

Table 4.10: Trends in Hip and Knee Joint Replacement Procedures, All Ages, in the United States, 1992-2011**National Hospital Discharge Survey, 1992- 2010****Joint Replacement Procedures (in 000s)**

Description	ICD-9 CM	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
	Code										
All Hip Replacement Procedures											
Total Hip Replacement	81.51	127.0	124.0	138.0	160.0	152.0	193.0	234.0	230.1	262.7	326.1
Partial Hip Replacement [1]	81.52	88.0	93.0	103.0	112.0	106.0	108.8	119.7	138.5	132.4	134.8
Revision of Hip Replacement [2,3]	81.53, 00.70, 00.71, 00.72, 00.73	23.0	28.0	30.0	33.0	31.0	42.7	46.0	144.0	36.6	47.5
Ratio Hip Revision to Primary		18.1%	22.6%	21.7%	20.6%	20.4%	22.1%	19.7%	62.6%	13.9%	14.6%
All Knee Replacement Procedures											
Total Knee Replacement	81.54	167.0	209.0	245.0	266.0	299.0	381.3	478.0	516.4	609.1	693.4
Revision of Knee Replacement [3]	81.55, 00.80, 00.81, 00.82, 00.83, 00.84	13.0	19.0	20.0	23.0	28.0	35.1	40.0	35.3	43.0	65.2
Ratio Knee Revision to Primary		7.8%	9.1%	8.2%	8.6%	9.4%	9.2%	8.4%	6.8%	7.1%	9.4%
TOTAL Hip and Knee Replacement/ Revision Procedures		418.0	473.0	536.0	594.0	616.0	760.8	917.7	954.1	1,083.8	1,267.0

Source: National Hospital Discharge Survey (NHDS), 1991-2010. www.cdc.gov/nchs/nhds/nhds_questionnaires.htm April 23, 2013.**Nationwide Inpatient Sample, 1992-2011****Joint Replacement Procedures (in 000s)**

Description	ICD-9 CM	1992	1994	1996	1998	2000	2002	2004	2007	2011
	Code									
All Hip Replacement Procedures										
Total Hip Replacement	81.51	139.9	148.2	157.0	166.7	176.1	187.7	227.5	252.7	306.6
Partial Hip Replacement	81.52	97.9	100.8	103.5	105.8	107.4	109.9	105.1	103.7	105.5
Revision of Hip Replacement [2,3]	81.53, 00.70, 00.71, 00.72, 00.73	28.3	29.9	31.7	33.5	35.2	37.2	37.9	164.0	50.6
Ratio Hip Revision to Primary		20.2%	20.2%	20.2%	20.1%	20.0%	19.8%	16.7%	64.9%	16.5%
All Knee Replacement Procedures										
Total Knee Replacement	81.54	203.6	227.9	255.1	286.6	321.8	365.3	435.5	551.3	645.1
Revision of Knee Replacement [3]	81.55, 00.80, 00.81, 00.82, 00.83, 00.84	17.5	19.5	21.9	24.6	27.6	31.2	36.2	45.0	62.6
Ratio Knee Revision to Primary		8.6%	8.6%	8.6%	8.6%	8.6%	8.5%	8.3%	8.2%	9.7%
TOTAL Hip and Knee Replacement/ Revision Procedures		487.2	526.3	569.2	617.2	668.1	731.3	842.2	999.5	1,170.4

Source: HCUP Nationwide Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP). 1991-2011. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nisoverview.jsp

[1] An unknown error in the partial hip replacement data occurred in the NHDS 2010 data file. A correction for total partial hip cases was made by excluding cases with diagnosis of spine (720 724, 737, 756, 805, 806).

[2] A significant jump in the number of hip revision procedures was found between the 2004 and the 2006/2007 data. The increase was similar in both the NHDS and NIS data sets, indicating the increase may have occurred; however, the 2010/2011 data indicates it was an error.

[3] In 2006, additional codes were added to hip and knee revision replacement procedures to identify specific parts being revised.