**	...
Unknown	...	...	1.3**	...	0.3**	...	1.2**	...	1.2**	...
Missing	1.2**	...	0.9**	...	1.8**	...	0.9**	...	0.2**	...
Region										
Northeast	1.1*	4.7	1.3*	1.9	1.8**	1.0	1.9**	1.6	1.1*	5.4
South	1.0*	0.8	1.0*	0.8	1.1*	1.1	1.0*	0.8	0.9*	0.7
▶ Midwest	1.5*	1.1	0.9*	0.4	0.7*	1.0	1.0*	0.9	0.8*	0.9
West	0.9**	1.7	1.0**	...	1.4**	1.4	0.9*	1.2	0.5**	1.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-38. Hospital outpatient visits by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=265)		2003 (N=253)		2004 (N=230)		2005 (N=236)		2006 (N=250)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	6.2	3.8	5.3	3.1	4.7	2.5	4.5	2.6	4.9	2.6
Age										
18-24	13.3*		9.3*		7.8*		9.3*		9.0*	
25-34	6.9*		7.6*		6.5*		6.7*		6.7*	
35-39	6.8*		4.7**		7.0*		3.5*		6.1*	
40-44	3.4**		5.1*		4.3**		5.0*		4.5**	
45-54	3.7*		4.1*		2.2*		2.9		3.1	
55-64	6.2*		1.2*		2.3*		1.2*		1.4*	
▶ 65-74	2.4*		1.1*		1.0*		1.7*		1.2*	
75-84	1.0**		2.5**		2.4**		1.9**		1.8**	
85+	...		4.6**		4.3**		...		...
Race/ethnicity										
▶ White	5.5	3.7	5.6	3.5	4.4	2.2	4.6	2.7	4.8	2.5
Black	5.9**	9.4	4.8**	3.7	12.5**	12.1	7.1**	5.4	6.5**	1.6
Hispanic	5.3**	2.2	4.6**	2.5	5.9**	2.2	3.2**	3.1	7.1*	5.1
Asian	...	...	4.0**	...	2.9**	3.4	3.9**	3.2	1.3**	11.6
Other	...	...	6.5**	15.8	2.3**	...	6.3**	10.1	10.2**	6.0
Unknown	7.4**	...	5.4**	...	3.6**	...	5.9**	...	6.3**	...
Missing	6.9*	...	5.1*	...	4.5*	...	3.6**	...	3.0**	...
Region										
Northeast	5.5**	4.9	6.3	5.4	4.9*	2.7	4.3*	4.6	5.5	3.4
South	5.5*	3.1	4.6*	2.3	4.2*	1.9	4.4*	2.7	4.3*	2.9
▶ Midwest	7.7	5.4	6.0	3.6	6.1	3.9	5.7	2.9	6.2	3.0
West	5.1**	3.3	4.7**	5.0	3.1**	3.9	2.7**	2.4	3.8*	3.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-39. Ambulatory surgery center visits by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=28)		2003 (N=25)		2004 (N=31)		2005 (N=40)		2006 (N=32)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.7*	0.6	0.5*	0.5	0.6	0.5	0.8	0.6	0.6	0.4
Age										
18-24	0.9*		0.8*		1.4*		1.0*		0.9*	
25-34	0.4**		0.9**		0.9**		0.8**		1.1*	
35-39	1.3**		0.2**		0.5**		1.3**		0.5*	
40-44	0.2**		0.6**		0.3**		0.5**		0.6*	
45-54	0.8**		0.5**		0.2**		1.0**		0.4*	
55-64	0.8**		...		0.7**		0.3**		0.1*	
▶ 65-74	...		...		...		...		0.6*	
75-84	...		...		...		...		...
Race/ethnicity										
▶ White	1.0*	0.9	0.6*	0.7	0.8*	0.7	0.7*	0.5	0.7*	0.6
Black	1.2**	...	...	...	0.5**	...	1.5**	2.5	...	...
Hispanic	...	...	...	...	0.3**	...	0.2**	...	...	1.3
Asian	...	...	2.0**	...	...	...	0.7**	3.9	0.6**	...
Other	...	...	3.3**	...	...	...	...	...	...	...
Unknown	...	...	0.9**	...	0.3**	...	1.5**	...	0.9**	...
Missing	0.5*	...	0.3**	...	0.4**	...	0.8**	...	0.5**	...
Region										
Northeast	0.7*	1.5	0.4*	...	0.2**	...	0.5*	1.6	0.4*	1.4
South	0.4*	0.3	0.4*	0.7	0.6*	0.7	1.0**	0.9	0.7*	0.5
▶ Midwest	0.6*	0.8	0.5*	1.0	0.9*	1.1	0.4*	0.4	0.5*	1.3
West	1.6**	0.9	1.1**	1.0	0.5**	4.9	1.1**	1.3	0.9**	1.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 12-40. Nationally representative ambulatory surgery center visits for undescended testes listed as primary diagnosis, count, rate^a

	Count	Rate
Total	30,570	80.8

^aRate per 100,000 individuals in the same demographic stratum is based on 2006 population estimates from Current Population Survey (CPS).

SOURCE: National Survey of Ambulatory Surgery, 2006.

Table 12-41. Physician office visits by privately insured individuals for undescended testes listed as any diagnosis, rate^a, age-adjusted rate^b

	2002 (N=711)		2003 (N=730)		2004 (N=750)		2005 (N=715)		2006 (N=709)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	16.6	12.2	15.2	10.9	15.3	11.2	13.8	10.0	13.9	10.8
Age										
18-24	20.5*		19.3*		18.1*		12.9*		15.9*	
25-34	22.5*		19.1*		19.1*		19.3*		17.5*	
35-39	16.8*		16.6*		17.6*		18.4*		16.2*	
40-44	14.8*		16.8*		14.7*		16.1*		16.0*	
45-54	13.1		13.5*		15.3*		12.0*		12.3	
55-64	13.8		8.5		9.8*		7.2		7.2	
▶ 65-74	8.9*		5.4*		4.1*		4.8*		8.6*	
75-84	4.2**		3.7**		3.5**		4.7**		7.2**	
85+	...		9.1**		8.6**		...		...
Race/ethnicity										
▶ White	15.6	12.0	13.9	10.9	14.2	10.3	13.5	9.9	13.2	10.1
Black	23.5**	27.1	29.6*	29.4	13.6**	15.1	13.1**	10.9	21.5*	23.5
Hispanic	33.1*	32.5	27.2*	31.3	23.6*	29.6	13.2*	14.5	21.3*	19.1
Asian	16.0**	11.5	33.3*	32.8	20.0**	16.8	14.4**	18.5	12.7**	17.6
Other	...	...	16.3**	15.8	16.0**	11.2	20.9**	32.4	18.4**	16.2
Unknown	24.7*	...	18.8*	...	14.2*	...	15.1*	...	9.9*	...
Missing	15.3*	...	12.8*	...	15.6*	...	14.3*	...	12.2*	...
Region										
Northeast	22.9*	13.9	25.1*	16.4	16.7*	14.6	13.9	9.1	15.0	12.4
South	17.1*	12.4	15.0*	11.3	17.2*	13.4	15.0*	11.5	14.2	12.2
▶ Midwest	13.3	12.0	11.4	8.9	12.1	8.3	12.1	8.2	12.5	9.1
West	18.0*	17.5	17.2*	13.4	15.6*	14.1	13.3*	9.9	14.8*	11.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

**Urologic
Diseases**
in America



CHAPTER 13

Pediatric Urologic Diseases

Urinary Incontinence
Hypospadias
Ureterocele
Ureteropelvic Junction Obstruction
Posterior Urethral Valves
Vesicoureteral Reflux Disease
Upper Urinary Tract Stones
Lower Urinary Tract Stones
Testicular Cancer
Urinary Tract Infection
Undescended Testes

Table 13-1. Codes used in the diagnosis and management of pediatric urologic diseases**Pediatric Incontinence***Individuals under 18 with one of the following ICD-9 diagnosis codes, but not a coexisting 952.XX or 953.XX code:*

307.6	Enuresis
596.51	Hypertonicity of bladder
596.52	Low bladder compliance
596.59	Other functional disorder of bladder
596.8	Other specified disorders of bladder
599.8	Other specified disorders of urethra and urinary tract
599.81	Urethral hypermobility
599.82	Intrinsic (urethral) sphincter deficiency (ISD)
599.83	Urethral instability
599.84	Other specified disorders of urethra
625.6	Stress incontinence, female
788.3	Urinary incontinence
788.30	Urinary incontinence unspecified
788.31	Urge incontinence
788.32	Stress incontinence, male
788.33	Mixed incontinence, male and female
788.34	Incontinence without sensory awareness
788.36	Nocturnal enuresis
788.37	Continuous leakage
788.39	Other urinary incontinence

Pediatric Urinary Tract Infection*Individuals under 18 with one of the following ICD-9 diagnosis codes:*

Cystitis	
112.2	Candidiasis of other urogenital sites
595.0	Acute cystitis
595.2	Other chronic cystitis
595.3	Trigonitis
595.89	Other specified types of cystitis
595.9	Cystitis, unspecified
Pyelonephritis	
590.0	Chronic pyelonephritis
590.00	Chronic pyelonephritis without lesion of renal medullary necrosis
590.01	Chronic pyelonephritis with lesion of renal medullary necrosis
590.1	Acute pyelonephritis
590.10	Acute pyelonephritis without lesion of renal medullary necrosis
590.11	Acute pyelonephritis with lesion of renal medullary necrosis
590.2	Renal and perinephric abscess
590.3	Pyeloureteritis cystica
590.8	Other pyelonephritis or pyonephrosis, not specified as acute or chronic
590.9	Infection of kidney, unspecified
593.89	Other specified disorders of kidney and ureter
Orchitis	
016.5	Tuberculosis of other male genital organs
072.0	Mumps orchitis
603.1	Infected hydrocele
604.0	Orchitis, epididymitis and epididymo-orchitis with abscess
604.9	Other orchitis, epididymitis, and epididymo-orchitis, without mention of abscess

Continued on next page.

Table 13-1 (continued). Codes used in the diagnosis and management of pediatric urologic diseases

604.90	Orchitis and epididymitis, unspecified
604.91	Orchitis and epididymitis in diseases classified elsewhere
604.99	Other orchitis, epididymitis, and epididymo-orchitis, without abscess
Other	
599.0	Urinary tract infection site not specified
760.1	Maternal renal and urinary tract diseases affecting fetus or newborn
771.82	Urinary tract infection of newborn

Pediatric Hypospadias**Males under 18 with one or more of the following:***ICD-9 diagnosis codes*

752.6	Hypospadias and epispadias and other penile anomalies
752.61	Hypospadias

ICD-9 procedure codes

58.45	Repair of hypospadias and epispadias
-------	--------------------------------------

CPT procedure codes

54300	Plastic operation on penis for straightening of chordee (eg, hypospadias), with or without mobilization of urethra
54304	Plastic operation on penis for correction of chordee or for first stage hypospadias repair with or without transplantation of prepuce and/or skin flaps
54308	Urethroplasty for second stage hypospadias repair (including urinary diversion); less than 3 cm
54312	Urethroplasty for second stage hypospadias repair (including urinary diversion); greater than 3 cm
54316	Urethroplasty for second stage hypospadias repair (including urinary diversion) with free skin graft obtained from site other than genitalia
54318	Urethroplasty for third stage hypospadias repair to release penis from scrotum (eg, third stage Cecil repair)
54322	One stage distal hypospadias repair (with or without chordee or circumcision); with simple meatal advancement (eg, Magpi, V-flap)
54324	One stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps (eg, flip-flap, prepuce flap)
54326	One stage distal hypospadias repair (with or without chordee or circumcision); with urethroplasty by local skin flaps and mobilization of urethra
54328	One stage distal hypospadias repair (with or without chordee or circumcision); with extensive dissection to correct chordee and urethroplasty with local skin flaps, skin graft patch, and/or island flap
54332	One stage proximal penile or penoscrotal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap
54336	One stage perineal hypospadias repair requiring extensive dissection to correct chordee and urethroplasty by use of skin graft tube and/or island flap
54340	Repair of hypospadias complications (ie, fistula, stricture, diverticula); by closure, incision, or excision, simple
54344	Repair of hypospadias complications (ie, fistula, stricture, diverticula); requiring mobilization of skin flaps and urethroplasty with flap or patch graft
54348	Repair of hypospadias complications (ie, fistula, stricture, diverticula); requiring extensive dissection and urethroplasty with, flap, patch or tubed graft (includes urinary diversion)
54352	Repair of hypospadias cripple requiring extensive dissection and excision of previously constructed structures including re-release of chordee and reconstruction of urethra and penis by use of local skin as grafts and island flaps and skin brought in as flaps or grafts
54360	Plastic operation on penis to correct angulation

Pediatric Testicular Cancer**Males under 18 with one or more of the following:***ICD-9 diagnosis codes*

186	Malignant neoplasm of testis
186.0	Malignant neoplasm of undescended testis
186.9	Malignant neoplasm of other and unspecified testis

CPT procedure codes

38564	Limited lymphadenectomy for staging (separate procedure); retroperitoneal (aortic and/or splenic)
38780	Retroperitoneal transabdominal lymphadenectomy, extensive, including pelvic, aortic, and renal nodes (separate procedure)

Continued on next page.

Table 13-1 (continued). Codes used in the diagnosis and management of pediatric urologic diseases

54530	Orchiectomy, radical, for tumor; inguinal approach
54535	Orchiectomy, radical, for tumor; with abdominal exploration

Pediatric Undescended Testes**Males under 18 with one or more of the following:***ICD-9 diagnosis codes*

752.5	Undescended and retractile testis
752.51	Undescended testis
752.52	Retractile testis

ICD-9 procedure codes

62.5 ^a	Orchiopexy
63.53 ^a	Transplantation of spermatic cord

CPT procedure codes

54550	Exploration for undescended testis (inguinal or scrotal area)
54560	Exploration for undescended testis with abdominal exploration
54640	Orchiopexy, inguinal approach, with or without hernia repair
54650	Orchiopexy, abdominal approach, for intra-abdominal testis (eg, Fowler-Stephens)
54690	Laparoscopy, surgical; orchiectomy
54692	Laparoscopy, surgical; orchiopexy for intra-abdominal testis
54699	Unlisted laparoscopy procedure, testis

Pediatric Vesicoureteral Reflux**Individuals under 18 with one or more of the following:***ICD-9 diagnosis codes*

593.7	Vesicoureteral reflux
593.70	Vesicoureteral reflux, unspecified or without reflux nephropathy
593.71	Vesicoureteral reflux with reflux nephropathy, unilateral
593.72	Vesicoureteral reflux with reflux nephropathy, bilateral
593.73	Other vesicoureteral reflux with reflux nephropathy NOS

CPT procedure codes

50660	Ureterectomy, total, ectopic ureter, combination abdominal, vaginal and/or perineal approach
50780	Ureteroneocystostomy; anastomosis of single ureter to bladder
50781	Ureteroneocystostomy
50782	Ureteroneocystostomy; anastomosis of duplicated ureter to bladder
50783	Ureteroneocystostomy; with extensive ureteral tailoring
50785	Ureteroneocystostomy; with vesico-psoas hitch or bladder flap
50947	Laparoscopy, surgical; ureteroneocystostomy with cystoscopy and ureteral stent placement
50948	Laparoscopy, surgical; ureteroneocystostomy without cystoscopy and ureteral stent placement
52327	Cystourethroscopy (including ureteral catheterization); with subureteric injection of implant material

Pediatric Posterior Urethral Valves**Males under 18 with one or more of the following:***ICD-9 diagnosis codes*

753.6	Congenital atresia and stenosis of urethra and bladder neck
-------	---

CPT procedure codes

52340	Cystourethroscopy with incision, fulguration, or resection of congenital posterior urethral valves, or congenital obstructive hypertrophic mucosal folds
52400	Cystourethroscopy with incision, fulguration, or resection of congenital posterior urethral valves, or congenital obstructive hypertrophic mucosal folds

Continued on next page.

Table 13-1 (continued). Codes used in the diagnosis and management of pediatric urologic diseases**Pediatric Ureterocele****Individuals under 18 with one or more of the following:***ICD-9 diagnosis codes*

- 593.89 Other specified disorders of kidney and ureter
 753.23 Congenital ureterocele

CPT procedure codes

- 50660 Ureterectomy, total, ectopic ureter, combination abdominal, vaginal and/or perineal approach
 51535 Cystotomy for excision, incision, or repair of ureterocele
 52300 Cystourethroscopy; with resection or fulguration of orthotopic ureterocele(s), unilateral or bilateral
 52301 Cystourethroscopy; with resection or fulguration of ectopic ureterocele(s), unilateral or bilateral

Pediatric Ureteropelvic Junction Obstruction**Individuals under 18 with one or more of the following:***ICD-9 diagnosis codes*

- 753.2 Obstructive defects of renal pelvis and ureter
 753.20 Unspecified obstructive defect of renal pelvis and ureter
 753.21 Congenital obstruction of ureteropelvic junction

CPT procedure codes

- 50400 Pyeloplasty (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting; simple
 50405 Pyeloplasty (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting; complicated (congenital kidney abnormality, secondary pyeloplasty, solitary kidney, calyccoplasty)
 50540 Symphysiotomy for horseshoe kidney with or without pyeloplasty and/or other plastic procedure, unilateral or bilateral (1 operation)
 50544 Laparoscopy, surgical; pyeloplasty
 50575 Renal endoscopy through nephrotomy or pyelotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with endopyelotomy (includes cystoscopy, ureteroscopy, dilation of ureter and ureteral pelvic junction, incision of ureteral pelvic junction and insertion of endopyelotomy stent)
 50740 Ureteropyelostomy, anastomosis of ureter and renal pelvis
 50750 Ureterocalycostomy, anastomosis of ureter and renal calyx
 52342 Cystourethroscopy; with treatment of ureteropelvic junction stricture (eg, balloon dilation, laser, electrocautery, and incision)
 52346 Cystourethroscopy with ureteroscopy; with treatment of intra-renal stricture (eg, balloon dilation, laser, electrocautery, and incision)

Pediatric Upper Tract Kidney Stones**Individuals under 18 with one of the following ICD-9 diagnosis codes:**

- 270.0 Disturbances of amino-acid transport
 274.11 Uric acid nephrolithiasis
 592.0 Calculus of kidney
 592.1 Calculus of ureter
 592.9 Urinary calculus, unspecified

Individuals under 18 with the following ICD-9 diagnosis code and any one of the following procedure codes, or the procedure code alone:

- 271.8 Other specified disorders of carbohydrate transport and metabolism
 and

ICD-9 procedure codes

- 55.03 Percutaneous nephrostomy without fragmentation
 55.04 Percutaneous nephrostomy with fragmentation
 55.92 Percutaneous aspiration of kidney (pelvis)
 56.0 Transurethral removal of obstruction from ureter and renal pelvis
 56.2 Ureterotomy
 59.8 Ureteral catheterization
 59.95 Ultrasonic fragmentation of urinary stones
 98.51 Extracorporeal shockwave lithotripsy (ESWL) of the kidney, ureter and/or bladder

Continued on next page.

Table 13-1 (continued). Codes used in the diagnosis and management of pediatric urologic diseases*CPT procedure codes*

50060	Nephrolithotomy; removal of calculus
50065	Nephrolithotomy; secondary surgical operation for calculus
50070	Nephrolithotomy; complicated by congenital kidney abnormality
50075	Nephrolithotomy; removal of large staghorn calculus filling renal pelvis and calyces (including anatomic pyelolithotomy)
50080	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation, endoscopy, lithotripsy, stenting, or basket extraction; up to 2 cm
50081	Percutaneous nephrostolithotomy or pyelostolithotomy, with or without dilation, endoscopy, lithotripsy, stenting, or basket extraction; over 2 cm
50130	Pyelotomy; with removal of calculus (pyelolithotomy, pelviolithotomy, including coagulum pyelolithotomy)
50135	Pyelotomy; complicated (eg, secondary operation, congenital kidney abnormality)
50561	Renal endoscopy through established nephrostomy or pyelostomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50580	Renal endoscopy through nephrotomy or pyelotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50590	Lithotripsy, extracorporeal shock wave
50610	Ureterolithotomy, upper one-third of ureter
50620	Ureterolithotomy, middle one-third of ureter
50630	Ureterolithotomy, lower one-third of ureter
50945	Laparoscopy, surgical; ureterolithotomy
50961	Ureteral endoscopy through established ureterostomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
50980	Ureteral endoscopy through ureterotomy, with or without irrigation, instillation, or ureteropyelography, exclusive of radiologic service; with removal of foreign body or calculus
51060	Transvesical ureterolithotomy
51065	Cystotomy, with calculus basket extraction and/or ultrasonic or electrohydraulic fragmentation of ureteral calculus
52320	Cystourethroscopy (including ureteral catheterization); with removal of ureteral calculus
52325	Cystourethroscopy (including ureteral catheterization); with fragmentation of ureteral calculus (eg, ultrasonic or electro-hydraulic technique)
52330	Cystourethroscopy (including ureteral catheterization); with manipulation, without removal of ureteral calculus
52351	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic
52352	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with removal or manipulation of calculus (ureteral catheterization is included)
52353	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral catheterization is included)

Pediatric Lower Tract Kidney Stones**Individuals under 18 with one of the following ICD-9 diagnosis codes:**

594.0	Calculus in diverticulum of bladder
594.1	Other calculus in bladder
594.2	Calculus in urethra
594.8	Other lower urinary tract calculus
594.9	Calculus of lower urinary tract, unspecified

^aMust occur with diagnosis of 550.XX or 752.XX.

Table 13-2. Nationally representative inpatient stays for pediatric^a urinary incontinence listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=231)		2006 (N=184)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.3	0.3	0.2	0.2
Age				
0-2	†		†	
3-10	0.3		0.3	
▶ 11-17	0.3		0.3	
Race/ethnicity				
▶ White	0.2	0.2	0.2	0.2
Black	†	0.2	†	0.3
Hispanic	0.3*	0.3	†	0.1
Asian	†	0.2	...	...
Other	†	0.5	†	0.5
Missing	...	...	...	...
Region				
Northeast	†	0.2	†	0.2
South	0.2	0.2	0.2	0.2
▶ Midwest	0.3	0.3	0.3	0.3
West	0.3*	0.3	†	0.1
Missing	...	...	...	...
Gender				
Female	0.3	0.3	0.2	0.2
▶ Male	0.3	0.3	0.3	0.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-3. Nationally representative inpatient stays for pediatric^a hypospadias listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=1,073)		2006 (N=875)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.9	3.0	2.3	2.3
Age				
0-2	12.9		9.8	
3-10	1.4		1.0	
▶ 11-17	0.6		0.6	
Race/ethnicity				
▶ White	2.0	2.1	1.5	1.4
Black	1.9*	2.0	1.9*	1.9
Hispanic	2.4*	2.5	2.0*	2.0
Asian	3.4*	3.8	2.9*	2.8
Other	6.1*	6.2	5.3*	5.2
Missing	...	...	...	...
Region				
Northeast	3.9	4.3	3.4	3.5
South	1.3	1.3	1.0	1.0
▶ Midwest	1.0	1.0	0.9	0.9
West	3.2*	3.2	2.6*	2.6
Missing	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-4. Nationally representative inpatient stays for pediatric^a ureterocele listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=645)		2006 (N=597)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.9	0.9	0.8	0.8
Age				
0-2	3.6		3.3	
3-10	0.4		0.4	
▶ 11-17	0.3		0.2	
Race/ethnicity				
▶ White	0.8	0.8	0.6	0.6
Black	†	0.2	0.4*	0.4
Hispanic	0.7*	0.8	0.8*	0.8
Asian	†	1.0	†	0.4
Other	†	1.5	1.8*	1.8
Missing	...	...	...	...
Region				
Northeast	0.7	0.7	0.8	0.8
South	0.7	0.7	0.6	0.6
▶ Midwest	0.7	0.7	0.5	0.5
West	0.7*	0.7	0.5*	0.5
Missing	...	...	...	...
Gender				
Female	1.2	1.2	1.0	1.0
▶ Male	0.6	0.6	0.6	0.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-5. Nationally representative inpatient stays for pediatric^a ureteropelvic junction obstruction listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=1,746)		2006 (N=1,306)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	2.4	2.4	1.8	1.8
Age				
0-2	9.0		6.8	
3-10	1.4		0.9	
▶ 11-17	0.9		0.6	
Race/ethnicity				
▶ White	1.9	1.9	1.6	1.6
Black	1.0*	1.0	0.8*	0.8
Hispanic	1.7*	1.8	1.1*	1.1
Asian	1.5*	1.6	†	0.9
Other	3.8*	3.8	2.8*	2.8
Missing	...	...	...	...
Region				
Northeast	2.2	2.2	1.6	1.6
South	1.6	1.6	1.2	1.2
▶ Midwest	2.3	2.4	1.5	1.5
West	1.8*	1.9	1.5*	1.5
Missing	...	...	...	...
Gender				
Female	1.4	1.5	1.0	1.0
▶ Male	3.3	3.4	2.5	2.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-6. Nationally representative inpatient stays for pediatric^a posterior urethral valves listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=248)		2006 (N=254)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.3	0.3	0.3	0.3
Age				
0-2	1.7		1.5	
3-10	0.1		0.1	
▶ 11-17	†		†	
Race/ethnicity				
▶ White	0.2	0.2	0.2	0.2
Black	0.5*	0.5	0.3*	0.3
Hispanic	0.2*	0.4	0.2*	0.2
Asian	†	0.9	†	0.3
Other	†	1.3	†	1.2
Missing	...	...	...	...
Region				
Northeast	0.3	0.5	0.3	0.3
South	0.3	0.3	0.2	0.2
▶ Midwest	0.2	0.3	0.2	0.4
West	0.2*	0.2	0.3*	0.3
Missing	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-7. Nationally representative inpatient stays for pediatric^a vesicoureteral reflux listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=7,458)		2006 (N=5,908)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	10.2	10.2	8.0	8.0
Age				
0-2	22.0*		18.8*	
3-10	13.5		10.1	
▶ 11-17	2.0		1.3	
Race/ethnicity				
▶ White	8.6	8.6	7.6	7.6
Black	1.4*	1.4	1.1*	1.1
Hispanic	6.5*	6.7	4.4*	4.4
Asian	2.6*	2.7	3.5*	3.5
Other	12.4*	12.3	12.3*	12.4
Missing	...	...	...	...
Region				
Northeast	8.8	8.7	7.8	7.8
South	7.2	7.3	5.8	5.7
▶ Midwest	7.6	7.5	6.4	6.4
West	8.1*	8.1	5.8*	5.8
Missing	...	...	...	...
Gender				
Female	15.2	15.2	11.7	11.6
▶ Male	5.4	5.5	4.5	4.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-8. Nationally representative inpatient stays for pediatric^a upper urinary tract stones listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=6,503)		2006 (N=6,772)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	8.9	8.9	9.2	9.2
Age				
0-2	11.6		12.4	
3-10	5.1		5.7	
▶ 11-17	11.9		11.5	
Race/ethnicity				
▶ White	7.3	7.3	8.2	8.2
Black	2.8*	2.9	3.1*	3.1
Hispanic	5.4*	5.5	5.1*	5.1
Asian	2.5*	2.5	3.1*	3.1
Other	11.3*	11.3	10.0*	9.9
Unknown	†	...	†	...
Missing	...	...	...	...
Region				
Northeast	7.0	7.1	8.0	8.0
South	7.1	7.1	7.1	7.1
▶ Midwest	8.1	8.2	8.3	8.3
West	5.6*	5.7	5.4*	5.4
Missing	...	...	...	...
Gender				
Female	9.6	9.6	10.0	10.0
▶ Male	8.2	8.2	8.3	8.3

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-9. Nationally representative inpatient stays for pediatric^a lower urinary tract stones listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=145)		2006 (N=150)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.2	0.2	0.2	0.2
Age				
0-2	†		†	
3-10	0.2		0.2	
▶ 11-17	0.3		0.3	
Race/ethnicity				
▶ White	0.2	0.2	0.2	0.2
Black	†	0.1	†	0.1
Hispanic	0.2*	0.3	†	0.2
Asian	†	0.3	†	0.1
Other	†	0.2	†	0.5
Missing	...	...	†	...
Region				
Northeast	†	0.2	0.3	0.3
South	0.1	0.2	0.2	0.2
▶ Midwest	†	0.2	†	0.1
West	0.2*	0.2	0.2*	0.2
Missing	†	...	...	...
Gender				
Female	0.2	0.2	0.2	0.2
▶ Male	0.2	0.2	0.2	0.2

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-10. Nationally representative inpatient stays for pediatric^a testicular cancer listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=159)		2006 (N=122)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	0.4	0.4	0.3	0.3
Age				
0-2	†		†	
3-10	†		†	
▶ 11-17	0.9		0.7	
Race/ethnicity				
▶ White	0.3	0.6	0.2	0.2
Black	†	0.3	†	0.1
Hispanic	0.5*	0.5	0.5*	0.8
Asian	†	0.5	†	0.4
Other	†	0.5	†	1.6
Missing	...	...	†	...
Region				
Northeast	†	0.4	†	0.3
South	0.4	0.4	0.3	0.3
▶ Midwest	†	0.3	†	0.3
West	0.4*	0.4	0.3*	0.4
Missing	...	...	†	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-11. Nationally representative inpatient stays for pediatric^a urinary tract infection listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=40,984)		2006 (N=38,372)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	55.9	57.4	51.9	51.7
Age				
0-2	222.9*		201.6*	
3-10	26.0		23.1	
▶ 11-17	23.3		21.0	
Race/ethnicity				
▶ White	31.0	31.4	30.8	30.6
Black	33.2*	34.2	31.7*	31.9
Hispanic	81.1*	84.9	70.2*	70.3
Asian	36.5*	41.0	33.7*	34.1
Other	94.2*	94.6	74.6*	73.2
Unknown	†	...	†	...
Missing	...	...	...	...
Region				
Northeast	47.3	48.5	48.8	48.7
South	54.1	54.7	47.0	46.4
▶ Midwest	37.4	38.4	35.6	35.7
West	38.1*	39.7	34.6*	34.8
Missing	...	...	...	...
Gender				
Female	75.1*	76.4	69.8*	69.6
▶ Male	37.5	39.1	34.8	34.6

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

† Figure does not meet standard for reliability or precision.

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-12. Nationally representative inpatient stays for pediatric^a orchitis, count, rate^b

Year	Count	Rate
2003	567	1.5
2006	556	1.5

^aIndividuals under 18.

^bRate per 100,000 based on 2002-2007 population estimates from the Public Use Microdata Sample (PUMS) files from the American Community Survey, for relevant demographic categories of US male civilian non-institutionalized population under age 18.

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-13. Nationally representative inpatient stays for pediatric^a undescended testes listed as primary diagnosis, rate,^b age-adjusted rate^c

	2003 (N=1,158)		2006 (N=1,042)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.1	3.2	2.8	2.7
Age				
0-2	12.9		12.0	
3-10	1.6		1.1	
▶ 11-17	0.9		0.7	
Race/ethnicity				
▶ White	2.0	2.0	1.9	1.9
Black	2.4*	2.5	2.5*	2.6
Hispanic	2.4*	2.5	2.1*	2.1
Asian	2.7*	2.9	2.8*	2.8
Other	6.3*	6.5	4.2*	4.1
Missing	...	...	...	...
Region				
Northeast	3.3	3.5	2.9	2.9
South	1.6	1.6	1.6	1.6
▶ Midwest	2.6	2.7	2.2	2.2
West	2.9*	3.0	2.6*	2.6
Missing	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aIndividuals under 18.

^bRate per 100,000 individuals in the same demographic stratum is based on 2003 & 2006 population estimates from Current Population Survey (CPS).

^cRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: Healthcare Cost and Utilization Project (HCUP), Kids' Inpatient Database, 2003 & 2006.

Table 13-14. Inpatient stays by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=133)		2003 (N=136)		2004 (N=125)		2005 (N=160)		2006 (N=136)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	7.7	7.7	7.2	7.4	6.7	6.8	8.6	8.7	7.3	7.3
Age										
▶ 0-2	28.3		23.5		22.6		31.9		27.1	
3-10	3.5**		3.0**		2.9**		2.7**		2.9**	
11-17	3.7**		5.5*		4.5*		5.6*		4.0**	
Race/ethnicity										
▶ White	6.4	6.6	8.1	8.2	7.1	7.2	9.7	9.7	8.1	8.1
Black	8.4**	14.7	12.1**	13.1	3.4**	6.1	8.9**	17.4	12.3**	22.7
Hispanic	5.0**	3.9	9.4**	9.7	8.4**	8.7	7.6**	7.8	5.0**	5.1
Asian	3.6**	16.9	7.6**	13.1	...	...	14.5**	12.9	5.2**	9.0
Other	26.4**	25.5	...	...	9.2**	17.7	...	...	4.4**	24.5
Unknown	13.8**	...	5.7**	...	7.7**	...	6.7**	...	6.7**	...
Missing	8.1*	...	5.7*	...	5.9**	...	4.7**	...	5.4**	...
Region										
Northeast	18.2*	17.7	10.2*	10.2	11.3**	11.4	11.9*	12.2	9.8*	9.8
South	5.7	6.0	7.0	7.3	5.6	5.8	8.0	8.2	6.7	6.8
▶ Midwest	6.3	6.3	6.9	6.9	5.7	5.7	8.5	8.5	6.4	6.4
West	9.2**	8.7	6.5**	6.2	9.3**	9.2	8.2**	8.0	9.5**	9.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 13-15. Hospital outpatient visits by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=1,823)		2003 (N=1,746)		2004 (N=1,617)		2005 (N=1,758)		2006 (N=1,596)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	105.0	103.9	93.0	93.1	86.8	86.8	94.3	94.1	86.0	85.1
Age										
▶ 0-2	299.5		270.6		238.5		264.0		229.7	
3-10	88.8*		75.9*		76.2*		82.6*		82.3*	
11-17	40.7*		39.3*		36.5*		37.5*		29.6*	
Race/ethnicity										
▶ White	117.5	117.4	100.6	100.7	92.0	91.4	98.3	97.4	86.5	85.3
Black	98.6*	110.8	75.9*	81.9	56.4*	58.0	70.2*	73.5	63.0*	65.2
Hispanic	99.2*	102.2	122.6*	128.4	73.1*	75.4	93.0*	97.3	86.8*	89.2
Asian	124.5*	114.8	96.8*	90.4	86.9*	78.9	97.8*	89.4	64.7*	58.9
Other	167.0**	148.6	126.3**	119.7	115.4**	111.6	99.1**	96.3	93.4**	92.1
Unknown	112.0*	...	95.1*	...	88.8*	...	81.6*	...	104.0*	...
Missing	95.1*	...	79.5*	...	81.1*	...	89.9*	...	85.3*	...
Region										
Northeast	105.6*	101.4	89.9*	88.1	85.7	84.1	97.4	95.7	95.1	93.8
South	84.4*	86.2	84.2*	86.8	74.9*	77.0	82.4*	84.2	75.5*	76.3
▶ Midwest	124.8	123.5	105.5	104.6	97.2	96.1	109.1	108.4	101.9	100.6
West	114.0*	107.1	89.4*	86.3	99.7*	96.3	92.0*	88.5	75.6*	72.5

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

*Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 13-16. Nationally representative hospital outpatient visits for undescended testes listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	132,730
Age	
0-2	68,330
3-10	63,399
11-17	1,001
Race/ethnicity	
White	91,809
Black	30,136
Hispanic	8,793
Other	1,992
Region	
Northeast	25,199
South	94,926
Midwest	5,784
West	6,821

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 13-17. Ambulatory surgery center visits by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=245)		2003 (N=272)		2004 (N=313)		2005 (N=313)		2006 (N=290)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	14.1	14.0	14.5	14.4	16.8	16.8	16.8	16.7	15.6	15.5
Age										
▶ 0-2	43.4		43.3		49.9		48.4		44.0	
3-10	11.7*		14.1*		13.5*		15.3*		14.4*	
11-17	4.6*		3.0**		7.0*		5.4*		5.1*	
Race/ethnicity										
▶ White	17.6	17.8	16.9	16.7	17.9	17.8	18.1	17.9	15.6	15.4
Black	...	...	9.1**	16.3	11.3**	11.6	10.2**	11.1	15.1**	15.7
Hispanic	6.3**	6.3	9.4**	9.7	15.6**	16.3	12.2**	12.8	8.4**	8.6
Asian	14.2**	20.1	17.8**	25.2	22.7**	20.9	16.3**	14.9	14.0**	19.5
Other	61.5**	89.9	25.3**	36.9	13.9**	17.6	4.5**	9.4	17.8**	17.4
Unknown	24.6**	...	15.8**	...	15.4**	...	16.6**	...	19.1**	...
Missing	11.8*	...	12.5*	...	14.7*	...	17.4*	...	19.0*	...
Region										
Northeast	20.5*	20.0	26.7*	25.9	23.2	22.6	27.3*	26.7	26.7*	26.4
South	8.6*	8.8	7.9*	8.1	10.8*	11.2	12.2*	12.4	10.2*	10.3
▶ Midwest	13.4	13.2	16.9	16.6	20.3	20.1	17.7	17.6	19.5	19.3
West	29.1*	27.3	18.6*	17.8	22.1*	21.1	20.2*	19.3	15.0*	14.4

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group ($p < .05$).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 13-18. Physician office visits by privately insured individuals for undescended testes listed as any diagnosis, rate,^a age-adjusted rate^b

	2002 (N=4,593)		2003 (N=4,616)		2004 (N=4,756)		2005 (N=4,878)		2006 (N=4,692)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	264.5	260.8	245.8	244.7	255.2	254.9	261.6	260.4	252.7	250.0
Age										
▶ 0-2	705.8		691.2		732.9		709.7		686.5	
3-10	259.0*		234.9*		233.2*		259.0*		248.9*	
11-17	82.8*		74.5*		84.4*		80.2*		74.6*	
Race/ethnicity										
▶ White	294.2	292.8	266.3	264.4	254.3	252.0	264.3	261.1	250.6	246.8
Black	186.7*	207.2	160.8*	172.3	178.2*	188.7	200.5*	213.3	169.8*	175.7
Hispanic	287.7*	293.9	246.9*	257.8	275.2*	285.3	257.0*	268.9	239.6*	246.3
Asian	270.3*	248.2	374.3*	342.5	298.6*	266.6	286.2*	258.7	265.6*	236.8
Other	457.1*	433.2	341.1*	323.3	332.4*	318.9	297.2*	283.8	386.9*	376.0
Unknown	314.6*	...	281.9*	...	301.4*	...	254.7*	...	306.9*	...
Missing	239.4*	...	215.8*	...	239.4*	...	265.9*	...	254.5*	...
Region										
Northeast	387.6*	367.7	300.4*	289.1	334.1*	325.9	335.4*	328.1	349.5*	344.7
South	221.9*	225.4	211.0*	216.8	216.7*	223.5	229.6*	234.4	211.4*	213.5
▶ Midwest	275.2	270.9	272.0	268.5	271.2	267.5	278.1	275.5	281.1	277.0
West	268.1*	253.5	239.3*	229.0	274.4*	265.0	260.2*	249.6	243.3	232.0

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 13-19. Nationally representative physician office visits for undescended testes listed as any diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	644,218
Age	
0-2	433,091
3-10	202,694
11-17	8,433
Race/ethnicity	
White	562,485
Black	34,335
Hispanic	47,398
Region	
Northeast	41,366
South	332,729
Midwest	181,933
West	88,190

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

Table 13-20. Emergency room visits by privately insured individuals for undescended testes listed as primary diagnosis, rate,^a age-adjusted rate^b

	2002 (N=52)		2003 (N=45)		2004 (N=23)		2005 (N=15)		2006 (N=20)	
	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate	Rate	Age-Adjusted Rate
Total	3.0	3.0	2.4	2.4	1.2*	1.3	0.8*	0.8	1.1*	1.1
Age										
▶ 0-2	1.4*		4.0*		2.7*		2.3*		2.6*	
3-10	2.2**		1.4**		0.4**		0.1**		1.1**	
11-17	4.6*		2.9**		1.6**		0.9**		0.4**	
Race/ethnicity										
▶ White	3.7*	4.4	2.5*	2.5	0.5*	0.5	0.6*	1.1	0.7*	0.7
Black	6.3**	8.0	12.1**	21.0	2.3**	2.6	...	...	...	...
Hispanic	1.3**	2.7	1.7**	10.1	1.8**	10.6	1.7**	3.2	0.6**	3.2
Asian	...	...	...	...	3.8**	11.8	...	...	...	...
Other	...	...	...	...	...	...	4.5**	13.5	...	...
Unknown	...	...	1.1**	...	2.6**	...	1.7**	...	2.5**	...
Missing	2.8**	...	1.8**	...	2.6**	...	0.7**	...	2.9**	...
Region										
Northeast	...	...	1.0**	2.1	0.5*	3.0	1.0*	1.8	...	...
South	1.6**	1.7	2.6*	2.6	1.1*	2.1	0.3**	0.6	0.6**	0.6
▶ Midwest	6.3	6.4	3.3*	3.3	2.0*	2.1	1.8*	1.8	2.5*	2.5
West	0.5**	2.5	0.4**	2.5	...	...	...	...	...	...

... Data unavailable.

▶ Denotes reference group.

*Statistically different from reference group (p<.05).

**Rate based on a count less than 30, should be interpreted with caution.

^aRate per 100,000 based on enrollment in calendar years for individuals in the same demographic stratum.

^bRate per 100,000 age-adjusted to the 2005 US standard population (US Population Estimates from Current Population Survey).

SOURCE: i3 Claims Database, 2002-2006.

Table 13-21. Nationally representative emergency room visits for undescended testes listed as primary diagnosis, 2002-2007 (merged), 6-year count

	6-Year Count
Total	5,279
Age	
0-2	1,905
3-10	3,374
11-17	...
Race/ethnicity	
White	5,279
Black	...
Hispanic	...
Region	
Northeast	3,374
South	...
Midwest	...
West	1,905

... Data unavailable.

SOURCE: National Ambulatory Medical Care Survey, 2002-2007; National Hospital Ambulatory Medical Care Survey, 2002-2007.

**Urologic
Diseases**
in America



CHAPTER 14
Economic Impact of Urologic Disease

Table 14-1. Expenditures^a among Medicare beneficiaries 65 and older for treatment of interstitial cystitis, disease specific, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$16,060,967	100%	\$16,069,494	100%	\$16,471,943	100%
Site of Service						
Inpatient	\$4,967,333	31.0%	\$4,355,199	27.0%	\$4,467,809	27.0%
Hospital Outpatient	\$439,489	2.7%	\$541,055	3.4%	\$635,866	3.9%
Ambulatory Surgery	\$5,775,397	36.0%	\$5,975,576	37.0%	\$6,228,757	38.0%
Physician Office	\$4,833,309	30.0%	\$5,038,130	31.0%	\$5,079,405	31.0%
Emergency Room	\$45,440	0.3%	\$159,533	1.0%	\$60,106	0.4%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$16,239,536	100%	\$18,247,984	100%	\$20,551,152	100%
Site of Service						
Inpatient	\$3,807,353	23.0%	\$5,411,263	30.0%	\$7,296,797	36.0%
Hospital Outpatient	\$482,259	3.0%	\$607,086	3.3%	\$745,710	3.6%
Ambulatory Surgery	\$6,346,180	39.0%	\$6,571,730	36.0%	\$5,862,396	29.0%
Physician Office	\$5,526,526	34.0%	\$5,566,795	31.0%	\$6,500,221	32.0%
Emergency Room	\$77,219	0.5%	\$91,111	0.5%	\$146,027	0.7%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-2. Nationally representative charges^a for treatment of interstitial cystitis, disease specific, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$203,579,799	100%	\$115,745,794	100%	\$189,657,094	100%	\$144,017,525	100%	\$194,379,567	100%
Site of Service										
Inpatient	\$12,159,919	6.0%	\$15,941,590	13.8%	\$20,026,178	10.6%	\$20,235,344	14.1%	\$13,987,077	7.2%
Hospital Outpatient	\$29,492,655	14.5%	\$6,918,730	6.0%	\$63,362,560	33.4%	\$17,792,288	12.4%	\$55,420,045	28.5%
Ambulatory Surgery	\$85,767,251	42.1%	\$72,670,944	62.8%	\$73,543,808	38.8%	\$79,179,813	55.0%	\$85,157,969	43.8%
Physician Office	\$75,065,485	36.9%	\$20,214,531	17.5%	\$32,153,712	17.0%	\$26,810,079	18.6%	\$39,814,477	20.5%
Emergency Room	\$1,094,488	0.5%	... ..	...	\$570,835	0.3%	... ..	...	... ..	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-3. Estimated annual expenditures^a for privately insured individuals^b with and without interstitial cystitis, disease specific

	With Interstitial Cystitis, Disease Specific (N=20,047)			Without Interstitial Cystitis, Disease Specific (N=4,697,669)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$15,517	\$1,890	\$17,407	\$8,315	\$1,114	\$9,429
Age						
18-34	\$12,462	\$1,105	\$13,567	\$6,678	\$651	\$7,329
35-44	\$14,728	\$1,796	\$16,524	\$7,892	\$1,059	\$8,951
45-54	\$16,732	\$2,496	\$19,228	\$8,966	\$1,471	\$10,437
55-64	\$20,681	\$3,056	\$23,737	\$11,082	\$1,801	\$12,883
Region						
Midwest	\$14,140	\$1,895	\$16,035	\$7,577	\$1,117	\$8,694
Northeast	\$15,915	\$1,791	\$17,706	\$8,528	\$1,056	\$9,584
South	\$16,339	\$1,915	\$18,254	\$8,755	\$1,128	\$9,883
West	\$15,648	\$1,886	\$17,534	\$8,385	\$1,112	\$9,497

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-4. Expenditures^a among Medicare beneficiaries 65 and older for treatment of interstitial cystitis, disease non-specific, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$204,605,069	100%	\$220,016,902	100%	\$227,357,288	100%
Site of Service						
Inpatient	\$81,842,683	40.0%	\$84,572,315	38.0%	\$86,471,739	38.0%
Hospital Outpatient	\$12,063,709	5.9%	\$13,148,466	6.0%	\$14,243,331	6.3%
Ambulatory Surgery	\$34,746,706	17.0%	\$37,615,807	17.0%	\$36,649,665	16.0%
Physician Office	\$69,588,074	34.0%	\$77,955,990	35.0%	\$82,118,883	36.0%
Emergency Room	\$6,363,897	3.1%	\$6,724,324	3.1%	\$7,873,670	3.5%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$239,123,112	100%	\$228,790,185	100%	\$228,609,081	100%
Site of Service						
Inpatient	\$95,756,616	40.0%	\$86,347,213	38.0%	\$83,723,169	37.0%
Hospital Outpatient	\$14,746,618	6.2%	\$15,405,146	6.7%	\$15,719,122	6.9%
Ambulatory Surgery	\$36,235,993	15.0%	\$35,746,626	16.0%	\$37,388,005	16.0%
Physician Office	\$84,217,761	35.0%	\$83,875,943	37.0%	\$84,083,186	37.0%
Emergency Room	\$8,166,124	3.4%	\$7,415,257	3.2%	\$7,695,598	3.4%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-5. Nationally representative charges^a for treatment of interstitial cystitis, disease non-specific, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,007,250,725	100%	\$1,557,497,119	100%	\$1,500,062,167	100%	\$1,431,271,548	100%	\$1,612,111,607	100%
Site of Service										
Inpatient	\$122,634,471	12.2%	\$135,274,631	8.7%	\$132,275,594	8.8%	\$153,409,586	10.7%	\$162,937,288	10.1%
Hospital Outpatient	\$175,162,272	17.4%	\$535,667,544	34.4%	\$279,939,092	18.7%	\$304,893,765	21.3%	\$257,487,231	16.0%
Ambulatory Surgery	\$282,946,383	28.1%	\$353,948,632	22.7%	\$537,759,880	35.8%	\$556,956,312	38.9%	\$584,662,382	36.3%
Physician Office	\$361,046,433	35.8%	\$450,756,445	28.9%	\$456,163,251	30.4%	\$297,633,281	20.8%	\$487,766,165	30.3%
Emergency Room	\$65,461,166	6.5%	\$81,849,866	5.3%	\$93,924,351	6.3%	\$118,378,604	8.3%	\$119,258,541	7.4%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-6. Estimated annual expenditures^a for privately insured individuals^b with and without interstitial cystitis, disease non-specific

	With Interstitial Cystitis, Disease Non-Specific (N=599,034)			Without Interstitial Cystitis, Disease Non-Specific (N=3,846,794)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$14,527	\$1,288	\$15,815	\$6,746	\$1,063	\$7,809
Age						
18-34	\$10,935	\$742	\$11,677	\$5,078	\$612	\$5,690
35-44	\$13,178	\$1,217	\$14,395	\$6,120	\$1,005	\$7,125
45-54	\$16,243	\$1,713	\$17,956	\$7,543	\$1,414	\$8,957
55-64	\$21,439	\$2,112	\$23,551	\$9,957	\$1,743	\$11,700
Region						
Midwest	\$13,088	\$1,287	\$14,375	\$6,078	\$1,063	\$7,141
Northeast	\$15,069	\$1,212	\$16,281	\$6,998	\$1,000	\$7,998
South	\$15,375	\$1,307	\$16,682	\$7,140	\$1,079	\$8,219
West	\$14,624	\$1,291	\$15,915	\$6,792	\$1,065	\$7,857

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-7. Expenditures^a among Medicare beneficiaries 65 and older for treatment of prostatitis, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$71,447,057	100%	\$68,094,765	100%	\$64,829,496	100%
Site of Service						
Inpatient	\$40,730,441	57.0%	\$38,148,316	56.0%	\$34,858,543	54.0%
Hospital Outpatient	\$2,759,346	3.9%	\$2,412,534	3.5%	\$2,311,084	3.6%
Ambulatory Surgery	\$5,663,929	7.9%	\$5,519,278	8.1%	\$5,598,779	8.6%
Physician Office	\$21,025,408	29.0%	\$20,451,080	30.0%	\$20,493,409	32.0%
Emergency Room	\$1,267,934	1.8%	\$1,563,558	2.3%	\$1,567,681	2.4%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$64,605,680	100%	\$56,917,081	100%	\$52,437,432	100%
Site of Service						
Inpatient	\$36,522,885	57.0%	\$31,267,228	55.0%	\$27,519,657	52.0%
Hospital Outpatient	\$2,351,427	3.6%	\$2,348,486	4.1%	\$2,264,573	4.3%
Ambulatory Surgery	\$6,008,392	9.3%	\$4,331,503	7.6%	\$4,846,933	9.2%
Physician Office	\$17,960,455	28.0%	\$17,170,458	30.0%	\$15,984,976	30.0%
Emergency Room	\$1,762,521	2.7%	\$1,799,406	3.2%	\$1,821,292	3.5%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-8. Nationally representative charges^a for treatment of prostatitis, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$259,751,524	100%	\$250,669,724	100%	\$277,166,297	100%	\$180,485,868	100%	\$307,065,816	100%
Site of Service										
Inpatient	\$45,834,456	17.6%	\$50,358,760	20.1%	\$47,690,010	17.2%	\$53,159,894	29.5%	\$50,193,370	16.3%
Hospital Outpatient	\$62,031,083	23.9%	\$53,449,925	21.3%	\$45,200,747	16.3%	\$26,687,876	14.8%	\$80,618,780	26.3%
Ambulatory Surgery	\$12,565,708	4.8%	\$14,440,650	5.8%	\$14,060,151	5.1%	\$13,447,160	7.5%	\$11,655,913	3.8%
Physician Office	\$91,515,728	35.2%	\$127,091,102	50.7%	\$152,456,835	55.0%	\$84,131,194	46.6%	\$150,568,045	49.0%
Emergency Room	\$47,804,550	18.4%	\$5,329,287	2.1%	\$17,758,554	6.4%	\$3,059,744	1.7%	\$14,029,708	4.6%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-9. Estimated annual expenditures^a for privately insured individuals^b with and without prostatitis

	With Prostatitis (N=95,174)			Without Prostatitis (N=1,827,487)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$8,000	\$1,184	\$9,184	\$5,775	\$1,005	\$6,780
Age						
18-34	\$4,143	\$508	\$4,651	\$2,991	\$431	\$3,422
35-44	\$6,506	\$1,114	\$7,620	\$4,697	\$946	\$5,643
45-54	\$9,766	\$1,582	\$11,348	\$7,050	\$1,342	\$8,392
55-64	\$14,407	\$1,989	\$16,396	\$10,400	\$1,688	\$12,088
Region						
Midwest	\$7,274	\$1,175	\$8,449	\$5,251	\$997	\$6,248
Northeast	\$8,353	\$1,153	\$9,506	\$6,030	\$979	\$7,009
South	\$8,443	\$1,194	\$9,637	\$6,095	\$1,013	\$7,108
West	\$7,930	\$1,195	\$9,125	\$5,725	\$1,014	\$6,739

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-10. Expenditures^a among Medicare beneficiaries 65 and older for benign prostatic hyperplasia, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,876,813,469	100%	\$1,779,764,113	100%	\$1,433,076,444	100%
Site of Service						
Inpatient	\$1,391,999,017	74.0%	\$1,313,246,772	74.0%	\$1,046,688,595	73.0%
Hospital Outpatient	\$23,032,728	1.2%	\$19,677,855	1.1%	\$13,231,448	0.9%
Ambulatory Surgery	\$112,387,741	6.0%	\$105,204,408	5.9%	\$109,480,690	7.6%
Physician Office	\$323,571,480	17.0%	\$313,561,525	18.0%	\$233,982,546	16.0%
Emergency Room	\$25,822,504	1.4%	\$28,073,553	1.6%	\$29,693,166	2.1%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,495,299,557	100%	\$1,402,923,038	100%	\$1,410,790,000	100%
Site of Service						
Inpatient	\$1,040,308,668	70.0%	\$938,484,676	67.0%	\$938,407,142	67.0%
Hospital Outpatient	\$14,553,945	1.0%	\$15,595,547	1.1%	\$16,878,711	1.2%
Ambulatory Surgery	\$155,272,773	10.0%	\$151,551,253	11.0%	\$152,482,587	11.0%
Physician Office	\$252,482,006	17.0%	\$266,416,508	19.0%	\$268,758,996	19.0%
Emergency Room	\$32,682,165	2.2%	\$30,875,054	2.2%	\$34,262,565	2.4%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-11. Nationally representative charges^a for treatment of benign prostatic hyperplasia, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$2,416,799,212	100%	\$2,312,072,623	100%	\$1,733,433,348	100%	\$1,880,483,045	100%	\$1,907,125,072	100%
Site of Service										
Inpatient	\$939,715,155	38.9%	\$826,610,949	35.8%	\$590,708,805	34.1%	\$611,640,121	32.5%	\$659,190,234	34.6%
Hospital Outpatient	\$167,199,299	6.9%	\$126,490,672	5.5%	\$265,314,010	15.3%	\$212,575,517	11.3%	\$310,137,629	16.3%
Ambulatory Surgery	\$208,324,693	8.6%	\$240,471,020	10.4%	\$236,439,061	13.6%	\$260,833,785	13.9%	\$259,372,942	13.6%
Physician Office	\$948,752,130	39.3%	\$988,719,820	42.8%	\$490,607,078	28.3%	\$627,767,044	33.4%	\$605,643,839	31.8%
Emergency Room	\$152,807,935	6.3%	\$129,780,161	5.6%	\$150,364,395	8.7%	\$167,666,579	8.9%	\$72,780,428	3.8%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-12. Estimated annual expenditures^a for privately insured individuals^b with and without benign prostatic hyperplasia

	With Benign Prostatic Hyperplasia (N=157,727)			Without Benign Prostatic Hyperplasia (N=1,668,816)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$8,758	\$1,177	\$9,935	\$5,310	\$944	\$6,254
Age						
35-44	\$7,446	\$1,145	\$8,591	\$4,515	\$918	\$5,433
45-54	\$10,450	\$1,587	\$12,037	\$6,336	\$1,273	\$7,609
55-64	\$15,171	\$1,960	\$17,131	\$9,199	\$1,572	\$10,771
Region						
Midwest	\$7,894	\$1,152	\$9,046	\$4,786	\$924	\$5,710
Northeast	\$9,057	\$1,114	\$10,171	\$5,492	\$894	\$6,386
South	\$9,326	\$1,205	\$10,531	\$5,654	\$967	\$6,621
West	\$8,638	\$1,190	\$9,828	\$5,237	\$954	\$6,191

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-13. Expenditures^a among Medicare beneficiaries 65 and older for treatment of bladder stones, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$59,985,114	100%	\$57,004,832	100%	\$69,204,980	100%
Site of Service						
Inpatient	\$40,606,357	68.0%	\$37,351,745	66.0%	\$48,912,556	71.0%
Hospital Outpatient	\$929,844	1.6%	\$925,710	1.6%	\$400,804	0.6%
Ambulatory Surgery	\$16,002,279	27.0%	\$16,116,822	28.0%	\$17,442,890	25.0%
Physician Office	\$2,266,410	3.8%	\$2,365,987	4.2%	\$2,245,045	3.2%
Emergency Room	\$180,223	0.3%	\$244,568	0.4%	\$203,686	0.3%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$59,482,978	100%	\$61,244,706	100%	\$53,145,933	100%
Site of Service						
Inpatient	\$37,877,542	64.0%	\$38,601,670	63.0%	\$33,029,045	62.0%
Hospital Outpatient	\$444,070	0.7%	\$837,339	1.4%	\$989,258	1.9%
Ambulatory Surgery	\$17,814,786	30.0%	\$18,206,991	30.0%	\$15,936,746	30.0%
Physician Office	\$3,011,354	5.1%	\$3,081,888	5.0%	\$2,773,120	5.2%
Emergency Room	\$335,225	0.6%	\$516,818	0.8%	\$417,764	0.8%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-14. Nationally representative charges^a for treatment of bladder stones, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$124,587,255	100%	\$136,264,673	100%	\$115,728,547	100%	\$119,568,998	100%	\$122,340,712	100%
Site of Service										
Inpatient	\$50,496,274	40.5%	\$54,243,701	39.8%	\$48,889,666	42.2%	\$36,350,236	30.4%	\$44,503,332	36.4%
Hospital Outpatient	\$14,422,770	11.6%	...	...	\$5,797,454	5.0%	\$8,671,354	7.3%	...	...
Ambulatory Surgery	\$59,668,211	47.9%	\$62,613,407	45.9%	\$49,963,439	43.2%	\$68,100,604	57.0%	\$73,744,565	60.3%
Physician Office	...	...	\$13,802,009	10.1%	\$11,077,988	9.6%	\$6,446,804	5.4%	...	...
Emergency Room	...	...	\$5,605,556	4.1%	...	...	...	...	\$4,092,815	3.3%

... Data unavailable.

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-15. Expenditures^a among Medicare beneficiaries 65 and older for treatment of prostate cancer, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$3,015,496,712	100%	\$3,087,469,583	100%	\$2,755,639,529	100%
Site of Service						
Inpatient	\$666,219,550	22.0%	\$623,907,197	20.0%	\$588,924,243	21.0%
Hospital Outpatient	\$463,344,277	15.0%	\$530,914,883	17.0%	\$514,275,989	19.0%
Ambulatory Surgery	\$263,813,053	8.7%	\$217,420,394	7.0%	\$247,270,020	9.0%
Physician Office	\$1,616,172,362	54.0%	\$1,709,198,065	55.0%	\$1,397,967,526	51.0%
Emergency Room	\$5,947,470	0.2%	\$6,029,044	0.2%	\$7,201,750	0.3%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$2,271,879,678	100%	\$2,205,759,100	100%	\$2,155,505,168	100%
Site of Service						
Inpatient	\$551,150,349	24.0%	\$533,056,146	24.0%	\$535,971,300	25.0%
Hospital Outpatient	\$494,549,070	22.0%	\$501,237,532	23.0%	\$525,221,173	24.0%
Ambulatory Surgery	\$266,986,177	12.0%	\$264,965,923	12.0%	\$263,617,058	12.0%
Physician Office	\$953,310,584	42.0%	\$899,999,564	41.0%	\$822,657,973	38.0%
Emergency Room	\$5,883,499	0.3%	\$6,499,936	0.3%	\$8,037,664	0.4%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-16. Nationally representative charges^a for treatment of prostate cancer, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$4,582,673,864	100%	\$5,166,109,554	100%	\$6,150,557,170	100%	\$5,752,105,221	100%	\$7,260,460,117	100%
Site of Service										
Inpatient	\$1,984,680,240	43.3%	\$1,900,232,239	36.8%	\$1,906,269,371	31.0%	\$1,943,976,921	33.8%	\$2,570,835,918	35.4%
Hospital Outpatient	\$325,876,104	7.1%	\$227,080,828	4.4%	\$422,984,826	6.9%	\$290,605,393	5.1%	\$871,906,214	12.0%
Ambulatory Surgery	\$283,383,041	6.2%	\$323,821,940	6.3%	\$335,387,801	5.5%	\$429,522,968	7.5%	\$476,196,403	6.6%
Physician Office	\$1,962,980,710	42.8%	\$2,713,455,314	52.5%	\$3,483,087,728	56.6%	\$3,087,062,169	53.7%	\$3,341,482,184	46.0%
Emergency Room	\$25,753,769	0.6%	\$1,519,233	0.03%	\$2,827,444	0.05%	\$937,771	0.02%	\$39,398	0.001%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-17. Estimated annual expenditures^a for privately insured individuals^b with and without prostate cancer

	With Prostate Cancer (N=62,611)			Without Prostate Cancer (N=1,243,028)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$17,949	\$1,586	\$19,535	\$11,081	\$1,482	\$12,563
Age						
40-44	\$13,118	\$1,230	\$14,348	\$8,098	\$1,150	\$9,248
45-49	\$15,513	\$1,444	\$16,957	\$9,577	\$1,350	\$10,927
50-54	\$19,576	\$1,633	\$21,209	\$12,085	\$1,526	\$13,611
55-59	\$21,187	\$1,810	\$22,997	\$13,080	\$1,691	\$14,771
60-64	\$22,731	\$1,967	\$24,698	\$14,033	\$1,837	\$15,870
Region						
Midwest	\$16,591	\$1,563	\$18,154	\$10,243	\$1,460	\$11,703
Northeast	\$16,523	\$1,505	\$18,028	\$10,200	\$1,407	\$11,607
South	\$18,995	\$1,619	\$20,614	\$11,726	\$1,513	\$13,239
West	\$18,840	\$1,593	\$20,433	\$11,631	\$1,488	\$13,119

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-18. Expenditures^a among Medicare beneficiaries 65 and older for treatment of female urinary incontinence, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$418,420,965	100%	\$413,888,631	100%	\$427,586,450	100%
Site of Service						
Inpatient	\$254,584,346	61.0%	\$242,302,406	59.0%	\$234,828,019	55.0%
Hospital Outpatient	\$12,562,252	3.0%	\$12,701,297	3.1%	\$13,009,890	3.0%
Ambulatory Surgery	\$77,380,829	18.0%	\$81,443,648	20.0%	\$96,706,624	23.0%
Physician Office	\$73,152,614	17.0%	\$76,408,433	18.0%	\$82,354,904	19.0%
Emergency Room	\$740,924	0.2%	\$1,032,847	0.2%	\$687,012	0.2%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$417,432,907	100%	\$415,945,234	100%	\$407,384,983	100%
Site of Service						
Inpatient	\$224,372,004	54.0%	\$208,789,589	50.0%	\$183,412,766	45.0%
Hospital Outpatient	\$11,093,447	2.7%	\$12,058,993	2.9%	\$12,225,661	3.0%
Ambulatory Surgery	\$95,452,281	23.0%	\$109,628,482	26.0%	\$122,389,793	30.0%
Physician Office	\$85,485,668	20.0%	\$84,822,815	20.0%	\$88,401,353	22.0%
Emergency Room	\$1,029,507	0.2%	\$645,355	0.2%	\$955,409	0.2%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-19. Nationally representative charges^a for treatment of female urinary incontinence, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,395,029,489	100%	\$1,685,609,902	100%	\$1,879,657,053	100%	\$1,951,899,161	100%	\$2,398,052,485	100%
Site of Service										
Inpatient	\$694,809,290	49.8%	\$639,622,510	37.9%	\$620,216,783	33.0%	\$594,991,636	30.5%	\$527,919,803	22.0%
Hospital Outpatient	\$140,442,131	10.1%	\$388,972,430	23.1%	\$264,784,730	14.1%	\$368,015,887	18.9%	\$681,822,040	28.4%
Ambulatory Surgery	\$294,931,089	21.1%	\$383,402,740	22.7%	\$515,794,323	27.4%	\$566,564,094	29.0%	\$659,463,282	27.5%
Physician Office	\$259,775,757	18.6%	\$273,612,222	16.2%	\$472,145,223	25.1%	\$417,588,912	21.4%	\$528,385,993	22.0%
Emergency Room	\$5,071,222	0.4%	... ..	...	\$6,715,995	0.4%	\$4,738,632	0.2%	\$461,367	0.0%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-20. Estimated annual expenditures^a for privately insured individuals^b with and without female urinary incontinence

	With Female Urinary Incontinence (N=103,104)			Without Female Urinary Incontinence (N=2,567,645)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$16,821	\$1,443	\$18,264	\$9,176	\$1,126	\$10,302
Age						
18-34	\$15,011	\$956	\$15,967	\$8,189	\$746	\$8,935
35-44	\$17,058	\$1,415	\$18,473	\$9,306	\$1,105	\$10,411
45-54	\$17,602	\$1,931	\$19,533	\$9,602	\$1,507	\$11,109
55-64	\$19,620	\$2,330	\$21,950	\$10,703	\$1,818	\$12,521
Region						
Midwest	\$15,320	\$1,453	\$16,773	\$8,357	\$1,134	\$9,491
Northeast	\$17,589	\$1,357	\$18,946	\$9,595	\$1,059	\$10,654
South	\$17,628	\$1,470	\$19,098	\$9,616	\$1,147	\$10,763
West	\$16,981	\$1,406	\$18,387	\$9,263	\$1,097	\$10,360

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-21. Expenditures^a among Medicare beneficiaries 65 and older for treatment of male urinary incontinence, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$77,057,831	100%	\$77,770,207	100%	\$77,289,810	100%
Site of Service						
Inpatient	\$38,618,119	50.0%	\$39,275,122	51.0%	\$33,780,036	44.0%
Hospital Outpatient	\$2,222,329	2.9%	\$2,495,896	3.2%	\$2,785,563	3.6%
Ambulatory Surgery	\$16,148,645	21.0%	\$13,709,874	18.0%	\$17,310,703	22.0%
Physician Office	\$19,120,331	25.0%	\$21,700,095	28.0%	\$22,524,042	29.0%
Emergency Room	\$948,406	1.2%	\$589,220	0.8%	\$889,466	1.2%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$72,267,203	100%	\$68,314,840	100%	\$72,395,756	100%
Site of Service						
Inpatient	\$29,786,893	41.0%	\$25,049,689	37.0%	\$29,966,124	41.0%
Hospital Outpatient	\$2,600,987	3.6%	\$2,670,119	3.9%	\$2,462,025	3.4%
Ambulatory Surgery	\$16,048,528	22.0%	\$17,398,211	25.0%	\$16,855,696	23.0%
Physician Office	\$23,057,393	32.0%	\$22,312,882	33.0%	\$22,640,981	31.0%
Emergency Room	\$773,402	1.1%	\$883,939	1.3%	\$470,930	0.7%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-22. Nationally representative charges^a for treatment of male urinary incontinence, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$109,297,875	100%	\$124,031,781	100%	\$179,411,682	100%	\$278,499,373	100%	\$128,781,773	100%
Site of Service										
Inpatient	\$4,605,114	4.2%	\$6,127,174	4.9%	\$4,963,964	2.8%	\$4,104,700	1.5%	\$6,026,406	4.7%
Hospital Outpatient	\$19,675,503	18.0%	\$1,947,798	1.6%	\$51,681,568	28.8%	\$54,570,714	19.6%	\$15,385,369	11.9%
Ambulatory Surgery	\$19,412,030	17.8%	\$18,397,759	14.8%	\$28,767,758	16.0%	\$20,047,470	7.2%	\$24,176,608	18.8%
Physician Office	\$63,946,320	58.5%	\$96,750,308	78.0%	\$86,472,267	48.2%	\$190,883,816	68.5%	\$81,742,571	63.5%
Emergency Room	\$1,658,908	1.5%	\$808,742	0.7%	\$7,526,125	4.2%	\$8,892,673	3.2%	\$1,450,820	1.1%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-23. Estimated annual expenditures^a for privately insured individuals^b with and without male urinary incontinence

	With Male Urinary Incontinence (N=11,881)			Without Male Urinary Incontinence (N=1,955,671)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$14,508	\$1,309	\$15,817	\$5,867	\$1,023	\$6,890
Age						
18-34	\$7,423	\$557	\$7,980	\$3,002	\$435	\$3,437
35-44	\$11,787	\$1,222	\$13,009	\$4,767	\$955	\$5,722
45-54	\$17,714	\$1,747	\$19,461	\$7,164	\$1,366	\$8,530
55-64	\$25,855	\$2,185	\$28,040	\$10,457	\$1,708	\$12,165
Region						
Midwest	\$13,113	\$1,298	\$14,411	\$5,303	\$1,015	\$6,318
Northeast	\$15,221	\$1,266	\$16,487	\$6,156	\$990	\$7,146
South	\$15,374	\$1,323	\$16,697	\$6,217	\$1,034	\$7,251
West	\$14,273	\$1,322	\$15,595	\$5,772	\$1,034	\$6,806

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-24. Nationally representative charges^a for treatment of pediatric^b urinary incontinence, by site of service, charges, percent^c

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$64,153,149	100%	\$107,437,820	100%	\$36,575,250	100%	\$79,576,060	100%	\$128,713,272	100%
Site of Service										
Inpatient	\$1,319,516	2.1%	\$695,726	0.6%	\$1,051,510	2.9%	\$1,333,385	1.7%	\$797,833	0.6%
Hospital Outpatient	\$38,041,653	59.3%	\$65,943,231	61.4%	\$17,118,998	46.8%	\$42,164,631	53.0%	\$41,386,231	32.2%
Ambulatory Surgery	\$2,998,433	4.7%	\$3,407,439	3.2%	\$2,771,475	7.6%	\$3,910,022	4.9%	\$2,707,396	2.1%
Physician Office	\$21,793,547	34.0%	\$36,198,004	33.7%	\$14,419,601	39.4%	\$32,168,022	40.4%	\$83,821,812	65.1%
Emergency Room	...	...	\$1,193,420	1.1%	\$1,213,667	3.3%	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bIndividuals under 18.

^cPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-25. Expenditures^a among Medicare beneficiaries 65 and older for treatment of spinal cord injury-related urinary incontinence, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$111,541	100%	\$1,882,861	100%	\$2,906,722	100%
Site of Service						
Inpatient	\$39,881	36.0%	\$1,851,151	98.0%	\$2,788,826	96.0%
Hospital Outpatient	\$5,599	5.0%	\$3,549	0.2%	\$11,777	0.4%
Ambulatory Surgery	\$16,215	15.0%	...	...	\$15,762	0.5%
Physician Office	\$20,023	18.0%	\$28,161	1.5%	\$90,357	3.1%
Emergency Room	\$29,822	27.0%	...	...	...	...
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$2,917,290	100%	\$5,700,663	100%	\$3,374,217	100%
Site of Service						
Inpatient	\$2,705,957	93.0%	\$5,619,703	99.0%	\$3,119,525	92.0%
Hospital Outpatient	\$41,884	1.4%	...	...	\$17,046	0.5%
Ambulatory Surgery	\$86,082	3.0%	\$13,171	0.2%	\$171,441	5.1%
Physician Office	\$83,367	2.9%	\$58,907	1.0%	\$66,205	2.0%
Emergency Room	...	...	\$8,882	0.2%	...	...

... Data unavailable.

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-26. Expenditures^a among Medicare beneficiaries 65 and older for treatment of lower tract transitional cell carcinoma, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,081,253,837	100%	\$1,059,879,188	100%	\$1,076,519,011	100%
Site of Service						
Inpatient	\$589,117,429	54.0%	\$575,445,864	54.0%	\$596,120,843	55.0%
Hospital Outpatient	\$51,430,835	4.8%	\$58,155,748	5.5%	\$60,776,605	5.6%
Ambulatory Surgery	\$242,578,912	22.0%	\$212,585,199	20.0%	\$221,052,273	21.0%
Physician Office	\$196,310,649	18.0%	\$211,879,392	20.0%	\$197,141,188	18.0%
Emergency Room	\$1,816,012	0.2%	\$1,812,984	0.2%	\$1,428,102	0.1%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,090,088,061	100%	\$1,028,246,240	100%	\$1,041,568,297	100%
Site of Service						
Inpatient	\$621,683,613	57.0%	\$565,146,066	55.0%	\$595,413,936	57.0%
Hospital Outpatient	\$62,765,083	5.8%	\$63,183,182	6.1%	\$60,855,797	5.8%
Ambulatory Surgery	\$224,313,117	21.0%	\$212,747,756	21.0%	\$209,833,165	20.0%
Physician Office	\$179,182,153	16.0%	\$185,058,425	18.0%	\$173,583,436	17.0%
Emergency Room	\$2,144,095	0.2%	\$2,110,810	0.2%	\$1,881,963	0.2%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-27. Nationally representative charges^a for treatment of lower tract transitional cell carcinoma, by site of service, charge, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$2,024,801,579	100%	\$2,178,132,570	100%	\$2,326,840,124	100%	\$2,504,067,942	100%	\$3,104,358,139	100%
Site of Service										
Inpatient	\$1,186,778,606	58.6%	\$1,329,124,355	61.0%	\$1,360,279,536	58.5%	\$1,500,239,773	59.9%	\$1,482,445,470	47.8%
Hospital Outpatient	\$169,008,057	8.3%	\$102,485,473	4.7%	\$112,279,791	4.8%	\$109,819,936	4.4%	\$368,854,256	11.9%
Ambulatory Surgery	\$390,875,673	19.3%	\$400,167,503	18.4%	\$423,526,577	18.2%	\$423,912,067	16.9%	\$485,822,130	15.6%
Physician Office	\$278,139,242	13.7%	\$340,603,888	15.6%	\$430,754,219	18.5%	\$469,721,830	18.8%	\$764,219,505	24.6%
Emergency Room	... ..		\$5,751,351	0.3%	... ..		\$374,336	0.0%	\$3,016,778	0.1%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-28. Estimated annual expenditures^a for privately insured individuals^b with and without lower tract transitional cell carcinoma

	With Lower Tract Transitional Cell Carcinoma (N=15,967)			Without Lower Tract Transitional Cell Carcinoma (N=4,707,309)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$23,304	\$1,414	\$24,718	\$8,300	\$1,116	\$9,416
Age						
35-44	\$22,225	\$1,343	\$23,568	\$7,916	\$1,060	\$8,976
45-54	\$25,042	\$1,869	\$26,911	\$8,919	\$1,475	\$10,394
55-64	\$30,664	\$2,283	\$32,947	\$10,922	\$1,801	\$12,723
Region						
Midwest	\$21,222	\$1,416	\$22,638	\$7,559	\$1,118	\$8,677
Northeast	\$23,850	\$1,338	\$25,188	\$8,495	\$1,056	\$9,551
South	\$24,553	\$1,432	\$25,985	\$8,745	\$1,130	\$9,875
West	\$23,526	\$1,414	\$24,940	\$8,379	\$1,116	\$9,495

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-29. Expenditures^a among Medicare beneficiaries 65 and older for treatment of upper tract transitional cell carcinoma, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$85,774,292	100%	\$68,544,633	100%	\$73,991,336	100%
Site of Service						
Inpatient	\$70,489,262	82.0%	\$54,057,713	79.0%	\$56,111,949	76.0%
Hospital Outpatient	\$1,344,792	1.6%	\$2,381,660	3.5%	\$2,581,874	3.5%
Ambulatory Surgery	\$5,119,000	6.0%	\$4,216,750	6.2%	\$5,497,615	7.4%
Physician Office	\$8,802,360	10.0%	\$7,711,492	11.0%	\$9,698,463	13.0%
Emergency Room	\$18,877	0.0%	\$177,018	0.3%	\$101,435	0.1%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$73,657,744	100%	\$75,172,459	100%	\$65,089,472	100%
Site of Service						
Inpatient	\$55,046,337	75.0%	\$56,806,974	76.0%	\$49,376,054	76.0%
Hospital Outpatient	\$3,333,005	4.5%	\$3,596,005	4.8%	\$2,866,276	4.4%
Ambulatory Surgery	\$5,411,135	7.3%	\$6,335,068	8.4%	\$4,974,585	7.6%
Physician Office	\$9,828,466	13.0%	\$8,393,491	11.0%	\$7,859,760	12.0%
Emergency Room	\$38,801	0.1%	\$40,921	0.1%	\$12,796	0.0%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-30. Nationally representative charges^a for treatment of upper tract transitional cell carcinoma, by site of service, charge, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$89,400,228	100%	\$75,049,631	100%	\$116,221,184	100%	\$132,784,849	100%	\$147,385,701	100%
Site of Service										
Inpatient	\$62,514,578	69.9%	\$70,382,487	93.8%	\$78,233,734	67.3%	\$77,794,803	58.6%	\$97,560,494	66.2%
Hospital Outpatient	\$9,850,315	11.0%	...	...	\$1,140,536	1.0%	...	...	\$47,858,586	32.5%
Ambulatory Surgery	\$1,390,529	1.6%	\$4,667,144	6.2%	\$2,317,059	2.0%	\$1,897,219	1.4%	\$1,966,620	1.3%
Physician Office	\$15,644,806	17.5%	...	...	\$34,529,855	29.7%	\$53,092,827	40.0%	...	...
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-31. Expenditures^a among Medicare beneficiaries 65 and older for treatment of male urethral stricture, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$101,153,692	100%	\$110,498,122	100%	\$102,807,283	100%
Site of Service						
Inpatient	\$56,254,742	56.0%	\$62,857,656	57.0%	\$53,858,118	52.0%
Hospital Outpatient	\$1,573,119	1.6%	\$2,266,675	2.1%	\$2,572,183	2.5%
Ambulatory Surgery	\$33,281,159	33.0%	\$35,018,143	32.0%	\$36,521,490	36.0%
Physician Office	\$9,558,313	9.4%	\$9,943,960	9.0%	\$9,456,716	9.2%
Emergency Room	\$486,359	0.5%	\$411,688	0.4%	\$398,776	0.4%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$103,063,810	100%	\$90,307,166	100%	\$93,426,384	100%
Site of Service						
Inpatient	\$53,357,779	52.0%	\$41,454,008	46.0%	\$42,645,082	46.0%
Hospital Outpatient	\$2,035,859	2.0%	\$1,950,560	2.2%	\$2,072,391	2.2%
Ambulatory Surgery	\$37,508,074	36.0%	\$37,636,230	42.0%	\$38,807,398	42.0%
Physician Office	\$9,699,609	9.4%	\$8,856,449	9.8%	\$9,430,039	10.0%
Emergency Room	\$462,489	0.4%	\$409,920	0.5%	\$471,474	0.5%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-32. Nationally representative charges^a for treatment of male urethral stricture, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$227,602,623	100%	\$203,386,422	100%	\$290,597,740	100%	\$334,962,930	100%	\$309,716,491	100%
Site of Service										
Inpatient	\$24,093,695	10.6%	\$35,848,693	17.6%	\$31,284,623	10.8%	\$35,005,270	10.5%	\$36,374,736	11.7%
Hospital Outpatient	\$12,641,944	5.6%	\$1,806,253	0.9%	\$89,450,497	30.8%	\$66,289,373	19.8%	\$57,259,650	18.5%
Ambulatory Surgery	\$111,577,886	49.0%	\$107,543,646	52.9%	\$109,437,768	37.7%	\$117,346,768	35.0%	\$122,221,714	39.5%
Physician Office	\$68,646,948	30.2%	\$58,187,829	28.6%	\$60,424,851	20.8%	\$116,321,519	34.7%	\$93,860,392	30.3%
Emergency Room	\$10,642,149	4.7%	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-33. Estimated annual expenditures^a for privately insured individuals^b with and without male urethral stricture

	With Male Urethral Stricture (N=13,609)			Without Male Urethral Stricture (N=1,963,622)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$18,102	\$1,248	\$19,350	\$5,890	\$1,030	\$6,920
Age						
18-34	\$9,273	\$533	\$9,806	\$3,017	\$440	\$3,457
35-44	\$14,679	\$1,164	\$15,843	\$4,776	\$960	\$5,736
45-54	\$22,024	\$1,662	\$23,686	\$7,166	\$1,371	\$8,537
55-64	\$32,264	\$2,075	\$34,339	\$10,498	\$1,711	\$12,209
Region						
Midwest	\$16,365	\$1,233	\$17,598	\$5,325	\$1,017	\$6,342
Northeast	\$18,979	\$1,210	\$20,189	\$6,175	\$998	\$7,173
South	\$19,156	\$1,263	\$20,419	\$6,233	\$1,042	\$7,275
West	\$17,896	\$1,264	\$19,160	\$5,823	\$1,043	\$6,866

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-34. Expenditures^a among Medicare beneficiaries 65 and older for female urethral stricture, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$20,611,962	100%	\$22,041,643	100%	\$25,553,428	100%
Site of Service						
Inpatient	\$4,681,639	23.0%	\$4,982,366	23.0%	\$8,149,421	32.0%
Hospital Outpatient	\$335,470	1.6%	\$413,474	1.9%	\$260,341	1.0%
Ambulatory Surgery	\$9,337,330	45.0%	\$10,976,206	50.0%	\$11,958,082	47.0%
Physician Office	\$6,173,263	30.0%	\$5,643,294	26.0%	\$5,172,558	20.0%
Emergency Room	\$84,261	0.4%	\$26,304	0.1%	\$13,026	0.1%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$19,608,010	100%	\$20,051,655	100%	\$16,523,534	100%
Site of Service						
Inpatient	\$6,079,835	31.0%	\$5,862,995	29.0%	\$4,059,383	25.0%
Hospital Outpatient	\$225,115	1.1%	\$161,067	0.8%	\$203,290	1.2%
Ambulatory Surgery	\$8,606,244	44.0%	\$9,614,159	48.0%	\$7,816,201	47.0%
Physician Office	\$4,619,531	24.0%	\$4,401,729	22.0%	\$4,361,058	26.0%
Emergency Room	\$77,285	0.4%	\$11,705	0.1%	\$83,602	0.5%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-35. Nationally representative charges^a for treatment of female urethral stricture, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$89,410,054	100%	\$76,469,825	100%	\$101,914,063	100%	\$83,430,885	100%	\$89,960,909	100%
Site of Service										
Inpatient	\$2,185,932	2.4%	\$2,248,481	2.9%	\$1,359,276	1.3%	\$1,616,649	1.9%	\$1,298,770	1.4%
Hospital Outpatient	\$4,911,464	5.5%	\$7,634,085	10.0%	\$10,761,033	10.6%	...	...	...	...
Ambulatory Surgery	\$40,576,718	45.4%	\$40,473,881	52.9%	\$47,176,861	46.3%	\$45,800,877	54.9%	\$48,355,033	53.8%
Physician Office	\$41,735,940	46.7%	\$26,113,378	34.1%	\$42,616,893	41.8%	\$36,013,360	43.2%	\$40,307,106	44.8%
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-36. Expenditures^a among Medicare beneficiaries 65 and older for treatment of hypospadias, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,181,490	100%	\$798,809	100%	\$1,652,418	100%
Site of Service						
Inpatient	\$914,198	77.0%	\$669,143	84.0%	\$1,382,685	84.0%
Hospital Outpatient	...	...	...	...	...	...
Ambulatory Surgery	\$228,978	19.0%	\$44,031	5.5%	\$253,208	15.0%
Physician Office	\$38,313	3.2%	\$85,635	11.0%	\$16,525	1.0%
Emergency Room	...	...	...	...	...	...
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$419,965	100%	\$1,561,437	100%	\$500,546	100%
Site of Service						
Inpatient	\$305,312	73.0%	\$1,292,166	83.0%	\$223,872	45.0%
Hospital Outpatient	...	...	...	...	...	...
Ambulatory Surgery	\$29,451	7.0%	\$124,715	8.0%	\$242,155	48.0%
Physician Office	\$85,202	20.0%	\$144,555	9.3%	\$34,520	6.9%
Emergency Room	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-37. Nationally representative charges^a for treatment of hypospadias, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$84,018,291	100%	\$122,819,451	100%	\$75,216,595	100%	\$106,993,708	100%	\$246,171,706	100%
Site of Service										
Inpatient	\$108,500	0.1%	\$224,154	0.2%	\$157,490	0.2%	\$294,435	0.3%	\$168,584	0.1%
Hospital Outpatient	\$6,981,781	8.3%	\$50,218,356	40.9%	\$25,922,124	34.5%	\$16,958,078	15.8%	\$164,038,853	66.6%
Ambulatory Surgery	\$49,253,949	58.6%	\$50,993,041	41.5%	\$41,269,069	54.9%	\$78,188,992	73.1%	\$58,861,849	23.9%
Physician Office	\$27,674,060	32.9%	\$17,448,733	14.2%	\$7,867,912	10.5%	\$11,552,203	10.8%	\$23,102,419	9.4%
Emergency Room	...	...	\$3,935,168	3.2%	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-38. Nationally representative charges^a for treatment of vesicoureteral reflux, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$62,305,535	100%	\$52,903,108	100%	\$101,990,144	100%	\$178,996,050	100%	\$83,869,530	100%
Site of Service										
Inpatient	\$13,051,010	20.9%	\$5,362,259	10.1%	\$9,592,316	9.4%	\$13,225,507	7.4%	\$11,324,015	13.5%
Hospital Outpatient	\$7,061,891	11.3%	\$2,867,622	5.4%	\$59,283,608	58.1%	\$98,490,328	55.0%	\$16,727,610	19.9%
Ambulatory Surgery	\$14,658,440	23.5%	\$20,543,663	38.8%	\$27,342,671	26.8%	\$23,922,662	13.4%	\$23,957,724	28.6%
Physician Office	\$27,534,194	44.2%	\$24,129,564	45.6%	\$5,771,548	5.7%	\$43,357,553	24.2%	\$31,860,182	38.0%
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-39. Nationally representative charges^a for treatment of ureteropelvic junction obstruction, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$16,735,028	100%	\$24,932,393	100%	\$8,583,810	100%	\$10,046,637	100%	\$5,155,100	100%
Site of Service										
Inpatient	\$3,683,226	22.0%	\$3,941,546	15.8%	\$4,138,091	48.2%	\$3,824,188	38.1%	\$4,764,526	92.4%
Hospital Outpatient	...	...	\$20,691,280	83.0%	\$3,976,027	46.3%	...	...	...	...
Ambulatory Surgery	\$384,916	2.3%	\$299,567	1.2%	\$469,693	5.5%	\$287,700	2.9%	\$390,573	7.6%
Physician Office	\$12,666,887	75.7%	...	...	...	...	\$5,934,748	59.1%	...	...
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-40. Nationally representative charges^a for treatment of posterior urethral valves, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$127,500	100%	\$6,006,195	100%	\$1,025,876	100%	\$490,418	100%	\$158,767	100%
Site of Service										
Inpatient	\$127,500	100%	\$325,343	5.4%	\$1,025,876	100%	\$490,418	100%	\$158,767	100%
Hospital Outpatient	...	...	...	...	...	...	...	...	...	...
Ambulatory Surgery	...	...	...	...	...	...	...	...	...	...
Physician Office	...	...	\$5,680,852	94.6%	...	...	...	...	...	...
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, I3 Claims Database; 2002-2006.

Table 14-41. Expenditures^a among Medicare beneficiaries 65 and older for treatment of ureterocele, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$21,710,394	100%	\$18,177,833	100%	\$16,969,005	100%
Site of Service						
Inpatient	\$16,320,595	75.0%	\$12,168,759	67.0%	\$10,383,588	61.0%
Hospital Outpatient	\$1,616,690	7.4%	\$1,329,605	7.3%	\$1,941,725	11.0%
Ambulatory Surgery	\$2,258,412	10.0%	\$2,729,680	15.0%	\$2,980,543	18.0%
Physician Office	\$866,326	4.0%	\$845,947	4.7%	\$810,651	4.8%
Emergency Room	\$648,371	3.0%	\$1,103,841	6.1%	\$852,498	5.0%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$18,640,328	100%	\$14,437,444	100%	\$14,846,322	100%
Site of Service						
Inpatient	\$13,403,501	72.0%	\$8,847,623	61.0%	\$9,989,038	67.0%
Hospital Outpatient	\$1,752,289	9.4%	\$1,607,627	11.0%	\$1,447,259	9.7%
Ambulatory Surgery	\$2,301,599	12.0%	\$2,729,082	19.0%	\$2,473,308	17.0%
Physician Office	\$790,141	4.2%	\$897,665	6.2%	\$619,129	4.2%
Emergency Room	\$392,798	2.1%	\$355,446	2.5%	\$317,588	2.1%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-42. Nationally representative charges^a for treatment of ureterocele, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,255,578	100%	\$1,957,866	100%	\$1,110,536	100%	\$1,445,960	100%	\$1,225,485	100%
Site of Service										
Inpatient	\$1,255,578	100.0%	\$1,227,616	62.7%	\$1,110,536	100.0%	\$1,445,960	100.0%	\$1,225,485	100.0%
Hospital Outpatient	...	...	...	...	...	...	...	...	...	...
Ambulatory Surgery	...	...	...	...	...	...	...	...	...	...
Physician Office	...	...	...	...	...	...	...	...	...	...
Emergency Room	...	...	\$730,250	37.3%	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-43. Expenditures^a among Medicare beneficiaries 65 and older for treatment of kidney cancer, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$345,579,302	100%	\$402,458,178	100%	\$420,946,029	100%
Site of Service						
Inpatient	\$284,200,121	82.0%	\$331,887,345	82.0%	\$340,951,457	81.0%
Hospital Outpatient	\$16,495,513	4.8%	\$20,940,712	5.2%	\$28,869,351	6.9%
Ambulatory Surgery	\$4,034,532	1.2%	\$3,274,867	0.8%	\$4,511,257	1.1%
Physician Office	\$39,670,606	11.0%	\$45,891,497	11.0%	\$45,993,323	11.0%
Emergency Room	\$1,178,530	0.3%	\$463,757	0.1%	\$620,640	0.1%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$424,016,082	100%	\$416,388,756	100%	\$378,575,680	100%
Site of Service						
Inpatient	\$335,153,874	79.0%	\$336,236,243	81.0%	\$296,353,849	78.0%
Hospital Outpatient	\$38,195,660	9.0%	\$33,084,640	7.9%	\$35,322,593	9.3%
Ambulatory Surgery	\$4,840,948	1.1%	\$6,338,399	1.5%	\$5,553,348	1.5%
Physician Office	\$45,168,579	11.0%	\$40,162,506	9.6%	\$40,194,594	11.0%
Emergency Room	\$657,021	0.2%	\$566,968	0.1%	\$1,151,295	0.3%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-44. Nationally representative charges^a for treatment of kidney cancer, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,036,418,763	100%	\$989,225,309	100%	\$1,454,327,159	100%	\$1,521,368,430	100%	\$1,655,981,968	100%
Site of Service										
Inpatient	\$827,696,869	79.9%	\$855,666,343	86.5%	\$986,961,624	67.9%	\$1,122,098,059	73.8%	\$1,162,984,071	70.2%
Hospital Outpatient	\$62,095,484	6.0%	\$63,247,866	6.4%	\$183,289,792	12.6%	\$75,152,651	4.9%	\$266,915,468	16.1%
Ambulatory Surgery	\$9,280,759	0.9%	\$10,579,335	1.1%	\$14,412,784	1.0%	\$27,468,685	1.8%	\$26,252,245	1.6%
Physician Office	\$134,656,894	13.0%	\$59,731,765	6.0%	\$269,662,959	18.5%	\$296,649,035	19.5%	\$193,988,930	11.7%
Emergency Room	\$2,688,757	0.3%	... ..	... ..	... ..	... ..	... ..	... ..	\$5,841,254	0.4%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-45. Estimated annual expenditures^a for privately insured individuals^b with and without kidney cancer

	With Kidney Cancer (N=11,236)			Without Kidney Cancer (N=3,356,753)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$37,670	\$2,171	\$39,841	\$9,042	\$1,415	\$10,457
Age						
35-44	\$31,195	\$1,659	\$32,854	\$7,488	\$1,081	\$8,569
45-49	\$34,998	\$2,115	\$37,113	\$8,400	\$1,379	\$9,779
50-54	\$39,874	\$2,491	\$42,365	\$9,571	\$1,624	\$11,195
55-59	\$45,630	\$2,776	\$48,406	\$10,952	\$1,809	\$12,761
60-64	\$53,434	\$3,000	\$56,434	\$12,825	\$1,956	\$14,781
Region						
Midwest	\$34,075	\$2,173	\$36,248	\$8,179	\$1,416	\$9,595
Northeast	\$38,452	\$2,039	\$40,491	\$9,229	\$1,329	\$10,558
South	\$39,832	\$2,200	\$42,032	\$9,561	\$1,434	\$10,995
West	\$38,015	\$2,178	\$40,193	\$9,125	\$1,420	\$10,545

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-46. Expenditures^a among Medicare beneficiaries 65 and older for treatment of upper urinary tract stones, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$967,824,214	100%	\$1,002,295,332	100%	\$1,101,870,912	100%
Site of Service						
Inpatient	\$687,575,729	71.0%	\$709,294,002	71.0%	\$797,897,460	72.0%
Hospital Outpatient	\$48,731,598	5.0%	\$55,794,843	5.6%	\$60,567,653	5.5%
Ambulatory Surgery	\$206,045,547	21.0%	\$207,030,827	21.0%	\$208,502,984	19.0%
Physician Office	\$11,184,536	1.2%	\$12,907,373	1.3%	\$13,690,257	1.2%
Emergency Room	\$14,286,804	1.5%	\$17,268,287	1.7%	\$21,212,558	1.9%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,084,435,019	100%	\$1,079,810,984	100%	\$1,043,066,863	100%
Site of Service						
Inpatient	\$791,502,893	73.0%	\$802,041,817	74.0%	\$769,071,853	74.0%
Hospital Outpatient	\$60,611,387	5.6%	\$54,630,411	5.1%	\$49,479,899	4.7%
Ambulatory Surgery	\$193,900,951	18.0%	\$186,806,170	17.0%	\$186,404,094	18.0%
Physician Office	\$13,728,134	1.3%	\$12,441,547	1.2%	\$12,928,855	1.2%
Emergency Room	\$24,691,654	2.3%	\$23,891,039	2.2%	\$25,182,161	2.4%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-47. Nationally representative charges^a for treatment of upper urinary tract stones, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$7,475,084,781	100%	\$8,095,566,784	100%	\$9,391,542,719	100%	\$9,560,942,896	100%	\$10,312,491,612	100%
Site of Service										
Inpatient	\$3,512,357,740	47.0%	\$3,866,759,108	47.8%	\$4,716,972,285	50.2%	\$5,126,615,955	53.6%	\$5,529,565,189	53.6%
Hospital Outpatient	\$197,332,733	2.6%	\$243,410,909	3.0%	\$434,304,532	4.6%	\$164,949,881	1.7%	\$386,695,285	3.7%
Ambulatory Surgery	\$3,488,642,437	46.7%	\$3,528,743,343	43.6%	\$3,625,673,640	38.6%	\$3,718,361,442	38.9%	\$4,036,479,078	39.1%
Physician Office	\$93,990,872	1.3%	\$146,695,186	1.8%	\$273,051,811	2.9%	\$194,363,644	2.0%	\$130,193,542	1.3%
Emergency Room	\$182,760,998	2.4%	\$309,958,238	3.8%	\$341,540,451	3.6%	\$356,651,974	3.7%	\$229,558,519	2.2%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-48. Expenditures^a among Medicare beneficiaries 65 and older for treatment of lower urinary tract stones, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$49,102,720	100%	\$44,753,318	100%	\$45,109,035	100%
Site of Service						
Inpatient	\$30,679,657	62.0%	\$25,118,912	56.0%	\$26,258,501	58.0%
Hospital Outpatient	\$889,215	1.8%	\$1,085,925	2.4%	\$558,377	1.2%
Ambulatory Surgery	\$14,257,643	29.0%	\$14,574,105	33.0%	\$14,640,375	32.0%
Physician Office	\$2,843,488	5.8%	\$3,333,776	7.4%	\$3,002,391	6.7%
Emergency Room	\$432,717	0.9%	\$640,600	1.4%	\$649,391	1.4%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$46,356,372	100%	\$45,801,610	100%	\$41,700,852	100%
Site of Service						
Inpatient	\$26,422,243	57.0%	\$24,862,736	54.0%	\$22,855,383	55.0%
Hospital Outpatient	\$680,708	1.5%	\$940,213	2.1%	\$1,086,149	2.6%
Ambulatory Surgery	\$14,807,386	32.0%	\$15,509,334	34.0%	\$13,743,044	33.0%
Physician Office	\$3,634,386	7.8%	\$3,363,171	7.3%	\$3,332,298	8.0%
Emergency Room	\$811,650	1.8%	\$1,126,157	2.5%	\$683,978	1.6%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-49. Nationally representative charges^a for treatment of lower urinary tract stones, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$129,411,061	100%	\$202,117,206	100%	\$177,431,908	100%	\$221,057,515	100%	\$196,429,392	100%
Site of Service										
Inpatient	\$46,107,281	35.6%	\$53,628,892	26.5%	\$49,535,873	27.9%	\$61,239,266	27.7%	\$52,361,111	26.7%
Hospital Outpatient	\$24,524,848	19.0%	\$12,148,967	6.0%	\$7,257,474	4.1%	\$25,346,614	11.5%	...	...
Ambulatory Surgery	\$54,884,037	42.4%	\$78,244,955	38.7%	\$83,356,447	47.0%	\$66,782,505	30.2%	\$86,336,719	44.0%
Physician Office	\$1,085,246	0.8%	\$11,917,511	5.9%	\$15,368,535	8.7%	\$5,549,326	2.5%	\$8,415,461	4.3%
Emergency Room	\$2,809,649	2.2%	\$46,176,881	22.8%	\$21,913,579	12.4%	\$62,139,804	28.1%	\$49,316,101	25.1%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-50. Estimated annual expenditures^a for privately insured individuals^b with and without urinary tract stones

	With Urinary Tract Stones (N=127,165)			Without Urinary Tract Stones (N=4,580,244)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$22,498	\$1,241	\$23,739	\$7,878	\$1,111	\$8,989
Age						
18-34	\$18,209	\$726	\$18,935	\$6,376	\$650	\$7,026
35-44	\$21,299	\$1,178	\$22,477	\$7,458	\$1,055	\$8,513
45-54	\$24,097	\$1,640	\$25,737	\$8,438	\$1,468	\$9,906
55-64	\$30,039	\$2,006	\$32,045	\$10,519	\$1,796	\$12,315
Region						
Midwest	\$20,396	\$1,244	\$21,640	\$7,142	\$1,114	\$8,256
Northeast	\$23,373	\$1,174	\$24,547	\$8,185	\$1,051	\$9,236
South	\$23,646	\$1,257	\$24,903	\$8,280	\$1,126	\$9,406
West	\$22,838	\$1,239	\$24,077	\$7,997	\$1,109	\$9,106

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-51. Expenditures^a among Medicare beneficiaries 65 and older for treatment of testicular cancer, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$5,935,762	100%	\$8,560,166	100%	\$5,063,084	100%
Site of Service						
Inpatient	\$2,112,296	36.0%	\$3,155,205	37.0%	\$1,331,143	26.0%
Hospital Outpatient	\$785,419	13.0%	\$922,795	11.0%	\$637,949	13.0%
Ambulatory Surgery	\$2,193,886	37.0%	\$2,500,111	29.0%	\$2,102,814	42.0%
Physician Office	\$825,495	14.0%	\$1,942,533	23.0%	\$976,604	19.0%
Emergency Room	\$18,665	0.3%	\$39,521	0.5%	\$14,576	0.3%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$4,535,345	100%	\$4,422,344	100%	\$5,120,715	100%
Site of Service						
Inpatient	\$825,199	18.0%	\$540,346	12.0%	\$702,811	14.0%
Hospital Outpatient	\$726,504	16.0%	\$1,432,980	32.0%	\$1,446,929	28.0%
Ambulatory Surgery	\$2,360,598	52.0%	\$1,750,877	40.0%	\$2,294,446	45.0%
Physician Office	\$563,362	12.0%	\$663,989	15.0%	\$667,036	13.0%
Emergency Room	\$59,682	1.3%	\$34,153	0.8%	\$9,493	0.2%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-52. Nationally representative charges^a for treatment of testicular cancer, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$52,270,777	100%	\$139,314,358	100%	\$357,548,929	100%	\$69,447,494	100%	\$182,909,672	100%
Site of Service										
Inpatient	\$18,641,374	35.7%	\$20,529,224	14.7%	\$18,824,287	5.3%	\$30,841,892	44.4%	\$34,735,518	19.0%
Hospital Outpatient	\$4,965,991	9.5%	...	...	\$11,431,961	3.2%	\$10,875,725	15.7%	\$13,538,592	7.4%
Ambulatory Surgery	\$27,276,506	52.2%	\$25,790,191	18.5%	\$29,314,494	8.2%	\$27,729,877	39.9%	\$32,609,028	17.8%
Physician Office	...	...	\$92,994,943	66.8%	\$297,978,187	83.3%	...	...	\$101,194,711	55.3%
Emergency Room	\$1,386,906	2.7%	...	...	...	...	...	...	\$831,825	0.5%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-53. Estimated annual expenditures^a for privately insured individuals^b with and without testicular cancer

	With Testicular Cancer (N=8,492)			Without Testicular Cancer (N=1,970,770)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$32,422	\$1,325	\$33,747	\$5,886	\$1,032	\$6,918
Age						
18-34	\$16,233	\$565	\$16,798	\$2,947	\$440	\$3,387
34-44	\$26,132	\$1,233	\$27,365	\$4,744	\$961	\$5,705
45-54	\$39,809	\$1,763	\$41,572	\$7,227	\$1,373	\$8,600
55-64	\$58,662	\$2,207	\$60,869	\$10,650	\$1,719	\$12,369
Region						
Midwest	\$29,286	\$1,309	\$30,595	\$5,317	\$1,020	\$6,337
Northeast	\$33,958	\$1,285	\$35,243	\$6,165	\$1,001	\$7,166
South	\$34,404	\$1,340	\$35,744	\$6,246	\$1,044	\$7,290
West	\$31,840	\$1,343	\$33,183	\$5,780	\$1,046	\$6,826

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-54. Expenditures^a among Medicare beneficiaries 65 and older for female urinary tract infection, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$2,523,814,348	100%	\$2,749,691,216	100%	\$2,949,775,928	100%
Site of Service						
Inpatient	\$2,243,865,625	89.0%	\$2,452,061,054	89.0%	\$2,627,046,037	89.0%
Hospital Outpatient	\$34,554,948	1.4%	\$27,482,236	1.0%	\$30,472,645	1.0%
Ambulatory Surgery	\$23,315,809	0.9%	\$24,280,402	0.9%	\$26,348,567	0.9%
Physician Office	\$153,189,771	6.1%	\$165,973,380	6.0%	\$177,416,786	6.0%
Emergency Room	\$68,888,195	2.7%	\$79,894,146	2.9%	\$88,491,893	3.0%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$3,180,799,102	100%	\$3,271,738,924	100%	\$3,417,629,889	100%
Site of Service						
Inpatient	\$2,842,937,409	89.0%	\$2,929,882,471	90.0%	\$3,060,509,250	90.0%
Hospital Outpatient	\$33,516,851	1.1%	\$34,044,197	1.0%	\$34,544,275	1.0%
Ambulatory Surgery	\$24,970,482	0.8%	\$23,486,921	0.7%	\$22,452,519	0.7%
Physician Office	\$180,911,161	5.7%	\$182,166,737	5.6%	\$191,072,016	5.6%
Emergency Room	\$98,463,199	3.1%	\$102,158,597	3.1%	\$109,051,829	3.2%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-55. Nationally representative charges^a for treatment of female urinary tract infection, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$3,832,659,337	100%	\$4,615,334,798	100%	\$5,028,912,986	100%	\$5,420,856,204	100%	\$5,468,500,725	100%
Site of Service										
Inpatient	\$2,195,970,902	57.3%	\$2,744,276,256	59.5%	\$3,145,148,913	62.5%	\$3,312,198,006	61.1%	\$3,513,686,210	64.3%
Hospital Outpatient	\$287,907,818	7.5%	\$482,464,403	10.5%	\$299,851,582	6.0%	\$504,983,042	9.3%	\$417,364,322	7.6%
Ambulatory Surgery	\$123,433,084	3.2%	\$122,393,996	2.7%	\$131,869,299	2.6%	\$130,049,477	2.4%	\$141,196,485	2.6%
Physician Office	\$731,817,488	19.1%	\$594,419,881	12.9%	\$729,852,623	14.5%	\$696,292,864	12.8%	\$709,880,828	13.0%
Emergency Room	\$493,530,045	12.9%	\$671,780,262	14.6%	\$722,190,569	14.4%	\$777,332,816	14.3%	\$686,372,881	12.6%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-56. Estimated annual expenditures^a for privately insured individuals^b with and without female urinary tract infection

	With Female Urinary Tract Infection (N=939,804)			Without Female Urinary Tract Infection (N=1,570,182)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$10,814	\$1,317	\$12,131	\$7,784	\$971	\$8,755
Age						
18-34	\$9,212	\$853	\$10,065	\$6,631	\$629	\$7,260
35-44	\$11,151	\$1,295	\$12,446	\$8,027	\$955	\$8,982
45-54	\$11,695	\$1,783	\$13,478	\$8,419	\$1,314	\$9,733
55-64	\$12,762	\$2,131	\$14,893	\$9,187	\$1,571	\$10,758
Region						
Midwest	\$9,955	\$1,340	\$11,295	\$7,166	\$988	\$8,154
Northeast	\$10,976	\$1,224	\$12,200	\$7,901	\$902	\$8,803
South	\$11,377	\$1,337	\$12,714	\$8,189	\$985	\$9,174
West	\$10,839	\$1,283	\$12,122	\$7,802	\$945	\$8,747

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-57. Expenditures^a among Medicare beneficiaries 65 and older for male urinary tract infection, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,362,016,880	100%	\$1,399,260,344	100%	\$1,537,861,679	100%
Site of Service						
Inpatient	\$1,250,141,142	92.0%	\$1,275,155,039	91.0%	\$1,402,211,630	91.0%
Hospital Outpatient	\$7,722,037	0.6%	\$9,127,540	0.7%	\$10,339,340	0.7%
Ambulatory Surgery	\$20,582,636	1.5%	\$22,906,717	1.6%	\$23,023,669	1.5%
Physician Office	\$55,271,410	4.1%	\$59,704,157	4.3%	\$63,842,557	4.2%
Emergency Room	\$28,299,655	2.1%	\$32,366,891	2.3%	\$38,444,483	2.5%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,691,656,622	100%	\$1,663,723,237	100%	\$1,740,114,936	100%
Site of Service						
Inpatient	\$1,557,915,160	92.0%	\$1,534,986,592	92.0%	\$1,605,902,534	92.0%
Hospital Outpatient	\$9,956,199	0.6%	\$10,453,299	0.6%	\$9,664,855	0.6%
Ambulatory Surgery	\$23,126,010	1.4%	\$20,236,859	1.2%	\$20,749,649	1.2%
Physician Office	\$61,320,447	3.6%	\$58,839,500	3.5%	\$60,950,022	3.5%
Emergency Room	\$39,338,806	2.3%	\$39,206,989	2.4%	\$42,847,875	2.5%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-58. Nationally representative charges^a for treatment of male urinary tract infection, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,768,187,203	100%	\$1,965,140,635	100%	\$2,059,836,811	100%	\$2,259,169,424	100%	\$2,159,353,727	100%
Site of Service										
Inpatient	\$1,084,196,722	61.3%	\$1,262,677,640	64.3%	\$1,491,687,123	72.4%	\$1,457,868,160	64.5%	\$1,454,279,332	67.3%
Hospital Outpatient	\$64,722,597	3.7%	\$118,309,414	6.0%	\$106,690,038	5.2%	\$214,378,394	9.5%	\$131,748,908	6.1%
Ambulatory Surgery	\$67,515,562	3.8%	\$65,149,125	3.3%	\$61,906,118	3.0%	\$75,325,858	3.3%	\$79,603,280	3.7%
Physician Office	\$241,678,395	13.7%	\$153,846,288	7.8%	\$154,988,978	7.5%	\$158,602,164	7.0%	\$234,371,654	10.9%
Emergency Room	\$310,073,928	17.5%	\$365,158,169	18.6%	\$244,564,555	11.9%	\$352,994,847	15.6%	\$259,350,552	12.0%

^aDoes not include medication related costs.^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-59. Estimated annual expenditures^a for privately insured individuals^b with and without male urinary tract infection

	With Male Urinary Tract Infection (N=201,895)			Without Male Urinary Tract Infection (N=1,693,689)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$11,171	\$1,154	\$12,325	\$4,841	\$971	\$5,812
Age						
18-34	\$5,159	\$478	\$5,637	\$2,236	\$402	\$2,638
35-44	\$8,911	\$1,073	\$9,984	\$3,862	\$903	\$4,765
45-54	\$14,127	\$1,550	\$15,677	\$6,122	\$1,304	\$7,426
55-64	\$21,426	\$1,972	\$23,398	\$9,285	\$1,659	\$10,944
Region						
Midwest	\$10,220	\$1,140	\$11,360	\$4,429	\$959	\$5,388
Northeast	\$11,619	\$1,101	\$12,720	\$5,035	\$926	\$5,961
South	\$11,778	\$1,168	\$12,946	\$5,104	\$983	\$6,087
West	\$11,012	\$1,181	\$12,193	\$4,772	\$993	\$5,765

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-60. Nationally representative charges^a for treatment of pediatric^b urinary tract infection, by site of service, charges, percent^c

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$780,771,318	100%	\$851,855,359	100%	\$874,862,211	100%	\$997,635,166	100%	\$1,102,729,754	100%
Site of Service										
Inpatient	\$260,072,745	33.3%	\$275,741,127	32.4%	\$304,848,902	34.8%	\$337,810,598	33.9%	\$324,113,005	29.4%
Hospital Outpatient	\$86,165,072	11.0%	\$129,166,439	15.2%	\$109,505,970	12.5%	\$196,327,664	19.7%	\$164,551,352	14.9%
Ambulatory Surgery	\$7,120,997	0.9%	\$5,706,692	0.7%	\$6,883,785	0.8%	\$8,482,404	0.9%	\$7,132,500	0.6%
Physician Office	\$126,935,766	16.3%	\$161,356,549	18.9%	\$157,949,963	18.1%	\$204,266,749	20.5%	\$167,543,513	15.2%
Emergency Room	\$300,476,737	38.5%	\$279,884,552	32.9%	\$295,673,591	33.8%	\$250,747,750	25.1%	\$439,389,385	39.8%

^aDoes not include medication related costs.^bIndividuals under 18.^cPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-61. Expenditures^a among Medicare beneficiaries 65 and older for treatment of male infertility, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,493,252	100%	\$1,345,895	100%	\$1,412,552	100%
Site of Service						
Inpatient	\$494,523	33.0%	\$361,762	27.0%	\$19,679	1.4%
Hospital Outpatient	\$45,413	3.0%	\$72,848	5.4%	\$115,323	8.2%
Ambulatory Surgery	\$666,561	45.0%	\$605,662	45.0%	\$976,510	69.0%
Physician Office	\$249,973	17.0%	\$272,298	20.0%	\$273,022	19.0%
Emergency Room	\$36,783	2.5%	\$33,325	2.5%	\$28,019	2.0%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$1,555,642	100%	\$1,596,719	100%	\$1,400,046	100%
Site of Service						
Inpatient	\$23,882	1.5%	\$510,893	32.0%	\$111,390	8.0%
Hospital Outpatient	\$113,481	7.3%	\$116,811	7.3%	\$112,717	8.1%
Ambulatory Surgery	\$980,790	63.0%	\$597,673	37.0%	\$781,851	56.0%
Physician Office	\$389,822	25.0%	\$253,116	16.0%	\$245,687	18.0%
Emergency Room	\$47,667	3.1%	\$118,226	7.4%	\$148,401	11.0%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-62. Estimated annual expenditures^a for privately insured individuals^b with and without male infertility

	With Male Infertility (N=37,974)			Without Male Infertility (N=1,934,337)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$10,429	\$1,008	\$11,437	\$5,909	\$1,033	\$6,942
Age						
18-34	\$5,214	\$427	\$5,641	\$2,954	\$438	\$3,392
35-44	\$8,397	\$941	\$9,338	\$4,758	\$965	\$5,723
45-54	\$12,808	\$1,341	\$14,149	\$7,257	\$1,375	\$8,632
55-64	\$18,850	\$1,679	\$20,529	\$10,680	\$1,722	\$12,402
Region						
Midwest	\$9,422	\$996	\$10,418	\$5,338	\$1,021	\$6,359
Northeast	\$10,805	\$979	\$11,784	\$6,122	\$1,004	\$7,126
South	\$11,066	\$1,019	\$12,085	\$6,270	\$1,045	\$7,315
West	\$10,333	\$1,021	\$11,354	\$5,855	\$1,047	\$6,902

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-63. Expenditures^a among Medicare beneficiaries 65 and older for treatment of erectile dysfunction, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$87,459,183	100%	\$85,677,764	100%	\$83,877,640	100%
Site of Service						
Inpatient	\$38,840,478	44.0%	\$36,512,478	43.0%	\$29,743,599	35.0%
Hospital Outpatient	\$1,948,180	2.2%	\$2,022,644	2.4%	\$1,919,876	2.3%
Ambulatory Surgery	\$23,206,186	27.0%	\$23,199,104	27.0%	\$26,809,664	32.0%
Physician Office	\$22,801,970	26.0%	\$23,079,008	27.0%	\$24,543,268	29.0%
Emergency Room	\$662,369	0.8%	\$864,530	1.0%	\$861,234	1.0%
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$84,681,105	100%	\$74,383,181	100%	\$82,233,436	100%
Site of Service						
Inpatient	\$36,092,369	43.0%	\$22,105,728	30.0%	\$26,780,414	33.0%
Hospital Outpatient	\$1,957,463	2.3%	\$1,912,765	2.6%	\$2,001,219	2.4%
Ambulatory Surgery	\$26,334,167	31.0%	\$31,134,273	42.0%	\$35,682,778	43.0%
Physician Office	\$19,464,580	23.0%	\$18,277,089	25.0%	\$17,176,446	21.0%
Emergency Room	\$832,524	1.0%	\$953,326	1.3%	\$592,579	0.7%

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-64. Nationally representative charges^a for treatment of erectile dysfunction, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$516,262,082	100%	\$557,178,807	100%	\$540,575,622	100%	\$481,129,899	100%	\$555,785,501	100%
Site of Service										
Inpatient	\$130,289,579	25.2%	\$140,781,128	25.3%	\$144,531,119	26.7%	\$141,289,573	29.4%	\$157,708,954	28.4%
Hospital Outpatient	\$166,119,274	32.2%	\$192,470,575	34.5%	\$210,933,487	39.0%	\$147,885,619	30.7%	\$191,129,054	34.4%
Ambulatory Surgery	... ..	...	... ..	...	... ..	...	... ..	...	... ..	...
Physician Office	\$215,360,466	41.7%	\$223,252,810	40.1%	\$185,111,015	34.2%	\$188,000,464	39.1%	\$203,765,153	36.7%
Emergency Room	\$4,492,764	0.9%	\$674,293	0.1%	... ..	...	\$3,954,243	0.8%	\$3,182,340	0.6%

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-65. Estimated annual expenditures^a for privately insured individuals^b with and without erectile dysfunction

	With Erectile Dysfunction (N=110,116)			Without Erectile Dysfunction (N=1,702,460)		
	Medical	Prescription Drugs	Total	Medical	Prescription Drugs	Total
Total	\$7,979	\$1,195	\$9,174	\$6,084	\$946	\$7,030
Age						
18-34	\$4,074	\$528	\$4,602	\$3,106	\$418	\$3,524
34-44	\$6,306	\$1,160	\$7,466	\$4,809	\$918	\$5,727
45-54	\$9,956	\$1,613	\$11,569	\$7,591	\$1,277	\$8,868
55-64	\$15,661	\$2,011	\$17,672	\$11,941	\$1,591	\$13,532
Region						
Midwest	\$7,175	\$1,167	\$8,342	\$5,471	\$924	\$6,395
Northeast	\$8,340	\$1,157	\$9,497	\$6,359	\$915	\$7,274
South	\$8,474	\$1,222	\$9,696	\$6,462	\$967	\$7,429
West	\$7,907	\$1,203	\$9,110	\$6,029	\$952	\$6,981

Generalized estimating equations were used to account for the correlation within patients.

^aEstimated annual expenditures were derived from multivariate models that control for age, gender, insurance type, region, calendar year, and all individual disease conditions in the modified Charlson Comorbidity Index.

^bSample consists of beneficiaries between 18-64 years who were continuously enrolled in employer-provided insurance for at least a full calendar year during 2003-2006.

NOTE: Costs are in charges rather than payments; charges are in 2009 dollars.

SOURCE: i3 Claims Database, 2003-2006

Table 14-66. Expenditures^a among Medicare beneficiaries 65 and older for treatment of Peyronie's disease, by site of service, reimbursement costs, percent^b

	2002		2003		2004	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$4,835,057	100%	\$4,677,437	100%	\$7,953,952	100%
Site of Service						
Inpatient	\$2,819,942	58.0%	\$2,507,230	54.0%	\$5,820,189	73.0%
Hospital Outpatient	\$42,526	0.9%	\$51,961	1.1%	\$53,122	0.7%
Ambulatory Surgery	\$1,588,799	33.0%	\$1,722,405	37.0%	\$1,741,921	22.0%
Physician Office	\$383,790	7.9%	\$395,841	8.5%	\$338,721	4.3%
Emergency Room	...	...	...	...	...	...
	2005		2006		2007	
	Reimbursements	Percent	Reimbursements	Percent	Reimbursements	Percent
Total	\$4,475,878	100%	\$5,249,678	100%	\$6,445,393	100%
Site of Service						
Inpatient	\$2,638,770	59.0%	\$2,213,523	42.0%	\$3,678,560	57.0%
Hospital Outpatient	\$67,220	1.5%	\$210,690	4.0%	\$63,339	1.0%
Ambulatory Surgery	\$1,519,603	34.0%	\$2,565,517	49.0%	\$2,440,135	38.0%
Physician Office	\$250,284	5.6%	\$259,948	5.0%	\$263,360	4.1%
Emergency Room	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: Reimbursements are in 2009 US dollars.

SOURCE: Centers for Medicare and Medicaid Services, 2002-2007.

Table 14-67. Nationally representative charges^a for treatment of Peyronie's disease, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$11,615,665	100%	\$11,098,205	100%	\$10,462,968	100%	\$16,592,907	100%	\$11,162,684	100%
Site of Service										
Inpatient	\$11,615,665	100%	\$11,098,205	100%	\$10,462,968	100%	\$16,592,907	100%	\$11,162,684	100%
Hospital Outpatient	...	...	...	...	...	...	...	...	...	...
Ambulatory Surgery	...	...	...	...	...	...	...	...	...	...
Physician Office	...	...	...	...	...	...	...	...	...	...
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

Table 14-68. Nationally representative charges^a for treatment of undescended testes, by site of service, charges, percent^b

	2002		2003		2004		2005		2006	
	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent	Charges	Percent
Total	\$1,758,161	100%	\$1,230,695	100%	\$3,485,070	100%	\$2,706,570	100%	\$1,674,371	100%
Site of Service										
Inpatient	\$1,758,161	100%	\$1,230,695	100%	\$3,485,070	100%	\$2,706,570	100%	\$1,674,371	100%
Hospital Outpatient	...	...	...	...	...	...	...	...	...	...
Ambulatory Surgery	...	...	...	...	...	...	...	...	...	...
Physician Office	...	...	...	...	...	...	...	...	...	...
Emergency Room	...	...	...	...	...	...	...	...	...	...

... Data unavailable.

^aDoes not include medication related costs.

^bPercents may not sum to total due to rounding.

NOTE: All costs are charges and in 2009 US dollars.

SOURCE: Healthcare Cost and Utilization Project, Kids' Inpatient Database, 2003 & 2006; National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, i3 Claims Database; 2002-2006.

CHAPTER 15

Methods

Christopher S. Saigal, MD, MPH
Hangsheng Liu, PhD, MS, BMed
Jan M. Hanley, MS
Rodger A. Madison, MA
Alexandria C. Smith, MSPH
Julie C. Lai, MPH
Andrew W. Dick, PhD

Suggested Citation: Saigal CS, Liu H, Hanley JM, Madison RA, Smith AC, Lai JC, and Dick AW. Chapter 15: Methods. In: Litwin MS, Saigal CS, editors. Urologic Diseases in America. US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Washington, DC: US Government Printing Office, 2012; NIH Publication No. 12-7865 [pp. 497-522].

OVERVIEW

The purpose of the Urologic Diseases in America (UDA) project was to assess the burden of illness imposed upon the United States by the major urologic diseases. To accomplish this task, the UDA team at UCLA and RAND reviewed a large number of existing public and private datasets. Component elements of these databases were evaluated to compare their specific characteristics, uses, benefits, and limitations. Criteria for selecting the preliminary set of databases included (a) availability of information on key features of the data collection process, e.g., the unit of observation, reliability of the data, etc.; (b) issues related to the study design, e.g., the target population selected, whether incidence or prevalence data were available, etc.; (c) analytic information, e.g., whether adjustment for sample design characteristics, such as clustering was necessary, etc.; (d) the robustness of the dataset relative to others available to assess the same UDA condition; and (e) an estimate of the time required to procure and analyze the dataset. Ultimately, a complementary set of data sources was selected for this project, in coordination with approval from various experts in the field of urologic illnesses, as well as at the National Institute of Diabetes and Digestive and Kidney Diseases (see Appendix B). Together, these datasets allowed us to paint a broad picture of the burden of urologic diseases in America.

DATABASE SOURCES

Databases selected to study the UDA conditions included in this compendium fall into three categories. The first group describes the Medicare program's experience with the UDA conditions. The datasets were derived from Centers for Medicare and Medicaid Services (CMS) administrative records as either a complete, or a 5% sample (which was then appropriately weighted to represent the national Medicare population). These datasets include the Medicare inpatient (MedPAR) sample, the Medicare carrier file (previously referred to as the Physician/Part B file), and the hospital outpatient file. Finally, the Medicare denominator file, which includes all Medicare beneficiaries enrolled in a given year, was used to supply denominator data for analysis. Medicare data is also linked to information from the Surveillance Epidemiology and End Results (SEER) database.

The second group of datasets allows computation of national estimates of health care utilization, costs, and, for some conditions, prevalence. Data for inpatient utilization measures were obtained from the Healthcare Cost and Utilization Project – Nationwide Inpatient Sample (HCUP-NIS), conducted by the Agency for Healthcare Research and Quality. Data for pediatric inpatient stays were collected using the Kids' Inpatient Database (KID), conducted as part of the HCUP. Data for physician office and hospital outpatient utilization measures were obtained from two surveys conducted by the National Center for Health Statistics: the National Ambulatory Medical Care Survey (NAMCS) and the outpatient and emergency department components of the National Hospital Ambulatory Medical Care Survey (NHAMCS). Data on ambulatory surgery services were obtained from the National Survey of Ambulatory Surgery (NSAS). These databases contain data on national samples of visits to physician offices, outpatient hospital departments, and emergency departments, respectively, and yield a higher number of patients with diagnoses and procedures of interest than do population-based surveys. Finally, we examined the National Health and Nutrition Examination Survey (NHANES), a population-based survey, for items that could be used to create estimates of true nationally representative disease prevalence.

The third type of dataset allowed us to make utilization and cost estimates regarding the commercially insured population. The i3 dataset contains claims for inpatient stays, physician office, and hospital outpatient utilization. Data on patient medication use and lab values are also available in i3.

The combination of databases (Medicare, nationally representative datasets, and i3) allowed us to complete a comprehensive evaluation of the following primary service utilization categories: (1) inpatient stays, (2) hospital outpatient visits, (3) ambulatory surgery center visits, (4) physician office visits, and (5) emergency room visits for the UDA conditions in this compendium. The data also enabled us to derive estimates of disease prevalence for some conditions. The following is a detailed description of the databases analyzed in this compendium, and an in-depth discussion of the analytic approach we used for each data source.

MEDICARE DATA

Description

Medicare enrollment and claims data are available from the Centers for Medicare and Medicaid Services (CMS). Data from 2002 to 2007 claims were used for the tables in this compendium. The enrollment file contains information on all Medicare beneficiaries enrolled, or entitled in the year, and these data were used to generate counts for the denominator when calculating rates. The Medicare claims data consist of three separate files: MedPAR, which contains records for Medicare beneficiaries who used hospital inpatient services during the given year; the carrier file (previously referred to as the Physician (Part B) claims file); and the outpatient claims file (which contains hospital outpatient, laboratory, radiology, rehabilitation, and various other facility charges). For our analyses, we used 5% random samples drawn from these files. Previous work using CMS data has found that this sample size is adequate to detect significant racial and ethnic differences in use of cardiac procedures and tests (7). The carrier and outpatient files contained individual claims for provider services, and the MedPAR sample contained information on hospitalizations incurred by those same Medicare enrollees.

Analytic Approach

Data from the three Medicare files (MedPAR, carrier, and outpatient) were linked to determine inpatient, ambulatory surgery center, hospital outpatient, physician office and emergency room (ER) utilization, as well as to calculate average payments for the various UDA conditions by place of service. The procedure we used is described below.

First, personal identifiers and dates from facility records in the inpatient MedPAR and outpatient files were evaluated to ascertain the number of visits to inpatient hospitals, ERs, hospital outpatient departments, and ambulatory surgery centers. Ambulatory surgery centers were identified in both the outpatient file using revenue center codes (for hospital-based ambulatory surgery centers), and from the carrier file (for free-standing ambulatory surgery centers). Next, person identifiers and dates of service for these visits were linked to the matching line items listing payment for those services recorded in the carrier file. For records that did not have an exact match, an algorithm was developed to assign the remaining carrier file line items and outpatient file records to the appropriate place of service. Utilization of physician office visits was determined by examining line items in the carrier file for appropriate place-of-service and physician-evaluation-and-management billing codes.

Remaining unmatched line items and claims (primarily laboratory charges) from the outpatient file were totaled by disease entity and by place of service (physician office, hospital

outpatient, hospital inpatient, ambulatory surgery, or ER). Total dollars of expenditure associated with these unmatched items were then added to the total expenditure calculation for each place of service, stratified by disease. Average cost-per-service unit was calculated by dividing this total by the number of disease-related visits to the place of service.

At the completion of the matching process, descriptive tables were generated using appropriate International Classification of Diseases, 9th edition (ICD-9) diagnosis codes for the conditions of interest. Hospitalization or facility visit was used as the unit of analysis for the number of claims for each type of service. Denominators were derived using the CMS enrollment file. Because a 5% sample of Medicare records was utilized, national estimates of service use were obtained by multiplying counts by a constant weight of 20 to represent use in the entire Medicare-eligible population. The data were stratified by age, gender, and race variables. Confidence intervals were calculated using standard methods for proportions (1). In Medicare data analyses, 5% samples are considered adequate for meaningful comparisons among different minority, geographic, and age groups (2).

The analytic methodology is described in more detail in Appendix A, Technical Programming for Medicare Data.

NATIONALLY REPRESENTATIVE HEALTH CARE UTILIZATION AND COST DATA

Description

We used six datasets to derive nationally representative estimates of disease-specific service use, disease prevalence, and health care payments. These datasets include data for outpatient and ambulatory care utilization (NAMCS, NHAMCS and NSAS), data for inpatient stays or hospitalizations (HCUP-NIS and KIDs'), and data for outpatient and ambulatory care utilization (NSAS, NAMCS and NHAMCS). Finally, NHANES was used to determine the prevalence of urinary incontinence and kidney stones.

The databases assessed had different designs, depending on the goals of the surveys they represented. The NAMCS and NHAMCS databases used a nationally representative multi-stage probability sample. The sample design consisted of a number of stages that subcategorized the sample into units. First, counties or groups of counties were selected. Next, a probability sample of hospitals and their associated clinics or physicians (depending on the database) was selected within each county. Finally, a systematic sampling of patient visits to those physicians, or clinics was selected within a randomly assigned window of time during the year. The sample size for the years of data evaluated in these two databases ranged from approximately 25,000 to 40,000 patient visits per year, and the sample was used to describe utilization of physician office visit, hospital outpatient, and ER services in the United States. Similarly, the NSAS used a multistage probability sample, with the hospitals, or freestanding ambulatory surgery centers sampled at the first stage, or second stage, and specific surgical procedures sampled at the final stage. The 'hospital' universe includes non-Federal general, short-stay and children's hospitals located in the 50 states and the District of Columbia. The universe of "freestanding ambulatory surgery centers" comprises facilities which are state-licensed or Medicare-certified or which provide ambulatory surgery as the primary business activity, and operate independently as separate businesses.

The Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (HCUP) database is also a nationally representative probability sample, but rather than using a multi-stage approach, the design is based on a sample stratified on five characteristics: geographic area (US

Census Region), location (Metropolitan Statistical Area (MSA), the teaching status of the hospital (teaching or non-teaching), the control of the hospital (public, voluntary, or proprietary), and size, by number of beds (small, medium, or large). This database is much larger than the NAMCS or NHAMCS; it contains from 7.5 million to 8 million discharge records from community hospitals for any given year of our analysis. HCUP data are thus adequate to describe utilization of hospital inpatient services in the United States.

The Kids' Inpatient Database (KID) was created as part of the Healthcare Cost and Utilization Project, sponsored by the Agency for Healthcare Research and Quality. KID is the only all-payer inpatient care database for children in the United States. KID contains a sample of pediatric discharges from approximately 3,000 community hospitals nationwide; it contains data from 2 to 3 million pediatric hospital discharges. For this compendium, data was available for 2003 and 2006. KID provides information on primary and secondary diagnoses, admission and discharge status, patient demographics (e.g., gender, age, race, median income for ZIP code), expected payment source, total charges (regardless of payer), length of stay, and hospital characteristics (e.g., ownership, size, teaching status) related to pediatric inpatient stays. KID samples all pediatric discharges from all hospitals in its sampling frame, stratified as "uncomplicated in-hospital birth," "complicated in-hospital birth," and "other pediatric discharges." After sorting discharges by state, hospital, diagnosis related group, and a random number within the diagnosis related group, systematic random sampling was applied. KID's sampling design allows nationally generalizable observations to be made about inpatient utilization for pediatric conditions.

The NHANES, conducted by the National Center for Health Statistics (NCHS), collects data by household interview, supplemented by medical examination and laboratory testing in a mobile center. The sample design is a stratified, multi-stage, probability sample of clusters of persons representing the civilian non-institutionalized population (African-Americans and Mexican-Americans are oversampled). Data include medical histories in which specific queries are made regarding urological symptoms and conditions. These items were selected for analysis. NCHS releases public use data sets from the continuous NHANES in two-year cycles. In our analyses, we present data on information available regarding urologic conditions from NHANES data from 2001-2008.

The benefits of using this combination of data sources are numerous. First, the databases are nationally representative samples that allow for the evaluation of genitourinary conditions even within special subpopulations (e.g., pediatric or ER patients). Demographic information is also available to complement the clinical data provided. However, the datasets have some limitations; for example, they use an inpatient stay or clinic visit, not an individual patient, as the unit of analysis, thus making it impossible to follow patients over time. Also, some of the databases sample a small fraction of total service use, so rare or more-chronic conditions may be missed.

The Surveillance, Epidemiology, and End Results (SEER) Program maintains several population-based registries in the United States and Puerto Rico and provides data on all residents diagnosed with cancer, and follow up information on all previously diagnosed patients. A continuing project of the National Cancer Institute, the SEER Program collects cancer data twice a year from designated population-based cancer registries in various areas of the country. Data are compiled twice a year. SEER is a product of the National Cancer Act of 1971, which mandated the collection, analysis, and dissemination of all data useful in prevention, diagnosis, and treatment of cancer. Trends in cancer incidence, mortality and patient survival in the United

States, as well as many other studies, are derived from this data bank. The geographic areas comprising the SEER Program's database represent an estimated 26% of the US population. SEER coverage includes 23% of African Americans, 40% of Hispanics, 42% of American Indians and Alaska Natives, 53% of Asians, and 70% of Hawaiian/Pacific Islanders. The database contains information on 6 million in situ and invasive cancers diagnosed between 1973 and 2008 (as of this printing); approximately 350,000 new cases are accessioned yearly in 18 geographical areas in the United States including Atlanta, Connecticut, Detroit, Hawaii, Iowa, New Mexico, San Francisco-Oakland, Seattle-Puget Sound, Utah, Los Angeles, San Jose-Monterey, Rural Georgia, the Alaska Native Tumor Registry, Arizona Indians, Greater California, Kentucky, Louisiana, and New Jersey. Cancer mortality data are obtained from vital statistics for the entire United States. SEER provides authoritative genitourinary cancer prevalence and incidence data which provide context for trends in expenditures and utilization documented in the other UDA datasets.

SEER-Medicare data

Through a collaborative effort between the National Cancer Institute and CMS, SEER data have been linked to Medicare claims in order to allow greater specificity when analyzing utilization of resources by older patients with cancers. SEER data, which are replete with clinical detail, are paired with related Medicare claims for covered health care services from the time of a person's Medicare eligibility until death. Linkage is accomplished by matching SEER identifiers with identifiers located in Medicare's master enrollment file. Linkages have been completed for years subsequent to 1991. Linkages are updated every 3 years. Data are currently available through 2008. SEER-Medicare data are requested as a series of files containing data on inpatient stays, outpatient claims, clinical cancer information, etc. Investigators may link individual patients across files using the unique SEER case ID number. Data are available for both subjects with cancer from SEER, and a random sample of Medicare beneficiaries without cancer (for comparison purposes).

Analytic Approach (NAMCS, NHAMCS, NSAS, HCUP, KID, NHANES)

The years of NAMCS, NHAMCS and HCUP data analyzed are 2002 to 2007. NSAS data were available for 2006 only. KID data were available for 2003 and 2006.

First, we identified individuals with visits for specific urologic conditions based on the ICD-9 diagnosis, or procedure codes that defined each of the conditions and any age and gender specifications necessary to create subpopulations for the analyses. Analytical files for outpatient visits included records of visits with a relevant diagnosis code listed as one of any reasons for the visit. Tables were produced reflecting service use, both when the diagnosis codes in question were listed as any of the reasons for the visit, and when they were listed as the primary reason for the visit. Analytical files for inpatient stays included only those records of inpatient hospitalizations for which a relevant diagnosis code was listed as the *primary diagnosis* during the hospitalization. The raw number of visits in each subset varied by condition and by year. Analyses were conducted at the visit level, or the stay level, depending on which database was being analyzed.

For the NHANES, cases were identified on the basis of answers to specific questions asked in the survey. The frequency of individual "yes" answers and answers regarding the intensity of symptoms were tabulated by gender, age, and other demographic variables. Using

the weights provided by the NCHS, raw counts were weighted to give nationally-representative estimates of disease prevalence.

National estimates of the annual frequency of visits for the demographic groups studied for each of the UDA conditions were calculated when the raw counts were deemed large enough to produce reliable estimates. Under NCHS guidelines there must be at least 30 unweighted counts for creation of reliable national estimates¹. When insufficient data were available, subgroups (e.g., age categories) were combined to create adequate unweighted counts. In some instances, unweighted corresponding counts for conditions in NHAMCS Outpatient (NHAMCS-OP) and NAMCS were combined to provide reliable estimates of overall outpatient service use. HCUP cell sizes were always large enough to produce reliable estimates ($N \geq 30$), and therefore no combining, or regrouping of stratification variables was necessary. For some analyses, a merging of population weights was applied to unweighted counts, according to the methodology provided by each organization sponsoring a survey, to obtain national estimates of the frequency of visits in the entire population and in sub-populations of interest. SAS (3) was used to derive the standard errors and compute the 95% confidence intervals (CIs) for these estimates using the method described below under "Computing Confidence Intervals for Proportions."

To create an estimate of the burden of outpatient visits for urologic conditions in relation to the total burden of illness represented by outpatient visits, national estimates of visits for urologic conditions within various subpopulations were divided by national estimates of the total number of outpatient visits for the demographic groups of interest. This number was multiplied by 100 to generate a percentage. National annual outpatient visit rates were calculated using the US Census non-institutionalized civilian population estimates corresponding to demographic and visit-characteristic groupings for each survey year used. Population estimates were obtained from the Current Population Survey (CPS) for select demographic categories of the US civilian non-institutionalized population.

Stratification variables evaluated for all databases include age, race/ethnicity, gender, region and/or MSA, and other variables selected as appropriate for the database of interest.

COMMERCIALLY INSURED POPULATION

i3 Description

The i3 dataset contains claims from 2002-2007 and represents approximately 30 million insured individuals. The i3 dataset contains three main files: medical claims, prescription claims, and an enrollment file. The i3 medical claims consist of inpatient stays, outpatient and physician utilization. Procedure and diagnosis codes, financial information, dates of service, information regarding the types of facilities and provider are included in the i3. In addition to utilization, the i3 provides drug claims, which consist of prescription fill date, refills, brand name, therapeutic class and cost. For the majority of analysis the national drug codes (NDC), were used to examine utilization of specific drugs and therapeutic classes. The enrollment file contains demographic information, such as the person's age, sex, plan type (FFS, PPO, POS, HMO), zip code of residence, and relationship to employee.

Analytic approach

Using the place of service variable in the i3 dataset, line item claims were designated to inpatient, hospital outpatient, ambulatory surgery center, physician office, and emergency room utilizations. Inpatient line items were "rolled up" to create a single inpatient stay and any line items that fell into the dates of the stay, regardless of place of service code, were included in the

inpatient costs and utilization. To determine an inpatient stay, line items that had a two day or less gap were matched into one stay episode. Laboratory claims were matched to hospital outpatient, ambulatory surgery center, physician office, and emergency room claims using person identifiers and exact dates of record. Remaining laboratory claims that did not have an exact date match were then matched using a seven day window to the nearest visit claim. If laboratory claims still did not match, these claims were added to the total cost of the disease, but not split out to the different place of service. Utilization of the place of service by disease were determined by aggregating the claims to a person date level. Charges assigned to the place of service by disease were determined by the summation of charges from claims to a person date level.

ESTIMATING COSTS ASSOCIATED WITH UROLOGIC DISEASES

Methods on Estimating Costs Associated With Urologic Diseases

Overview

As one of the goals of the Urologic Diseases in America (UDA) project, we estimated the economic burden of the major urologic diseases in the United States. Two types of analyses were conducted to describe disease burden. First, the total costs incurred were summarized for each urologic disease of interest, by place of service, patient population, and calendar year. Second, incremental costs were estimated through modeling the cost difference between patients with a urologic disease and those without, after controlling for patient socio-demographics, comorbidities, health insurance status, and geographic location. These two sets of analyses provide the UDA compendium users costs estimates that may be used for various purposes.

Data Sources

The 2002-2007 Medicare claims data were used to describe urologic conditions among the population over 65 years old. The datasets contain medical claims and administrative records of a 5% random sample of Medicare beneficiaries, including the Medicare carrier file, inpatient file, hospital outpatient file, and the denominator file.

In order to describe the non-Medicare population, several nationally-representative datasets were used to estimate economic costs of urologic diseases. These include the Healthcare Cost and Utilization Project – Nationwide Inpatient Sample (HCUP-NIS), the National Ambulatory Medical Care Survey (NAMCS), the National Hospital Ambulatory Medical Care Survey (NHAMCS). These databases provide information on a national level about physician office visits, hospital outpatient visits, emergency department visits, and hospital inpatient stays.

Not all of these datasets provided charge data to accompany utilization estimates. To estimate the economic burden of these nationally-representative utilization estimates, we used charge data from the i3 claims database of privately insured individuals.

Analytical Approach

Most cost-of-illness studies distinguish between the direct costs of treating a medical condition and the indirect costs associated with lost work days, reduced quality of life, and premature mortality. Direct costs typically include expenditures for medical treatments, such as hospitalizations, emergency care, ambulatory visits, nursing home and home health care, medical supplies, prescription drugs, and other services provided by medical professionals. Indirect costs usually refer to disability days, work loss, and other labor-market consequences associated with medical illness. For this compendium, the analysis focused on direct costs only as data on lost work days were not available.

Direct costs were quantified as a dollar-denominated measure of resource utilization, by assigning prices to a comprehensive list of utilization and services. For the Medicare population, prices of medical services were estimated based on average payments made by the enrollee (co-payments, deductibles, excluded expenses) and by Medicare as well as other third-party payers. Medicare claims were used to estimate utilization and average reimbursements for the Medicare population. For the non-Medicare population, average prices were approximated using charges derived from the i3 data because the actual payments were not available in the data. National

surveys and inpatient discharge databases were relied upon for deriving estimates of medical service utilization for the non-Medicare population, where the data source depends on the type of service provided. All expenditures for medical and pharmacy services were reported in 2009 dollars, after adjusting inflation using the Consumer Price Index compiled by Bureau of Labor Statistics, U.S. Department of Labor. Finally, all descriptive analyses used appropriate sampling weights to obtain national estimates.

Similar to the analysis of health care utilization, the cost analysis was also based on episodes of care with a primary diagnosis of a urologic condition. That is, urology-related costs that are secondary to the primary diagnosis were excluded, while costs related to non-urologic conditions incurred during a visit, or hospitalization for a urologic illness listed as a primary diagnosis were included. This approach might over-estimate average expenditures by including treatment costs of non-urologic conditions. However, urology-related costs that occur during visits for which a urologic diagnosis is not the primary diagnosis are not included in our estimates.

The incremental medical costs incurred by persons with urologic conditions were estimated using i3 data. Individuals with an inpatient, or outpatient claim for specific urologic conditions were identified. Multivariate regression models were used to predict medical and pharmacy spending during 2003-2006 for persons with and without a particular condition, controlling for differences in patient demographics, health status, and insurance coverage. The primary outcomes of interest included annual medical and pharmacy expenditures for each person. Expenditures consisted of total annual provider charges for medical services, and outpatient prescription drug claims. Covariates included age, sex, region of residence, insurance type (HMO or not), and Charlson co-morbid conditions. Medical claims were used to identify individuals treated for any of 18 chronic conditions based on ICD9 diagnostic codes, including hypertension, diabetes, congestive heart failure, and depression, and included a binary indicator for each condition.

Statistical analyses used generalized linear models that incorporated within-patient correlations based on generalized estimating equations. A log link and Gaussian family were used, and the correlation structure was unstructured. The models did not converge when using a Gamma family or a Poisson family. All patients with at least one urologic condition of interest were included in the disease group, while others without any urologic condition formed the control group. Due to the sheer size of the control group data, a 3% random sample of the control patients was selected for modeling purposes and appropriate weights were used to reflect the sampling method.

Limitations

Our national economic burden estimates reflect charge data, and as such may be overestimating the burden since charges are generally higher than reimbursements. We were unable to estimate medication costs, which are a substantial component of the economic burden for several diseases (e.g. erectile dysfunction).

Data Quality

A systematic approach was developed to evaluate the quality of the data generated for this project. A multi-tiered effort was made to ensure that the data met a high level of accuracy and consistency throughout. Data generated from each database were subjected to multiple levels of examination.

The first level of review required confirmation that the base populations used for each database were correct for each condition being evaluated (e.g., the population at risk for BPH included only males aged 40 years and older, whereas both sexes are at risk for kidney stones). Also, the total frequencies were checked to ensure that they were correctly reported (e.g., that there was no double counting of cases).

Next, individual frequencies were evaluated within patient subgroups to ensure that the counts were appropriate. Any numbers that appeared inconsistent were flagged for a programmer to recheck and review. For example, one would not expect to find a dramatically greater incidence of a particular condition among patients from two different regions of the country, and this inconsistency might be identified for further review.

Third, the rates were compared over all years for which data were available. This allowed for an evaluation of whether any unusual rates were reported for a particular year, or service. We developed a graphical tool to compare the rates across data sets including the results from the previous compendium for each disease. We examined the rate both for overall and individual age groups. This approach was particularly valuable in identifying potential data errors or trend changes. Any rates that appeared out of range were flagged for further review. To this end, a comprehensive literature review was performed using the relevant disease search terms. Rates generated from the datasets were compared with published estimates, and clinical experts adjudicated whether discrepancies signaled analysis errors. Also, confidence interval calculations were reviewed to ensure that they were within the appropriate range for all rates reported.

For the next level of verification, a mean-annual-payment summary table was produced to compare payments across years and services. Again, any payments that appeared out of range were flagged for further evaluation. In many cases, a small sample size explained a wide variation in reported payments.

Finally, summary base population tables were generated for all conditions and years. These tables revealed cases where the sum of subpopulations did not total the base population for any given year, or where a base population was mistakenly used for the wrong year.

This systematic approach to reviewing data quality successfully uncovered issues that were later remedied at all levels of evaluation.

APPENDIX A: TECHNICAL PROGRAMMING FOR MEDICARE DATA

This appendix describes the process by which data from the Medicare MedPAR, carrier, and outpatient files were combined to assign number of visits and costs to five separate types of service: inpatient stays, physician office visits, hospital outpatient visits, ambulatory surgery visits, and emergency room (ER) visits.

Claims records from the MedPAR, carrier and outpatient files for a 5% sample of Medicare beneficiaries were used in building the files for this research effort.² The MedPAR files contain summary records for all inpatient stays. The carrier file contains detailed information at the line-item level, which provided information on payment and place of service by line item³. Therefore, the carrier records were processed by line item rather than claim for this project. The outpatient file also contains detailed information, but not about payments, or place of service⁴.

An iterative process was used to build the analysis files. First, inpatient stays were identified, using MedPAR records. All costs from claims in the outpatient and carrier records with a date of service that occurred during an inpatient stay, as determined by the admission and discharge dates, were added to the inpatient silo. Next, ER, outpatient surgery, and ambulatory surgery visits in the outpatient file were defined, using appropriate revenue center codes. Stand-alone ambulatory center were defined using the place of service code from the carrier files and remaining line items with place of service as office and procedure codes with a range of 99024-99058 or 99199-99999 became the physician office visit core records. Payments from other line items with the same patient identifier, provider, and date of service were added to these physician office visit records; Finally, the line items and outpatient records that were not facility charges were matched to these visits, using the following procedure: (a) person and exact dates of service were matched; (b) unassigned line items and outpatient records were assigned, using place of service and date ranges; (c) payments from any line item or facility records that had not yet been assigned were aggregated by place of service. These “orphan” payments were included only in the calculation of cost per visit.

CREATING THE FILES

The Inpatient Analysis File

Inpatient stays were identified from MedPAR as those stays in which the admitting diagnosis matched one of the diagnoses used to define a UDA condition. This provided the count of inpatient stays for the UDA utilization tables. All other data added to the stay were used to track payments that were occasioned by the stay.

Assigning Payments from Carrier Line Items to Inpatient Stays

Line items were matched to stays, using person identifier and dates of service. Each stay had an admission date and a discharge date. Each line item also had a begin date and an end date (although for most line items they were equivalent). The rules for assigning line-item payments to stays varied by whether the line item matched the admission date, the discharge date, or a date in between (or an interim stay date).

Payments from any line item that matched a person and an admission, or interim stay date were assigned to the stay. Payments from line items that matched a person and discharge date, and had place of service equivalent to *inpatient* or *ambulance* were assigned to the stay. Payments from any line item with a place of service equivalent to *emergency room* that matched

a stay on admission date, or any interim dates were included with the stay. If the line item also matched an emergency room facility, the payments were included with the emergency room visit.

Matching Outpatient Files with Inpatient Stays

Outpatient claims were matched to inpatient stays using HICs,⁵ inpatient admission and discharge dates, and outpatient begin and end dates. Outpatient dollars were added to the inpatient stay if at least one of the following rules was met:

- The outpatient claim began and ended between (or including) the inpatient admission and discharge dates.
- The outpatient claim began during an inpatient stay and ended after the stay.
- The outpatient claim began and ended on the inpatient admission date.
- The outpatient claim began and ended on the inpatient discharge date.

An outpatient claim with an ER revenue center “flag” that occurred on the same day as an admission date counted as an ER visit in the ER facility of service.

Facility claims matching the discharge date of one stay and the admission date of a second stay were assigned to the second stay. These were generally ambulance services related to hospital transfers.

The Hospital Outpatient, Ambulatory Surgery, and ER Analysis Files

Each of these files was created using the revenue center codes found on the claims. The reason for the visit to one of these places of service was determined by the UDA condition found at the revenue center, not on the condition shown in data imported from the carrier file.

The revenue centers used to define *hospital outpatient* were:

- Clinic-general classification
- Clinic-chronic pain center
- Clinic-psychiatric
- Clinic-OB-GYN
- Clinic-pediatric
- Clinic-urgent care
- Clinic-family practice
- Clinic-other
- Free standing clinic-general classification
- Free standing clinic-rural health, clinic
- Free standing clinic-rural health, home
- Free standing clinic-family practice
- Free standing clinic-urgent care

The revenue centers used to define an *ambulatory surgery visit* were:

- Ambulatory surgical care-general
- Ambulatory surgical care-other
- Operating room services-general classification
- Operating room services – minor surgery

The revenue centers used to define an *emergency room visit* were:

- Emergency room-general classification

- Emergency room-EMTALA⁶ emergency medical screening services
- Emergency room-emergency room beyond EMTALA screening
- Emergency room-urgent care (effective 10/96)
- Emergency room-other

If an individual had two ER visits on the same day, they were counted as separate encounters. Claims were also assigned to the ambulatory surgery silo if the Facility type was “Special Facility or ASC Surgery” and the claim type was Ambulatory surgical center in hospital outpatient department. There could be up to 45 revenue centers on a single outpatient claim record. For some claims, the revenue center fell into more than one facility of service. They were then assigned to the appropriate facility of service based on their HCPCS⁷ codes

Physician services were drawn from the line-item file (carrier), and the payments associated with these services were assigned to an emergency room visit, hospital outpatient visit, or ambulatory surgery visit, using place of service, HIC, and exact date matches, as follows.

Payments from line items that matched an ER visit by person and exact date, and had a place of service that included ER, ambulance, or independent laboratory, or had a CPT code ranging from 99281 to 99285, were assigned to the emergency room facility of service. Payments from line items that matched a hospital outpatient visit by person and exact date, and had a place of service that included outpatient hospital, ambulatory surgery center, ambulance, or independent laboratory, were assigned to the hospital outpatient facility of service. Similarly, payments from line items that matched an ambulatory surgery visit by person and exact date, and had a place of service equivalent to outpatient hospital, ambulatory surgery center, ambulance, or independent laboratory, were assigned to the ambulatory surgery facility of service. Claims for free standing ambulatory surgery centers are only in the carrier file and have place of service coded as ambulatory surgery center. These claims were included in the ambulatory surgery center silo and counted as ASC visits.

The remaining line items on the carrier file that had a place of service that included inpatient, ER, outpatient, or ambulatory surgery were examined. The number of days between each line item and each visit for a person were reviewed, and payments for remaining line items (most of which were laboratory services) were matched to the payment total for the type of service encounter that occurred closest in time to the date of the line item⁸. For example, the payment for a line item with a place of service listed as *hospital outpatient* that occurred within seven days of a hospital outpatient visit was added to the grand total of all hospital outpatient payments, but was not assigned to the cost of that particular visit. The mean payment for a hospital outpatient visit would be calculated by dividing the grand total for all hospital outpatient payments by the total number of hospital outpatient visits. If the nearest date for a service encounter was more than seven days from the date of the line item, the cost for the line item was not added to any silo but the cost was added to the total cost for the disease.

The Physician Office Analysis File

After the above steps were performed, the remaining line items, having procedure codes equivalent to 99024–99058 or 99199–99999, formed the core physician office visit file. Payments from any line items from the carrier file or remaining facility records from the outpatient file that matched by patient, provider, and exact date of service were added to this visit file.

Remaining Carrier and Outpatient Payment Items

Remaining facility records that were not matched in the steps outlined above were matched to ER visits, hospital outpatient visits, or ambulatory surgery visits based on exact date of service. Payments from these facility records were added to the payment total for the relevant visit. If a record matched more than one such place of service, its payment amount was split between them. All remaining ambulance service revenue center payments were added to the total payments for ER visits. All radiation therapy revenue center payments were added to the total for hospital outpatient visits.

The remaining facility records were those that did not match a place of service by exact date, and hence were coined “orphan” records. These records’ payments were added to the established total payments for physician office visits, ambulatory surgery visits, hospital outpatient visits, and ER visits by HIC to the nearest date of service, using the following rules:

- Facility records were matched to the nearest visit by date of service within seven days.
- Matches were allowed to the ER only by plus, or minus one day.
- Records that matched more than one place of service by the same number of days were assigned in the following order: physician office, hospital outpatient, ER, ambulatory surgery.

Counts—Units of Analysis

Counts presented in the tables of this compendium are claims for each type of service. An individual could be counted more than once in each table if he or she had multiple events during the year. Within each facility of service, group counts, as well as payments, were tabulated for all persons and were stratified by age group, gender, race, and region. Gender and race codes used were those found on the claims record. The age category was derived from the age recorded on the claim record. The region code used was the census region, with claims recoded to region, using the state of residence.

Calculation of Denominators

Denominators for tables were derived from the CMS denominator file. This file includes the entire Medicare-eligible population and contains one record for each individual. Data from the denominator file can be linked to all other CMS files, using a unique identifier (ID) common to all files. In addition to eligibility status, the denominator file contains information about HMO membership. Individuals who were members of an HMO at any time during a year were dropped from the analysis because HMO claim records contain no payment information.

Weighting

The Medicare claims files, MedPAR, carrier file and the outpatient file are simple 5% random samples of the Medicare-eligible population. The sample was drawn using the last two digits of enrollees’ SSNs. National estimates presented in the tables were obtained by multiplying counts by a constant weight of 20 to represent the entire Medicare-eligible population.

Computing Confidence Intervals for Proportions

Ninety-five percent confidence intervals were calculated using the normal approximation to the binomial distribution (1). The confidence interval is:

$$(p - 1.96 \text{ sqrt}(pq/n), p + 1.96 \text{ sqrt}(pq/n))$$

where ***p*** is the estimated proportion of interest, ***q***= 1-***p***, ***n*** is the number of observations, and ***sqrt*** refers to the square-root function.

APPENDIX B: SUMMARY OF DATASETS

Centers for Medicare and Medicaid Services (CMS)

Sponsor:

Robyn Thomas, Director

Division of Quality Coordination and Data Distribution (DQCDD)

OIS/EDG/DQCDD N1-15-03

Centers for Medicare and Medicaid Services (CMS)

7500 Security Blvd.

Baltimore, MD 21244-1850

Design: The Medicare dataset contains a number of files, including the Medicare provider analysis and review (MedPAR) file, the carrier file, the outpatient file, and the denominator file. The *MedPAR* file contains records for Medicare beneficiaries who used hospital inpatient services during the given year. Each record summarizes a stay. The *carrier file* contains final action claims data submitted by non-institutional providers, such as physicians, physician assistants, nurse practitioners, and standalone ambulatory surgical centers. Each observation in this file is at the claim level. The *outpatient file* contains final action claims data submitted by institutional outpatient providers, such as hospital outpatient departments, rural health clinics, and outpatient rehabilitation facilities. The unit of observation is also at the claim level. Finally, the *denominator file* contains demographic and enrollment information about each beneficiary enrolled in Medicare during the calendar year.

Time Frame: Data are available for 2002 to 2007.

Sample Size: The 100% MedPAR dataset contains approximately 11 million records annually. For our analyses, a 5% MedPAR sample was used. The carrier and outpatient dataset samples we used were based on a 5% simple random sample of the HIC numbers from each database. The carrier file contains 30 million records, and the outpatient file contains 5 million records

Use: MedPAR provides in-depth information on all Medicare beneficiaries, including information on their diagnoses and procedures, along with a breakdown of charges for the year.

Benefits: Longitudinal tracking is possible, given the continuous data collection and large sample size. The detailed breakdown of charges allows for calculation of expenditures over a given year. The database also includes multiple diagnosis/procedure codes, thereby allowing for a more detailed level of analysis of charges associated with the urologic conditions under review.

Limitations: These data contain limited demographic information. Most beneficiaries are over 65 years of age.

Healthcare Cost and Utilization Project (HCUP)—Nationwide Inpatient Sample (NIS)**Sponsor:**

Healthcare Cost and Utilization Project (HCUP)—Nationwide Inpatient Sample (NIS)
Agency for Healthcare Research and Quality
HCUP Central Distributor
Social and Scientific Systems
8757 Georgia Ave., 12th Floor
Silver Spring, MD 20910
(866) 556-4287

Design: The Nationwide Inpatient Sample (NIS) is a subsample of the State Inpatient Databases (SID). NIS represents a 20% sample of hospital discharges from SID that includes all ages. The database utilizes a nationally representative stratified sample of approximately 6 million to 7.5 million records for the time period analyzed in this study.

Time Frame: The database contains data for 2002 to 2007.

Sample Size: Initially, the database covered only eight states; it has since grown to 28 states. It contains discharge data on approximately 7 million discharges, approximating a 20% stratified sample of US community hospitals. The sample of hospitals comprises about 80% of all hospital discharges in the United States.

Use: Data on hospital inpatient stays can be used to identify, track, and analyze national trends in access, charges, quality, and outcomes. It is the only national hospital database with charge information on all patient stays, regardless of payer.

Benefits: This large, nationally representative sample allows for the evaluation of trends over time. It can also be used to evaluate rare conditions and special populations (e.g., pediatric), and it includes charge information on all patient stays.

Limitations: Only hospitalizations are included, thereby limiting the types of service that can be analyzed. However, it may be possible to document change from inpatient to outpatient care over the years if HCUP is combined appropriately with other databases.

I3**Sponsor:**

I3 Innovus
10 Cabot Rd, Ste 304
Medford, MA 02155
www.i3global.com

Design: Observational claims database of individuals with private insurance.

Time Frame: 2002-2007.

Sample Size: Contains information on approximately 30 million individuals with private insurance.

Use: Allows characterization of utilization and charges in privately insured individuals with urologic disease.

Benefits: This is a large dataset which allows for adequate numbers to describe less common urologic conditions, for example amongst the pediatric population. Data on medication use and some laboratory values are available.

Limitations: Privately insured individuals differ in socioeconomic status from non-insured or underinsured individuals. The data are not nationally representative. Only charge data are available, as opposed to reimbursement data.

National Survey of Ambulatory Surgery (NSAS)

Sponsor:

National Center for Health Statistics
Centers for Disease Control and Prevention
Division of Data Services
6525 Belcrest Road
Hyattsville, MD, 20782-2003
(301) 458-4636

Design: The NSAS is a multi-stage probability sample, with the hospitals, or freestanding ambulatory surgery centers sampled at the first stage or second stage and specific surgical procedures sampled at the final stage. The “hospital” universe includes non-Federal, general, short-stay, and children’s hospitals located in the 50 states and the District of Columbia. The universe of “freestanding ambulatory surgery centers” is comprised of facilities which are state licensed/ Medicare certified, or which provide ambulatory surgery as the primary business activity and operate independently as a separate business. Facilities specializing in dentistry, podiatry, abortion, family planning, or birthing were also excluded from NSAS.

Time Frame: 2006

Sample Size: The 2006 NSAS abstracted data from 52,000 ambulatory surgery visits to 437 facilities.

Use: As surgical services migrate to outpatient settings, describing ambulatory surgery use is required to present a comprehensive portrait of disease burden. Specific trends within surgical diseases can be examined in relation to subject demographics.

Benefits: This unique dataset allows for national estimation of ambulatory surgery services and trends.

Limitations: ICD-9 procedure codes are used, which are of limited specificity when compared with Common Procedural Terminology procedure codes.

Kids' Inpatient Database (KID)

Sponsor:

Healthcare Cost and Utilization Project (HCUP)—Nationwide Inpatient Sample (NIS)
Agency for Healthcare Research and Quality
HCUP Central Distributor
Social and Scientific Systems
8757 Georgia Ave., 12th Floor
Silver Spring, MD 20910
(866) 556-4287

Design: US community hospitals (defined as short-term, non-Federal, general and specialty hospitals, excluding hospital units of other institutions).

Time Frame: 2003, 2006

Sample Size: KID contains a sample of pediatric discharges from approximately 3,000 community hospitals nationwide; it contains data from 2 to 3 million pediatric hospital discharges.

Use: KID allows national estimates of pediatric inpatient utilization, including procedure use.

Benefits: This dataset allows national estimates of time trends, quality of care, and charges related to pediatric urologic conditions.

Limitations: Procedures are listed using ICD-9 coding, which limits specificity when compared with CPT coding. Despite the size of the dataset, some urologic conditions are incompletely described by the data. As the trend toward outpatient care in urology continues, this limitation may grow.

National Ambulatory Medical Care Survey (NAMCS)**Sponsor:**

National Center for Health Statistics
Centers for Disease Control and Prevention
Division of Data Services
6525 Belcrest Road
Hyattsville, MD, 20782-2003
(301) 458-4636

Design: Data are collected from non-Federally employed physicians engaged in direct patient care (this excludes anesthesiology, radiology, and pathology) during a randomly assigned one-week reporting period. The physicians are selected on the basis of a national probability sample of office-based physicians. During the reporting period, data are gathered on an encounter form that records a systematic random sample of visits per physician. Data collected include patients' symptoms, physicians' diagnoses, and medications either ordered, or provided to the patient.

Time Frame: 2002 to 2007.

Sample Size: The sample size for the years of data evaluated in this compendium ranges from 1,200 to 1,700 physicians and 25,000 to 40,000 patient visits annually.

Use: The data provide information about the provision and use of ambulatory medical care in the United States.

Benefits: This database may be considered nationally representative, since it has a multistage probability design and captures the physician subspecialties that may encounter urologic conditions. Also, this database may identify a number of urologic conditions (e.g. UTI, BPH) that might otherwise go unreported because many of them are identified on the basis of office visits alone.

Limitations: There are no identifiers to track patients longitudinally. Also, some rare pediatric conditions may be missed because of the limited number of visits reported. The number of urologists sampled may be small for specific analyses. There are no cost data, and there may be more than one record per person because the data report number of *patient visits*, not *patients*.

National Hospital Ambulatory Medical Care Survey (NHAMCS)

Sponsor:

National Center for Health Statistics
Centers for Disease Control and Prevention
Division of Data Services
6525 Belcrest Road
Hyattsville, MD, 20782-2003
(301) 458-4636

Design: These data are collected in order to provide a better understanding of the utilization and extent of ambulatory care services in hospital emergency and outpatient departments. Data are collected on a national sample of emergency department and outpatient visits, excluding federal, military, and VA hospitals. The database uses a four-stage probability design. First, a sample of geographic areas is defined. Next, a sample of hospitals is identified within these areas. Third, clinics are selected within these hospitals. Finally, patients are selected on the basis of their visits to these clinics.

A patient record form is completed by hospital staff during a randomly assigned four-week period.

Time Frame: 2002-2007.

Sample Size: The sample size for the years of data evaluated in this compendium is in the range of 25,000 to 40,000 patient visits annually.

Use: The data describe utilization and provision of ambulatory care services in hospital emergency and outpatient departments (excluding federal, military, and VA hospitals).

Benefits: The survey covers a nationally representative multistage probability sample, which includes a pediatric population and contains data on genitourinary care in ERs. Other data reported include demographic characteristics of patients, expected source(s) of payment, diagnoses, medication, and certain characteristics of the hospital, such as type of ownership.

Limitations: There are no cost data and no identifiers to track patients longitudinally. An individual may have more than one record, since the data are based on number of *patient visits*, not *patients*. Because the number of visits is small, rare conditions and those that are chronic in nature may be missed.

National Health and Nutrition Examination Survey (NHANES)

Sponsor:

National Center for Health Statistics
Centers for Disease Control and Prevention
Division of Data Services
3311 Toledo Road
Hyattsville, MD 20782
(301) 458-4636

Design: NHANES is a continuing series of national sample surveys of households and household members in 50 states.

Time Frame: 2001-2008.

Sample Size: The sample for the 2008 NHANES includes approximately 9,762 respondents, age 2 months and older.

Use: The survey allows collection of data regarding urologic diseases and symptoms that can be used to generate true national prevalence for these diseases and symptoms during the time period covered in the survey.

Benefits: The data are unique in that they allow for nationally-representative estimates of the prevalence of certain urologic conditions.

Limitations: Relatively few urologic conditions are asked about in this survey. Subject self-report regarding medical history is subject to error.

Databases Selected for Analysis

DATABASE	ACRONYM	CATEGORY	PURPOSE
Centers for Medicare and Medicaid Services-Medicare Provider Analysis and Review	CMS-MedPAR	Medicare	Records of hospital inpatient services for Medicare beneficiaries
Centers for Medicare and Medicaid Services-Carrier File	CMS-Carrier	Medicare	Claims submitted by non-institutional providers for Medicare beneficiaries
Centers for Medicare and Medicaid Services-Outpatient file	CMS-Outpatient	Medicare	Claims submitted by institutional outpatient providers for Medicare beneficiaries
Centers for Medicare and Medicaid Services-Denominator file	CMS-Denominator	Medicare	Demographic and enrollment information on Medicare beneficiaries
Healthcare Cost and Utilization Project – Nationwide Inpatient Sample	HCUP-NIS	Health care utilization and cost	National sample of inpatient stays and hospitalizations
National Ambulatory Medical Care Survey	NAMCS	Health care utilization and cost	National sample of ambulatory care utilization
National Hospital Ambulatory Medical Care Survey-Outpatient and Emergency Room Components	NHAMCS-OP NHAMCS-ER	Health care utilization and cost	National sample of ambulatory care services in hospital emergency and outpatient departments
I3 database		Cost of disease	Medical claims database providing utilization and cost data for private sector
National Survey of Ambulatory Surgery	NSAS	Health care utilization and cost	National sample of ambulatory surgery performed in hospitals and freestanding ambulatory surgery centers
Kids' Inpatient Database	KID	Health care utilization and cost	Database of hospital inpatient stays for children to examine a broad range of conditions and procedures related to child health issues. Part of Healthcare Cost and Utilization Project
National Health and Nutrition Examination Survey	NHANES	Health care utilization and cost	Continuing series of national sample surveys of households and household members to assess health and nutritional status of adults and children in the US

REFERENCES

1. Modern Elementary Statistics. Fifth ed. Englewood Cliffs, NJ: Prentice Hall, 1979.
2. Escarce JJ, McGuire TG. Methods for using Medicare data to compare procedure rates among Asians, blacks, Hispanics, Native Americans, and whites. *Health Serv Res* 2003; 38:1303-17.
3. The [output/code/data analysis] for this paper was generated using SAS software, Version 9 of the SAS System for Linux. Copyright © 2002 SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.
4. Rothenberg R, Bross DC, Vernon TM. Reporting of gonorrhea by private physicians: A behavioral study. *Am J Public Health* 1980; 70:983-6.
5. Rothenberg RB. Analysis of routine data describing morbidity from gonorrhea. *Sex Transm Dis* 1979;6:5-9.
6. Chorba TL. Disease surveillance. In: Thomas JC, Weber DJ, eds. *Epidemiologic methods for the study of infectious diseases*. New York: Oxford University Press, 2001:138-162.
7. Chorba TL, Berkelman RL, Safford SK, Gibbs NP, Hull HF. Mandatory reporting of infectious diseases by clinicians. *JAMA* 1989; 262:3018-26.
8. 1998 guidelines for treatment of sexually transmitted diseases. Centers for Disease Control and Prevention. *MMWR Recomm Rep* 1998;47:1-111.
9. National Drug Data File Plus Tm reference software. First Data Bank Inc; San Bruno, CA.
10. Drug Topics Redbook. 107th ed. Montvale, NJ: Medical Economics Co., 2003.
11. Brown ML, Riley GF, Schussler N, Etzioni R. Estimating health care costs related to cancer treatment from SEER-Medicare data. *Med Care* 2002; 40:IV-104-17.

NOTES

¹ 2000 NAMCS Micro-data file documentation, Data Dissemination Branch, National Center for Health Statistics, 6525 Belcrest Road, Room 1064, Hyattsville, MD, 20782.

² These files excluded anyone with health maintenance organization (HMO) experience during any years of our analysis.

³ Line items with place of service other than physician office, inpatient hospital, ER, ambulatory surgery, outpatient hospital, ambulance, or independent laboratory were excluded from the analysis.

⁴ Outpatient claims with facility type listed as skilled nursing facilities (SNF) or home health agencies (HHA) were excluded from analysis.

⁵ HIC is an acronym for Health Insurance Claim number. It is an 11-digit code made up of a nine-digit claim account number (CAN) (which is actually a social security number (SSN)) and a two-digit beneficiary identification code (BIC), which uniquely identifies multiple people claiming benefits under the same SSN.

⁶ The Emergency Medical Treatment and Active Labor Act, a statute that governs when and how a patient may be (1) refused treatment or (2) transferred from one hospital to another when he or she is in an unstable medical condition.

⁷ The HCFA Common Procedure Coding System.

⁸ If matches of ER and ambulatory surgery were within one day of each other, then half the costs were assigned to each facility of service. Also, when the office visit line item was matched to a place of service, the non-office-visit line items that matched on HIC, provider, and date were also assigned to that place of service.

Glossary

GLOSSARY OF SELECTED TERMS

Race- The concept of race reflects self-identification by people according to the race, or races with which they mostly identify. These categories are socio-political constructs and should not be interpreted as being scientific, or anthropological in nature. Furthermore, the race categories include both racial and national-origin groups. According the Office of Management and Budget (OMB) standards, race is considered a separate concept from Hispanic origin (ethnicity).

White- A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicated their race as “White”, or report entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish.

Black or African American- A person having origins in any of the Black racial groups of Africa. It includes people who indicated their race as “Black, African Am”, or provide written entries such as African- American, Afro American, Kenyan, Nigerian, or Haitian.

American Indian and Alaska Native (North American Native)- A person having origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation, or community attachment.

Asian- A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes “Asian Indian,” “Chinese,” “Filipino,” “Korean,” “Japanese,” “Vietnamese,” and “Other Asian.”

Pacific Islander- A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as “Native Hawaiian,” “Guamanian or Chamorro,” “Samoan,” and “Other Pacific Islander.”

Other race- Includes all other responses not included in the “White,” “Black or African American,” “American Indian and Alaska Native,” “Asian,” “Native Hawaiian,” and “Other Pacific Islander” race categories described above. Respondents providing write-in entries, such as multi-racial, mixed, interracial, or a Hispanic/Latino group (for example, Mexican, Puerto Rican, or Cuban) in the “Some other race” category are included here.

Ethnicity- The heritage, nationality group, lineage, or country of birth of the person, or the person’s parents, or ancestors before their arrival in the United States.

Hispanic- Persons of Cuban, Mexican, Puerto Rican, South or Central-American, or other Spanish culture, or origin, regardless of race.

Region- The United States is grouped into four regions of states corresponding to those used by the US Census Bureau:

Northeast- Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania

Midwest- Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas

South- Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas

West- Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

Public Use Microdata Sample (PUMS)- These files are a sub-sample from the American Community Survey (ACS) and show the full range of population and housing unit responses collected on individual ACS questionnaires. These data are used for variables not commonly offered by the US Census bureau. Questionnaire data includes: age, sex, tenure, income, education, language spoken at home, journey to work, occupation, condominium status, shelter costs, vehicles available, and other subjects.

Urban Area- Urban consists of urbanized areas and other urban entities. An urban area consists of densely settled territory with a population of 50,000, or more inhabitants. Other urban areas have from 2,500 to 49,999 populations.

Rural- Territory, population, and housing units not classified as urban.

Source of payment

Medicare- The health insurance program for the aged and disabled administered by the Centers for Medicare and Medicaid Services.

Medicaid- A jointly funded Federal-State health insurance program providing medical care to those unable to afford it.

Private insurance- A private insurance plan not specified as an HMO/PPO. This includes Blue Cross/Blue Shield plans, medical coverage provided by life insurance companies, health insurance companies, and independent plans such as employer/non-sponsored plans and /or self-funded plans (partial or total).

HMO/PPO- Any Health Maintenance Organization (HMO), or Preferred Provider Organization (PPO) sponsored by consumers, communities, physicians, or hospitals.

Self-pay- The majority of the costs for the visits were paid by the patient, spouse, family, or next-of-kin.

Other insurance- Includes any non-profit source of payment (such as church welfare, United Way, or Shriner's Hospitals for Children).

Poverty Income Ratio- This is a calculated variable based on family income and family size using tables published each year by the bureau of the Census in a series "Current Population Reports" on poverty in the United States. The primary reporting categories are:

0.00-0.999 (Below poverty)

1.000 and above (At or above poverty)

Or

0.00-1.850 (Low)

1.851-3.500 (Middle)

3.501 and above (High)

Primary Diagnosis- The condition that is determined during the hospital stay to be the chief reason for causing the hospital admission.

Any Diagnosis- Includes primary diagnosis and additional conditions that coexist at the time of admission, or that develop during the stay, and which have an effect on the treatment, or length of stay in the hospital.

Discharge status- The disposition of a patient at the time of discharge from an inpatient facility.

