

Table 116 (page 1 of 3). Cost of hospital discharges with common hospital operating room procedures in nonfederal community hospitals, by age and selected principal procedure: United States, selected years 2000–2011

Updated data when available, Excel, and PDF: <http://www.cdc.gov/nchs/hus/contents2013.htm#116>.

[Data are compiled by the Agency for Healthcare Research and Quality using discharge data from participating states]

Age and principal operating room procedure ¹	Mean inflation-adjusted cost per hospitalization: 2011 dollars ²			Number of discharges with operating room principal procedure			Total inflation-adjusted national costs: 2011 dollars (in millions)		
	2000	2005	2011	2000	2005	2011	2000	2005	2011
All ages									
Hospital discharges with an operating room principal procedure ³	\$13,271	\$15,883	\$17,824	9,022,288	10,285,810	9,896,370	\$119,000	\$163,518	\$175,990
Laminectomy (back surgery)	8,170	9,218	11,493	294,345	255,955	203,297	2,415	2,361	2,342
Heart valve procedures	42,900	52,435	53,282	82,826	96,715	113,996	3,547	5,091	6,048
Coronary artery bypass graft (CABG)	31,268	37,984	38,707	349,967	227,774	165,683	10,984	8,666	6,411
Percutaneous coronary angioplasty (PTCA) (balloon angioplasty of heart)	14,978	18,415	18,823	601,832	749,572	516,941	9,016	13,809	9,728
Insertion, revision, replacement, removal of cardiac pacemaker or cardioverter/defibrillator	27,684	35,291	33,194	68,723	165,619	121,497	1,918	5,837	4,035
Colorectal resection (removal of part of the bowel)	19,476	22,594	23,194	261,519	283,453	288,458	5,198	6,412	6,681
Appendectomy	7,328	8,475	9,206	277,029	308,634	264,882	2,007	2,615	2,438
Cholecystectomy (gall bladder removal)	10,402	12,060	12,644	400,818	388,252	399,933	4,134	4,683	5,047
Hysterectomy	6,537	7,249	9,288	596,889	567,964	350,962	3,873	4,124	3,268
Cesarean section	5,437	5,463	5,889	927,397	1,301,770	1,269,236	4,923	7,115	7,481
Treatment, fracture or dislocation of hip and femur	12,585	15,231	16,780	244,706	259,071	255,022	3,132	3,943	4,275
Arthroplasty knee (knee replacement)	13,805	15,566	15,908	328,118	549,867	711,398	4,503	8,563	11,317
Hip replacement	14,974	17,038	17,155	304,709	381,318	464,452	4,619	6,490	7,962
Spinal fusion	17,433	24,730	27,570	210,677	331,912	464,975	3,587	8,217	12,837
Under 18 years									
Hospital discharges with an operating room principal procedure ³	13,307	19,260	20,879	394,504	551,952	348,370	5,075	10,588	7,165
Incision and excision of CNS (a type of brain surgery)	28,857	34,930	39,295	6,581	11,786	6,959	183	413	272
Tonsillectomy and/or adenoidectomy	4,404	5,699	5,628	12,524	16,842	16,103	57	96	92
Small bowel resection (removal of part of the small bowel)	36,209	50,383	50,686	1,769	3,075	1,856	63	153	92
Appendectomy	6,575	8,091	8,453	77,676	88,563	64,020	497	716	543
Cesarean section	6,035	5,735	6,050	24,419	29,549	19,491	133	170	118
Spinal fusion	29,262	45,920	54,953	7,704	13,305	10,159	222	605	552
18–44 years									
Hospital discharges with an operating room principal procedure ³	8,771	9,889	11,490	2,894,835	3,202,648	2,845,870	24,844	31,706	32,597
Incision and excision of CNS (a type of brain surgery)	25,471	30,435	37,438	20,221	18,779	20,935	496	575	779
Laminectomy (back surgery)	7,351	8,584	11,009	98,649	69,320	42,269	730	596	468
Appendectomy	6,750	7,714	8,465	137,667	140,028	120,243	916	1,080	1,019
Cholecystectomy (gall bladder removal)	8,521	9,384	10,186	136,587	133,060	146,198	1,118	1,249	1,492
Oophorectomy (removal of one or both ovaries)	6,351	7,370	9,271	39,388	34,430	24,413	253	254	227
Ligation of fallopian tubes (“tying” of fallopian tubes)	4,703	4,537	5,204	77,428	77,073	48,106	344	350	251
Hysterectomy	6,059	6,581	8,350	299,858	262,861	146,091	1,791	1,732	1,223
Cesarean section	5,419	5,452	5,879	900,964	1,267,786	1,245,270	4,778	6,917	7,328
Treatment, fracture or dislocation of lower extremity (other than hip or femur)	9,338	11,803	13,927	70,112	61,369	52,424	643	723	729
Spinal fusion	16,385	22,893	25,251	75,502	89,893	85,881	1,196	2,059	2,170

See footnotes at end of table.

Table 116 (page 2 of 3). Cost of hospital discharges with common hospital operating room procedures in nonfederal community hospitals, by age and selected principal procedure: United States, selected years 2000–2011

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[Data are compiled by the Agency for Healthcare Research and Quality using discharge data from participating states]

Age and principal operating room procedure ¹	Mean inflation-adjusted cost per hospitalization: 2011 dollars ²			Number of discharges with operating room principal procedure			Total inflation-adjusted national costs: 2011 dollars (in millions)		
	2000	2005	2011	2000	2005	2011	2000	2005	2011
45–64 years									
Hospital discharges with an operating room principal procedure ³	\$14,515	\$17,416	\$19,942	2,513,848	3,001,674	3,172,099	\$36,330	\$52,349	\$63,119
Laminectomy (back surgery)	8,240	9,099	11,752	111,022	98,847	79,445	916	900	934
Heart valve procedures	40,302	48,031	51,918	23,731	27,467	32,351	951	1,326	1,670
Coronary artery bypass graft (CABG)	29,211	34,786	37,059	144,812	97,449	73,441	4,251	3,398	2,723
Percutaneous coronary angioplasty (PTCA) (balloon angioplasty of heart)	14,496	17,780	18,337	261,110	328,248	232,484	3,778	5,841	4,263
Insertion, revision, replacement, removal of cardiac pacemaker or cardioverter/defibrillator	33,879	38,293	36,137	16,558	45,357	35,584	557	1,736	1,284
Colorectal resection (removal of part of the bowel)	17,522	20,125	21,635	78,937	98,142	110,704	1,411	1,978	2,390
Cholecystectomy (gall bladder removal)	9,809	11,609	12,518	120,985	121,446	127,318	1,187	1,413	1,590
Oophorectomy	7,608	8,665	10,353	21,888	23,172	24,330	166	201	252
Hysterectomy	6,669	7,392	9,542	238,417	249,676	162,626	1,587	1,849	1,555
Arthroplasty knee (knee replacement)	14,123	15,620	15,999	98,691	205,869	303,745	1,386	3,216	4,859
Hip replacement	15,558	17,281	16,851	67,121	108,449	159,186	1,052	1,871	2,681
Spinal fusion	16,731	22,981	26,038	90,101	154,618	226,588	1,468	3,556	5,904
65–74 years									
Hospital discharges with an operating room principal procedure ³	16,263	19,391	20,904	1,559,874	1,653,945	1,775,480	25,503	32,122	37,076
Laminectomy (back surgery)	8,636	9,189	11,180	47,332	47,031	45,169	409	432	506
Heart valve procedures	43,898	53,346	52,862	24,127	25,535	31,122	1,050	1,366	1,639
Coronary artery bypass graft (CABG)	31,820	38,742	38,597	116,648	72,447	54,435	3,711	2,809	2,100
Percutaneous coronary angioplasty (PTCA) (balloon angioplasty of heart)	14,914	18,242	18,867	172,403	202,718	135,585	2,567	3,700	2,558
Insertion, revision, replacement, removal of cardiac pacemaker or cardioverter/defibrillator	30,240	36,420	35,172	19,805	46,292	33,255	602	1,684	1,168
Endarterectomy (plaque removal from artery lining brain, head, neck)	8,699	9,301	10,140	52,875	41,903	37,423	471	391	380
Colorectal resection (removal of part of the bowel)	19,577	22,882	23,723	65,640	64,326	67,652	1,324	1,475	1,602
Cholecystectomy (gall bladder removal)	11,500	13,766	14,620	67,897	57,382	56,290	793	790	821
Arthroplasty knee (knee replacement)	14,063	15,519	15,697	114,150	182,838	239,275	1,590	2,840	3,757
Hip replacement	14,917	16,759	16,877	74,103	89,657	115,501	1,122	1,502	1,948
Spinal fusion	18,436	26,563	29,449	24,143	48,299	96,137	443	1,283	2,829
75–84 years									
Hospital discharges with an operating room principal procedure ³	16,510	20,052	21,080	1,263,420	1,405,406	1,259,943	21,162	28,215	26,563
Laminectomy (back surgery)	9,321	10,086	11,092	31,988	32,853	28,644	302	331	319
Heart valve procedures	45,278	56,192	54,256	21,844	25,893	31,507	1,000	1,461	1,706
Coronary artery bypass graft (CABG)	34,499	43,067	42,663	71,235	46,557	29,569	2,478	2,007	1,258
Percutaneous coronary angioplasty (PTCA) (balloon angioplasty of heart)	15,788	19,498	19,509	115,128	149,285	93,356	1,830	2,911	1,820
Insertion, revision, replacement, removal of cardiac pacemaker or cardioverter/defibrillator	24,814	34,232	31,374	20,711	50,092	32,348	524	1,712	1,016
Endarterectomy (plaque removal from artery lining brain, head, neck)	9,035	9,647	10,579	46,719	39,208	30,796	436	380	326
Colorectal resection (removal of part of the bowel)	21,352	25,387	25,068	63,982	63,255	53,258	1,403	1,606	1,336
Cholecystectomy (gall bladder removal)	13,165	16,222	16,473	54,014	51,443	45,703	726	833	752
Treatment, fracture or dislocation of hip and femur	11,849	14,194	15,653	75,452	75,221	69,220	920	1,069	1,086
Arthroplasty knee (knee replacement)	14,055	15,617	15,845	81,404	125,729	132,713	1,146	1,964	2,103
Hip replacement	14,737	16,907	17,483	95,401	108,919	108,081	1,429	1,840	1,888
Spinal fusion	19,197	27,712	29,822	12,139	23,530	41,282	231	652	1,231

See footnotes at end of table.

Table 116 (page 3 of 3). Cost of hospital discharges with common hospital operating room procedures in nonfederal community hospitals, by age and selected principal procedure: United States, selected years 2000–2011

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[Data are compiled by the Agency for Healthcare Research and Quality using discharge data from participating states]

Age and principal operating room procedure ¹	Mean inflation-adjusted cost per hospitalization: 2011 dollars ²			Number of discharges with operating room principal procedure			Total inflation-adjusted national costs: 2011 dollars (in millions)		
	2000	2005	2011	2000	2005	2011	2000	2005	2011
85 years and over									
Hospital discharges with an operating room principal procedure ³	\$15,139	\$18,471	\$19,268	394,256	450,122	483,698	\$6,062	\$8,322	\$9,328
Heart valve procedures	47,631	60,260	54,121	3,114	4,088	8,055	148	246	435
Coronary artery bypass graft (CABG)	38,816	49,624	46,357	5,483	4,315	3,122	211	215	145
Percutaneous coronary angioplasty (PTCA) (balloon angioplasty of heart)	17,928	21,745	20,394	17,268	29,810	27,087	307	647	552
Insertion, revision, replacement, removal of cardiac pacemaker or cardioverter/defibrillator	14,733	24,954	23,910	7,301	14,121	12,205	110	351	293
Colorectal resection (removal of part of the bowel)	23,084	27,175	26,174	21,347	21,140	20,082	503	575	526
Cholecystectomy (gall bladder removal)	16,040	18,021	17,917	16,163	17,286	17,927	262	311	321
Treatment, fracture or dislocation of hip and femur	11,536	13,631	15,245	79,202	80,284	83,872	940	1,096	1,281
Arthroplasty knee	14,254	16,402	16,795	10,414	16,274	18,974	149	266	318
Hip replacement	14,338	16,975	17,802	51,469	55,699	62,419	750	944	1,111
Amputation of lower extremity (amputation of leg, foot or toe)	13,238	17,152	17,284	13,260	10,403	9,754	179	179	170

¹Data are based on valid operating room procedures. Operating room procedures were identified using the Centers for Medicare & Medicaid Services' Diagnosis Related Groups (DRGs). For DRGs, physician panels identified *International Classification of Diseases (ICD-9-CM)* procedure codes that would be performed in operating rooms in most hospitals. Operating room procedures, as defined by DRGs, are classified by the Clinical Classifications Software (CCS) into 1 of 231 clinically meaningful categories. Mean costs per hospitalization are based on the principal procedure as determined by the CCS. The number of discharges is based on the first-listed (principal) major procedure. See [Appendix II, Procedure](#).

²Charges (the amount billed by the hospital) were converted to costs using cost-charge ratios from the Centers for Medicare & Medicaid Services. Costs are for the entire hospitalization including the principal procedure. Costs were adjusted for inflation to 2011 dollars using the gross domestic product deflator (<http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1>, Table 1.1.4. Price Indexes for Gross Domestic Product, downloaded July 8, 2013). See [Appendix II, Cost-charge ratio](#).

³Includes discharges for operating room principal procedures not shown separately.

NOTES: Excludes newborn infants. The number of states participating in the sample varied over time from 28 states in 2000 to 46 states in 2011. See [Appendix I, Healthcare Cost and Utilization Project \(HCUP\), Nationwide Inpatient Sample](#), for a list of states available in each year. The estimates are weighted to provide national estimates. Because of sampling frame and methodological differences between the Healthcare Cost and Utilization Project, Nationwide Inpatient Sample, and the National Hospital Discharge Survey (NHDS), estimates from these data sources are not directly comparable. Standard errors are available in the spreadsheet version of this table. Available from: <http://www.cdc.gov/nchs/hus.htm>. Data for additional years are available. See the Excel spreadsheet on the *Health, United States* website at: <http://www.cdc.gov/nchs/hus.htm>.

SOURCE: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, Nationwide Inpatient Sample. See [Appendix I, Healthcare Cost and Utilization Project \(HCUP\), Nationwide Inpatient Sample](#).