

Appendix A: Descriptive Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Average Episode Payment			5th Percentile		Median		95th Percentile	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC Total to Total)	BACPAC	Total	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total				7,945,600	\$12,938	\$27,058	0.48	\$1,526	\$7,804	\$10,033	\$23,124	\$34,766	\$59,481
470	Major joint replacement or reattachment of lower extremity w/o MCC	1	1	1,276,700	\$9,938	\$24,798	0.40	\$1,970	\$14,757	\$7,193	\$22,068	\$25,909	\$43,034
481	Hip & femur procedures except major joint w CC	2	2	240,760	\$19,502	\$34,295	0.57	\$3,997	\$17,322	\$18,692	\$32,973	\$37,002	\$54,642
65	Intracranial hemorrhage or cerebral infarction w CC	3	4	207,200	\$20,842	\$31,132	0.67	\$2,042	\$9,695	\$18,668	\$28,589	\$47,354	\$61,131
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	4	3	222,440	\$14,400	\$30,009	0.48	\$1,396	\$12,788	\$11,679	\$26,211	\$37,062	\$60,269
690	Kidney & urinary tract infections w/o MCC	5	6	228,960	\$12,227	\$19,164	0.64	\$1,525	\$6,288	\$10,535	\$17,144	\$28,904	\$38,719
291	Heart failure & shock w MCC	6	5	174,820	\$13,543	\$26,233	0.52	\$1,464	\$9,607	\$10,396	\$22,191	\$36,503	\$56,197
194	Simple pneumonia & pleurisy w CC	7	7	205,980	\$11,023	\$19,743	0.56	\$1,323	\$7,410	\$8,166	\$16,640	\$29,805	\$42,123
482	Hip & femur procedures except major joint w/o CC/MCC	8	10	121,000	\$17,727	\$30,142	0.59	\$2,763	\$13,498	\$17,181	\$29,092	\$34,848	\$50,103
64	Intracranial hemorrhage or cerebral infarction w MCC	9	12	92,800	\$21,934	\$37,284	0.59	\$1,895	\$12,639	\$19,651	\$33,905	\$49,931	\$72,617
292	Heart failure & shock w CC	10	13	162,180	\$11,786	\$21,097	0.56	\$1,376	\$7,636	\$8,350	\$17,169	\$33,468	\$48,002
641	Nutritional & misc metabolic disorders w/o MCC	11	16	157,200	\$12,017	\$18,881	0.64	\$1,327	\$5,815	\$9,852	\$16,346	\$30,447	\$40,961
552	Medical back problems w/o MCC	12	18	128,240	\$14,682	\$21,919	0.67	\$1,758	\$7,007	\$12,930	\$19,648	\$35,337	\$45,927
66	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13	19	111,720	\$15,972	\$24,029	0.66	\$1,642	\$7,518	\$13,526	\$21,151	\$40,966	\$51,849
536	Fractures of hip & pelvis w/o MCC	14	22	99,660	\$16,992	\$23,352	0.73	\$2,878	\$7,714	\$15,792	\$21,775	\$36,238	\$56,576
469	Major joint replacement or reattachment of lower extremity w MCC	15	11	93,700	\$16,937	\$38,841	0.44	\$2,620	\$18,070	\$14,815	\$35,804	\$38,962	\$69,789
480	Hip & femur procedures except major joint w MCC	16	14	74,300	\$21,211	\$42,830	0.50	\$4,411	\$22,934	\$19,854	\$40,351	\$41,373	\$70,707
280	Acute myocardial infarction, discharged alive w MCC	17	15	92,820	\$16,601	\$32,076	0.52	\$1,459	\$12,574	\$12,558	\$27,177	\$47,446	\$69,538
193	Simple pneumonia & pleurisy w MCC	18	17	117,700	\$12,850	\$24,681	0.52	\$1,504	\$9,533	\$10,240	\$21,292	\$34,492	\$52,000
683	Renal failure w CC	19	21	104,220	\$13,216	\$23,718	0.56	\$1,521	\$8,770	\$10,852	\$20,805	\$33,745	\$48,810
312	Syncope & collapse	20	25	124,840	\$10,580	\$17,379	0.61	\$1,202	\$5,978	\$7,643	\$14,314	\$28,842	\$38,257
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	21	36	82,260	\$15,983	\$22,190	0.72	\$2,291	\$6,941	\$15,538	\$21,353	\$33,210	\$41,523
603	Cellulitis w/o MCC	22	24	129,660	\$10,079	\$17,330	0.58	\$995	\$5,966	\$6,296	\$13,495	\$29,495	\$39,805
689	Kidney & urinary tract infections w MCC	23	26	89,920	\$13,567	\$23,460	0.58	\$1,696	\$8,630	\$11,677	\$21,021	\$32,298	\$46,900
190	Chronic obstructive pulmonary disease w MCC	24	23	105,000	\$11,358	\$21,921	0.52	\$1,327	\$8,338	\$8,018	\$17,974	\$32,294	\$47,609
392	Esophagitis, gastroent & misc digest disorders w/o MCC	25	31	107,280	\$10,885	\$18,045	0.60	\$1,134	\$5,843	\$7,492	\$14,383	\$30,680	\$42,007
191	Chronic obstructive pulmonary disease w CC	26	28	102,540	\$11,123	\$19,898	0.56	\$1,391	\$7,271	\$7,842	\$16,186	\$31,481	\$44,503
293	Heart failure & shock w/o CC/MCC	27	35	103,120	\$10,587	\$18,129	0.58	\$1,315	\$6,084	\$6,669	\$13,928	\$30,731	\$42,621
460	Spinal fusion except cervical w/o MCC	28	8	98,420	\$10,825	\$40,454	0.27	\$1,373	\$24,310	\$7,267	\$37,104	\$30,830	\$68,609
329	Major small & large bowel procedures w MCC	29	9	76,400	\$13,880	\$51,832	0.27	\$1,604	\$24,250	\$10,801	\$46,701	\$37,556	\$95,889
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	30	34	82,980	\$12,584	\$23,029	0.55	\$1,371	\$8,999	\$10,279	\$20,380	\$32,748	\$46,385
682	Renal failure w MCC	31	29	66,620	\$14,799	\$29,643	0.50	\$1,362	\$11,350	\$12,237	\$25,770	\$36,941	\$61,063
195	Simple pneumonia & pleurisy w/o CC/MCC	32	39	95,420	\$10,207	\$17,175	0.59	\$1,279	\$5,802	\$7,253	\$14,173	\$28,163	\$37,807
189	Pulmonary edema & respiratory failure	33	32	79,200	\$11,753	\$24,364	0.48	\$1,250	\$10,338	\$8,673	\$20,364	\$33,161	\$51,593
177	Respiratory infections & inflammations w MCC	34	33	62,940	\$14,177	\$30,433	0.47	\$1,243	\$12,618	\$11,720	\$26,607	\$36,151	\$60,892
178	Respiratory infections & inflammations w CC	35	40	66,020	\$12,428	\$24,807	0.50	\$1,330	\$10,397	\$10,275	\$21,765	\$31,733	\$48,862
208	Respiratory system diagnosis w ventilator support <96 hours	36	37	48,040	\$16,935	\$37,903	0.45	\$1,397	\$17,013	\$12,012	\$31,546	\$49,244	\$79,854
69	Transient ischemia	37	54	75,380	\$10,585	\$17,215	0.61	\$1,262	\$5,993	\$7,137	\$13,629	\$29,055	\$38,745
378	G.I. hemorrhage w CC	38	43	71,820	\$11,086	\$20,330	0.55	\$1,295	\$7,942	\$8,131	\$17,088	\$29,766	\$43,425
192	Chronic obstructive pulmonary disease w/o CC/MCC	39	47	84,200	\$9,451	\$16,604	0.57	\$1,205	\$5,981	\$5,535	\$12,560	\$28,303	\$39,064
309	Cardiac arrhythmia & conduction disorders w CC	40	52	65,900	\$11,853	\$19,949	0.59	\$1,325	\$6,838	\$8,708	\$16,667	\$33,146	\$45,403
281	Acute myocardial infarction, discharged alive w CC	41	56	45,880	\$16,194	\$27,375	0.59	\$1,486	\$9,836	\$11,636	\$22,651	\$49,502	\$65,111
330	Major small & large bowel procedures w CC	42	20	77,260	\$9,564	\$32,238	0.30	\$1,300	\$16,584	\$5,815	\$28,825	\$29,181	\$58,495
640	Nutritional & misc metabolic disorders w MCC	43	55	54,000	\$13,655	\$23,933	0.57	\$1,523	\$8,403	\$11,040	\$20,655	\$35,663	\$51,263
308	Cardiac arrhythmia & conduction disorders w MCC	44	49	53,440	\$13,625	\$25,161	0.54	\$1,357	\$9,182	\$10,358	\$21,074	\$38,145	\$56,096
493	Lower extrem & humer proc except hip,foot,femur w CC	45	53	43,100	\$16,052	\$30,372	0.53	\$2,202	\$14,012	\$15,165	\$28,920	\$34,694	\$52,819
494	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	46	58	53,240	\$12,987	\$23,201	0.56	\$1,570	\$9,644	\$11,379	\$21,419	\$30,533	\$43,182

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Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG (1)	MS-DRG Description (2)	Episode Rank		Number of Episodes (5)	Average Episode Payment			5th Percentile		Median		95th Percentile	
		BACPAC (3)	Total (4)		BACPAC (6)	Total (7)	Ratio (BACPAC Total to Total) (8)	BACPAC (9)	Total (10)	BACPAC (11)	Total (12)	BACPAC (13)	Total (14)
Total			7,945,600		\$12,938	\$27,058	0.48	\$1,526	\$7,804	\$10,033	\$23,124	\$34,766	\$59,481
377	G.I. hemorrhage w MCC	47	57	44,840	\$13,536	\$27,589	0.49	\$1,369	\$10,866	\$10,842	\$23,913	\$35,484	\$56,661
282	Acute myocardial infarction, discharged alive w/o CC/MCC	48	71	27,520	\$19,412	\$28,873	0.67	\$1,391	\$7,635	\$13,673	\$22,451	\$58,498	\$71,947
253	Other vascular procedures w CC	49	51	39,260	\$13,368	\$33,672	0.40	\$1,394	\$16,632	\$9,342	\$29,195	\$39,107	\$67,070
467	Revision of hip or knee replacement w CC	50	44	42,840	\$12,147	\$33,655	0.36	\$1,970	\$19,094	\$9,274	\$30,297	\$33,175	\$61,015
310	Cardiac arrhythmia & conduction disorders w/o CC/MCC	51	69	50,420	\$9,867	\$16,266	0.61	\$938	\$5,032	\$5,072	\$11,465	\$31,095	\$40,938
462	Bilateral or multiple major joint procs of lower extremity w/o MCC	52	48	37,660	\$12,985	\$36,528	0.36	\$2,484	\$23,120	\$12,377	\$35,735	\$24,913	\$52,748
812	Red blood cell disorders w/o MCC	53	70	40,480	\$11,899	\$20,022	0.59	\$1,390	\$6,450	\$9,096	\$16,939	\$32,751	\$44,114
252	Other vascular procedures w MCC	54	50	28,580	\$16,655	\$46,361	0.36	\$1,663	\$22,050	\$12,939	\$40,018	\$47,458	\$93,956
602	Cellulitis w MCC	55	64	33,900	\$14,024	\$26,187	0.54	\$1,696	\$8,949	\$10,820	\$21,969	\$37,600	\$58,252
391	Esophagitis, gastroent & misc digest disorders w MCC	56	67	34,480	\$13,401	\$24,407	0.55	\$1,474	\$8,672	\$9,855	\$19,784	\$36,629	\$55,214
300	Peripheral vascular disorders w CC	57	72	38,120	\$11,530	\$20,366	0.57	\$1,264	\$6,582	\$7,488	\$15,942	\$34,672	\$48,238
207	Respiratory system diagnosis w ventilator support 96+ hours	58	46	23,440	\$18,465	\$60,265	0.31	\$1,704	\$32,553	\$14,311	\$54,414	\$50,101	\$106,076
313	Chest pain	59	76	41,180	\$10,284	\$16,488	0.62	\$1,181	\$4,875	\$5,953	\$11,773	\$30,574	\$41,095
551	Medical back problems w MCC	60	74	22,800	\$18,360	\$30,521	0.60	\$1,927	\$10,161	\$15,451	\$26,525	\$45,324	\$64,279
490	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	61	66	30,380	\$13,468	\$27,931	0.48	\$1,445	\$12,307	\$9,886	\$23,424	\$38,943	\$59,258
233	Coronary bypass w cardiac cath w MCC	62	30	30,540	\$13,146	\$63,707	0.21	\$1,455	\$34,635	\$8,682	\$57,908	\$39,048	\$110,418
638	Diabetes w CC	63	75	35,580	\$11,194	\$19,266	0.58	\$1,470	\$6,531	\$8,043	\$15,963	\$31,233	\$43,508
242	Permanent cardiac pacemaker implant w MCC	64	61	28,900	\$13,576	\$40,088	0.34	\$1,567	\$20,294	\$11,205	\$36,558	\$34,924	\$70,700
468	Revision of hip or knee replacement w/o CC/MCC	65	60	42,400	\$9,187	\$27,736	0.33	\$1,609	\$17,069	\$5,595	\$24,512	\$27,107	\$49,705
237	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	66	45	22,940	\$16,429	\$61,752	0.27	\$1,556	\$32,706	\$11,535	\$51,422	\$49,647	\$130,843
558	Tendonitis, myositis & bursitis w/o MCC	67	84	27,300	\$13,560	\$20,740	0.65	\$1,692	\$6,930	\$12,369	\$18,915	\$30,542	\$41,913
535	Fractures of hip & pelvis w MCC	68	85	18,680	\$19,415	\$30,095	0.65	\$2,773	\$10,639	\$17,737	\$27,767	\$41,424	\$56,992
234	Coronary bypass w cardiac cath w/o MCC	69	27	47,620	\$7,516	\$43,577	0.17	\$1,099	\$28,511	\$3,436	\$40,631	\$25,416	\$68,486
243	Permanent cardiac pacemaker implant w CC	70	62	33,020	\$10,502	\$30,007	0.35	\$1,210	\$16,373	\$7,146	\$26,695	\$29,738	\$54,026
389	G.I. obstruction w CC	71	80	28,060	\$12,300	\$21,468	0.57	\$1,462	\$7,311	\$8,801	\$17,405	\$35,913	\$49,697
491	Back & neck proc exc spinal fusion w/o CC/MCC	72	78	37,400	\$8,795	\$17,299	0.51	\$500	\$7,742	\$4,596	\$12,817	\$27,193	\$38,061
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	73	90	16,880	\$18,440	\$29,741	0.62	\$2,436	\$10,510	\$17,066	\$27,379	\$38,274	\$54,737
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	74	101	22,200	\$13,766	\$19,984	0.69	\$1,732	\$5,728	\$11,938	\$17,673	\$33,732	\$43,379
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	75	38	22,820	\$13,328	\$75,334	0.18	\$1,366	\$44,458	\$9,630	\$67,862	\$38,873	\$128,037
554	Bone diseases & arthropathies w/o MCC	76	99	23,780	\$12,393	\$18,790	0.66	\$1,644	\$5,955	\$10,185	\$16,420	\$32,103	\$41,761
492	Lower extrem & humer proc except hip,foot,femur w MCC	77	83	13,700	\$20,599	\$42,770	0.48	\$2,674	\$20,292	\$18,713	\$38,956	\$44,382	\$79,870
202	Bronchitis & asthma w CC/MCC	78	93	27,620	\$10,011	\$17,206	0.58	\$1,143	\$6,231	\$6,058	\$13,198	\$29,591	\$39,584
684	Renal failure w/o CC/MCC	79	98	23,760	\$11,445	\$19,210	0.60	\$1,314	\$6,294	\$8,506	\$16,147	\$31,875	\$42,243
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	80	41	30,540	\$8,836	\$51,488	0.17	\$592	\$33,924	\$4,535	\$48,172	\$29,621	\$79,952
239	Amputation for circ sys disorders exc upper limb & toe w MCC	81	77	10,680	\$24,847	\$61,666	0.40	\$2,912	\$28,134	\$21,814	\$57,013	\$56,441	\$110,694
303	Atherosclerosis w/o MCC	82	109	17,140	\$15,378	\$22,478	0.68	\$1,313	\$5,408	\$10,074	\$15,934	\$50,759	\$64,675
811	Red blood cell disorders w MCC	83	91	19,760	\$13,270	\$24,774	0.54	\$1,530	\$9,383	\$10,511	\$21,381	\$34,813	\$51,619
870	Septicemia or severe sepsis w MV 96+ hours	84	65	11,780	\$21,779	\$72,300	0.30	\$1,878	\$41,095	\$18,498	\$66,087	\$56,901	\$130,831
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	85	42	17,260	\$14,862	\$85,590	0.17	\$1,658	\$45,007	\$11,097	\$81,833	\$42,902	\$140,399
238	Major cardiovasc procedures w/o MCC	86	63	25,520	\$9,795	\$35,904	0.27	\$418	\$21,143	\$4,055	\$30,526	\$34,644	\$68,038
483	Major joint & limb reattachment proc of upper extremity w CC/MCC	87	81	21,860	\$11,248	\$27,540	0.41	\$1,592	\$14,908	\$8,227	\$24,595	\$28,242	\$48,245
299	Peripheral vascular disorders w MCC	88	92	18,000	\$13,657	\$26,603	0.51	\$1,061	\$8,538	\$9,418	\$21,422	\$41,734	\$65,023
240	Amputation for circ sys disorders exc upper limb & toe w CC	89	88	11,520	\$21,193	\$44,702	0.47	\$2,523	\$18,039	\$19,232	\$42,215	\$47,606	\$80,562
179	Respiratory infections & inflammations w/o CC/MCC	90	102	20,840	\$11,664	\$21,093	0.55	\$1,372	\$8,014	\$9,138	\$18,069	\$30,193	\$42,368
388	G.I. obstruction w MCC	91	95	17,480	\$13,885	\$27,075	0.51	\$1,333	\$10,061	\$10,100	\$22,399	\$41,595	\$62,968
236	Coronary bypass w/o cardiac cath w/o MCC	92	59	34,740	\$6,925	\$35,169	0.20	\$507	\$22,912	\$2,517	\$31,517	\$24,081	\$57,571

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MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Average Episode Payment			5th Percentile		Median		95th Percentile	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC Total to Total)	BACPAC	Total	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total				7,945,600	\$12,938	\$27,058	0.48	\$1,526	\$7,804	\$10,033	\$23,124	\$34,766	\$59,481
637	Diabetes w MCC	93	100	18,280	\$12,742	\$24,319	0.52	\$950	\$8,175	\$10,116	\$20,764	\$32,414	\$53,221
379	G.I. hemorrhage w/o CC/MCC	94	110	22,920	\$9,256	\$16,674	0.56	\$878	\$6,249	\$5,642	\$12,744	\$25,319	\$36,443
301	Peripheral vascular disorders w/o CC/MCC	95	112	24,100	\$8,670	\$14,620	0.59	\$507	\$4,488	\$4,182	\$10,033	\$28,368	\$38,204
254	Other vascular procedures w/o CC/MCC	96	89	21,680	\$9,532	\$23,748	0.40	\$507	\$11,812	\$4,516	\$18,764	\$31,606	\$49,882
206	Other respiratory system diagnoses w/o MCC	97	113	16,760	\$12,092	\$19,923	0.61	\$1,378	\$6,133	\$9,780	\$16,704	\$30,465	\$46,008
484	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	98	86	26,500	\$7,556	\$20,593	0.37	\$1,341	\$13,078	\$4,660	\$17,750	\$23,432	\$37,458
557	Tendonitis, myositis & bursitis w MCC	99	114	11,920	\$16,619	\$27,759	0.60	\$1,947	\$10,575	\$15,127	\$25,935	\$37,258	\$53,461
246	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	100	79	14,740	\$13,311	\$41,053	0.32	\$1,267	\$21,564	\$9,268	\$34,999	\$40,529	\$78,200
62	Acute ischemic stroke w use of thrombolytic agent w CC	101	116	7,800	\$24,636	\$41,603	0.59	\$2,220	\$16,688	\$23,483	\$40,008	\$51,558	\$71,920
235	Coronary bypass w/o cardiac cath w MCC	102	73	13,980	\$12,758	\$54,394	0.23	\$1,270	\$27,936	\$7,187	\$49,063	\$42,140	\$100,502
639	Diabetes w/o CC/MCC	103	118	18,840	\$9,148	\$15,057	0.61	\$637	\$4,898	\$4,754	\$10,671	\$27,433	\$36,464
244	Permanent cardiac pacemaker implant w/o CC/MCC	104	87	23,200	\$7,384	\$23,160	0.32	\$416	\$13,707	\$3,665	\$19,569	\$24,362	\$42,265
459	Spinal fusion except cervical w MCC	105	82	9,700	\$17,029	\$60,758	0.28	\$1,899	\$33,835	\$14,496	\$57,119	\$42,515	\$104,030
247	Perc cardiovasc proc w drug-eluting stent w/o MCC	106	97	17,640	\$8,880	\$26,310	0.34	\$519	\$14,349	\$4,298	\$21,987	\$30,013	\$52,463
390	G.I. obstruction w/o CC/MCC	107	123	12,720	\$11,854	\$18,856	0.63	\$1,023	\$5,503	\$7,703	\$14,370	\$36,672	\$47,158
331	Major small & large bowel procedures w/o CC/MCC	108	103	19,960	\$7,476	\$21,912	0.34	\$507	\$11,460	\$3,279	\$18,428	\$24,659	\$43,000
248	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	109	105	10,620	\$14,017	\$38,449	0.36	\$1,657	\$19,771	\$10,580	\$33,778	\$40,441	\$75,284
203	Bronchitis & asthma w/o CC/MCC	110	122	16,860	\$8,822	\$14,252	0.62	\$802	\$4,890	\$4,756	\$10,348	\$26,044	\$33,071
534	Fractures of femur w/o MCC	111	128	8,140	\$18,238	\$25,003	0.73	\$2,562	\$8,118	\$16,813	\$23,198	\$38,708	\$47,964
466	Revision of hip or knee replacement w MCC	112	107	8,400	\$17,181	\$46,481	0.37	\$2,431	\$22,594	\$15,823	\$43,050	\$41,765	\$78,236
473	Cervical spinal fusion w/o CC/MCC	113	108	12,420	\$11,599	\$31,151	0.37	\$1,137	\$15,949	\$6,436	\$26,194	\$35,357	\$59,504
472	Cervical spinal fusion w CC	114	111	8,840	\$16,133	\$41,668	0.39	\$1,556	\$21,550	\$12,966	\$37,318	\$46,804	\$83,908
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	115	68	13,180	\$10,115	\$62,976	0.16	\$1,346	\$36,874	\$6,683	\$60,695	\$28,937	\$100,159
457	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	116	96	7,060	\$15,749	\$66,702	0.24	\$1,767	\$41,719	\$12,674	\$60,984	\$42,275	\$112,473
617	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC	117	120	8,620	\$12,879	\$30,956	0.42	\$1,750	\$12,210	\$8,926	\$27,537	\$35,401	\$61,156
204	Respiratory signs & symptoms	118	132	9,820	\$10,686	\$18,582	0.58	\$1,210	\$5,697	\$7,494	\$14,375	\$31,355	\$47,210
471	Cervical spinal fusion w MCC	119	119	4,300	\$24,318	\$64,108	0.38	\$1,872	\$32,640	\$22,143	\$59,263	\$57,048	\$106,153
249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	120	117	11,780	\$8,836	\$24,491	0.36	\$500	\$12,774	\$4,152	\$20,402	\$27,228	\$48,042
561	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	121	142	5,760	\$17,174	\$24,656	0.70	\$1,575	\$6,000	\$14,142	\$20,959	\$47,096	\$56,374
454	Combined anterior/posterior spinal fusion w CC	122	94	6,060	\$16,281	\$78,288	0.21	\$1,538	\$49,274	\$11,722	\$70,523	\$47,655	\$134,790
61	Acute ischemic stroke w use of thrombolytic agent w MCC	123	133	3,420	\$28,659	\$53,108	0.54	\$3,241	\$24,640	\$24,938	\$47,035	\$68,490	\$103,004
186	Pleural effusion w MCC	124	131	6,500	\$14,313	\$30,170	0.47	\$1,328	\$11,945	\$10,636	\$26,691	\$37,860	\$64,536
560	Aftercare, musculoskeletal system & connective tissue w CC	125	144	5,020	\$17,728	\$26,590	0.67	\$2,078	\$8,627	\$15,814	\$22,937	\$43,170	\$56,902
489	Knee procedures w/o pdx of infection w/o CC/MCC	126	129	10,640	\$8,152	\$18,873	0.43	\$1,341	\$9,189	\$4,501	\$15,059	\$25,539	\$38,395
205	Other respiratory system diagnoses w MCC	127	137	6,020	\$13,295	\$25,943	0.51	\$1,248	\$8,657	\$11,393	\$22,840	\$33,912	\$62,423
187	Pleural effusion w CC	128	140	5,980	\$12,673	\$24,660	0.51	\$1,236	\$8,770	\$10,043	\$21,565	\$36,663	\$55,859
226	Cardiac defibrillator implant w/o cardiac cath w MCC	129	115	5,020	\$14,267	\$65,590	0.22	\$1,554	\$41,582	\$9,344	\$59,376	\$40,072	\$107,660
250	Perc cardiovasc proc w/o coronary artery stent w MCC	130	130	4,660	\$15,149	\$42,281	0.36	\$1,489	\$19,313	\$10,511	\$35,404	\$48,700	\$92,663
553	Bone diseases & arthropathies w MCC	131	146	4,820	\$14,130	\$24,009	0.59	\$1,649	\$8,494	\$12,604	\$21,011	\$34,327	\$48,048
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	132	104	9,600	\$6,908	\$43,621	0.16	\$560	\$29,357	\$2,991	\$41,614	\$24,037	\$66,480
488	Knee procedures w/o pdx of infection w CC/MCC	133	139	6,180	\$10,719	\$24,270	0.44	\$1,883	\$10,447	\$6,857	\$19,948	\$31,608	\$47,943
302	Atherosclerosis w MCC	134	149	3,660	\$17,145	\$29,072	0.59	\$1,695	\$7,921	\$12,162	\$23,341	\$53,549	\$69,466
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC	135	106	8,720	\$6,947	\$46,535	0.15	\$400	\$32,396	\$2,768	\$43,218	\$25,108	\$73,900
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC	136	155	3,460	\$17,488	\$26,492	0.66	\$2,258	\$9,322	\$16,196	\$24,014	\$41,582	\$55,800
251	Perc cardiovasc proc w/o coronary artery stent w/o MCC	137	135	6,240	\$9,579	\$25,751	0.37	\$434	\$13,181	\$4,550	\$20,102	\$32,357	\$54,666
456	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	138	124	2,320	\$25,405	\$101,230	0.25	\$2,371	\$59,210	\$22,455	\$95,581	\$66,372	\$180,227

Appendix A: Descriptive Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG (1)	MS-DRG Description (2)	Episode Rank		Number of Episodes (5)	Average Episode Payment			5th Percentile		Median		95th Percentile		
		BACPAC (3)	Total (4)		BACPAC (6)	Total (7)	Ratio (BACPAC to Total) (8)	BACPAC (9)	Total (10)	BACPAC (11)	Total (12)	BACPAC (13)	Total (14)	
Total					7,945,600	\$12,938	\$27,058	0.48	\$1,526	\$7,804	\$10,033	\$23,124	\$34,766	\$59,481
255	Upper limb & toe amputation for circ system disorders w MCC	139	145	2,640	\$21,660	\$47,803	0.45	\$2,205	\$19,040	\$14,079	\$39,696	\$57,078	\$100,184	
496	Local excision & removal int fix devices exc hip & femur w CC	140	143	5,460	\$10,376	\$25,001	0.42	\$1,340	\$11,675	\$6,655	\$21,542	\$29,365	\$52,837	
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	141	151	2,860	\$19,254	\$36,264	0.53	\$2,570	\$12,161	\$17,951	\$35,366	\$42,215	\$64,326	
256	Upper limb & toe amputation for circ system disorders w CC	142	150	3,460	\$15,702	\$30,085	0.52	\$1,822	\$11,824	\$13,036	\$26,317	\$40,796	\$61,752	
461	Bilateral or multiple major joint procs of lower extremity w MCC	143	141	2,720	\$18,956	\$52,813	0.36	\$5,265	\$34,465	\$15,473	\$48,646	\$43,940	\$90,490	
486	Knee procedures w pdx of infection w CC	144	147	3,460	\$13,701	\$32,761	0.42	\$2,069	\$17,551	\$11,332	\$30,963	\$33,691	\$54,256	
559	Aftercare, musculoskeletal system & connective tissue w MCC	145	160	2,100	\$22,453	\$35,000	0.64	\$2,412	\$12,660	\$19,475	\$29,909	\$55,602	\$74,416	
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	146	154	4,880	\$9,046	\$18,916	0.48	\$429	\$8,721	\$4,568	\$14,790	\$27,023	\$38,968	
474	Amputation for musculoskeletal sys & conn tissue dis w MCC	147	148	2,340	\$18,428	\$48,023	0.38	\$2,117	\$21,691	\$16,636	\$43,970	\$47,588	\$91,427	
475	Amputation for musculoskeletal sys & conn tissue dis w CC	148	156	2,860	\$14,511	\$31,716	0.46	\$1,997	\$12,757	\$13,052	\$29,627	\$32,274	\$61,490	
453	Combined anterior/posterior spinal fusion w MCC	149	126	2,040	\$20,038	\$103,614	0.19	\$2,094	\$67,311	\$17,086	\$96,946	\$52,538	\$158,590	
222	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	150	121	3,060	\$13,296	\$81,714	0.16	\$1,481	\$53,499	\$9,149	\$74,448	\$43,716	\$127,450	
458	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	151	134	3,040	\$12,678	\$54,976	0.23	\$1,249	\$33,806	\$7,901	\$50,526	\$37,196	\$93,787	
485	Knee procedures w pdx of infection w MCC	152	157	1,760	\$20,212	\$51,078	0.40	\$2,002	\$22,526	\$17,650	\$44,962	\$50,201	\$90,757	
455	Combined anterior/posterior spinal fusion w/o CC/MCC	153	127	3,740	\$9,404	\$55,739	0.17	\$1,497	\$36,573	\$6,496	\$53,087	\$23,622	\$87,900	
231	Coronary bypass w PTCA w MCC	154	125	2,700	\$12,898	\$79,278	0.16	\$672	\$49,186	\$8,314	\$68,858	\$36,293	\$137,750	
616	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	155	152	1,640	\$20,706	\$57,587	0.36	\$2,296	\$27,630	\$18,658	\$57,487	\$49,189	\$95,795	
63	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	156	163	1,900	\$16,809	\$30,985	0.54	\$559	\$12,847	\$12,405	\$26,385	\$41,424	\$54,547	
259	Cardiac pacemaker device replacement w/o MCC	157	161	3,080	\$8,884	\$22,262	0.40	\$958	\$12,082	\$5,074	\$17,959	\$27,967	\$47,727	
498	Local excision & removal int fix devices of hip & femur w CC/MCC	158	165	1,620	\$16,337	\$33,357	0.49	\$1,526	\$13,820	\$13,805	\$30,032	\$45,789	\$66,308	
533	Fractures of femur w MCC	159	170	1,320	\$19,943	\$32,721	0.61	\$2,690	\$12,625	\$18,079	\$29,101	\$45,884	\$63,516	
495	Local excision & removal int fix devices exc hip & femur w MCC	160	162	1,640	\$14,916	\$38,971	0.38	\$1,660	\$18,932	\$12,952	\$37,076	\$38,416	\$68,816	
224	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	161	138	2,060	\$11,798	\$74,464	0.16	\$1,669	\$51,636	\$8,044	\$68,905	\$30,257	\$119,657	
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	162	136	3,000	\$7,924	\$52,204	0.15	\$1,359	\$33,511	\$4,725	\$50,576	\$22,651	\$71,760	
487	Knee procedures w pdx of infection w/o CC/MCC	163	168	1,820	\$12,918	\$26,752	0.48	\$1,552	\$11,900	\$9,492	\$25,395	\$33,973	\$55,057	
188	Pleural effusion w/o CC/MCC	164	169	1,900	\$12,136	\$23,126	0.52	\$722	\$7,321	\$7,885	\$17,134	\$30,268	\$61,459	
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	165	172	1,780	\$12,041	\$18,935	0.64	\$1,884	\$7,409	\$9,638	\$16,033	\$31,582	\$39,562	
261	Cardiac pacemaker revision except device replacement w CC	166	167	2,160	\$9,809	\$22,561	0.43	\$1,505	\$9,815	\$4,428	\$18,124	\$35,028	\$50,762	
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	167	174	1,580	\$11,696	\$16,900	0.69	\$474	\$4,494	\$9,488	\$13,463	\$33,512	\$38,490	
260	Cardiac pacemaker revision except device replacement w MCC	168	166	1,020	\$16,865	\$47,845	0.35	\$1,871	\$18,177	\$14,261	\$45,404	\$50,345	\$80,732	
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC	169	173	1,440	\$10,486	\$19,819	0.53	\$907	\$7,698	\$5,990	\$13,614	\$30,695	\$55,663	
245	AICD generator procedures	170	164	1,420	\$10,115	\$40,793	0.25	\$421	\$20,551	\$6,160	\$35,761	\$24,610	\$91,317	
225	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	171	158	1,660	\$8,289	\$53,570	0.15	\$511	\$39,831	\$2,932	\$51,463	\$24,844	\$78,027	
223	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	172	159	1,460	\$9,328	\$59,704	0.16	\$1,660	\$41,636	\$3,994	\$55,149	\$25,531	\$81,185	
258	Cardiac pacemaker device replacement w MCC	173	171	920	\$14,589	\$37,068	0.39	\$1,933	\$20,829	\$13,419	\$32,890	\$31,276	\$63,587	
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	174	175	920	\$13,945	\$27,519	0.51	\$1,863	\$11,464	\$14,249	\$27,433	\$25,602	\$44,568	
232	Coronary bypass w PTCA w/o MCC	175	153	1,780	\$6,005	\$53,050	0.11	\$566	\$38,844	\$3,223	\$50,984	\$21,839	\$78,219	
262	Cardiac pacemaker revision except device replacement w/o CC/MCC	176	176	1,160	\$8,378	\$18,318	0.46	\$1,330	\$8,481	\$4,090	\$15,158	\$31,774	\$47,125	
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC	177	178	300	\$10,416	\$20,008	0.52	\$1,655	\$7,577	\$2,841	\$15,398	\$41,775	\$53,723	
265	AICD lead procedures	178	177	300	\$8,089	\$30,916	0.26	\$401	\$16,672	\$3,234	\$29,259	\$35,651	\$63,744	
618	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC	179	179	240	\$6,735	\$18,020	0.37	\$1,355	\$8,051	\$3,795	\$17,591	\$24,797	\$38,035	

Appendix B: Distributional Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
		BACPAC	Total		BACPAC	Ratio (BACPAC to Total)	Total	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total				7,945,600	0.95	0.66	1.43	\$12,295	\$17,989	\$102,800	\$214,990
470	Major joint replacement or reattachment of lower extremity w/o MCC	1	1	1,276,700	0.88	0.41	2.14	\$8,758	\$10,232	\$12,688	\$31,660
481	Hip & femur procedures except major joint w CC	2	2	240,760	0.54	0.36	1.51	\$10,582	\$12,325	\$4,695	\$8,257
65	Intracranial hemorrhage or cerebral infarction w CC	3	4	207,200	0.72	0.55	1.32	\$15,016	\$17,017	\$4,318	\$6,451
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	4	3	222,440	0.94	0.58	1.63	\$13,561	\$17,370	\$3,203	\$6,675
690	Kidney & urinary tract infections w/o MCC	5	6	228,960	0.81	0.61	1.33	\$9,845	\$11,609	\$2,800	\$4,388
291	Heart failure & shock w MCC	6	5	174,820	1.02	0.66	1.54	\$13,768	\$17,305	\$2,368	\$4,586
194	Simple pneumonia & pleurisy w CC	7	7	205,980	0.94	0.64	1.48	\$10,397	\$12,559	\$2,271	\$4,067
482	Hip & femur procedures except major joint w/o CC/MCC	8	10	121,000	0.61	0.41	1.48	\$10,806	\$12,389	\$2,145	\$3,647
64	Intracranial hemorrhage or cerebral infarction w MCC	9	12	92,800	0.73	0.53	1.36	\$15,998	\$19,936	\$2,035	\$3,460
292	Heart failure & shock w CC	10	13	162,180	1.04	0.73	1.42	\$12,225	\$15,416	\$1,911	\$3,421
641	Nutritional & misc metabolic disorders w/o MCC	11	16	157,200	0.88	0.66	1.32	\$10,523	\$12,500	\$1,889	\$2,968
552	Medical back problems w/o MCC	12	18	128,240	0.80	0.62	1.30	\$11,794	\$13,496	\$1,883	\$2,811
66	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13	19	111,720	0.83	0.62	1.35	\$13,278	\$14,814	\$1,784	\$2,685
536	Fractures of hip & pelvis w/o MCC	14	22	99,660	0.64	0.52	1.22	\$10,792	\$12,204	\$1,693	\$2,327
469	Major joint replacement or reattachment of lower extremity w MCC	15	11	93,700	0.78	0.46	1.69	\$13,154	\$17,799	\$1,587	\$3,639
480	Hip & femur procedures except major joint w MCC	16	14	74,300	0.56	0.37	1.52	\$11,843	\$15,760	\$1,576	\$3,182
280	Acute myocardial infarction, discharged alive w MCC	17	15	92,820	1.04	0.66	1.57	\$17,304	\$21,250	\$1,541	\$2,977
193	Simple pneumonia & pleurisy w MCC	18	17	117,700	0.92	0.60	1.53	\$11,779	\$14,777	\$1,512	\$2,905
683	Renal failure w CC	19	21	104,220	0.89	0.61	1.47	\$11,786	\$14,415	\$1,377	\$2,472
312	Syncope & collapse	20	25	124,840	0.95	0.68	1.40	\$10,037	\$11,809	\$1,321	\$2,170
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	21	36	82,260	0.64	0.52	1.24	\$10,244	\$11,472	\$1,315	\$1,825
603	Cellulitis w/o MCC	22	24	129,660	1.04	0.72	1.46	\$10,511	\$12,411	\$1,307	\$2,247
689	Kidney & urinary tract infections w MCC	23	26	89,920	0.78	0.56	1.40	\$10,596	\$13,119	\$1,220	\$2,110
190	Chronic obstructive pulmonary disease w MCC	24	23	105,000	1.02	0.67	1.53	\$11,609	\$14,638	\$1,193	\$2,302
392	Esophagitis, gastroent & misc digest disorders w/o MCC	25	31	107,280	1.00	0.72	1.39	\$10,835	\$12,931	\$1,168	\$1,936
191	Chronic obstructive pulmonary disease w CC	26	28	102,540	1.03	0.70	1.47	\$11,443	\$13,942	\$1,141	\$2,040
293	Heart failure & shock w/o CC/MCC	27	35	103,120	1.16	0.79	1.46	\$12,254	\$14,368	\$1,092	\$1,869
460	Spinal fusion except cervical w/o MCC	28	8	98,420	1.28	0.44	2.94	\$13,880	\$17,646	\$1,065	\$3,981
329	Major small & large bowel procedures w MCC	29	9	76,400	0.97	0.47	2.05	\$13,407	\$24,468	\$1,060	\$3,960
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	30	34	82,980	0.91	0.59	1.55	\$11,391	\$13,487	\$1,044	\$1,911
682	Renal failure w MCC	31	29	66,620	0.93	0.61	1.52	\$13,773	\$18,159	\$986	\$1,975
195	Simple pneumonia & pleurisy w/o CC/MCC	32	39	95,420	0.98	0.69	1.42	\$9,962	\$11,799	\$974	\$1,639
189	Pulmonary edema & respiratory failure	33	32	79,200	1.04	0.67	1.55	\$12,226	\$16,304	\$931	\$1,930
177	Respiratory infections & inflammations w MCC	34	33	62,940	0.90	0.59	1.52	\$12,830	\$18,093	\$892	\$1,915
178	Respiratory infections & inflammations w CC	35	40	66,020	0.85	0.56	1.51	\$10,599	\$13,990	\$820	\$1,638
208	Respiratory system diagnosis w ventilator support <96 hours	36	37	48,040	1.14	0.63	1.81	\$19,303	\$23,856	\$814	\$1,821
69	Transient ischemia	37	54	75,380	0.96	0.68	1.41	\$10,134	\$11,683	\$798	\$1,298
378	G.I. hemorrhage w CC	38	43	71,820	0.95	0.62	1.52	\$10,536	\$12,678	\$796	\$1,460

Appendix B: Distributional Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC to Total)	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
192	Chronic obstructive pulmonary disease w/o CC/MCC	39	47	84,200	1.13	0.77	1.48	\$10,693	\$12,723	\$796	\$1,398
309	Cardiac arrhythmia & conduction disorders w CC	40	52	65,900	0.96	0.67	1.43	\$11,396	\$13,436	\$781	\$1,315
281	Acute myocardial infarction, discharged alive w CC	41	56	45,880	1.07	0.71	1.51	\$17,358	\$19,475	\$743	\$1,256
330	Major small & large bowel procedures w CC	42	20	77,260	1.08	0.46	2.33	\$10,347	\$14,989	\$739	\$2,491
640	Nutritional & misc metabolic disorders w MCC	43	55	54,000	0.90	0.64	1.41	\$12,331	\$15,377	\$737	\$1,292
308	Cardiac arrhythmia & conduction disorders w MCC	44	49	53,440	0.97	0.64	1.50	\$13,159	\$16,172	\$728	\$1,345
493	Lower extrem & humer proc except hip,foot,femur w CC	45	53	43,100	0.70	0.44	1.59	\$11,160	\$13,317	\$692	\$1,309
494	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	46	58	53,240	0.88	0.56	1.58	\$11,383	\$12,902	\$691	\$1,235
377	G.I. hemorrhage w MCC	47	57	44,840	0.97	0.62	1.56	\$13,153	\$17,228	\$607	\$1,237
282	Acute myocardial infarction, discharged alive w/o CC/MCC	48	71	27,520	1.05	0.79	1.32	\$20,368	\$22,898	\$534	\$795
253	Other vascular procedures w CC	49	51	39,260	0.98	0.50	1.96	\$13,093	\$16,865	\$525	\$1,322
467	Revision of hip or knee replacement w CC	50	44	42,840	0.92	0.41	2.24	\$11,204	\$13,870	\$520	\$1,442
310	Cardiac arrhythmia & conduction disorders w/o CC/MCC	51	69	50,420	1.27	0.88	1.44	\$12,544	\$14,378	\$498	\$820
462	Bilateral or multiple major joint procs of lower extremity w/o MCC	52	48	37,660	0.67	0.30	2.21	\$8,695	\$11,071	\$489	\$1,376
812	Red blood cell disorders w/o MCC	53	70	40,480	1.00	0.74	1.36	\$11,950	\$14,834	\$482	\$811
252	Other vascular procedures w MCC	54	50	28,580	0.93	0.51	1.84	\$15,506	\$23,450	\$476	\$1,325
602	Cellulitis w MCC	55	64	33,900	0.97	0.67	1.45	\$13,564	\$17,505	\$475	\$888
391	Esophagitis, gastroent & misc digest disorders w MCC	56	67	34,480	1.03	0.73	1.42	\$13,838	\$17,769	\$462	\$842
300	Peripheral vascular disorders w CC	57	72	38,120	1.05	0.73	1.44	\$12,092	\$14,813	\$440	\$776
207	Respiratory system diagnosis w ventilator support 96+ hours	58	46	23,440	1.04	0.45	2.32	\$19,201	\$27,017	\$433	\$1,413
313	Chest pain	59	76	41,180	1.11	0.87	1.27	\$11,404	\$14,376	\$424	\$679
551	Medical back problems w MCC	60	74	22,800	0.86	0.63	1.38	\$15,848	\$19,081	\$419	\$696
490	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	61	66	30,380	1.02	0.60	1.70	\$13,790	\$16,833	\$409	\$849
233	Coronary bypass w cardiac cath w MCC	62	30	30,540	1.14	0.41	2.76	\$14,948	\$26,208	\$401	\$1,946
638	Diabetes w CC	63	75	35,580	1.02	0.71	1.43	\$11,433	\$13,754	\$398	\$685
242	Permanent cardiac pacemaker implant w MCC	64	61	28,900	0.89	0.45	1.95	\$12,043	\$18,217	\$392	\$1,159
468	Revision of hip or knee replacement w/o CC/MCC	65	60	42,400	1.01	0.41	2.46	\$9,240	\$11,345	\$390	\$1,176
237	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	66	45	22,940	1.11	0.52	2.14	\$18,208	\$31,954	\$377	\$1,417
558	Tendonitis, myositis & bursitis w/o MCC	67	84	27,300	0.78	0.59	1.31	\$10,546	\$12,323	\$370	\$566
535	Fractures of hip & pelvis w MCC	68	85	18,680	0.68	0.52	1.30	\$13,167	\$15,667	\$363	\$562
234	Coronary bypass w cardiac cath w/o MCC	69	27	47,620	1.21	0.31	3.90	\$9,059	\$13,469	\$358	\$2,075
243	Permanent cardiac pacemaker implant w CC	70	62	33,020	0.98	0.43	2.30	\$10,311	\$12,826	\$347	\$991
389	G.I. obstruction w CC	71	80	28,060	1.02	0.69	1.49	\$12,566	\$14,747	\$345	\$602
491	Back & neck proc exc spinal fusion w/o CC/MCC	72	78	37,400	1.11	0.65	1.72	\$9,772	\$11,187	\$329	\$647
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	73	90	16,880	0.66	0.50	1.30	\$12,100	\$14,996	\$311	\$502
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	74	101	22,200	0.81	0.67	1.21	\$11,103	\$13,338	\$306	\$444
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	75	38	22,820	1.06	0.43	2.49	\$14,117	\$32,023	\$304	\$1,719
554	Bone diseases & arthropathies w/o MCC	76	99	23,780	0.86	0.66	1.31	\$10,684	\$12,407	\$295	\$447
492	Lower extrem & humer proc except hip,foot,femur w MCC	77	83	13,700	0.64	0.42	1.52	\$13,181	\$17,997	\$282	\$586

Appendix B: Distributional Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC to Total)	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
202	Bronchitis & asthma w CC/MCC	78	93	27,620	1.09	0.74	1.48	\$10,923	\$12,658	\$277	\$475
684	Renal failure w/o CC/MCC	79	98	23,760	0.98	0.68	1.45	\$11,273	\$13,043	\$272	\$456
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	80	41	30,540	1.16	0.30	3.91	\$10,289	\$15,342	\$270	\$1,572
239	Amputation for circ sys disorders exc upper limb & toe w MCC	81	77	10,680	0.69	0.43	1.60	\$17,155	\$26,651	\$265	\$659
303	Atherosclerosis w/o MCC	82	109	17,140	1.14	0.90	1.27	\$17,503	\$20,220	\$264	\$385
811	Red blood cell disorders w MCC	83	91	19,760	0.91	0.59	1.54	\$12,027	\$14,568	\$262	\$490
870	Septicemia or severe sepsis w MV 96+ hours	84	65	11,780	0.89	0.40	2.25	\$19,449	\$28,720	\$257	\$852
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	85	42	17,260	1.15	0.35	3.30	\$17,145	\$29,877	\$257	\$1,477
238	Major cardioasc procedures w/o MCC	86	63	25,520	1.34	0.47	2.86	\$13,141	\$16,827	\$250	\$916
483	Major joint & limb reattachment proc of upper extremity w CC/MCC	87	81	21,860	0.86	0.43	1.99	\$9,721	\$11,969	\$246	\$602
299	Peripheral vascular disorders w MCC	88	92	18,000	1.08	0.75	1.45	\$14,798	\$19,948	\$246	\$479
240	Amputation for circ sys disorders exc upper limb & toe w CC	89	88	11,520	0.69	0.44	1.56	\$14,582	\$19,738	\$244	\$515
179	Respiratory infections & inflammations w/o CC/MCC	90	102	20,840	0.98	0.66	1.48	\$11,422	\$13,986	\$243	\$440
388	G.I. obstruction w MCC	91	95	17,480	1.02	0.66	1.56	\$14,226	\$17,747	\$243	\$473
236	Coronary bypass w/o cardiac cath w/o MCC	92	59	34,740	1.45	0.38	3.80	\$10,057	\$13,442	\$241	\$1,222
637	Diabetes w MCC	93	100	18,280	1.02	0.67	1.51	\$12,966	\$16,398	\$233	\$445
379	G.I. hemorrhage w/o CC/MCC	94	110	22,920	1.01	0.69	1.47	\$9,374	\$11,454	\$212	\$382
301	Peripheral vascular disorders w/o CC/MCC	95	112	24,100	1.21	0.82	1.47	\$10,473	\$12,026	\$209	\$352
254	Other vascular procedures w/o CC/MCC	96	89	21,680	1.20	0.59	2.03	\$11,482	\$14,106	\$207	\$515
206	Other respiratory system diagnoses w/o MCC	97	113	16,760	0.92	0.80	1.15	\$11,175	\$15,959	\$203	\$334
484	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	98	86	26,500	0.99	0.40	2.45	\$7,489	\$8,317	\$200	\$546
557	Tendonitis, myositis & bursitis w MCC	99	114	11,920	0.72	0.54	1.34	\$11,934	\$14,895	\$198	\$331
246	Perc cardioasc proc w drug-eluting stent w MCC or 4+ vessels/stents	100	79	14,740	1.09	0.58	1.90	\$14,550	\$23,656	\$196	\$605
62	Acute ischemic stroke w use of thrombolytic agent w CC	101	116	7,800	0.65	0.42	1.52	\$15,918	\$17,672	\$192	\$324
235	Coronary bypass w/o cardiac cath w MCC	102	73	13,980	1.26	0.45	2.81	\$16,135	\$24,464	\$178	\$760
639	Diabetes w/o CC/MCC	103	118	18,840	1.14	0.81	1.42	\$10,448	\$12,145	\$172	\$284
244	Permanent cardiac pacemaker implant w/o CC/MCC	104	87	23,200	1.15	0.46	2.53	\$8,512	\$10,540	\$171	\$537
459	Spinal fusion except cervical w MCC	105	82	9,700	0.77	0.35	2.21	\$13,173	\$21,272	\$165	\$589
247	Perc cardioasc proc w drug-eluting stent w/o MCC	106	97	17,640	1.20	0.50	2.43	\$10,682	\$13,031	\$157	\$464
390	G.I. obstruction w/o CC/MCC	107	123	12,720	1.10	0.84	1.32	\$13,094	\$15,840	\$151	\$240
331	Major small & large bowel procedures w/o CC/MCC	108	103	19,960	1.21	0.53	2.29	\$9,025	\$11,577	\$149	\$437
248	Perc cardioasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	109	105	10,620	1.01	0.49	2.06	\$14,144	\$18,813	\$149	\$408
203	Bronchitis & asthma w/o CC/MCC	110	122	16,860	1.19	0.83	1.44	\$10,505	\$11,778	\$149	\$240
534	Fractures of femur w/o MCC	111	128	8,140	0.62	0.51	1.23	\$11,393	\$12,651	\$148	\$204
466	Revision of hip or knee replacement w MCC	112	107	8,400	0.68	0.43	1.60	\$11,706	\$19,852	\$144	\$390
473	Cervical spinal fusion w/o CC/MCC	113	108	12,420	1.08	0.50	2.18	\$12,583	\$15,481	\$144	\$387
472	Cervical spinal fusion w CC	114	111	8,840	0.98	0.48	2.04	\$15,843	\$20,041	\$143	\$368
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	115	68	13,180	1.10	0.31	3.52	\$11,083	\$19,578	\$133	\$830
457	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	116	96	7,060	0.92	0.34	2.75	\$14,542	\$22,395	\$111	\$471

Appendix B: Distributional Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC to Total)	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
617	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC	117	120	8,620	1.04	0.56	1.86	\$13,437	\$17,361	\$111	\$267
204	Respiratory signs & symptoms	118	132	9,820	1.03	0.79	1.30	\$11,035	\$14,759	\$105	\$182
471	Cervical spinal fusion w MCC	119	119	4,300	0.79	0.42	1.87	\$19,159	\$27,017	\$105	\$276
249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	120	117	11,780	1.27	0.54	2.35	\$11,211	\$13,235	\$104	\$288
561	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	121	142	5,760	0.91	0.72	1.26	\$15,565	\$17,688	\$99	\$142
454	Combined anterior/posterior spinal fusion w CC	122	94	6,060	1.16	0.38	3.09	\$18,904	\$29,402	\$99	\$474
61	Acute ischemic stroke w use of thrombolytic agent w MCC	123	133	3,420	0.71	0.45	1.58	\$20,238	\$23,735	\$98	\$182
186	Pleural effusion w MCC	124	131	6,500	0.89	0.56	1.59	\$12,800	\$17,005	\$93	\$196
560	Aftercare, musculoskeletal system & connective tissue w CC	125	144	5,020	0.78	0.62	1.26	\$13,774	\$16,373	\$89	\$133
489	Knee procedures w/o pdx of infection w/o CC/MCC	126	129	10,640	1.09	0.56	1.95	\$8,914	\$10,606	\$87	\$201
205	Other respiratory system diagnoses w MCC	127	137	6,020	0.93	0.66	1.42	\$12,368	\$17,033	\$80	\$156
187	Pleural effusion w CC	128	140	5,980	0.99	0.64	1.54	\$12,492	\$15,766	\$76	\$147
226	Cardiac defibrillator implant w/o cardiac cath w MCC	129	115	5,020	1.03	0.35	2.92	\$14,736	\$23,185	\$72	\$329
250	Perc cardiovasc proc w/o coronary artery stent w MCC	130	130	4,660	1.22	0.58	2.08	\$18,456	\$24,729	\$71	\$197
553	Bone diseases & arthropathies w MCC	131	146	4,820	0.86	0.64	1.34	\$12,120	\$15,320	\$68	\$116
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	132	104	9,600	1.13	0.27	4.18	\$7,775	\$11,732	\$66	\$419
488	Knee procedures w/o pdx of infection w CC/MCC	133	139	6,180	0.90	0.56	1.61	\$9,651	\$13,581	\$66	\$150
302	Atherosclerosis w MCC	134	149	3,660	1.01	0.74	1.37	\$17,322	\$21,480	\$63	\$106
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC	135	106	8,720	1.20	0.29	4.08	\$8,320	\$13,665	\$61	\$406
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC	136	155	3,460	0.83	0.64	1.30	\$14,476	\$16,932	\$61	\$92
251	Perc cardiovasc proc w/o coronary artery stent w/o MCC	137	135	6,240	1.35	0.60	2.26	\$12,918	\$15,338	\$60	\$161
456	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	138	124	2,320	0.74	0.32	2.28	\$18,757	\$32,718	\$59	\$235
255	Upper limb & toe amputation for circ system disorders w MCC	139	145	2,640	1.07	0.59	1.81	\$23,129	\$28,223	\$57	\$126
496	Local excision & removal int fix devices exc hip & femur w CC	140	143	5,460	0.97	0.51	1.90	\$10,024	\$12,739	\$57	\$137
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	141	151	2,860	0.63	0.44	1.43	\$12,126	\$16,022	\$55	\$104
256	Upper limb & toe amputation for circ system disorders w CC	142	150	3,460	0.85	0.54	1.56	\$13,302	\$16,290	\$54	\$104
461	Bilateral or multiple major joint procs of lower extremity w MCC	143	141	2,720	0.64	0.35	1.80	\$12,089	\$18,678	\$52	\$144
486	Knee procedures w pdx of infection w CC	144	147	3,460	0.90	0.45	2.00	\$12,341	\$14,737	\$47	\$113
559	Aftercare, musculoskeletal system & connective tissue w MCC	145	160	2,100	0.74	0.53	1.40	\$16,716	\$18,577	\$47	\$73
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	146	154	4,880	1.15	0.63	1.83	\$10,397	\$11,889	\$44	\$92
474	Amputation for musculoskeletal sys & conn tissue dis w MCC	147	148	2,340	0.80	0.49	1.64	\$14,740	\$23,377	\$43	\$112
475	Amputation for musculoskeletal sys & conn tissue dis w CC	148	156	2,860	0.90	0.50	1.81	\$13,055	\$15,748	\$42	\$91
453	Combined anterior/posterior spinal fusion w MCC	149	126	2,040	0.87	0.35	2.47	\$17,388	\$36,456	\$41	\$211
222	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	150	121	3,060	1.07	0.30	3.54	\$14,196	\$24,676	\$41	\$250
458	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	151	134	3,040	1.03	0.35	2.94	\$13,035	\$19,208	\$39	\$167
485	Knee procedures w pdx of infection w MCC	152	157	1,760	0.80	0.52	1.52	\$16,177	\$26,812	\$36	\$90
455	Combined anterior/posterior spinal fusion w/o CC/MCC	153	127	3,740	0.87	0.32	2.71	\$8,153	\$17,864	\$35	\$208
231	Coronary bypass w PTCA w MCC	154	125	2,700	1.24	0.39	3.19	\$16,002	\$30,844	\$35	\$214
616	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	155	152	1,640	0.71	0.35	2.01	\$14,694	\$20,351	\$34	\$94

Appendix B: Distributional Statistics for BACPAC and Total Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Episode Rank		Number of Episodes	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
		BACPAC	Total		BACPAC	Total	Ratio (BACPAC to Total)	BACPAC	Total	BACPAC	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
63	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	156	163	1,900	0.99	0.59	1.69	\$16,719	\$18,262	\$32	\$59
259	Cardiac pacemaker device replacement w/o MCC	157	161	3,080	1.03	0.50	2.06	\$9,159	\$11,147	\$27	\$69
498	Local excision & removal int fix devices of hip & femur w CC/MCC	158	165	1,620	0.92	0.52	1.78	\$15,105	\$17,286	\$26	\$54
533	Fractures of femur w MCC	159	170	1,320	0.69	0.50	1.37	\$13,705	\$16,380	\$26	\$43
495	Local excision & removal int fix devices exc hip & femur w MCC	160	162	1,640	0.83	0.43	1.94	\$12,427	\$16,770	\$24	\$64
224	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	161	138	2,060	0.93	0.27	3.39	\$10,952	\$20,407	\$24	\$153
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	162	136	3,000	1.03	0.26	4.02	\$8,184	\$13,406	\$24	\$157
487	Knee procedures w pdx of infection w/o CC/MCC	163	168	1,820	0.83	0.47	1.76	\$10,731	\$12,644	\$24	\$49
188	Pleural effusion w/o CC/MCC	164	169	1,900	1.45	0.92	1.58	\$17,646	\$21,256	\$23	\$44
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	165	172	1,780	0.78	0.57	1.36	\$9,367	\$10,811	\$21	\$34
261	Cardiac pacemaker revision except device replacement w CC	166	167	2,160	1.13	0.61	1.86	\$11,056	\$13,688	\$21	\$49
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	167	174	1,580	0.83	0.67	1.23	\$9,715	\$11,391	\$18	\$27
260	Cardiac pacemaker revision except device replacement w MCC	168	166	1,020	1.00	0.47	2.10	\$16,792	\$22,721	\$17	\$49
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC	169	173	1,440	1.09	0.71	1.54	\$11,397	\$13,992	\$15	\$29
245	AICD generator procedures	170	164	1,420	1.06	0.49	2.16	\$10,743	\$20,059	\$14	\$58
225	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	171	158	1,660	1.10	0.23	4.84	\$9,119	\$12,173	\$14	\$89
223	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	172	159	1,460	1.61	0.31	5.25	\$15,056	\$18,368	\$14	\$87
258	Cardiac pacemaker device replacement w MCC	173	171	920	0.73	0.48	1.52	\$10,695	\$17,885	\$13	\$34
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	174	175	920	0.61	0.41	1.49	\$8,559	\$11,342	\$13	\$25
232	Coronary bypass w PTCA w/o MCC	175	153	1,780	1.17	0.26	4.44	\$7,038	\$13,995	\$11	\$94
262	Cardiac pacemaker revision except device replacement w/o CC/MCC	176	176	1,160	1.19	0.63	1.90	\$9,988	\$11,477	\$10	\$21
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC	177	178	300	1.30	0.72	1.80	\$13,500	\$14,393	\$3	\$6
265	AICD lead procedures	178	177	300	1.25	0.39	3.21	\$10,091	\$12,003	\$2	\$9
618	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC	179	179	240	1.04	0.44	2.36	\$6,987	\$7,927	\$2	\$4

Appendix C: Distribution of Payments by Care Setting for BACPAC Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Rank	Episodes	HHA	SNF	IRF	ER	Readmission to STACH	OP Therapy	Total
<i>Total</i>		.	397,280	12.9%	47.7%	13.1%	1.0%	24.8%	0.5%	100.0%
470	Major joint replacement or reattachment of lower extremity w/o MCC	1	1,276,700	23.6%	44.7%	18.3%	0.6%	10.9%	1.9%	100.0%
481	Hip & femur procedures except major joint w CC	2	240,760	6.7%	61.7%	19.3%	0.6%	11.4%	0.2%	100.0%
065	Intracranial hemorrhage or cerebral infarction w CC	3	207,200	7.1%	37.0%	41.0%	0.8%	13.5%	0.6%	100.0%
871	Septicemia or severe sepsis w/o MV 96+ hours w MCC	4	222,440	7.7%	52.4%	4.7%	0.9%	34.1%	0.2%	100.0%
690	Kidney & urinary tract infections w/o MCC	5	228,960	9.8%	65.1%	2.8%	1.1%	20.9%	0.3%	100.0%
291	Heart failure & shock w MCC	6	174,820	11.2%	42.6%	4.6%	1.0%	40.5%	0.2%	100.0%
194	Simple pneumonia & pleurisy w CC	7	205,980	11.8%	56.4%	3.2%	1.4%	27.0%	0.2%	100.0%
482	Hip & femur procedures except major joint w/o CC/MCC	8	121,000	9.4%	56.4%	24.1%	0.6%	9.2%	0.3%	100.0%
064	Intracranial hemorrhage or cerebral infarction w MCC	9	92,800	5.5%	40.3%	32.7%	0.9%	20.2%	0.3%	100.0%
292	Heart failure & shock w CC	10	162,180	13.8%	42.9%	3.0%	1.2%	38.9%	0.2%	100.0%
641	Nutritional & misc metabolic disorders w/o MCC	11	157,200	11.5%	59.2%	4.1%	1.1%	23.9%	0.2%	100.0%
552	Medical back problems w/o MCC	12	128,240	10.8%	55.7%	11.5%	1.0%	20.6%	0.3%	100.0%
066	Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13	111,720	11.7%	34.6%	39.1%	1.0%	12.8%	0.9%	100.0%
536	Fractures of hip & pelvis w/o MCC	14	99,660	8.8%	61.2%	14.5%	0.7%	14.6%	0.3%	100.0%
469	Major joint replacement or reattachment of lower extremity w MCC	15	93,700	10.5%	49.4%	20.4%	0.7%	18.4%	0.7%	100.0%
480	Hip & femur procedures except major joint w MCC	16	74,300	5.2%	60.0%	17.2%	0.7%	16.8%	0.1%	100.0%
280	Acute myocardial infarction, discharged alive w MCC	17	92,820	8.3%	40.1%	5.7%	1.0%	44.9%	0.1%	100.0%
193	Simple pneumonia & pleurisy w MCC	18	117,700	10.7%	50.0%	4.9%	1.1%	33.0%	0.2%	100.0%
683	Renal failure w CC	19	104,220	9.9%	53.5%	4.3%	1.0%	31.1%	0.2%	100.0%
312	Syncope & collapse	20	124,840	16.5%	55.5%	5.2%	1.0%	21.4%	0.3%	100.0%
563	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	21	82,260	9.0%	67.9%	8.2%	0.7%	13.9%	0.3%	100.0%
603	Cellulitis w/o MCC	22	129,660	16.0%	53.1%	3.3%	1.1%	26.3%	0.3%	100.0%
689	Kidney & urinary tract infections w MCC	23	89,920	7.7%	63.0%	4.0%	1.0%	24.0%	0.2%	100.0%
190	Chronic obstructive pulmonary disease w MCC	24	105,000	14.8%	42.1%	4.0%	1.2%	37.7%	0.2%	100.0%
392	Esophagitis, gastroent & misc digest disorders w/o MCC	25	107,280	14.8%	50.2%	3.5%	1.4%	29.9%	0.3%	100.0%
191	Chronic obstructive pulmonary disease w CC	26	102,540	15.0%	43.7%	3.8%	1.3%	36.0%	0.2%	100.0%
293	Heart failure & shock w/o CC/MCC	27	103,120	15.6%	39.3%	3.2%	1.5%	40.2%	0.2%	100.0%
460	Spinal fusion except cervical w/o MCC	28	98,420	18.9%	29.5%	34.0%	0.6%	16.3%	0.7%	100.0%
329	Major small & large bowel procedures w MCC	29	76,400	13.2%	42.9%	10.1%	0.9%	32.7%	0.1%	100.0%
872	Septicemia or severe sepsis w/o MV 96+ hours w/o MCC	30	82,980	9.4%	58.1%	3.9%	1.0%	27.3%	0.3%	100.0%
682	Renal failure w MCC	31	66,620	8.6%	49.2%	4.6%	0.8%	36.6%	0.2%	100.0%
195	Simple pneumonia & pleurisy w/o CC/MCC	32	95,420	12.4%	60.8%	2.0%	1.9%	22.7%	0.2%	100.0%
189	Pulmonary edema & respiratory failure	33	79,200	12.7%	42.1%	4.7%	1.1%	39.2%	0.2%	100.0%
177	Respiratory infections & inflammations w MCC	34	62,940	7.2%	52.8%	4.0%	0.9%	34.9%	0.2%	100.0%
178	Respiratory infections & inflammations w CC	35	66,020	8.0%	58.5%	2.9%	1.0%	29.4%	0.3%	100.0%
208	Respiratory system diagnosis w ventilator support <96 hours	36	48,040	8.6%	33.2%	8.4%	1.3%	48.3%	0.2%	100.0%
069	Transient ischemia	37	75,380	17.8%	50.0%	10.7%	1.2%	19.9%	0.4%	100.0%
378	G.I. hemorrhage w CC	38	71,820	12.4%	54.8%	2.8%	1.2%	28.6%	0.3%	100.0%
192	Chronic obstructive pulmonary disease w/o CC/MCC	39	84,200	17.0%	42.4%	4.4%	1.9%	34.1%	0.2%	100.0%
309	Cardiac arrhythmia & conduction disorders w CC	40	65,900	13.6%	46.3%	4.0%	1.2%	34.6%	0.3%	100.0%
281	Acute myocardial infarction, discharged alive w CC	41	45,880	8.5%	39.1%	3.8%	1.2%	47.3%	0.1%	100.0%
330	Major small & large bowel procedures w CC	42	77,260	19.9%	39.9%	6.1%	1.1%	32.8%	0.2%	100.0%
640	Nutritional & misc metabolic disorders w MCC	43	54,000	9.7%	54.6%	3.9%	1.0%	30.6%	0.2%	100.0%
308	Cardiac arrhythmia & conduction disorders w MCC	44	53,440	11.4%	42.1%	5.9%	1.1%	39.4%	0.2%	100.0%
493	Lower extrem & humer proc except hip,foot,femur w CC	45	43,100	10.3%	63.0%	12.0%	0.6%	13.6%	0.4%	100.0%
494	Lower extrem & humer proc except hip,foot,femur w/o CC/MCC	46	53,240	15.1%	59.6%	13.1%	0.7%	11.1%	0.5%	100.0%
377	G.I. hemorrhage w MCC	47	44,840	9.9%	49.9%	4.7%	1.0%	34.4%	0.2%	100.0%
282	Acute myocardial infarction, discharged alive w/o CC/MCC	48	27,520	7.8%	25.6%	3.3%	1.0%	62.3%	0.1%	100.0%
253	Other vascular procedures w CC	49	39,260	13.6%	37.4%	9.1%	0.8%	38.9%	0.2%	100.0%
467	Revision of hip or knee replacement w CC	50	42,840	18.8%	44.6%	16.8%	0.6%	18.0%	1.2%	100.0%
310	Cardiac arrhythmia & conduction disorders w/o CC/MCC	51	50,420	16.9%	38.7%	4.1%	1.6%	38.4%	0.2%	100.0%
462	Bilateral or multiple major joint procs of lower extremity w/o MCC	52	37,660	14.4%	22.8%	52.9%	0.3%	7.1%	2.6%	100.0%
812	Red blood cell disorders w/o MCC	53	40,480	12.5%	50.2%	3.9%	1.2%	31.9%	0.2%	100.0%
252	Other vascular procedures w MCC	54	28,580	9.7%	35.6%	10.0%	0.9%	43.7%	0.1%	100.0%
602	Cellulitis w MCC	55	33,900	11.1%	49.1%	5.2%	0.9%	33.5%	0.2%	100.0%
391	Esophagitis, gastroent & misc digest disorders w MCC	56	34,480	12.4%	45.3%	4.9%	1.1%	36.1%	0.2%	100.0%
300	Peripheral vascular disorders w CC	57	38,120	13.0%	47.9%	3.9%	1.0%	33.9%	0.4%	100.0%
207	Respiratory system diagnosis w ventilator support 96+ hours	58	23,440	7.9%	35.9%	11.5%	0.9%	43.6%	0.1%	100.0%
313	Chest pain	59	41,180	15.9%	44.4%	3.5%	1.6%	34.4%	0.3%	100.0%
551	Medical back problems w MCC	60	22,800	7.6%	49.5%	15.0%	0.9%	26.8%	0.2%	100.0%
490	Back & neck proc exc spinal fusion w CC/MCC or disc device/neurostim	61	30,380	13.8%	27.3%	38.2%	0.5%	19.3%	0.8%	100.0%
233	Coronary bypass w cardiac cath w MCC	62	30,540	14.6%	26.5%	22.2%	1.7%	34.8%	0.2%	100.0%
638	Diabetes w CC	63	35,580	15.1%	49.6%	3.3%	1.1%	30.7%	0.2%	100.0%
242	Permanent cardiac pacemaker implant w MCC	64	28,900	11.6%	45.6%	10.6%	1.1%	30.8%	0.2%	100.0%
468	Revision of hip or knee replacement w/o CC/MCC	65	42,400	26.1%	37.9%	16.2%	0.8%	17.7%	1.4%	100.0%
237	Major cardiovasc procedures w MCC or thoracic aortic aneurysm repair	66	22,940	11.1%	30.6%	16.3%	1.4%	40.4%	0.2%	100.0%
558	Tendonitis, myositis & bursitis w/o MCC	67	27,300	10.9%	62.4%	7.9%	0.7%	17.8%	0.2%	100.0%
535	Fractures of hip & pelvis w MCC	68	18,680	5.7%	59.0%	12.4%	0.7%	21.9%	0.2%	100.0%
234	Coronary bypass w cardiac cath w/o MCC	69	47,620	25.8%	28.5%	14.9%	2.4%	28.3%	0.2%	100.0%
243	Permanent cardiac pacemaker implant w CC	70	33,020	16.1%	48.4%	8.0%	1.3%	26.0%	0.2%	100.0%

Appendix C: Distribution of Payments by Care Setting for BACPAC Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Rank	Episodes	HHA	SNF	IRF	ER	Readmission to STACH	OP Therapy	Total
389	G.I. obstruction w CC	71	28,060	11.1%	48.7%	2.6%	1.4%	36.1%	0.2%	100.0%
491	Back & neck proc exc spinal fusion w/o CC/MCC	72	37,400	23.3%	25.1%	35.5%	0.6%	14.3%	1.1%	100.0%
562	Fx, sprn, strn & disl except femur, hip, pelvis & thigh w MCC	73	16,880	6.5%	65.1%	6.3%	0.7%	21.2%	0.2%	100.0%
556	Signs & symptoms of musculoskeletal system & conn tissue w/o MCC	74	22,200	11.5%	57.9%	9.8%	1.1%	19.4%	0.4%	100.0%
219	Cardiac valve & oth maj cardiothoracic proc w/o card cath w MCC	75	22,820	14.5%	29.7%	22.2%	1.0%	32.3%	0.2%	100.0%
554	Bone diseases & arthropathies w/o MCC	76	23,780	13.9%	57.4%	6.4%	0.9%	21.2%	0.3%	100.0%
492	Lower extrem & humer proc except hip,foot,femur w MCC	77	13,700	5.9%	58.3%	12.7%	0.6%	22.2%	0.3%	100.0%
202	Bronchitis & asthma w CC/MCC	78	27,620	17.0%	49.3%	3.4%	1.5%	28.6%	0.2%	100.0%
684	Renal failure w/o CC/MCC	79	23,760	12.9%	52.2%	5.3%	1.2%	28.2%	0.2%	100.0%
220	Cardiac valve & oth maj cardiothoracic proc w/o card cath w CC	80	30,540	21.4%	29.4%	16.1%	1.2%	31.6%	0.2%	100.0%
239	Amputation for circ sys disorders exc upper limb & toe w MCC	81	10,680	4.9%	32.6%	28.1%	0.5%	33.7%	0.2%	100.0%
303	Atherosclerosis w/o MCC	82	17,140	11.1%	26.6%	3.8%	1.2%	57.2%	0.1%	100.0%
811	Red blood cell disorders w MCC	83	19,760	10.4%	47.3%	5.2%	1.0%	35.8%	0.2%	100.0%
870	Septicemia or severe sepsis w MV 96+ hours	84	11,780	5.5%	37.5%	14.6%	1.0%	41.3%	0.2%	100.0%
216	Cardiac valve & oth maj cardiothoracic proc w card cath w MCC	85	17,260	12.3%	31.6%	20.3%	1.0%	34.6%	0.2%	100.0%
238	Major cardiovasc procedures w/o MCC	86	25,520	18.5%	26.6%	11.0%	1.4%	42.3%	0.3%	100.0%
483	Major joint & limb reattachment proc of upper extremity w CC/MCC	87	21,860	21.2%	55.5%	11.2%	0.5%	10.2%	1.4%	100.0%
299	Peripheral vascular disorders w MCC	88	18,000	10.8%	40.8%	7.2%	1.0%	40.0%	0.1%	100.0%
240	Amputation for circ sys disorders exc upper limb & toe w CC	89	11,520	6.2%	38.7%	27.2%	0.4%	27.4%	0.2%	100.0%
179	Respiratory infections & inflammations w/o CC/MCC	90	20,840	7.2%	65.5%	1.7%	1.0%	24.4%	0.2%	100.0%
388	G.I. obstruction w MCC	91	17,480	9.5%	45.2%	6.0%	0.9%	38.3%	0.2%	100.0%
236	Coronary bypass w/o cardiac cath w/o MCC	92	34,740	27.4%	24.0%	14.9%	1.5%	32.0%	0.1%	100.0%
637	Diabetes w MCC	93	18,280	11.7%	50.0%	5.2%	1.2%	31.8%	0.2%	100.0%
379	G.I. hemorrhage w/o CC/MCC	94	22,920	15.2%	56.8%	2.9%	1.3%	23.4%	0.3%	100.0%
301	Peripheral vascular disorders w/o CC/MCC	95	24,100	18.7%	43.8%	2.7%	1.2%	33.4%	0.2%	100.0%
254	Other vascular procedures w/o CC/MCC	96	21,680	19.7%	32.1%	10.0%	0.9%	36.8%	0.4%	100.0%
206	Other respiratory system diagnoses w/o MCC	97	16,760	13.5%	53.0%	7.2%	1.2%	24.7%	0.3%	100.0%
484	Major joint & limb reattachment proc of upper extremity w/o CC/MCC	98	26,500	34.8%	45.3%	7.3%	0.5%	9.6%	2.6%	100.0%
557	Tendonitis, myositis & bursitis w MCC	99	11,920	7.5%	61.1%	9.5%	0.9%	20.8%	0.1%	100.0%
246	Perc cardiovasc proc w drug-eluting stent w MCC or 4+ vessels/stents	100	14,740	14.0%	31.5%	9.6%	2.2%	42.6%	0.1%	100.0%
062	Acute ischemic stroke w use of thrombolytic agent w CC	101	7,800	7.3%	26.9%	53.3%	0.6%	11.1%	0.8%	100.0%
235	Coronary bypass w/o cardiac cath w MCC	102	13,980	15.4%	22.2%	23.5%	1.0%	37.7%	0.2%	100.0%
639	Diabetes w/o CC/MCC	103	18,840	19.5%	55.0%	3.6%	1.4%	20.2%	0.3%	100.0%
244	Permanent cardiac pacemaker implant w/o CC/MCC	104	23,200	24.8%	42.8%	5.1%	1.5%	25.3%	0.4%	100.0%
459	Spinal fusion except cervical w MCC	105	9,700	12.0%	29.1%	37.9%	0.7%	19.8%	0.5%	100.0%
247	Perc cardiovasc proc w drug-eluting stent w/o MCC	106	17,640	22.4%	27.5%	6.3%	2.7%	40.9%	0.2%	100.0%
390	G.I. obstruction w/o CC/MCC	107	12,720	12.3%	45.7%	2.2%	1.6%	38.0%	0.2%	100.0%
331	Major small & large bowel procedures w/o CC/MCC	108	19,960	25.0%	38.3%	4.1%	1.0%	31.4%	0.2%	100.0%
248	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	109	10,620	12.6%	34.6%	11.0%	2.2%	39.4%	0.1%	100.0%
203	Bronchitis & asthma w/o CC/MCC	110	16,860	18.4%	57.2%	2.6%	1.8%	19.8%	0.3%	100.0%
534	Fractures of femur w/o MCC	111	8,140	4.6%	66.2%	7.6%	0.6%	21.0%	0.1%	100.0%
466	Revision of hip or knee replacement w MCC	112	8,400	11.3%	51.5%	19.6%	0.6%	16.5%	0.5%	100.0%
473	Cervical spinal fusion w/o CC/MCC	113	12,420	19.4%	21.3%	42.2%	0.6%	15.6%	0.9%	100.0%
472	Cervical spinal fusion w CC	114	8,840	13.3%	27.0%	39.8%	0.8%	18.4%	0.7%	100.0%
217	Cardiac valve & oth maj cardiothoracic proc w card cath w CC	115	13,180	19.7%	29.5%	18.2%	1.4%	31.1%	0.1%	100.0%
457	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w CC	116	7,060	11.5%	33.1%	32.6%	0.6%	21.8%	0.5%	100.0%
617	Amputat of lower limb for endocrine,nutrit,& metabol dis w CC	117	8,620	13.2%	43.3%	11.1%	0.8%	30.7%	1.0%	100.0%
204	Respiratory signs & symptoms	118	9,820	14.8%	41.3%	5.0%	1.8%	36.9%	0.2%	100.0%
471	Cervical spinal fusion w MCC	119	4,300	7.5%	22.4%	49.2%	0.7%	19.7%	0.4%	100.0%
249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	120	11,780	20.6%	31.6%	7.4%	2.7%	37.7%	0.1%	100.0%
561	Aftercare, musculoskeletal system & connective tissue w/o CC/MCC	121	5,760	8.6%	46.6%	9.0%	0.7%	34.8%	0.3%	100.0%
454	Combined anterior/posterior spinal fusion w CC	122	6,060	12.8%	21.6%	40.3%	0.3%	24.4%	0.6%	100.0%
061	Acute ischemic stroke w use of thrombolytic agent w MCC	123	3,420	4.6%	28.1%	49.0%	0.9%	17.2%	0.3%	100.0%
186	Pleural effusion w MCC	124	6,500	10.8%	36.9%	6.8%	1.0%	44.4%	0.1%	100.0%
560	Aftercare, musculoskeletal system & connective tissue w CC	125	5,020	7.4%	52.8%	8.2%	1.0%	30.6%	0.2%	100.0%
489	Knee procedures w/o pdx of infection w/o CC/MCC	126	10,640	26.8%	41.9%	13.9%	0.7%	15.2%	1.5%	100.0%
205	Other respiratory system diagnoses w MCC	127	6,020	10.7%	55.4%	1.6%	1.5%	30.5%	0.3%	100.0%
187	Pleural effusion w CC	128	5,980	11.5%	37.8%	3.0%	1.0%	46.6%	0.1%	100.0%
226	Cardiac defibrillator implant w/o cardiac cath w MCC	129	5,020	13.5%	26.8%	18.0%	1.4%	40.1%	0.3%	100.0%
250	Perc cardiovasc proc w/o coronary artery stent w MCC	130	4,660	10.8%	31.4%	9.2%	1.3%	47.3%	0.1%	100.0%
553	Bone diseases & arthropathies w MCC	131	4,820	13.3%	46.1%	11.8%	0.6%	28.2%	0.2%	100.0%
221	Cardiac valve & oth maj cardiothoracic proc w/o card cath w/o CC/MCC	132	9,600	27.6%	28.4%	14.3%	1.2%	28.5%	0.1%	100.0%
488	Knee procedures w/o pdx of infection w CC/MCC	133	6,180	20.6%	42.6%	17.3%	0.5%	17.7%	1.2%	100.0%
302	Atherosclerosis w MCC	134	3,660	9.7%	31.2%	7.5%	0.8%	50.8%	0.0%	100.0%
227	Cardiac defibrillator implant w/o cardiac cath w/o MCC	135	8,720	29.9%	28.5%	5.6%	1.3%	34.5%	0.2%	100.0%
555	Signs & symptoms of musculoskeletal system & conn tissue w MCC	136	3,460	8.1%	50.2%	15.3%	0.8%	25.2%	0.5%	100.0%
251	Perc cardiovasc proc w/o coronary artery stent w/o MCC	137	6,240	19.4%	29.4%	8.5%	1.9%	40.7%	0.2%	100.0%
456	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	138	2,320	6.7%	23.2%	39.8%	0.4%	29.6%	0.2%	100.0%
255	Upper limb & toe amputation for circ system disorders w MCC	139	2,640	7.9%	28.6%	3.8%	0.7%	58.7%	0.3%	100.0%
496	Local excision & removal int fix devices exc hip & femur w CC	140	5,460	18.4%	46.4%	8.3%	1.1%	25.6%	0.2%	100.0%
241	Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	141	2,860	8.9%	32.6%	33.5%	0.5%	24.2%	0.3%	100.0%

Appendix C: Distribution of Payments by Care Setting for BACPAC Episodes by MS-DRG

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

MS-DRG	MS-DRG Description	Rank	Episodes	HHA	SNF	IRF	ER	Readmission to STACH	OP Therapy	Total
256	Upper limb & toe amputation for circ system disorders w CC	142	3,460	8.4%	40.9%	5.0%	0.8%	44.2%	0.7%	100.0%
461	Bilateral or multiple major joint procs of lower extremity w MCC	143	2,720	8.5%	20.6%	49.0%	0.2%	19.8%	1.8%	100.0%
486	Knee procedures w pdx of infection w CC	144	3,460	13.9%	52.5%	8.3%	0.8%	23.8%	0.7%	100.0%
559	Aftercare, musculoskeletal system & connective tissue w MCC	145	2,100	5.8%	51.8%	5.0%	0.8%	36.5%	0.0%	100.0%
497	Local excision & removal int fix devices exc hip & femur w/o CC/MCC	146	4,880	24.0%	41.9%	7.9%	0.6%	24.9%	0.8%	100.0%
474	Amputation for musculoskeletal sys & conn tissue dis w MCC	147	2,340	7.3%	39.9%	19.6%	1.0%	31.8%	0.5%	100.0%
475	Amputation for musculoskeletal sys & conn tissue dis w CC	148	2,860	11.2%	47.3%	28.6%	0.9%	11.9%	0.2%	100.0%
453	Combined anterior/posterior spinal fusion w MCC	149	2,040	10.6%	23.9%	43.4%	0.5%	20.9%	0.6%	100.0%
222	Cardiac defib implant w cardiac cath w AMI/HF/shock w MCC	150	3,060	14.5%	27.0%	18.9%	2.1%	37.4%	0.2%	100.0%
458	Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w/o CC/MCC	151	3,040	18.5%	23.1%	35.3%	0.3%	22.1%	0.7%	100.0%
485	Knee procedures w pdx of infection w MCC	152	1,760	7.3%	53.1%	10.6%	0.7%	28.2%	0.2%	100.0%
455	Combined anterior/posterior spinal fusion w/o CC/MCC	153	3,740	23.5%	26.7%	41.7%	0.7%	6.3%	1.2%	100.0%
231	Coronary bypass w PTCA w MCC	154	2,700	14.5%	29.1%	21.1%	2.2%	32.8%	0.3%	100.0%
616	Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	155	1,640	7.4%	33.2%	17.6%	0.5%	41.2%	0.2%	100.0%
063	Acute ischemic stroke w use of thrombolytic agent w/o CC/MCC	156	1,900	11.7%	25.3%	50.5%	0.7%	10.4%	1.3%	100.0%
259	Cardiac pacemaker device replacement w/o MCC	157	3,080	21.7%	44.7%	8.1%	1.1%	24.0%	0.3%	100.0%
498	Local excision & removal int fix devices of hip & femur w CC/MCC	158	1,620	10.3%	44.9%	6.7%	0.9%	36.9%	0.3%	100.0%
533	Fractures of femur w MCC	159	1,320	2.1%	68.3%	5.7%	0.7%	22.9%	0.2%	100.0%
495	Local excision & removal int fix devices exc hip & femur w MCC	160	1,640	10.4%	42.9%	7.2%	1.3%	38.0%	0.2%	100.0%
224	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w MCC	161	2,060	18.0%	29.8%	23.4%	1.6%	26.8%	0.4%	100.0%
218	Cardiac valve & oth maj cardiothoracic proc w card cath w/o CC/MCC	162	3,000	25.9%	25.9%	22.1%	1.8%	24.2%	0.1%	100.0%
487	Knee procedures w pdx of infection w/o CC/MCC	163	1,820	13.3%	51.8%	0.9%	1.6%	31.8%	0.5%	100.0%
188	Pleural effusion w/o CC/MCC	164	1,900	14.1%	32.4%	7.4%	0.7%	45.4%	0.1%	100.0%
537	Sprains, strains, & dislocations of hip, pelvis & thigh w CC/MCC	165	1,780	13.4%	61.6%	2.7%	1.1%	21.0%	0.2%	100.0%
261	Cardiac pacemaker revision except device replacement w CC	166	2,160	20.3%	29.3%	1.2%	1.1%	47.9%	0.2%	100.0%
538	Sprains, strains, & dislocations of hip, pelvis & thigh w/o CC/MCC	167	1,580	15.5%	54.5%	6.8%	0.9%	22.1%	0.2%	100.0%
260	Cardiac pacemaker revision except device replacement w MCC	168	1,020	8.9%	38.7%	1.5%	0.8%	49.7%	0.4%	100.0%
499	Local excision & removal int fix devices of hip & femur w/o CC/MCC	169	1,440	18.4%	42.5%	11.6%	0.3%	26.6%	0.5%	100.0%
245	AICD generator procedures	170	1,420	19.8%	35.7%	0.0%	2.6%	41.9%	0.0%	100.0%
225	Cardiac defib implant w cardiac cath w/o AMI/HF/shock w/o MCC	171	1,660	21.2%	39.8%	6.9%	2.5%	29.2%	0.4%	100.0%
223	Cardiac defib implant w cardiac cath w AMI/HF/shock w/o MCC	172	1,460	22.9%	24.7%	2.1%	1.0%	48.6%	0.7%	100.0%
258	Cardiac pacemaker device replacement w MCC	173	920	9.8%	56.7%	6.0%	1.2%	26.3%	0.0%	100.0%
476	Amputation for musculoskeletal sys & conn tissue dis w/o CC/MCC	174	920	11.9%	42.4%	35.7%	0.6%	9.2%	0.2%	100.0%
232	Coronary bypass w PTCA w/o MCC	175	1,780	36.4%	20.5%	15.4%	4.2%	23.5%	0.0%	100.0%
262	Cardiac pacemaker revision except device replacement w/o CC/MCC	176	1,160	27.1%	17.4%	2.8%	1.3%	51.4%	0.0%	100.0%
257	Upper limb & toe amputation for circ system disorders w/o CC/MCC	177	300	19.1%	27.4%	0.0%	0.0%	53.3%	0.2%	100.0%
265	AICD lead procedures	178	300	17.8%	54.0%	0.0%	0.6%	27.6%	0.0%	100.0%
618	Amputat of lower limb for endocrine,nutrit,& metabol dis w/o CC/MCC	179	240	28.3%	46.9%	0.0%	2.0%	21.9%	0.9%	100.0%

Appendix D: Descriptive Statistics for BACPAC and Total Episodes by Primary Chronic Condition

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

Chronic Conditions	Episode Rank		Number of Episodes	Average Episode Payment			5th Percentile		Median		95th Percentile	
	BACPAC	Total		BACPAC	Total	Ratio (BACPAC to Total)	BACPAC	Total	BACPAC	Total	BACPAC	Total
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			7,945,600	12,937.97	27,057.69	0.48	\$1,526	\$7,804	\$10,033	\$23,124	\$34,766	\$59,481
CHF* COPD	1	1	2,394,080	14,426.83	28,583.93	0.50	\$1,623	\$7,949	\$11,457	\$23,928	\$38,449	\$65,657
Osteoporosis	2	2	1,426,160	12,301.58	25,345.67	0.49	\$1,594	\$7,737	\$10,299	\$22,970	\$30,631	\$50,103
DIABETES* CHF	3	3	1,123,440	14,505.29	29,752.20	0.49	\$1,638	\$7,911	\$11,623	\$25,154	\$38,851	\$67,719
RA/OA	4	4	1,209,400	9,977.27	24,414.45	0.41	\$1,559	\$8,511	\$6,622	\$21,085	\$27,700	\$48,950
CHF* RENAL	5	5	536,860	14,339.46	28,398.09	0.50	\$1,517	\$7,866	\$12,001	\$24,540	\$36,753	\$62,594
Chronic Obstructive Pulmonary Disease	6	6	466,460	11,209.10	25,217.60	0.44	\$1,328	\$7,398	\$7,796	\$21,587	\$31,806	\$54,615
Hip/Pelvic Fracture	7	8	96,480	16,099.57	29,451.16	0.55	\$2,232	\$10,406	\$15,224	\$28,353	\$33,550	\$51,612
Heart Failure	8	7	122,400	11,449.88	26,044.85	0.44	\$968	\$6,935	\$8,233	\$21,321	\$32,303	\$61,731
Alzheimer's Disease and Related Disorders or Senile	9	10	89,500	13,654.45	24,685.37	0.55	\$1,329	\$6,714	\$10,988	\$20,924	\$36,853	\$55,739
Alzheimer's Diseasev	10	11	101,740	11,870.87	21,533.39	0.55	\$1,301	\$6,613	\$9,936	\$19,268	\$29,838	\$45,500
Stroke / Transient Ischemic Attack	11	12	73,400	15,352.27	27,843.12	0.55	\$1,267	\$7,191	\$11,811	\$23,659	\$44,031	\$62,251
Lung Cancer	12	9	87,880	12,102.55	26,960.27	0.45	\$1,226	\$8,101	\$9,335	\$23,435	\$33,154	\$57,439
Depression	13	14	52,380	9,781.97	25,703.16	0.38	\$517	\$6,474	\$5,152	\$21,258	\$30,584	\$60,552
Ischemic Heart Disease	14	13	62,460	7,586.45	27,644.71	0.27	\$461	\$6,709	\$2,969	\$25,243	\$26,888	\$59,988
Chronic Kidney Disease	15	16	20,820	10,022.01	24,193.58	0.41	\$517	\$6,774	\$5,415	\$19,218	\$30,792	\$55,284
No Chronic Condition	16	17	20,700	7,657.92	21,319.52	0.36	\$410	\$6,003	\$3,627	\$17,032	\$25,147	\$51,005
Colorectal Cancer	17	15	17,980	8,650.36	31,629.27	0.27	\$563	\$10,630	\$4,619	\$27,552	\$27,938	\$63,384
Diabetes	18	19	13,260	7,602.04	20,258.66	0.38	\$496	\$6,170	\$3,945	\$16,753	\$24,736	\$46,917
Acute Myocardial Infarction	19	18	9,180	9,796.06	33,219.37	0.29	\$518	\$8,712	\$3,679	\$33,188	\$35,914	\$67,287
Atrial Fibrillation	20	20	6,400	8,371.61	23,813.18	0.35	\$357	\$5,214	\$3,208	\$17,649	\$26,008	\$59,128
Cataract	21	21	7,320	6,496.47	19,656.65	0.33	\$502	\$5,909	\$3,165	\$16,554	\$22,764	\$42,501
Glaucoma	22	22	3,040	7,066.53	19,886.05	0.36	\$316	\$5,389	\$2,634	\$14,761	\$24,172	\$50,846
Female Breast Cancer	23	23	2,160	7,934.71	21,496.30	0.37	\$862	\$6,594	\$4,641	\$17,314	\$24,550	\$44,030
Prostate Cancer	24	24	1,880	6,109.94	20,203.10	0.30	\$405	\$7,047	\$3,587	\$17,714	\$16,776	\$43,914
Endometrial Cancer	25	25	220	8,377.71	27,300.53	0.31	\$1,077	\$8,830	\$5,304	\$19,184	\$27,587	\$60,735

Appendix E: Distributional Statistics for BACPAC and Total Episodes by Primary Chronic Condition

Source: Dobson | DaVanzo analysis of 5% sample of Medicare beneficiaries, 2007-2010, extrapolated to the overall Medicare population.

Note: BACPAC episodes must be initiated by HHA, SNF or IRF and include the following care settings (HHA, SNF, IRF, OP Therapy, planned and unplanned readmissions to the acute care Hospital and ER). Total episode payments includes all care settings (including index acute care hospitalization) for episodes initiated in the HHA, SNF, and IRF.

Chronic Conditions (1)	Episode Rank		Number of Episodes (4)	Coefficient of Variation			Standard Deviation		Total Medicare Episode Payments (in millions)	
	BACPAC (2)	Total (3)		Ratio (BACPAC to Total) (7)			BACPAC (8)	Total (9)	BACPAC (10)	Total (11)
				BACPAC (5)	Total (6)					
			7,945,600	0.95	0.66	1.43	\$12,295	\$17,989	\$102,800	\$214,990
CHF* COPD	1	1	2,394,080	0.94	0.70	1.34	\$13,567	\$20,132	\$34,539	\$68,432
Osteoporosis	2	2	1,426,160	0.83	0.56	1.48	\$10,269	\$14,275	\$17,544	\$36,147
DIABETES* CHF	3	3	1,123,440	0.96	0.71	1.35	\$13,859	\$20,990	\$16,296	\$33,425
RA/OA	4	4	1,209,400	0.98	0.57	1.72	\$9,752	\$13,834	\$12,067	\$29,527
CHF* RENAL	5	5	536,860	0.88	0.68	1.30	\$12,663	\$19,217	\$7,698	\$15,246
Chronic Obstructive Pulmonary Disease	6	6	466,460	1.01	0.65	1.56	\$11,338	\$16,345	\$5,229	\$11,763
Hip/Pelvic Fracture	7	8	96,480	0.68	0.46	1.47	\$10,947	\$13,666	\$1,553	\$2,841
Heart Failure	8	7	122,400	1.07	0.74	1.45	\$12,231	\$19,162	\$1,401	\$3,188
Alzheimer's Disease and Related Disorders or Senile	9	10	89,500	0.89	0.67	1.34	\$12,185	\$16,495	\$1,222	\$2,209
Alzheimer's Disease	10	11	101,740	0.83	0.60	1.39	\$9,797	\$12,829	\$1,208	\$2,191
Stroke / Transient Ischemic Attack	11	12	73,400	0.95	0.67	1.43	\$14,642	\$18,624	\$1,127	\$2,044
Lung Cancer	12	9	87,880	0.92	0.61	1.50	\$11,096	\$16,486	\$1,064	\$2,369
Depression	13	14	52,380	1.22	0.76	1.61	\$11,961	\$19,550	\$512	\$1,346
Ischemic Heart Disease	14	13	62,460	1.36	0.66	2.05	\$10,317	\$18,357	\$474	\$1,727
Chronic Kidney Disease	15	16	20,820	1.14	0.74	1.55	\$11,463	\$17,871	\$209	\$504
No Chronic Condition	16	17	20,700	1.26	0.77	1.63	\$9,612	\$16,390	\$159	\$441
Colorectal Cancer	17	15	17,980	1.20	0.57	2.12	\$10,407	\$17,955	\$156	\$569
Diabetes	18	19	13,260	1.06	0.68	1.56	\$8,092	\$13,802	\$101	\$269
Acute Myocardial Infarction	19	18	9,180	1.31	0.54	2.41	\$12,856	\$18,064	\$90	\$305
Atrial Fibrillation	20	20	6,400	1.81	1.02	1.76	\$15,125	\$24,380	\$54	\$152
Cataract	21	21	7,320	1.11	0.62	1.79	\$7,227	\$12,187	\$48	\$144
Glaucoma	22	22	3,040	1.59	0.90	1.78	\$11,240	\$17,818	\$21	\$60
Female Breast Cancer	23	23	2,160	1.10	0.80	1.38	\$8,768	\$17,162	\$17	\$46
Prostate Cancer	24	24	1,880	0.94	0.64	1.46	\$5,733	\$12,982	\$11	\$38
Endometrial Cancer	25	25	220	0.94	0.65	1.44	\$7,852	\$17,727	\$2	\$6