Table 3A.5.6: Trends in Mean and Total Hospital Charges for Hip and Knee Joint Replacement Procedures in Actual and 2013 Dollars, United States 1998-2013

										n Actua	ו חר	ıllare								
								Average (I					zatio	on [1]						
		1998		1999		2000		2001		2002		2003		2004		2007		2011		2013
Total Hip Replacement [2]		\$22,000		\$23,000		\$26,000		\$27,000		\$31,000		\$35,000		\$37,000		\$45,500		\$56,000		\$58,500
Partial Hip Replacement [3]		\$22,000		\$23,000		\$26,000		\$28,000		\$32,000		\$35,000		\$39,000		\$49,300		\$62,800		\$67,400
Revision Hip Replacement [4]		\$27,000		\$31,000		\$32,000		\$34,000		\$39,000		\$45,000		\$46,000		\$50,200		\$79,500		\$81,200
Total Knee Replacement [5]		\$21,000		\$22,000		\$24,000		\$26,000		\$29,000		\$31,000		\$33,000		\$41,500		\$52,100		\$55,300
Revision Knee Replacement [6]		\$24,000		\$25,000		\$30,000		\$30,000		\$35,000		\$42,000		\$42,000		\$55,100		\$77,700		\$83,200
		Total Hospitalization Charges for Joint Replacements (in billions)																		
		1998		1999		2000		2001		2002		2003		2004		2007		2011		2013
Total Hip Replacement [2]		\$3.37		\$3.64		\$4.00		\$5.07		\$5.91		\$6.77		\$8.34		\$11.50		\$17.17		\$20.10
Partial Hip Replacement [3]		\$2.27		\$2.39		\$2.63		\$2.98		\$3.35		\$3.58		\$3.97		\$5.11		\$6.62		\$6.55
Revision Hip Replacement [4]		\$0.83		\$0.99		\$1.04		\$1.32		\$1.47		\$1.66		\$1.69		\$8.23		\$4.02		\$4.07
Total Knee Replacement [5]		\$5.36		\$5.67		\$6.22		\$8.06		\$9.82		\$11.38		\$14.26		\$22.88		\$33.61		\$36.64
Revision Knee Replacement [6]		\$0.54		\$0.63		\$0.70		\$0.85		\$1.01		\$1.47		\$1.48		\$2.48		\$4.86		\$5.08
Total Hip and Knee Replacement Cost		\$12.37		\$13.32		\$14.59		\$18.29		\$21.57		\$24.86		\$29.74		\$50.20		\$66.29		\$72.45
	In 2013 Dollars [7]																			
								Average (Mean) Charges Per Hospitalization												
								Average	(Me	an) Charg	es P	er Hospita	alizat	ion						
		1998		1999		2000		Average 2001	(Me	an) Charg 2002	es P	er Hospita 2003	alizat	2004		2007		2011		2013
Total Hip Replacement [2]	\$	1998 31,440	\$	1999 32,160	\$	2000 35,170	\$		(Me		es P \$	-	slizat \$		\$	2007 51,120	\$	2011 58,000	\$	2013 58,500
Total Hip Replacement [2] Partial Hip Replacement [3]	\$ \$		\$ \$		\$		\$	2001	-	2002		2003		2004	\$ \$		\$ \$		\$ \$	
	•	31,440	•	32,160		35,170		2001 35,520	\$	2002 40,140	\$	2003 44,310	\$	2004 45,630		51,120	-	58,000	-	58,500
Partial Hip Replacement [3]	\$	31,440 31,440	\$	32,160 32,160	\$	35,170 35,170	\$	2001 35,520 36,830	\$	2002 40,140 41,440	\$ \$	2003 44,310 44,310	\$	2004 45,630 48,100	\$	51,120 55,390	\$	58,000 65,040	\$	58,500 67,400
Partial Hip Replacement [3] Revision Hip Replacement [4]	\$	31,440 31,440 38,590	\$	32,160 32,160 43,350	\$	35,170 35,170 43,290	\$	2001 35,520 36,830 44,720	\$ \$ \$	2002 40,140 41,440 50,500	\$ \$ \$	2003 44,310 44,310 56,970	\$ \$ \$	2004 45,630 48,100 56,730	\$	51,120 55,390 56,400	\$	58,000 65,040 82,330	\$	58,500 67,400 81,200
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5]	\$ \$ \$	31,440 31,440 38,590 30,010	\$ \$ \$	32,160 32,160 43,350 30,760	\$ \$ \$	35,170 35,170 43,290 32,470 40,580	\$ \$ \$ \$	2001 35,520 36,830 44,720 34,200	\$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320	\$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170	\$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800	\$ \$ \$ \$	51,120 55,390 56,400 46,630 61,900	\$ \$ \$	58,000 65,040 82,330 53,960	\$ \$ \$	58,500 67,400 81,200 55,300
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5]	\$ \$ \$	31,440 31,440 38,590 30,010	\$ \$ \$	32,160 32,160 43,350 30,760	\$ \$ \$	35,170 35,170 43,290 32,470 40,580	\$ \$ \$ \$	2001 35,520 36,830 44,720 34,200 39,460	\$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320	\$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170	\$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800	\$ \$ \$ \$	51,120 55,390 56,400 46,630 61,900	\$ \$ \$	58,000 65,040 82,330 53,960	\$ \$ \$	58,500 67,400 81,200 55,300
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5]	\$ \$ \$	31,440 31,440 38,590 30,010 34,300	\$ \$ \$	32,160 32,160 43,350 30,760 34,960	\$ \$ \$	35,170 35,170 43,290 32,470 40,580	\$ \$ \$ \$	2001 35,520 36,830 44,720 34,200 39,460 spitalizatio	\$ \$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320 harges for	\$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170 art Replace 2003	\$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800 hts (in bill	\$ \$ \$ \$	51,120 55,390 56,400 46,630 61,900	\$ \$ \$	58,000 65,040 82,330 53,960 80,470	\$ \$ \$ \$	58,500 67,400 81,200 55,300 83,200
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5] Revision Knee Replacement [6]	\$ \$ \$	31,440 31,440 38,590 30,010 34,300	\$ \$ \$ \$	32,160 32,160 43,350 30,760 34,960	\$ \$ \$ \$	35,170 35,170 43,290 32,470 40,580 Total	\$ \$ \$ \$ I Ho:	2001 35,520 36,830 44,720 34,200 39,460 spitalization	\$ \$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320 harges for 2002	\$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170 at Replace 2003 8.57	\$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800 hts (in bill 2004	\$ \$ \$ \$	51,120 55,390 56,400 46,630 61,900	\$ \$ \$	58,000 65,040 82,330 53,960 80,470	\$ \$ \$ \$	58,500 67,400 81,200 55,300 83,200
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5] Revision Knee Replacement [6] Total Hip Replacement [2]	\$ \$ \$ \$	31,440 31,440 38,590 30,010 34,300 1998 4.82	\$ \$ \$ \$	32,160 32,160 43,350 30,760 34,960 1999 5.09	\$ \$ \$ \$	35,170 35,170 43,290 32,470 40,580 Total 2000 5.41	\$ \$ \$ \$ \$ \$ \$ \$ \$	2001 35,520 36,830 44,720 34,200 39,460 spitalizatio 2001 6.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320 harges for 2002 7.65	\$ \$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170 nt Replace 2003 8.57 4.53	\$ \$ \$ \$ emer	2004 45,630 48,100 56,730 40,700 51,800 ats (in bill 2004 10.29	\$ \$ \$ ions	51,120 55,390 56,400 46,630 61,900 2007 12.92 5.74	\$ \$ \$ \$	58,000 65,040 82,330 53,960 80,470 2011 17.78	\$ \$ \$ \$	58,500 67,400 81,200 55,300 83,200 2013 20.10
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5] Revision Knee Replacement [6] Total Hip Replacement [2] Partial Hip Replacement [3]	\$ \$ \$ \$	31,440 31,440 38,590 30,010 34,300 1998 4.82 3.24	\$ \$ \$ \$	32,160 32,160 43,350 30,760 34,960 1999 5.09 3.34	\$ \$ \$ \$	35,170 35,170 43,290 32,470 40,580 Total 2000 5.41 3.56	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2001 35,520 36,830 44,720 34,200 39,460 spitalization 2001 6.67 3.92	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320 harges for 2002 7.65 4.34	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170 nt Replace 2003 8.57 4.53 2.10	\$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800 hts (in bill 2004 10.29 4.90	\$ \$ \$ ions	51,120 55,390 56,400 46,630 61,900 2007 12.92 5.74	\$ \$ \$ \$ \$	58,000 65,040 82,330 53,960 80,470 2011 17.78 6.86	\$ \$ \$ \$ \$ \$	58,500 67,400 81,200 55,300 83,200 2013 20.10 6.55
Partial Hip Replacement [3] Revision Hip Replacement [4] Total Knee Replacement [5] Revision Knee Replacement [6] Total Hip Replacement [2] Partial Hip Replacement [3] Revision Hip Replacement [4]	\$ \$ \$ \$ \$	31,440 31,440 38,590 30,010 34,300 1998 4.82 3.24 1.19	\$ \$ \$ \$ \$ \$	32,160 32,160 43,350 30,760 34,960 1999 5.09 3.34 1.38	\$ \$ \$ \$ \$ \$ \$ \$	35,170 35,170 43,290 32,470 40,580 Total 2000 5.41 3.56 1.41	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2001 35,520 36,830 44,720 34,200 39,460 spitalization 2001 6.67 3.92 1.74	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2002 40,140 41,440 50,500 37,550 45,320 harges for 2002 7.65 4.34 1.90	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2003 44,310 44,310 56,970 39,250 53,170 nt Replace 2003 8.57 4.53 2.10	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2004 45,630 48,100 56,730 40,700 51,800 hts (in bill 2004 10.29 4.90 2.08	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	51,120 55,390 56,400 46,630 61,900 2007 12.92 5.74 9.25	\$ \$ \$ \$ \$	58,000 65,040 82,330 53,960 80,470 2011 17.78 6.86 4.16 34.81	\$ \$ \$ \$ \$ \$	58,500 67,400 81,200 55,300 83,200 2013 20.10 6.55 4.07

Table 3A.5.6: Trends in Mean and Total Hospital Charges for Hip and Knee Joint Replacement Procedures in Actual and 2013 Dollars, United States 1998-2013

[1] Average charges are based on individual record discharges. The fees included may vary from patient to patient, but generally include hospital room, supplies, medications, laboratory fees, and care staff, such as nurses. They generally do not include professional fees (doctors) and non-covered charges. In a small proportion of the discharge cases, professional fees (doctors) are not removed from total charges because the data source cannot provide the information. Emergency charges incurred prior to admission to the hospital may be included in total charges. Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department; other payers may or may not have similar requirements.

[2] ICD-9-CM procedure code 81.51. [3] ICD-9-CM procedure code 81.52. [4] ICD-9-CM procedure code 81.53, 00.70, 00.71.

[5] ICD-9-CM procedure code 81.54. [6] ICD-9-CM procedure code 81.55, 00.80-00.84.

[7] Source: United States Department of Labor, Bureau of Labor Statistics. Data Tools: CPI Inflation Calculator. www.bls.gov/data/inflation-calculator.htm Accessed October 25, 2016.

HCUP Nationwide Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP). 1998-2013. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nisoverview.jsp