

June 2011

Post-Acute Care Episodes Expanded Analytic File

Data Chart Book

Prepared for

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This report was produced under the direction of Susan Bogasky, Project Officer, Office of the Assistant Secretary for Planning and Evaluation (ASPE), Office of Health Policy. The findings and conclusions of this report are those of the authors and do not necessarily represent the views of ASPE or HHS.



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INTRODUCTION

POST-ACUTE CARE EPISODES EXPANDED ANALYTIC FILE DATA CHART BOOK

This study provides an opportunity to explore additional research questions as the Assistant Secretary for Planning and Evaluation (ASPE) and the Centers for Medicare & Medicaid Services (CMS) continue to consider alternatives to the prospective payment silos in post-acute care (PAC). Reports by MedPAC (June, 2008) and The Commonwealth Fund (Schoen et al., 2007) discuss the potential for moving to episode-based payments to better align incentives across providers, and the Patient Protection and Affordable Care Act includes a pilot program for a bundled payment. Episode-based payments may give providers a financial incentive to be more efficient and to coordinate patient services across settings, potentially helping to improve health outcomes and reduce Medicare payments. The work presented here provides more information on episodes of care and on the PAC services that are included and excluded based on different episode definitions. The results of this work can be used to inform discussions around bundled payments and for understanding the service use trajectories of beneficiaries using PAC across the country.

In work with ASPE over the last several years, RTI International has constructed episodes of PAC using 2005 and 2006 five percent Medicare claims data. These episodes were defined as starting with an index hospitalization and included all PAC services as well as Part B physician claims. While episode payments may be a way to improve care coordination across settings and reduce Medicare spending, there is no consensus on the definition of an episode. The 60-day gap variable-length episode that RTI has examined in past work with ASPE (Gage et al., 2009) has been used to explore trends in PAC use. Under this episode definition, all acute and PAC services prior to a 60-day gap in services are included in an episode. However, there are many alternative episode definitions, including fixed-length episode definitions, some of which were examined by RTI and ASPE in 2009 work (Morley et al., 2009). Fixed-length episodes—for example 30 days following discharge from an acute hospitalization—may provide administrative ease, but there is debate on how long episodes should be given that a beneficiary may have several unrelated services during a potential episode. Fixed-length episodes may also exclude services that are related clinically but initiate beyond a fixed period. This issue is of particular relevance for beneficiaries with longer PAC use trajectories. It is important to examine the impact of different definitions as policy makers consider alternatives.

In the current work, RTI has expanded the data file used in the episode analysis in terms of both sample size and the number of years of data used in order to provide more detailed information on the characteristics of PAC episodes under different definitions. The data used in this work include 30 percent of episodes initiating with an acute hospitalization, 30 percent of episodes initiating with home health (HHA), and 100 percent of episodes initiating in a long-term-care hospital (LTCH) or inpatient rehabilitation facility (IRF) in 2006, 2007, and 2008 Medicare claims. Expanding the analytic file provides information on changes in PAC use over the period 2006-2008, allows for a more detailed understanding of the patterns of PAC use by geography, and provides the

opportunity to follow patients over time. This work also differs from past work looking at episodes of care in that it includes analysis of PAC use for beneficiaries without an acute hospitalization at the start of an episode. Although much of the discussion surrounding episodes of care focuses on PAC use after a hospitalization, many beneficiaries are referred to HHA from physician offices, and a smaller number of beneficiaries enter IRF or LTCH without prior acute hospitalizations. Understanding use patterns for these types of beneficiaries is important in establishing context for discussions on how episodes of care are defined.

Definition of an Initiating Event

In previous work, RTI has examined PAC episodes initiating with an acute hospitalization. However, as ASPE and CMS begin to consider alternatives to silo-based payments, it is necessary to also consider service use that occurs without the presence of an acute hospitalization, so-called “community entrants.” For example, beneficiaries may enter home health services without having an acute hospital stay. In this work RTI has also constructed episodes that begin with HHA, IRF, and LTCH. The purpose of the community entrant analysis is to provide a baseline understanding of the characteristics of beneficiaries who enter care without an acute hospital stay. [Table 1](#) summarizes the services that initiate episodes in our analyses.

Table 1. Initiating Events for Post-Acute Care Episodes

Episode Initiating Event	Initiating Claim Type
1. Acute hospital-initiated episode	<ul style="list-style-type: none"> ▪ Acute hospital
2. Community entrant episode	<ul style="list-style-type: none"> ▪ Home Health (HHA) ▪ Inpatient Rehabilitation Hospital (IRF) ▪ Long-Term-Care Hospital (LTCH)

RTI’s past work constructing PAC episodes (Gage et al., 2009; Morley et al., 2009) required a 60-day clean period for an acute hospitalization to initiate an episode of care. This clean period was defined as the absence of acute hospital and PAC services (HHA, LTCH, IRF, and skilled nursing facility [SNF]). In the current work, RTI has replaced the 60-day clean period with a 30-day clean period. The decision to reduce the clean period to 30 days was based on earlier work with ASPE looking at time-based episode definitions. This decrease in the required gap in services prior to initiating an episode is likely to result in inclusion of a broader range of beneficiaries who may be in and out of acute and post-acute care.

Analytic Samples

One of the main goals of this project was to increase the sample size of the analytic file from the 5 percent Medicare beneficiary sample used in earlier work. The file constructed for this project includes 30 percent of beneficiaries with acute hospital-initiated episodes, 30 percent of beneficiaries with HHA-initiated episodes, plus 100 percent of beneficiaries initiating episodes in LTCH and IRF settings in 2006, 2007, and 2008. Two analytic samples were incorporated into the data files as described below.

- **Analytic Sample 1: Longitudinal Cohort**—The longitudinal cohort sample consists of a 30 percent sample of beneficiaries with an initiating event in an acute hospital or in home health in 2006 plus 100 percent of beneficiaries with an initiating event in LTCH or IRF in 2006. To construct the cohort sample, RTI selected the first initiating event in 2006 per beneficiary and then constructed a file of all claims following the initiating event for 2006, 2007, and 2008 for these beneficiaries. This file contains two calendar years of data for each beneficiary in the cohort.
- **Analytic Sample 2: Cross Section**—The cross-sectional samples consist of a 30 percent sample of beneficiaries with an initiating event in an acute hospital or in home health plus 100 percent of beneficiaries with an initiating event in LTCH or IRF in 2006, 2007, and 2008. RTI constructed the first episode per year for these beneficiaries to compare changes in utilization patterns over the 3-year study period.

Episode Definitions

RTI constructed 15 PAC episode definitions in the analytic file and constructed episodes for both acute hospital-initiated and community entrant episodes using the following definitions:

- 30-day fixed-length episode, and
- 30-day variable-length episode.

The endpoint of a fixed-length episode was defined using two different methods. The first method allowed any claim initiating within a fixed period to be part of the episode definition. For example, using this method, the entirety of a 60-day home health claim initiating 25 days after acute hospital discharge was included in the 30-day fixed-length episode definition. In the second method, we prorated claims so that only PAC days within the fixed period (and the associated dollars) were included in the episode. Using the example of the 60-day home health claim initiating 25 days after acute hospital discharge, under the prorated methodology, only visits occurring during the first 5 days of the home health claim (up to day 30 after acute hospital discharge) were included in the 30-day fixed episode definition. As in earlier work, prorated payments were estimated by dividing the total claim Medicare payment amount by the total number of visits on the claim (or the number of days on institutional claims). Note that an alternative end point to each of the episode definitions is acute hospitalization (a readmission for acute hospital-initiated episodes or the first acute hospitalization for community entrant episodes). Note also that all episode definitions include the initiating event and that episode end points for each of the definitions are calculated based on the discharge date on the claim for the initiating event. For example, in the case of home health community entrants, where a home health claim is the initiating event and may be followed by a series of home health claims for beneficiaries receiving ongoing care, the episode endpoint is calculated using the discharge date from the first home health claim that initiated the episode.

Physician claims were also examined as part of this analysis though only acute and PAC claims were used to define initiating events and episode endpoints. Physician claims with dates of service falling between the admission date on an initiating event and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment analyses.

In summary, episodes were constructed on the following dimensions:

1. Episode definition
 - a. 30-day fixed length
 - b. 30-day variable length
2. Initiating event
 - a. Acute hospital
 - b. HHA
 - c. IRF
 - d. LTCH
3. Alternative methods of handling the end of fixed episodes
 - a. Any claim initiating
 - b. Prorated
4. Alternative episode end point of an acute hospitalization.

Based on these dimensions, the total number of episodes examined in this work includes the 15 episode definitions shown in [Table 2](#). Using these definitions, RTI examined episode patterns, use of PAC services, and payments for both the acute hospital-initiated and the community entrant episodes.

Table 2. Episode Definitions

Initiating Event	Fixed or Variable Length	Episode End Point
Acute hospitalization	Fixed	Any Claim Starting Within 30 Days After Hospital Discharge
Acute hospitalization	Fixed	Any Claim Starting Within 30 Days After Hospital Discharge, Excluding Acute Hospital Readmissions
Acute hospitalization	Fixed	30-Day Fixed Period Following Hospital Discharge (prorated)
Acute hospitalization	Fixed	30-Day Fixed Period Following Hospital Discharge (prorated), Excluding Acute Hospital Readmissions
Acute hospitalization	Variable	30-Day Variable-Length Episode
Acute hospitalization	Variable	30-Day Variable-Length Episode Excluding Acute Hospital Readmissions
HHA	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
HHA	Variable	30-Day Variable-Length Episode
HHA	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations
IRF	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
IRF	Variable	30-Day Variable-Length Episode
IRF	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations
LTCH	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
LTCH	Variable	30-Day Variable-Length Episode
LTCH	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations

This Data Chart Book provides more detailed information on each of the episode definitions explored in our analysis across all MS-DRGs, for the top 20 MS-DRGs by volume of discharges to PAC, and for the top 20 MS-DRGs by mean PAC episode payment. In addition, the data presented here includes information on PAC episodes at both the state and CBSA level using standardized payments. The final report provides summary information based on our findings and focuses on a subset of the episode definitions. The final report on this work also contains details on the methods used to develop alternative episode definitions and to standardize episode payments.

SECTION 1

2008 CROSS SECTIONAL ANALYSIS: MEDICARE POST-ACUTE CARE EPISODE PAYMENTS AND UTILIZATION PER DISCHARGE AND PER PAC USER

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results across all conditions and then by condition for the top conditions by volume, by type of initiating event; by MS-DRG for acute and LTCH, by condition grouping for HHA, and by rehabilitation impairment category (RIC) for IRF. Tables 16-30 provide similar information but for the top conditions by mean PAC episode payment; Tables 16-21 for acute initiated episodes; Tables 22-24 for HHA-initiated episodes; Tables 25-27 for LTCH initiated episodes and Tables 28-30 for IRF-initiated episodes.

For the acute initiated episodes, we report the total number of hospital discharges, the number and percent of beneficiaries discharged to PAC, the total Medicare spending on PAC, and the rank by total PAC spending overall, and for the top MS-DRGs by volume. Additionally, summary statistics are reported per PAC user and per hospital discharge to illustrate the differences in setting a payment at the PAC user level versus the hospital discharge level. This summary information includes mean index acute hospital payment, mean PAC episode payment, mean total episode payment, total Medicare spending, and rank by total Medicare spending. For the community initiated episodes, we report the number of PAC users, the mean index payment, the mean total episode payment, total Medicare spending, and rank by total Medicare spending.

Key findings from the data presented here include the following.

- 39 percent of beneficiaries with acute initiated episodes go on to use PAC, but this percent varies significantly by MS-DRG. For example, 94 percent of beneficiaries in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC) go on to PAC compared to 36 percent of beneficiaries in MS-DRG 194 (Simple pneumonia & pleurisy w CC).
- The differences in the number of acute hospital discharges versus the number of beneficiaries using PAC are important to keep in mind when considering mean payments per discharge versus mean payments per PAC user. For example, for MS-DRG 194 (Simple pneumonia & pleurisy w CC), given that only 36 percent of beneficiaries are discharged to PAC, the mean PAC payment per discharge is \$7,072 and the mean PAC

payment per PAC user is \$14,892 under the 30 day variable length episode. However, given the very high percent of beneficiaries discharged to PAC in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC), the mean PAC payment per discharge and the mean PAC payment per PAC user are very similar, \$9,593 and \$10,067 for the 30 day variable length episode, respectively.

- An MS-DRG's ranking in terms of total Medicare spending on PAC is a function of the number of PAC users and the per user PAC payments. The sheer volume of PAC users in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC) make it number one in terms of total Medicare PAC spending though it is not in the top 20 MS-DRGs by mean PAC payments per PAC user.
- Most of the MS-DRGs in the top 20 by mean PAC payments per PAC user for acute initiated episodes have far fewer PAC users. Top MS-DRGs by mean PAC payments per PAC user under the 30 day variable length episode definition include transplants, ventilator use, spinal procedures, and skin grafts among others.
- Similar patterns emerge when looking at the community entrant populations. For the LTCH-initiated episodes, the MS-DRG with the highest volume of discharges is MS-DRG 885 (Psychoses) and the mean PAC episode payment per PAC user is \$16,486. However, when looking at the MS-DRG rankings for LTCH-initiated episodes by mean PAC payment per PAC user, the top 20 include MS-DRGs with very small numbers of beneficiaries (in most cases fewer than 20), but per PAC user payments of over \$100,000.
- As discussed in the report and in earlier work, the tables in this section also highlight differences in per PAC episode payments by episode definition. Relative differences in PAC episode payments by episode definition, by MS-DRG (or other condition grouping) depend on the service mix most typical to the condition. For example, for MS-DRGs with relatively short episodes and a small proportion of readmissions, we would expect differences in mean PAC payments per PAC user to be relatively small across episode definitions. In the case of MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC), mean PAC payments per PAC user are \$10,067 for the 30 day variable length episode definition, \$7,527 for the 30 day variable length episode definition excluding readmission, and \$7,701 for the 30 day fixed length episode definition. In contrast, we see larger differences in these payment amounts for MS-DRGs where there is more variation in episode trajectory. For example, MS-DRG 194 (Simple pneumonia & pleurisy w CC) exhibits more significant differences across the same set of episode definitions (\$14,892, \$7,458, and \$9,163, respectively). Examination of the mix of service use by condition grouping is presented in Section 3 and Section 4.

Section 1-Table 1
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
All MS-DRGs	1,705,794	659,549	39	11,368,296,315	8,531	8,384	16,915	11,156,428,709	1	10,572	17,236	27,808	18,341,033,052	1	
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	910,402,959	11,079	9,593	20,672	1,869,486,532	1	11,120	10,067	21,187	1,916,042,621	1	
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	392,252,681	6,392	21,822	28,213	394,762,222	4	6,401	28,034	34,435	481,815,198	3	
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	348,978,721	3	10,295	24,434	34,729	475,241,192	2	10,296	25,465	35,761	490,069,823	2
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	194,554,667	6	5,347	7,072	12,419	162,245,105	15	5,471	14,892	20,363	266,025,409	7
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	219,480,576	4	3,989	8,727	12,716	164,722,405	14	4,090	16,943	21,033	272,463,333	6
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	154,439,544	12	3,550	7,008	10,558	102,993,540	29	3,763	15,832	19,595	191,145,375	17
299: Peripheral vascular disorders w MCC	19,927	9,752	49	208,917,968	5	9,968	12,390	22,358	218,037,416	6	10,614	21,423	32,037	312,422,116	5
292: Heart failure & shock w CC	22,092	8,602	39	154,866,784	11	5,322	10,150	15,472	133,086,928	19	5,414	18,004	23,418	201,442,060	15
291: Heart failure & shock w MCC	19,401	8,561	44	176,488,813	8	7,199	12,370	19,569	167,527,534	13	7,307	20,615	27,923	239,045,546	10
552: Medical back problems w/o MCC	14,067	8,113	58	143,300,670	13	3,931	11,849	15,781	128,028,915	21	3,990	17,663	21,653	175,672,320	21
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	141,765,779	14	5,152	11,147	16,299	129,823,916	20	5,210	17,799	23,009	183,264,119	19
312: Syncope & collapse	29,247	7,926	27	107,508,042	25	3,610	4,920	8,531	67,613,778	49	3,796	13,564	17,360	137,597,849	29
603: Cellulitis w/o MCC	20,521	7,590	37	113,083,981	22	4,186	6,817	11,003	83,512,118	37	4,304	14,899	19,203	145,752,665	26
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	160,844,182	10	8,618	20,792	29,410	212,223,270	8	8,633	22,290	30,923	223,139,534	13
683: Renal failure w CC	16,395	6,765	41	131,652,302	15	6,437	10,425	16,862	114,070,246	25	6,464	19,461	25,925	175,379,726	22
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	90,997,553	31	3,409	3,951	7,360	49,187,153	62	3,703	13,616	17,319	115,743,479	37
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	77,316,131	38	21,360	6,496	27,856	185,213,121	12	21,955	11,628	33,583	223,296,204	12
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	117,213,100	21	7,058	10,450	17,508	113,921,824	26	7,060	18,013	25,074	163,154,488	23
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	81,286,212	36	4,142	4,756	8,898	57,034,536	56	4,372	12,681	17,053	109,309,314	40
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	108,767,163	23	6,075	8,121	14,196	89,715,826	34	6,242	17,210	23,452	148,215,192	25

NOTES:

- Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 - PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 - Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 - Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 - Total episode payment includes index acute hospitalization and post-acute car
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

**Section 1-Table 2
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission**

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						Discharge (\$)	Per Discharge (\$)	Per Discharge (\$)	(Acute + PAC) (\$)	PAC User (\$)	Per PAC User (\$)	Per PAC User (\$)	(Acute + PAC) (\$)	PAC User (\$)	
All MS-DRGs	1,705,794	659,549	39	5,985,617,985	8,531	3,511	12,042	7,942,498,324	1	10,572	9,075	19,647	12,958,354,722		
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	680,698,336	1	11,079	7,093	18,172	1,643,403,430	1	11,120	7,527	18,647	1,686,337,998	1
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	258,295,532	2	6,392	13,849	20,241	283,210,674	4	6,401	18,460	24,861	347,858,049	4
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	242,823,196	3	10,295	16,900	27,195	372,677,473	2	10,296	17,719	28,015	383,914,298	2
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	97,425,729	8	5,347	2,710	8,057	105,256,829	15	5,471	7,458	12,928	168,896,471	11
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	120,675,433	4	3,989	4,092	8,080	104,672,485	16	4,090	9,316	13,406	173,658,190	10
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	80,477,299	12	3,550	2,811	6,361	62,052,485	35	3,763	8,250	12,013	117,183,130	18
299: Peripheral vascular disorders w MCC	19,927	9,752	49	97,321,836	9	9,968	4,886	14,854	144,856,725	10	10,614	9,980	20,593	200,825,984	6
292: Heart failure & shock w CC	22,092	8,602	39	56,056,213	22	5,322	2,539	7,861	67,618,079	32	5,414	6,517	11,931	102,631,489	25
291: Heart failure & shock w MCC	19,401	8,561	44	63,997,414	18	7,199	3,303	10,501	89,903,089	19	7,307	7,475	14,783	126,554,147	16
552: Medical back problems w/o MCC	14,067	8,113	58	78,547,846	14	3,931	5,585	9,516	77,203,950	25	3,990	9,682	13,672	110,919,496	23
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	92,496,503	10	5,152	6,678	11,830	94,227,108	18	5,210	11,613	16,823	133,994,843	15
312: Syncope & collapse	29,247	7,926	27	57,464,996	21	3,610	1,967	5,578	44,209,217	52	3,796	7,250	11,047	87,554,803	30
603: Cellulitis w/o MCC	20,521	7,590	37	53,629,119	23	4,186	2,619	6,805	51,649,503	47	4,304	7,066	11,370	86,297,803	31
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	117,110,074	5	8,618	14,987	23,605	170,335,630	6	8,633	16,229	24,862	179,405,426	9
683: Renal failure w CC	16,395	6,765	41	57,647,158	20	6,437	3,521	9,958	67,363,785	33	6,464	8,521	14,985	101,374,582	26
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	39,528,124	34	3,409	937	4,346	29,046,980	74	3,703	5,915	9,618	64,274,050	51
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	50,568,576	27	21,360	3,827	25,187	167,467,720	8	21,955	7,605	29,561	196,548,649	7
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	53,396,950	24	7,058	3,676	10,734	69,845,419	28	7,060	8,206	15,266	99,338,338	27
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	45,121,749	29	4,142	1,962	6,104	39,126,178	59	4,372	7,039	11,411	73,144,851	39
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	41,640,727	31	6,075	2,182	8,257	52,182,678	46	6,242	6,589	12,830	81,088,756	34

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

Section 1-Table 3
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
 Acute Initiated Episodes
 Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Even

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per Discharge (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
All MS-DRGs	1,705,794	659,549	39	7,025,154,860		8,531	5,252	13,783	9,090,726,408	10,572	10,651	21,223	13,997,891,597		
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	696,476,523	1	11,079	7,335	18,414	1,665,279,239	11,120	7,701	18,822	1,702,116,185	1	
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	267,052,719	2	6,392	14,812	21,204	296,688,683	6,401	19,086	25,487	356,615,236	4	
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	252,183,479	3	10,295	17,664	27,958	383,136,940	10,296	18,402	28,698	393,274,581	2	
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	119,702,071	7	5,347	4,385	9,732	127,137,671	5,471	9,163	14,634	191,172,813	9	
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	135,414,326	4	3,989	5,418	9,407	121,856,394	4,090	10,453	14,544	188,397,083	10	
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	93,874,888	11	3,550	4,304	7,854	76,613,788	3,763	9,623	13,386	130,580,719	19	
299: Peripheral vascular disorders w MCC	19,927	9,752	49	123,970,894	5	9,968	7,365	17,334	169,037,868	10,614	12,712	23,326	227,475,042	5	
292: Heart failure & shock w CC	22,092	8,602	39	77,701,470	17	5,322	5,374	10,696	92,004,458	5,414	9,033	14,447	124,276,746	20	
291: Heart failure & shock w MCC	19,401	8,561	44	91,145,673	12	7,199	6,614	13,813	118,252,622	7,307	10,647	17,954	153,702,406	14	
552: Medical back problems w/o MCC	14,067	8,113	58	89,633,978	13	3,931	7,534	11,465	93,016,832	3,990	11,048	15,038	122,005,628	23	
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	97,052,728	10	5,152	7,696	12,848	102,333,940	5,210	12,185	17,395	138,551,068	16	
312: Syncope & collapse	29,247	7,926	27	62,899,380	24	3,610	2,992	6,603	52,333,604	51	3,796	7,936	11,732	92,989,187	34
603: Cellulitis w/o MCC	20,521	7,590	37	60,711,856	26	4,186	3,731	7,917	60,093,076	44	4,304	7,999	12,303	93,380,540	32
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	119,967,885	6	8,618	15,513	24,131	174,131,718	7	8,633	16,625	25,258	182,263,237	11
683: Renal failure w CC	16,395	6,765	41	75,006,635	19	6,437	6,019	12,456	84,264,390	28	6,464	11,087	17,551	118,734,059	25
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	48,127,793	36	3,409	2,337	5,746	38,403,343	65	3,703	7,202	10,904	72,873,719	48
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	56,837,242	28	21,360	4,789	26,150	173,868,615	8	21,955	8,548	30,503	202,817,315	7
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	68,868,338	23	7,058	6,185	13,243	86,173,069	27	7,060	10,584	17,644	114,809,726	27
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	51,052,520	34	4,142	3,027	7,169	45,953,685	56	4,372	7,965	12,336	79,075,622	40
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	57,097,594	27	6,075	4,395	10,470	66,170,227	39	6,242	9,034	15,276	96,545,623	29

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

Section 1-Table 4
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmission

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per Discharge (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
All MS-DRGs	1,705,794	659,549	39	5,385,244,492	8,531	3,157	11,688	7,709,003,101	1	10,572	8,165	18,737	12,357,981,229		
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	617,744,392	11,079	6,437	17,516	1,584,045,943	1	11,120	6,831	17,951	1,623,384,054	1	
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	228,268,676	6,392	12,239	18,631	260,681,892	4	6,401	16,314	22,715	317,831,193	4	
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	217,939,096	10,295	15,168	25,463	348,943,362	2	10,296	15,903	26,199	359,030,198	2	
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	89,596,925	5,347	2,490	7,837	102,382,886	15	5,471	6,858	12,329	161,067,667	11	
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	108,812,014	4	3,989	3,684	99,393,994	16	4,090	8,400	12,490	161,794,771	10	
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	72,142,759	12	3,550	2,518	6,068	59,195,248	36	3,763	7,395	11,158	108,848,590	21
299: Peripheral vascular disorders w MCC	19,927	9,752	49	89,653,146	8	9,968	4,499	14,467	141,085,087	10	10,614	9,193	19,807	193,157,294	6
292: Heart failure & shock w CC	22,092	8,602	39	50,487,012	21	5,322	2,285	7,607	65,437,311	31	5,414	5,869	11,284	97,062,288	25
291: Heart failure & shock w MCC	19,401	8,561	44	58,516,015	18	7,199	3,016	10,215	87,449,696	20	7,307	6,835	14,142	121,072,748	16
552: Medical back problems w/o MCC	14,067	8,113	58	69,974,772	14	3,931	4,974	8,906	72,252,028	26	3,990	8,625	12,615	102,346,422	24
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	82,764,500	10	5,152	5,974	11,126	88,619,746	18	5,210	10,391	15,601	124,262,840	15
312: Syncope & collapse	29,247	7,926	27	50,269,332	22	3,610	1,719	5,329	42,238,677	52	3,796	6,342	10,139	80,359,139	30
603: Cellulitis w/o MCC	20,521	7,590	37	46,961,070	25	4,186	2,288	6,475	49,143,419	48	4,304	6,187	10,491	79,629,754	31
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	105,949,824	5	8,618	13,559	22,177	160,029,467	8	8,633	14,683	23,316	168,245,176	9
683: Renal failure w CC	16,395	6,765	41	52,513,524	20	6,437	3,203	9,640	65,214,289	32	6,464	7,763	14,226	96,240,948	26
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	34,466,032	35	3,409	815	4,224	28,231,084	73	3,703	5,157	8,860	59,211,958	52
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	46,539,434	27	21,360	3,520	24,880	165,424,943	7	21,955	6,999	28,955	192,519,507	7
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	49,217,854	23	7,058	3,384	10,442	67,944,326	29	7,060	7,564	14,624	95,159,242	27
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	41,039,654	29	4,142	1,783	5,926	37,982,930	59	4,372	6,402	10,774	69,062,756	42
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	37,816,007	31	6,075	1,981	8,056	50,914,803	46	6,242	5,984	12,225	77,264,036	33

NOTES:

- Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 - PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 - Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 - Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 - Total episode payment includes index acute hospitalization and post-acute car
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

Section 1-Table 5
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
 Acute Initiated Episodes
 Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG						Per Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
All MS-DRGs	1,705,794	659,549	39	4,989,135,506	8,531	3,845	12,377	8,162,999,259	1	10,572	7,564	18,136	11,961,872,243	1	
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	559,053,777	11,079	5,893	16,972	1,534,852,275	1	11,120	6,182	17,302	1,564,693,439	1	
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	188,840,486	6,392	10,520	16,911	236,623,727	4	6,401	13,496	19,897	278,403,003	4	
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	165,087,649	10,295	11,567	21,861	299,587,854	3	10,296	12,047	22,342	306,178,751	3	
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	81,458,328	5,347	3,112	8,459	110,506,550	15	5,471	6,235	11,706	152,929,070	10	
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	87,426,820	3,989	3,615	7,604	98,502,490	18	4,090	6,749	10,839	140,409,577	12	
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	61,851,481	3,550	2,971	6,521	63,612,985	35	3,763	6,340	10,103	98,557,312	24	
299: Peripheral vascular disorders w MCC	19,927	9,752	49	85,170,943	5,968	5,174	15,142	147,666,294	9	10,614	8,734	19,347	188,675,091	6	
292: Heart failure & shock w CC	22,092	8,602	39	53,869,194	5,322	3,864	9,186	79,016,532	24	5,414	6,262	11,677	100,444,470	23	
291: Heart failure & shock w MCC	19,401	8,561	44	64,168,141	7,199	4,819	12,017	102,881,485	16	7,307	7,495	14,803	126,724,874	14	
552: Medical back problems w/o MCC	14,067	8,113	58	62,996,986	3,931	5,443	9,374	76,049,834	25	3,990	7,765	11,755	95,368,636	25	
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	72,160,098	5,152	5,783	10,935	87,097,548	22	5,210	9,060	14,270	113,658,438	18	
312: Syncope & collapse	29,247	7,926	27	42,710,506	2,610	3,610	5,756	45,620,655	51	3,796	5,389	9,185	72,800,313	40	
603: Cellulitis w/o MCC	20,521	7,590	37	40,566,111	4,186	2,578	6,765	51,342,802	46	4,304	5,345	9,649	73,234,795	37	
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	82,597,971	8,618	10,683	19,301	139,277,134	10	8,633	11,447	20,079	144,893,323	11	
683: Renal failure w CC	16,395	6,765	41	50,899,078	6,437	4,247	10,684	72,278,328	28	6,464	7,524	13,988	94,626,502	26	
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	32,078,961	3,409	1,715	5,125	34,248,175	67	3,703	4,800	8,503	56,824,887	51	
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	46,772,728	21,360	3,957	25,317	168,331,008	7	21,955	7,035	28,990	192,752,801	5	
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	48,664,017	7,058	4,440	11,498	74,816,718	26	7,060	7,479	14,539	94,605,405	27	
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	34,790,398	3,3	4,142	2,184	6,326	40,550,600	58	4,372	5,428	62,813,500	45	
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	40,422,458	6,075	3,233	9,308	58,827,236	40	6,242	6,396	12,638	79,870,487	29	

NOTES:

- Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 - PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 - Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 - Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 - Total episode payment includes index acute hospitalization and post-acute car
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 - Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

Section 1-Table 6
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Volume, 2008
 Acute Initiated Episodes
 Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
All MS-DRGs	1,705,794	659,549	39	3,789,135,413		8,531	2,221	10,753	7,091,864,016		10,572	5,745	16,317	10,761,872,150	
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94	496,472,553	1	11,079	5,173	16,252	1,469,770,824	1	11,120	5,490	16,610	1,502,112,215	1
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75	161,736,125	2	6,392	8,672	15,064	210,769,102	4	6,401	11,559	17,960	251,298,642	4
481: Hip & femur procedures except major joint w CC	14,368	13,704	95	143,034,825	3	10,295	9,955	20,250	277,500,703	3	10,296	10,437	20,733	284,125,927	3
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36	59,871,453	10	5,347	1,664	7,011	91,589,846	16	5,471	4,583	10,054	131,342,195	11
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	44	69,488,666	5	3,989	2,353	6,341	82,147,426	19	4,090	5,364	9,454	122,471,423	12
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34	46,696,236	15	3,550	1,630	5,180	50,530,088	39	3,763	4,787	8,550	83,402,067	23
299: Peripheral vascular disorders w MCC	19,927	9,752	49	60,601,951	9	9,968	3,041	13,009	126,867,832	10	10,614	6,214	16,828	164,106,099	8
292: Heart failure & shock w CC	22,092	8,602	39	33,227,115	24	5,322	1,504	6,826	58,716,795	31	5,414	3,863	9,277	79,802,391	27
291: Heart failure & shock w MCC	19,401	8,561	44	39,884,368	17	7,199	2,056	9,255	79,228,185	20	7,307	4,659	11,966	102,441,101	18
552: Medical back problems w/o MCC	14,067	8,113	58	49,213,545	13	3,931	3,499	7,430	60,278,200	30	3,990	6,066	10,056	81,585,195	25
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57	61,563,730	8	5,152	4,444	9,596	76,430,910	23	5,210	7,729	12,939	103,062,070	17
312: Syncope & collapse	29,247	7,926	27	33,647,642	23	3,610	4,761	37,734,163	55	3,796	4,245	8,042	63,737,449	40	
603: Cellulitis w/o MCC	20,521	7,590	37	31,205,463	27	4,186	1,521	5,707	43,315,971	48	4,304	4,111	8,416	63,874,147	39
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92	73,455,553	4	8,618	9,401	18,019	130,021,959	9	8,633	10,180	18,812	135,750,905	10
683: Renal failure w CC	16,395	6,765	41	34,771,062	21	6,437	2,121	8,558	57,893,291	33	6,464	5,140	11,604	78,498,486	28
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	16	22,192,624	37	3,409	525	3,934	26,291,543	73	3,703	3,321	7,024	46,938,550	56
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50	38,737,165	18	21,360	2,930	24,290	161,501,682	6	21,955	5,826	27,781	184,717,238	5
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	45	34,117,761	22	7,058	2,346	9,403	61,188,530	29	7,060	5,243	12,304	80,059,149	26
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	28	27,324,477	29	4,142	1,187	5,330	34,162,563	61	4,372	4,263	8,635	55,347,579	44
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33	25,787,592	32	6,075	1,351	7,426	46,932,218	43	6,242	4,080	10,322	65,235,621	37

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm272)

Section 1-Table 7

Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
			(\$)		
All Condition Groupings	236,307	2,779	11,736	2,773,347,980	
Other: Medical	57,849	2,781	9,205	532,511,945	1
Orthopedic: Minor Medical	40,669	3,166	10,777	438,296,336	2
Neurologic: Medical	33,344	3,356	12,920	430,798,502	3
Cardiovascular: General	21,438	2,322	10,488	224,846,812	6
Integumentary: Medical	20,783	2,496	13,374	277,945,339	5
Endocrine: Medical	19,050	2,919	16,093	306,571,940	4
Cardiovascular: Cardiac Medical	9,429	2,387	13,681	129,002,652	7
Kidney & Urinary: Medical	6,909	2,086	14,038	96,989,080	8
Respiratory: COPD	6,075	2,412	12,889	78,297,826	10
Cardiovascular: Vascular Medical	5,522	2,449	16,470	90,949,698	9
Respiratory: Medical	4,527	2,165	9,789	44,316,508	11
GI & Hepatobiliary: Minor Medical	3,149	2,080	9,606	30,250,732	13
Hematologic: Medical	3,113	1,927	14,009	43,610,107	12
Infections: Medical	1,980	2,383	10,345	20,483,631	14
GI & Hepatobiliary: Major Medical	1,470	1,995	12,121	17,817,558	15
Orthopedic: Major Medical	549	2,867	9,105	4,998,868	16
Neurologic: Stroke	325	3,339	14,346	4,662,526	17
Infections: Septicemia	100	1,822	6,328	632,850	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 8

Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
			Episode ³ Payment Per PAC User (\$)		
All Condition Groupings	236,307	2,779	4,966	1,173,536,103	
Other: Medical	57,849	2,781	4,191	242,424,599	1
Orthopedic: Minor Medical	40,669	3,166	5,155	209,662,694	2
Neurologic: Medical	33,344	3,356	6,029	201,018,669	3
Cardiovascular: General	21,438	2,322	4,877	104,562,963	5
Integumentary: Medical	20,783	2,496	4,337	90,139,232	6
Endocrine: Medical	19,050	2,919	7,610	144,971,471	4
Cardiovascular: Cardiac Medical	9,429	2,387	4,388	41,378,984	7
Kidney & Urinary: Medical	6,909	2,086	4,183	28,902,788	9
Respiratory: COPD	6,075	2,412	4,267	25,921,760	10
Cardiovascular: Vascular Medical	5,522	2,449	5,288	29,199,352	8
Respiratory: Medical	4,527	2,165	3,307	14,970,462	11
GI & Hepatobiliary: Minor Medical	3,149	2,080	3,239	10,200,602	13
Hematologic: Medical	3,113	1,927	4,506	14,026,006	12
Infections: Medical	1,980	2,383	3,709	7,344,089	14
GI & Hepatobiliary: Major Medical	1,470	1,995	2,963	4,355,327	15
Orthopedic: Major Medical	549	2,867	3,942	2,164,026	16
Neurologic: Stroke	325	3,339	5,766	1,873,837	17
Infections: Septicemia	100	1,822	2,692	269,150	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 9

Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
			Episode ³ Payment Per PAC User (\$)		
All Condition Groupings	236,307	2,779	6,446	1,523,242,403	
Other: Medical	57,849	2,781	5,798	335,394,567	1
Orthopedic: Minor Medical	40,669	3,166	6,520	265,159,178	2
Neurologic: Medical	33,344	3,356	7,114	237,216,578	3
Cardiovascular: General	21,438	2,322	5,273	113,046,151	6
Integumentary: Medical	20,783	2,496	7,289	151,484,355	4
Endocrine: Medical	19,050	2,919	7,005	133,453,588	5
Cardiovascular: Cardiac Medical	9,429	2,387	6,949	65,521,277	7
Kidney & Urinary: Medical	6,909	2,086	6,363	43,961,932	8
Respiratory: COPD	6,075	2,412	6,701	40,706,144	10
Cardiovascular: Vascular Medical	5,522	2,449	7,607	42,003,152	9
Respiratory: Medical	4,527	2,165	6,029	27,294,284	11
GI & Hepatobiliary: Minor Medical	3,149	2,080	5,629	17,726,529	13
Hematologic: Medical	3,113	1,927	6,329	19,701,422	12
Infections: Medical	1,980	2,383	6,226	12,326,653	14
GI & Hepatobiliary: Major Medical	1,470	1,995	7,765	11,413,971	15
Orthopedic: Major Medical	549	2,867	6,703	3,680,123	16
Neurologic: Stroke	325	3,339	7,572	2,460,881	17
Infections: Septicemia	100	1,822	4,921	492,149	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 10
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	46,633	231,625,823	
885: Psychoses	672	11,862	16,486	11,078,680	3
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	84,166	28,027,195	1
189: Pulmonary edema & respiratory failure	204	29,113	62,974	12,846,640	2
593: Skin ulcers w CC	196	23,280	48,163	9,439,971	6
592: Skin ulcers w MCC	195	27,465	55,248	10,773,272	5
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	68,876	10,882,479	4
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	62,879	8,928,765	7
057: Degenerative nervous system disorders w/o MCC	136	18,381	31,290	4,255,472	9
299: Peripheral vascular disorders w MCC	103	23,248	44,941	4,628,912	8
603: Cellulitis w/o MCC	84	15,137	34,513	2,899,059	17
945: Rehabilitation w CC/MCC	74	18,601	44,338	3,280,988	13
056: Degenerative nervous system disorders w MCC	73	25,861	51,075	3,728,500	10
300: Peripheral vascular disorders w CC	72	17,994	41,172	2,964,353	15
177: Respiratory infections & inflammations w MCC	70	25,129	48,737	3,411,618	12
190: Chronic obstructive pulmonary disease w MCC	61	20,621	37,546	2,290,302	22
191: Chronic obstructive pulmonary disease w CC	57	16,176	30,417	1,733,751	31
264: Other circulatory system O.R. procedures	55	33,631	52,152	2,868,348	18
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	54,898	3,019,400	14
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	54,160	2,924,645	16
193: Simple pneumonia & pleurisy w MCC	50	21,088	46,299	2,314,947	20

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 11
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	33,467	166,232,190	
885: Psychoses	672	11,862	14,442	9,705,201	2
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	67,030	22,320,888	1
189: Pulmonary edema & respiratory failure	204	29,113	39,524	8,062,957	4
593: Skin ulcers w CC	196	23,280	33,427	6,551,604	7
592: Skin ulcers w MCC	195	27,465	36,081	7,035,796	5
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	52,332	8,268,425	3
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	47,152	6,695,517	6
057: Degenerative nervous system disorders w/o MCC	136	18,381	26,032	3,540,381	8
299: Peripheral vascular disorders w MCC	103	23,248	28,819	2,968,317	9
603: Cellulitis w/o MCC	84	15,137	25,806	2,167,694	16
945: Rehabilitation w CC/MCC	74	18,601	29,488	2,182,100	15
056: Degenerative nervous system disorders w MCC	73	25,861	36,636	2,674,453	10
300: Peripheral vascular disorders w CC	72	17,994	27,649	1,990,738	17
177: Respiratory infections & inflammations w MCC	70	25,129	33,581	2,350,667	13
190: Chronic obstructive pulmonary disease w MCC	61	20,621	27,549	1,680,467	21
191: Chronic obstructive pulmonary disease w CC	57	16,176	23,232	1,324,236	28
264: Other circulatory system O.R. procedures	55	33,631	41,727	2,295,005	14
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	34,097	1,875,328	18
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	31,444	1,698,001	20
193: Simple pneumonia & pleurisy w MCC	50	21,088	29,345	1,467,242	24

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 12
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	36,399	180,794,723	
885: Psychoses	672	11,862	14,572	9,792,182	2
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	76,425	25,449,664	1
189: Pulmonary edema & respiratory failure	204	29,113	45,991	9,382,176	3
593: Skin ulcers w CC	196	23,280	35,280	6,914,791	7
592: Skin ulcers w MCC	195	27,465	39,532	7,708,802	5
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	52,990	8,372,463	4
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	49,955	7,093,591	6
057: Degenerative nervous system disorders w/o MCC	136	18,381	25,037	3,405,071	9
299: Peripheral vascular disorders w MCC	103	23,248	34,405	3,543,765	8
603: Cellulitis w/o MCC	84	15,137	26,076	2,190,349	18
945: Rehabilitation w CC/MCC	74	18,601	30,024	2,221,782	17
056: Degenerative nervous system disorders w MCC	73	25,861	39,336	2,871,498	11
300: Peripheral vascular disorders w CC	72	17,994	27,632	1,989,490	19
177: Respiratory infections & inflammations w MCC	70	25,129	36,609	2,562,596	13
190: Chronic obstructive pulmonary disease w MCC	61	20,621	27,339	1,667,651	21
191: Chronic obstructive pulmonary disease w CC	57	16,176	20,960	1,194,693	36
264: Other circulatory system O.R. procedures	55	33,631	44,524	2,448,820	15
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	42,279	2,325,357	16
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	47,112	2,544,070	14
193: Simple pneumonia & pleurisy w MCC	50	21,088	31,721	1,586,031	24

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 13
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	27,563	329,538,842	
RIC 01: Stroke	1,917	17,031	33,121	63,493,324	1
RIC 06: Neurological Conditions	1,875	13,618	28,157	52,793,977	2
RIC 09: Other Orthopedic	1,648	12,525	26,450	43,589,547	3
RIC 20: Miscellaneous	1,427	13,047	28,740	41,012,207	4
RIC 07: Lower Extremity Fracture	994	12,783	23,837	23,693,828	5
RIC 08: Lower Extremity Joint Replacement	710	6,889	10,332	7,335,783	13
RIC 16: Pain Syndrome	445	11,411	25,240	11,232,021	8
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	27,863	12,287,563	6
RIC 10: Amputation, Lower Extremity	376	14,271	28,522	10,724,235	9
RIC 02: Brain Dysfunction, Traumatic	373	16,849	30,816	11,494,358	7
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	26,620	9,476,690	10
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	27,506	8,911,812	11
RIC 12: Osteoarthritis	260	12,460	26,702	6,942,619	14
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	36,704	7,450,991	12
RIC 14: Cardiac	184	9,803	21,927	4,034,484	16
RIC 13: Rheumatoid And Other Arthritis	152	12,436	27,526	4,184,006	15
RIC 15: Pulmonary	107	13,062	25,633	2,742,721	19
RIC 18: MMT With Brain/Spinal	88	20,152	32,224	2,835,736	18
RIC 21: Burns	40	74,151	93,020	3,720,806	17
RIC 19: Guillain-Barre	25	24,546	48,204	1,205,105	20
RIC 11: Amputation, Non-Lower Extremity	8	16,459	36,171	289,368	21

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 14
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	19,349	231,340,883	
RIC 01: Stroke	1,917	17,031	23,843	45,706,103	1
RIC 06: Neurological Conditions	1,875	13,618	19,286	36,162,161	2
RIC 09: Other Orthopedic	1,648	12,525	19,155	31,566,969	3
RIC 20: Miscellaneous	1,427	13,047	18,645	26,606,904	4
RIC 07: Lower Extremity Fracture	994	12,783	17,921	17,813,187	5
RIC 08: Lower Extremity Joint Replacement	710	6,889	8,847	6,281,197	12
RIC 16: Pain Syndrome	445	11,411	16,202	7,210,018	8
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	18,240	8,043,697	7
RIC 10: Amputation, Lower Extremity	376	14,271	17,753	6,674,974	9
RIC 02: Brain Dysfunction, Traumatic	373	16,849	21,851	8,150,472	6
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	18,692	6,654,282	10
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	20,383	6,604,240	11
RIC 12: Osteoarthritis	260	12,460	19,644	5,107,459	14
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	27,139	5,509,302	13
RIC 14: Cardiac	184	9,803	12,364	2,274,975	18
RIC 13: Rheumatoid And Other Arthritis	152	12,436	18,197	2,765,900	16
RIC 15: Pulmonary	107	13,062	15,565	1,665,434	19
RIC 18: MMT With Brain/Spinal	88	20,152	26,125	2,298,957	17
RIC 21: Burns	40	74,151	82,452	3,298,088	15
RIC 19: Guillain-Barre	25	24,546	30,498	762,448	20
RIC 11: Amputation, Non-Lower Extremity	8	16,459	19,391	155,132	21

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 15
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	20,932	250,260,222	
RIC 01: Stroke	1,917	17,031	24,747	47,439,627	1
RIC 06: Neurological Conditions	1,875	13,618	20,839	39,072,368	2
RIC 09: Other Orthopedic	1,648	12,525	20,772	34,232,073	3
RIC 20: Miscellaneous	1,427	13,047	20,778	29,649,581	4
RIC 07: Lower Extremity Fracture	994	12,783	19,279	19,162,974	5
RIC 08: Lower Extremity Joint Replacement	710	6,889	9,121	6,475,950	12
RIC 16: Pain Syndrome	445	11,411	18,895	8,408,295	8
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	20,701	9,129,187	6
RIC 10: Amputation, Lower Extremity	376	14,271	19,476	7,323,130	10
RIC 02: Brain Dysfunction, Traumatic	373	16,849	24,124	8,998,166	7
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	20,730	7,379,801	9
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	22,477	7,282,509	11
RIC 12: Osteoarthritis	260	12,460	20,612	5,359,226	14
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	26,578	5,395,331	13
RIC 14: Cardiac	184	9,803	15,622	2,874,512	17
RIC 13: Rheumatoid And Other Arthritis	152	12,436	19,634	2,984,305	16
RIC 15: Pulmonary	107	13,062	18,140	1,940,988	19
RIC 18: MMT With Brain/Spinal	88	20,152	29,285	2,577,113	18
RIC 21: Burns	40	74,151	85,016	3,400,636	15
RIC 19: Guillain-Barre	25	24,546	35,508	887,704	20
RIC 11: Amputation, Non-Lower Extremity	8	16,459	28,032	224,260	21

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm274).

Section 1-Table 16
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
 Acute Initiated Episodes
 Episode Definition A: 30 Day Variable Episode

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
All MS-DRGs	1,705,794	659,549	39	11,368,296,315		8,531	8,384	16,915	11,156,428,709		10,572	17,236	27,808	18,341,033,052	
002: Heart transplant or implant of heart assist system w/o MCC	11	5	45	404,875	640	142,011	40,023	182,035	910,173	575	146,559	80,975	227,534	1,137,672	592
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89	131,469,111	17	69,917	71,471	141,388	235,410,465	5	69,697	78,960	148,657	247,514,193	8
970: HIV w extensive O.R. procedure w/o MCC	13	4	31	298,465	661	23,064	27,744	50,807	203,230	680	21,943	74,616	96,560	386,238	677
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	91	167,619,763	9	113,169	67,459	180,628	412,374,845	3	112,399	73,421	185,820	424,227,603	4
296: Cardiac arrest, unexplained w MCC	21	5	24	247,528	670	6,246	15,493	21,739	108,697	698	7,342	49,506	56,847	284,236	691
839: Chemo w acute leukemia as sdx w/o CC/MCC	91	10	11	461,061	627	16,107	26,189	42,295	422,955	639	17,241	46,106	63,348	633,475	645
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79	16,210,571	140	41,230	37,527	78,756	27,800,984	101	36,085	45,922	82,008	28,948,669	124
955: Craniotomy for multiple significant trauma	60	50	83	2,289,115	416	46,566	38,345	84,910	4,245,510	340	45,857	45,782	91,639	4,581,962	387
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78	8,679,119	213	17,623	35,658	53,281	10,229,862	222	18,025	45,204	63,229	12,140,006	239
239: Amputation for circ sys disorders exc upper limb & toe w MCC	783	682	87	30,665,117	77	26,178	40,270	66,448	45,317,504	66	26,037	44,964	71,000	48,422,329	84
005: Liver transplant w MCC or intestinal transplant	71	32	45	1,433,407	493	91,432	25,470	116,902	3,740,865	362	100,770	44,794	145,563	4,658,031	383
692: Urinary stones w esw lithotripsy w/o CC/MCC	72	3	4	131,934	693	4,993	3,112	8,105	24,315	722	6,265	43,978	50,243	150,729	704
028: Spinal procedures w MCC	193	158	82	6,920,454	238	31,290	38,443	69,734	11,017,916	210	31,540	43,800	75,340	11,903,752	243
901: Wound debridements for injuries w MCC	30	25	83	1,082,264	533	25,049	36,449	61,498	1,537,454	502	25,802	43,291	69,093	1,727,322	543
255: Upper limb & toe amputation for circ system disorders w MCC	303	208	69	8,776,894	212	15,315	34,424	49,739	10,345,637	219	16,325	42,197	58,521	12,172,436	237
870: Septicemia w MV 96+ hours	480	345	72	14,250,141	157	39,486	32,861	72,347	24,959,641	107	40,818	41,305	82,123	28,332,436	125
622: Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	89	69	78	2,773,415	386	15,660	33,921	49,581	3,421,088	368	15,677	40,194	55,871	3,855,118	412
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	86	4,974,065	289	67,545	32,724	100,269	13,034,999	184	69,474	38,262	107,736	14,005,682	222
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74	6,405,505	252	47,731	28,479	76,210	13,031,895	185	49,794	37,459	87,253	14,920,275	210
456: Spinal fus exc cerv w spinal curv/malg/infec or 9+ fus w MCC	159	132	83	4,916,315	292	54,709	31,477	86,185	11,376,468	207	55,930	37,245	93,174	12,299,022	236

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC User
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharge
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC User
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 17
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
 Acute Initiated Episodes
 Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per Discharge (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,705,794	659,549	39	5,985,617,985	11	8,531	3,511	12,042	7,942,498,324	5	10,572	9,075	19,647	12,958,354,722	5
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1,868	1,665	89	86,582,961	6	69,917	46,351	116,267	193,585,019	3	69,697	52,002	121,699	202,628,043	3
297: Cardiac arrest, unexplained w CC	2,512	2,283	91	107,187,916	707	113,169	42,670	155,840	355,781,709	723	112,399	46,950	159,350	363,795,756	722
061: Acute ischemic stroke w use of thrombolytic agent w MCC	3	1	33	34,387	180	3,929	11,462	15,391	15,391	215	3,964	34,387	38,351	38,351	229
955: Craniotomy for multiple significant trauma	245	192	78	5,426,674	374	17,623	22,150	39,773	7,636,362	316	18,025	28,264	46,289	8,887,561	361
028: Spinal procedures w MCC	60	50	83	1,341,915	213	46,566	22,365	68,931	3,446,539	199	45,857	26,838	72,695	3,634,762	224
020: Intracranial vascular procedures w PDX hemorrhage w MCC	193	158	82	4,152,248	238	31,290	21,514	52,804	8,343,099	148	31,540	26,280	57,820	9,135,546	187
957: Other O.R. procedures for multiple significant trauma w MCC	152	130	86	3,183,789	212	67,545	20,946	88,491	11,503,842	92	69,474	24,491	93,965	12,215,406	180
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	231	171	74	4,164,560	132	47,731	18,028	65,759	11,244,785	126	49,794	24,354	74,148	12,679,330	117
062: Acute ischemic stroke w use of thrombolytic agent w CC	445	353	79	8,404,318	107	41,230	18,886	60,116	21,220,887	169	36,085	23,808	59,894	21,142,416	146
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	590	449	76	10,555,383	182	12,506	17,890	30,397	13,648,045	102	12,682	23,509	36,190	16,249,518	199
870: Septicemia w MV 96+ hours	299	229	77	5,347,194	141	26,015	17,884	43,899	10,052,877	102	26,529	23,350	49,879	11,422,306	113
453: Combined anterior/posterior spinal fusion w MCC	480	345	72	7,571,994	245	39,486	15,775	55,261	19,064,933	141	40,818	21,948	62,766	21,654,289	177
480: Hip & femur procedures except major joint w MCC	186	150	81	2,974,692	13	65,079	15,993	81,071	12,160,723	11	65,740	19,831	85,571	12,835,721	14
021: Intracranial vascular procedures w PDX hemorrhage w CC	4,555	4,241	93	79,343,093	409	14,880	17,419	32,299	136,980,345	299	14,803	18,709	33,511	142,121,159	339
956: Limb reattachment, hip & femur proc for multiple significant trauma	78	59	76	1,095,148	90	49,863	14,040	63,903	3,770,277	78	49,944	18,562	68,506	4,041,852	90
094: Bacterial & tuberculous infections of nervous system w MCC	765	721	94	13,346,273	281	21,194	17,446	38,640	27,859,700	277	21,217	18,511	39,727	28,643,410	307
065: Intracranial hemorrhage or cerebral infarction w CC	172	125	73	2,308,949	2	21,406	13,424	34,830	4,353,729	4	21,655	18,472	40,126	5,015,764	4
025: Craniotomy & endovascular intracranial procedures w MCC	18,651	13,992	75	258,295,532	70	6,392	13,849	20,241	283,210,674	57	6,401	18,460	24,861	347,858,049	67
471: Cervical spinal fusion w MCC	1,251	926	74	17,066,773	174	29,554	13,643	43,196	39,999,942	147	29,616	18,431	48,046	44,490,766	171
	438	302	69	5,555,919		25,755	12,685	38,440	11,608,903		26,606	18,397	45,003	13,590,993	

NOTES:
 1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharge
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 18
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
 Acute Initiated Episodes
 Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Even

MS-DRG							Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per Discharge (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	
002: Heart transplant or implant of heart assist system w/o MCC	1,705,794	659,549	39	7,025,154,860	598	8,531	5,252	13,783	9,090,726,408	556	10,572	10,651	21,223	13,997,891,597	563	
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89	89,203,648	14	142,011	34,409	176,420	882,101	5	146,559	70,363	216,922	1,084,610	6	
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	91	113,760,030	9	69,917	48,460	118,376	197,096,538	3	69,697	53,576	123,273	205,248,730	3	
297: Cardiac arrest, unexplained w CC	3	1	33	34,387	713	113,169	45,785	158,954	362,892,613	724	112,399	49,829	162,229	370,367,870	723	
955: Craniotomy for multiple significant trauma	60	50	83	1,534,229	394	3,929	11,462	15,391	15,391	328	3,964	34,387	38,351	38,351	371	
005: Liver transplant w MCC or intestinal transplant	71	32	45	951,714	472	46,566	25,763	72,329	3,616,439	328	45,857	30,685	76,542	3,827,076	371	
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	86	3,688,899	251	91,432	16,792	108,224	3,463,158	337	100,770	29,741	130,511	4,176,338	352	
023: Cranio in major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79	9,847,824	134	67,545	24,269	91,814	11,935,844	163	69,474	28,376	97,850	12,720,516	194	
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78	5,353,119	209	41,230	22,914	64,144	22,642,739	95	36,085	27,898	63,983	22,585,922	119	
028: Spinal procedures w MCC	193	158	82	4,380,253	229	17,623	21,929	39,552	7,593,948	233	18,025	27,881	45,906	8,814,006	244	
870: Septicemia w MV 96+ hrs	480	345	72	9,002,170	146	31,290	23,753	55,043	8,696,822	214	31,540	27,723	59,263	9,363,551	235	
901: Wound debridements for injuries w MCC	30	25	83	634,556	527	39,486	20,695	60,181	20,762,436	104	40,818	26,093	66,911	23,084,465	117	
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74	4,296,019	233	25,049	21,526	46,575	1,164,364	513	25,802	25,382	51,185	1,279,614	541	
024: Cranio in major dev impl/acute complex CNS PDX w/o MCC	299	229	77	5,493,818	206	47,731	19,317	67,047	11,465,098	178	49,794	25,123	74,917	12,810,789	191	
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	16	14	88	331,044	603	26,015	18,929	44,944	10,292,233	190	26,529	23,990	50,519	11,568,930	208	
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76	10,568,311	129	124,832	21,419	146,251	2,047,520	419	126,523	23,646	150,169	2,102,369	466	
239: Amputation for circ sys disorders exc upper limb & toe w MCC	783	682	87	15,863,564	88	12,506	18,304	30,810	13,833,642	142	12,682	23,537	36,219	16,262,446	159	
453: Combined anterior/posterior spinal fusion w MCC	186	150	81	3,467,100	256	26,178	21,160	47,338	32,284,805	78	26,037	23,260	49,297	33,620,776	87	
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74	21,043,690	72	65,079	19,314	84,393	12,658,882	153	65,740	23,114	88,854	13,328,129	186	
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	73	2,801,731	298	29,554	17,844	47,398	43,890,226	58	29,616	22,725	52,341	48,467,683	68	
						21,406	18,055	39,461	4,932,624	285	21,655	22,414	44,068	5,508,546	308	

NOTES:
 1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC Use
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 19
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
Acute Initiated Episodes

Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmission

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per Discharge (\$)	Mean Total Episode ⁵ Payment Per Discharge (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean Total Episode ⁵ Payment Per PAC User (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,705,794	659,549	39	5,385,244,492	11	8,531	3,157	11,688	7,709,003,101	5	10,572	8,165	18,737	12,357,981,229	5
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1,868	1,665	89	78,345,682	6	69,917	41,941	111,858	186,242,905	3	69,697	47,054	116,751	194,390,764	3
297: Cardiac arrest, unexplained w CC	2,512	2,283	91	96,044,949	705	113,169	38,234	151,404	345,654,561	723	112,399	42,070	154,469	352,652,789	722
061: Acute ischemic stroke w use of thrombolytic agent w MCC	3	1	33	34,387	192	3,929	11,462	15,391	15,391	221	3,964	34,387	38,351	38,351	239
028: Spinal procedures w MCC	245	192	78	4,509,344	217	17,623	18,405	36,029	6,917,475	207	18,025	23,486	41,512	7,970,231	228
020: Intracranial vascular procedures w PDX hemorrhage w MCC	193	158	82	3,550,539	236	31,290	18,397	49,687	7,850,508	148	31,540	22,472	54,012	8,533,837	182
957: Other O.R. procedures for multiple significant trauma w MCC	152	130	86	2,891,280	213	67,545	19,022	86,567	11,253,669	152	69,474	22,241	91,715	11,922,897	178
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	231	171	74	3,617,666	396	47,731	15,661	63,391	10,839,942	319	49,794	21,156	70,950	12,132,436	371
955: Craniotomy for multiple significant trauma	445	353	79	7,406,169	184	41,230	16,643	57,873	20,429,096	171	36,085	20,981	57,066	20,144,267	197
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	60	50	83	1,045,543	108	46,566	17,426	63,991	3,199,563	135	45,857	20,911	66,768	3,338,390	150
062: Acute ischemic stroke w use of thrombolytic agent w CC	299	229	77	4,772,099	135	26,015	15,960	41,976	9,612,420	100	26,529	20,839	47,368	10,847,211	110
870: Septicemia w MV 96+ hours	590	449	76	9,197,119	239	12,506	15,588	28,094	12,614,384	58	12,682	20,484	33,165	14,891,254	66
453: Combined anterior/posterior spinal fusion w MCC	480	345	72	7,066,000	67	39,486	14,721	54,207	18,701,250	11	40,818	20,481	61,299	21,148,295	172
025: Craniotomy & endovascular intracranial procedures w MCC	186	150	81	2,806,291	175	65,079	15,088	80,166	12,024,915	149	65,740	18,709	84,449	12,667,320	170
480: Hip & femur procedures except major joint w MCC	1,251	926	74	15,668,876	13	29,554	12,525	42,079	38,965,207	11	29,616	16,921	46,537	43,092,869	14
471: Cervical spinal fusion w MCC	4,555	4,241	93	71,294,444	175	14,880	15,652	30,532	129,486,531	149	14,803	16,811	31,613	134,072,510	89
956: Limb reattachment, hip & femur proc for multiple significant trauma	438	302	69	5,007,246	7	25,755	11,432	37,187	11,230,595	12	26,606	16,580	43,186	13,042,320	13
064: Intracranial hemorrhage or cerebral infarction w MCC	765	721	94	11,949,160	283	21,194	15,620	36,814	26,542,944	280	21,217	16,573	37,790	27,246,297	310
094: Bacterial & tuberculous infections of nervous system w MCC	7,715	5,615	73	92,182,432	2	9,576	11,948	21,525	120,860,353	4	9,646	16,417	26,063	146,344,188	4
065: Intracranial hemorrhage or cerebral infarction w CC	172	125	73	2,051,618	2	21,406	11,928	33,334	4,166,715	4	21,655	16,413	38,067	4,758,433	4
	18,651	13,992	75	228,268,676		6,392	12,239	18,631	260,681,892		6,401	16,314	22,715	317,831,193	

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
5. Total episode payment includes index acute hospitalization and post-acute car
6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC User

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 20
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
 Acute Initiated Episodes
 Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG						Per Index Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,705,794	659,549	39	4,989,135,506	15	8,531	3,845	12,377	8,162,999,259	5	10,572	7,564	18,136	11,961,872,243	8
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1,868	1,665	89	61,524,408	9	69,917	33,467	103,384	172,134,595	2	69,697	36,952	106,648	177,569,490	2
002: Heart transplant or implant of heart assist system w/o MCC	2,512	2,283	91	80,101,419	657	113,169	32,230	145,399	331,946,252	560	112,399	35,086	147,485	336,709,259	574
955: Craniotomy for multiple significant trauma	11	5	45	121,390	390	142,011	12,882	154,893	774,465	331	146,559	24,278	170,837	854,187	361
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	60	50	83	1,098,726	131	46,566	18,505	65,070	3,253,519	96	45,857	21,975	67,831	3,391,573	116
020: Intracranial vascular procedures w PDX hemorrhage w MCC	445	353	79	7,192,982	255	41,230	16,706	57,935	20,451,153	160	36,085	20,377	56,462	19,931,080	185
028: Spinal procedures w MCC	152	130	86	2,594,425	234	67,545	17,069	84,614	10,999,780	218	69,474	19,957	89,431	11,626,042	241
061: Acute ischemic stroke w use of thrombolytic agent w MCC	193	158	82	3,116,987	212	31,290	17,182	48,472	7,658,619	187	31,540	19,728	51,268	8,100,285	249
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	245	192	78	3,771,770	195	17,623	15,474	33,097	6,354,687	102	18,025	19,645	37,670	7,232,657	199
870: Septicemia w MV 96+ hours	299	229	77	4,254,788	233	26,015	14,694	40,709	9,322,416	167	26,529	18,580	45,109	10,329,900	114
957: Other O.R. procedures for multiple significant trauma w MCC	480	345	72	6,408,028	252	39,486	14,789	54,274	18,724,648	146	40,818	18,574	59,392	20,490,323	184
453: Combined anterior/posterior spinal fusion w MCC	231	171	74	3,141,886	121	47,731	14,263	61,993	10,600,849	148	49,794	18,374	68,168	11,656,656	172
094: Bacterial & tuberculous infections of nervous system w MCC	186	150	81	2,630,996	279	65,079	14,754	79,832	11,974,824	286	65,740	17,540	83,280	12,492,025	306
062: Acute ischemic stroke w use of thrombolytic agent w CC	172	125	73	2,170,836	121	21,406	14,171	35,577	4,447,083	148	21,655	17,367	39,021	4,877,651	167
025: Craniotomy & endovascular intracranial procedures w MCC	590	449	76	7,754,677	67	12,506	13,497	26,003	11,675,570	59	12,682	17,271	29,953	13,448,812	327
082: Traumatic stupor & coma, coma >1 hr w MCC	1,251	926	74	15,910,673	276	29,554	13,578	43,132	39,940,197	327	29,616	17,182	46,798	43,334,666	547
901: Wound debridements for injuries w MCC	188	129	69	2,190,734	90	13,646	12,349	25,995	3,353,303	79	14,767	16,982	31,749	4,095,650	86
239: Amputation for circ sys disorders exc upper limb & toe w MCC	30	25	83	414,507	609	25,049	14,128	39,177	979,433	411	25,802	16,580	42,383	1,059,565	449
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	783	682	87	11,091,874	283	26,178	14,826	41,004	27,964,595	193	26,037	16,264	42,301	28,849,086	214
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	16	14	88	226,608		124,832	14,818	139,650	1,955,102		126,523	16,186	142,709	1,997,933	
	159	132	83	2,114,510		54,709	13,835	68,544	9,047,835		55,930	16,019	71,949	9,497,217	

NOTES:
 1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC Use
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharg
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC User
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 21
Medicare Post-Acute Care Episode Payments and Utilization Per Discharge and Per PAC User, Top MS-DRGs By Mean PAC Payments Per PAC User, 2008
 Acute Initiated Episodes
 Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG						Per Acute Hospital Discharge					Per PAC User				
	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Total Medicare Spending on PAC ³ (\$)	Rank By Total PAC Spending	Mean Index Acute Hospital Payment Per Discharge (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending	Mean Index Acute Hospital Payment Per PAC User (\$)	Mean PAC Episode ⁴ Payment (\$)	Mean Total Episode ⁵ Payment (\$)	Total Medicare Spending (Acute + PAC) (\$)	Rank By Total Medicare Spending
						(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)		
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,705,794	659,549	39	3,789,135,413	11	8,531	2,221	10,753	7,091,864,016	5	10,572	5,745	16,317	10,761,872,150	7
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	1,868	1,665	89	53,826,566	6	69,917	28,815	98,732	164,388,340	2	69,697	32,328	102,025	169,871,648	2
061: Acute ischemic stroke w use of thrombolytic agent w MCC	2,512	2,283	91	67,455,815	189	113,169	26,853	140,023	319,671,682	230	112,399	29,547	141,946	324,063,655	243
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	245	192	78	3,186,994	170	17,623	13,008	30,631	5,881,184	173	18,025	16,599	34,624	6,647,881	193
028: Spinal procedures w MCC	299	229	77	3,735,986	214	26,015	12,495	38,510	8,818,875	211	26,529	16,314	42,843	9,811,098	233
957: Other O.R. procedures for multiple significant trauma w MCC	193	158	82	2,549,452	209	31,290	13,210	44,500	7,030,965	150	31,540	16,136	47,676	7,532,750	174
020: Intracranial vascular procedures w PDX hemorrhage w MCC	231	171	74	2,707,735	106	47,731	11,722	59,452	10,166,357	142	49,794	15,835	65,629	11,222,505	114
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	152	130	86	2,034,452	391	67,545	13,385	80,930	10,520,856	134	69,474	15,650	85,124	11,066,069	153
062: Acute ischemic stroke w use of thrombolytic agent w CC	445	353	79	5,510,747	229	41,230	12,384	53,613	18,925,537	101	36,085	15,611	51,696	18,248,845	354
955: Craniotomy for multiple significant trauma	590	449	76	6,828,499	135	12,506	11,574	24,080	10,811,823	134	12,682	15,208	27,890	12,522,634	157
453: Combined anterior/posterior spinal fusion w MCC	60	50	83	754,284	375	46,566	12,571	59,137	2,956,847	292	45,857	15,086	60,943	3,047,131	109
870: Septicemia w MV 96+ hours	186	150	81	2,242,099	63	65,079	12,054	77,133	11,569,921	58	65,740	14,947	80,688	12,103,128	325
021: Intracranial vascular procedures w PDX hemorrhage w CC	480	345	72	4,978,608	63	39,486	10,372	49,858	17,200,937	58	40,818	14,431	55,249	19,060,903	64
025: Craniotomy & endovascular intracranial procedures w MCC	78	59	76	836,441	264	49,863	10,724	60,586	3,574,587	282	49,944	14,177	64,121	3,783,145	299
094: Bacterial & tuberculous infections of nervous system w MCC	1,251	926	74	12,187,522	169	29,554	9,742	39,296	36,388,281	146	29,616	13,161	42,777	39,611,515	159
471: Cervical spinal fusion w MCC	172	125	73	1,626,176	399	21,406	9,455	30,860	3,857,527	331	21,655	13,009	34,664	4,332,991	425
031: Ventricular shunt procedures w MCC	438	302	69	3,768,232	274	25,755	8,603	34,359	10,376,297	268	26,606	12,478	39,084	11,803,306	338
082: Traumatic stupor & coma, coma >1 hr w MCC	82	58	71	723,386	245	21,925	8,822	30,747	1,783,313	268	20,946	12,472	33,419	1,938,275	284
963: Other multiple significant trauma w MCC	188	129	69	1,554,924	232	13,646	8,271	21,916	2,827,212	209	14,767	12,054	26,820	3,459,840	227
958: Other O.R. procedures for multiple significant trauma w CC	215	158	73	1,897,698	232	17,608	8,827	26,434	4,176,580	209	18,628	12,011	30,639	4,840,967	
	242	184	76	2,203,565		29,827	9,106	38,933	7,163,678		30,534	11,976	42,510	7,821,790	

NOTES:
 1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service u
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Total Medicare spending on PAC is equal to Mean PAC Episode Payment Per PAC User * Number of PAC User
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Total episode payment includes index acute hospitalization and post-acute car
 6. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of Live Index Acute Hospital Discharge
 7. Total Medicare spending is equal to (Mean Index Acute Hospital Payment + Mean PAC Payment) * Number of PAC User
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm280)

Section 1-Table 22
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
			Episode ³ Payment Per PAC User (\$)		
All Condition Groupings	236,307	2,779	11,736	2,773,347,980	
Cardiovascular: Vascular Medical	5,522	2,449	16,470	90,949,698	9
Endocrine: Medical	19,050	2,919	16,093	306,571,940	4
Neurologic: Stroke	325	3,339	14,346	4,662,526	17
Kidney & Urinary: Medical	6,909	2,086	14,038	96,989,080	8
Hematologic: Medical	3,113	1,927	14,009	43,610,107	12
Cardiovascular: Cardiac Medical	9,429	2,387	13,681	129,002,652	7
Integumentary: Medical	20,783	2,496	13,374	277,945,339	5
Neurologic: Medical	33,344	3,356	12,920	430,798,502	3
Respiratory: COPD	6,075	2,412	12,889	78,297,826	10
GI & Hepatobiliary: Major Medical	1,470	1,995	12,121	17,817,558	15
Orthopedic: Minor Medical	40,669	3,166	10,777	438,296,336	2
Cardiovascular: General	21,438	2,322	10,488	224,846,812	6
Infections: Medical	1,980	2,383	10,345	20,483,631	14
Respiratory: Medical	4,527	2,165	9,789	44,316,508	11
GI & Hepatobiliary: Minor Medical	3,149	2,080	9,606	30,250,732	13
Other: Medical	57,849	2,781	9,205	532,511,945	1
Orthopedic: Major Medical	549	2,867	9,105	4,998,868	16
Infections: Septicemia	100	1,822	6,328	632,850	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Includes payments for first claim in episode only.
 3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
 4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 23
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Mean Index	Mean Total	Total Medicare Spending ⁴ (\$)	Rank By
		Payment Per PAC User ² (\$)	Episode ³ Payment Per PAC User (\$)		Total Medicare Spending
All Condition Groupings	236,307	2,779	4,966	1,173,536,103	
Endocrine: Medical	19,050	2,919	7,610	144,971,471	4
Neurologic: Medical	33,344	3,356	6,029	201,018,669	3
Neurologic: Stroke	325	3,339	5,766	1,873,837	17
Cardiovascular: Vascular Medical	5,522	2,449	5,288	29,199,352	8
Orthopedic: Minor Medical	40,669	3,166	5,155	209,662,694	2
Cardiovascular: General	21,438	2,322	4,877	104,562,963	5
Hematologic: Medical	3,113	1,927	4,506	14,026,006	12
Cardiovascular: Cardiac Medical	9,429	2,387	4,388	41,378,984	7
Integumentary: Medical	20,783	2,496	4,337	90,139,232	6
Respiratory: COPD	6,075	2,412	4,267	25,921,760	10
Other: Medical	57,849	2,781	4,191	242,424,599	1
Kidney & Urinary: Medical	6,909	2,086	4,183	28,902,788	9
Orthopedic: Major Medical	549	2,867	3,942	2,164,026	16
Infections: Medical	1,980	2,383	3,709	7,344,089	14
Respiratory: Medical	4,527	2,165	3,307	14,970,462	11
GI & Hepatobiliary: Minor Medical	3,149	2,080	3,239	10,200,602	13
GI & Hepatobiliary: Major Medical	1,470	1,995	2,963	4,355,327	15
Infections: Septicemia	100	1,822	2,692	269,150	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 24
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Mean Index	Mean Total	Total Medicare Spending ⁴	Rank By Total Medicare Spending
		Payment Per PAC User ²	Episode ³ Payment Per PAC User		
		(\$)	(\$)	(\$)	
All Condition Groupings	236,307	2,779	6,446	1,523,242,403	
672999 = GI & Hepatobiliary: Major Medical	1,470	1,995	7,765	11,413,971	15
52998 = Cardiovascular: Vascular Medical	5,522	2,449	7,607	42,003,152	9
10999 = Neurologic: Stroke	325	3,339	7,572	2,460,881	17
92000 = Integumentary: Medical	20,783	2,496	7,289	151,484,355	4
12000 = Neurologic: Medical	33,344	3,356	7,114	237,216,578	3
102000 = Endocrine: Medical	19,050	2,919	7,005	133,453,588	5
52999 = Cardiovascular: Cardiac Medical	9,429	2,387	6,949	65,521,277	7
82998 = Orthopedic: Major Medical	549	2,867	6,703	3,680,123	16
42065 = Respiratory: COPD	6,075	2,412	6,701	40,706,144	10
82997 = Orthopedic: Minor Medical	40,669	3,166	6,520	265,159,178	2
112000 = Kidney & Urinary: Medical	6,909	2,086	6,363	43,961,932	8
762000 = Hematologic: Medical	3,113	1,927	6,329	19,701,422	12
182000 = Infections: Medical	1,980	2,383	6,226	12,326,653	14
42000 = Respiratory: Medical	4,527	2,165	6,029	27,294,284	11
992000 = Other: Medical	57,849	2,781	5,798	335,394,567	1
672998 = GI & Hepatobiliary: Minor Medical	3,149	2,080	5,629	17,726,529	13
52997 = Cardiovascular: General	21,438	2,322	5,273	113,046,151	6
182999 = Infections: Septicemia	100	1,822	4,921	492,149	18
142000	5	817	2,078	10,390	20

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 25
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	46,633	231,625,823	
516: Other musculoskelet sys & conn tiss O.R. proc w CC	1	43,427	180,423	180,423	135
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	9,908	178,104	178,104	137
876: O.R. procedure w principal diagnoses of mental illness	3	32,750	162,077	486,232	84
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	145,900	437,699	89
163: Major chest procedures w MCC	2	104,529	138,876	277,751	108
256: Upper limb & toe amputation for circ system disorders w CC	1	16,035	129,097	129,097	157
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	53,031	125,279	876,955	54
459: Spinal fusion except cervical w MCC	1	47,963	119,225	119,225	163
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	119,091	1,786,358	29
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	118,211	118,211	166
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	118,182	118,182	167
167: Other resp system O.R. procedures w CC	2	39,946	117,226	234,452	117
870: Septicemia w MV 96+ hours	5	57,145	116,535	582,676	70
289: Acute & subacute endocarditis w CC	3	31,123	116,201	348,604	95
381: Complicated peptic ulcer w CC	2	32,327	107,446	214,892	123
166: Other resp system O.R. procedures w MCC	33	74,654	104,559	3,450,456	11
918: Poisoning & toxic effects of drugs w/o MCC	1	7,814	104,123	104,123	182
902: Wound debridements for injuries w CC	3	45,170	103,545	310,634	102
500: Soft tissue procedures w MCC	5	60,098	103,094	515,468	77
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	36,824	101,290	101,290	184

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 26
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	33,467	166,232,190	
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	9,908	177,537	177,537	113
163: Major chest procedures w MCC	2	104,529	121,283	242,566	97
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	109,507	1,642,606	22
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	97,075	291,226	84
503: Foot procedures w MCC	1	44,370	86,944	86,944	165
054: Nervous system neoplasms w MCC	1	63,218	84,695	84,695	168
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	36,824	83,678	83,678	169
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	69,266	82,210	2,384,085	12
500: Soft tissue procedures w MCC	5	60,098	81,894	409,471	69
166: Other resp system O.R. procedures w MCC	33	74,654	80,882	2,669,121	11
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	80,024	80,024	175
604: Trauma to the skin, subcut tiss & breast w MCC	1	31,941	76,964	76,964	178
958: Other O.R. procedures for multiple significant trauma w CC	1	55,597	74,463	74,463	182
356: Other digestive system O.R. procedures w MCC	3	40,275	73,474	220,421	104
987: Non-extensive O.R. proc unrelated to principal diagnosis w MCC	18	55,329	73,259	1,318,665	29
907: Other O.R. procedures for injuries w MCC	3	41,141	71,989	215,967	108
576: Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	2	63,059	69,924	139,848	135
357: Other digestive system O.R. procedures w CC	1	41,452	67,411	67,411	193
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	67,030	22,320,888	1
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	66,167	66,167	195

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 27
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All MS-DRGs	4,967	26,414	36,399	180,794,723	
163: Major chest procedures w MCC	2	104,529	131,143	262,286	99
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	112,056	112,056	152
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	109,423	1,641,342	22
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	100,958	302,875	88
381: Complicated peptic ulcer w CC	2	32,327	98,232	196,464	116
289: Acute & subacute endocarditis w CC	3	31,123	96,959	290,876	92
166: Other resp system O.R. procedures w MCC	33	74,654	90,189	2,976,228	10
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	69,266	90,131	2,613,793	12
459: Spinal fusion except cervical w MCC	1	47,963	89,635	89,635	173
241: Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1	47,587	89,368	89,368	174
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	85,241	85,241	177
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	53,031	84,904	594,328	57
054: Nervous system neoplasms w MCC	1	63,218	84,695	84,695	179
870: Septicemia w MV 96+ hours	5	57,145	78,187	390,935	79
503: Foot procedures w MCC	1	44,370	77,091	77,091	187
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	76,425	25,449,664	1
444: Disorders of the biliary tract w MCC	1	25,817	75,762	75,762	188
958: Other O.R. procedures for multiple significant trauma w CC	1	55,597	74,119	74,119	190
167: Other resp system O.R. procedures w CC	2	39,946	72,941	145,881	126
356: Other digestive system O.R. procedures w MCC	3	40,275	72,524	217,571	109

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 28
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	27,563	329,538,842	
RIC 21: Burns	40	74,151	93,020	3,720,806	17
RIC 19: Guillain-Barre	25	24,546	48,204	1,205,105	20
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	36,704	7,450,991	12
RIC 11: Amputation, Non-Lower Extremity	8	16,459	36,171	289,368	21
RIC 01: Stroke	1,917	17,031	33,121	63,493,324	1
RIC 18: MMT With Brain/Spinal	88	20,152	32,224	2,835,736	18
RIC 02: Brain Dysfunction, Traumatic	373	16,849	30,816	11,494,358	7
RIC 20: Miscellaneous	1,427	13,047	28,740	41,012,207	4
RIC 10: Amputation, Lower Extremity	376	14,271	28,522	10,724,235	9
RIC 06: Neurological Conditions	1,875	13,618	28,157	52,793,977	2
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	27,863	12,287,563	6
RIC 13: Rheumatoid And Other Arthritis	152	12,436	27,526	4,184,006	15
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	27,506	8,911,812	11
RIC 12: Osteoarthritis	260	12,460	26,702	6,942,619	14
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	26,620	9,476,690	10
RIC 09: Other Orthopedic	1,648	12,525	26,450	43,589,547	3
RIC 15: Pulmonary	107	13,062	25,633	2,742,721	19
RIC 16: Pain Syndrome	445	11,411	25,240	11,232,021	8
RIC 07: Lower Extremity Fracture	994	12,783	23,837	23,693,828	5
RIC 14: Cardiac	184	9,803	21,927	4,034,484	16

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 29
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	19,349	231,340,883	
RIC 21: Burns	40	74,151	82,452	3,298,088	15
RIC 19: Guillain-Barre	25	24,546	30,498	762,448	20
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	27,139	5,509,302	13
RIC 18: MMT With Brain/Spinal	88	20,152	26,125	2,298,957	17
RIC 01: Stroke	1,917	17,031	23,843	45,706,103	1
RIC 02: Brain Dysfunction, Traumatic	373	16,849	21,851	8,150,472	6
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	20,383	6,604,240	11
RIC 12: Osteoarthritis	260	12,460	19,644	5,107,459	14
RIC 11: Amputation, Non-Lower Extremity	8	16,459	19,391	155,132	21
RIC 06: Neurological Conditions	1,875	13,618	19,286	36,162,161	2
RIC 09: Other Orthopedic	1,648	12,525	19,155	31,566,969	3
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	18,692	6,654,282	10
RIC 20: Miscellaneous	1,427	13,047	18,645	26,606,904	4
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	18,240	8,043,697	7
RIC 13: Rheumatoid And Other Arthritis	152	12,436	18,197	2,765,900	16
RIC 07: Lower Extremity Fracture	994	12,783	17,921	17,813,187	5
RIC 10: Amputation, Lower Extremity	376	14,271	17,753	6,674,974	9
RIC 16: Pain Syndrome	445	11,411	16,202	7,210,018	8
RIC 15: Pulmonary	107	13,062	15,565	1,665,434	19
RIC 14: Cardiac	184	9,803	12,364	2,274,975	18

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

Section 1-Table 30
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User ² (\$)	Mean Total Episode ³ Payment Per PAC User (\$)	Total Medicare Spending ⁴ (\$)	Rank By Total Medicare Spending
All RICs	11,956	13,833	20,932	250,260,222	
RIC 21: Burns	40	74,151	85,016	3,400,636	15
RIC 19: Guillain-Barre	25	24,546	35,508	887,704	20
RIC 18: MMT With Brain/Spinal	88	20,152	29,285	2,577,113	18
RIC 11: Amputation, Non-Lower Extremity	8	16,459	28,032	224,260	21
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	26,578	5,395,331	13
RIC 01: Stroke	1,917	17,031	24,747	47,439,627	1
RIC 02: Brain Dysfunction, Traumatic	373	16,849	24,124	8,998,166	7
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	22,477	7,282,509	11
RIC 06: Neurological Conditions	1,875	13,618	20,839	39,072,368	2
RIC 20: Miscellaneous	1,427	13,047	20,778	29,649,581	4
RIC 09: Other Orthopedic	1,648	12,525	20,772	34,232,073	3
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	20,730	7,379,801	9
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	20,701	9,129,187	6
RIC 12: Osteoarthritis	260	12,460	20,612	5,359,226	14
RIC 13: Rheumatoid And Other Arthritis	152	12,436	19,634	2,984,305	16
RIC 10: Amputation, Lower Extremity	376	14,271	19,476	7,323,130	10
RIC 07: Lower Extremity Fracture	994	12,783	19,279	19,162,974	5
RIC 16: Pain Syndrome	445	11,411	18,895	8,408,295	8
RIC 15: Pulmonary	107	13,062	18,140	1,940,988	19
RIC 14: Cardiac	184	9,803	15,622	2,874,512	17

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Includes payments for first claim in episode only.
3. Total episode payment includes payments for index event and PAC services in the episode. This includes acute hospitalizations for Episode Definition B.
4. Total Medicare spending is equal to Mean Total Episode Payment * Number of PAC Users

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm282).

SECTION 2

2008 CROSS SECTIONAL ANALYSIS: MEDICARE POST-ACUTE CARE EPISODE PAYMENTS AND UTILIZATION FOR PAC USERS

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results across all conditions and then by condition for the top conditions by volume, by type of initiating event; by MS-DRG for acute and LTCH, by condition grouping for HHA, and by rehabilitation impairment category (RIC) for IRF. Tables 16-30 provide similar information but for the top conditions by mean PAC episode payment; Tables 16-21 for acute initiated episodes; Tables 22-24 for HHA-initiated episodes; Tables 25-27 for LTCH initiated episodes and Tables 28-30 for IRF-initiated episodes.

For the acute initiated episodes, we report the total number of hospital discharges, the number and percent of beneficiaries discharged to PAC, the percent of all PAC users, and the cumulative percent of all PAC users. Episode descriptives reported per PAC user include mean index acute hospital payment, mean index acute hospital length of stay, mean payment and service units, mean PAC episode payment and length, and mean total episode length and payment. For the community initiated episodes, we report the number of PAC users, the mean index payment and length of stay, the mean total episode payment and length of stay.

Key findings from the data presented here include the following.

- The top 20 MS-DRGs by volume of PAC users for acute initiated episodes account for over 39 percent of all PAC users. In contrast, the top 20 MS-DRGs by mean PAC episode payments (based on the 30 day variable length episode definition) account for only 1 percent of PAC users. The top 11 MS-DRGs account for 30 percent of PAC users.
- Mean PAC episode length differs significantly by condition. Among acute initiated episodes, the mean PAC episode length for the 30 day variable length episode is 79.1 days. However, the PAC episode length is 104.7 days for beneficiaries in MS-DRG 065 (Intracranial hemorrhage or cerebral infarction w CC) and 69.7 days for beneficiaries in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC).
- Mean PAC episode lengths of stay are much longer for HHA-initiated episodes on average compared to acute hospital initiated episodes. The mean PAC episode length for the 30 day variable definition is 113.1 days for HHA-initiated episodes compared to 79.1

days for acute initiated episodes. There was also significant variation by condition category for HHA-initiated episodes. For example, mean PAC episode length was 188.8 days for beneficiaries with hematologic medical conditions and 78.9 days for beneficiaries with orthopedic major medical conditions.

- LTCH and IRF-initiated episodes also had mean PAC episode length longer than the mean observed for acute initiated episodes (101.6 days and 92.2 days respectively for the 30 day variable length episode).
- In general, PAC episode length is longer for conditions with highest per PAC user payments.
- As discussed in the report and in earlier work, the tables in this section also highlight differences in per PAC episode length by episode definition. Relative differences in PAC episode length by episode definition, by MS-DRG (or other condition grouping) depend on the trajectory of service use most typical to the condition. For example, for MS-DRGs with relatively short episodes and a small proportion of readmissions, we would expect differences in mean PAC episode length to be relatively small across episode definitions. In the case of MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC), mean PAC episode length is 69.7 days for the 30 day variable length episode definition, 60.7 days for the 30 day variable length episode definition excluding readmission, and 36.6 days for the 30 day fixed length episode definition. In contrast, we see larger differences in these payment amounts for MS-DRGs where there is more variation in episode trajectory. For example, MS-DRG 194 (Simple pneumonia & pleurisy w CC) exhibits more significant differences across the same set of episode definitions (70.9, 49.5, and 40.1, respectively). Examination of the mix of service use by condition grouping is presented in Section 3 and Section 4.

Section 2-Table 1
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to		Cumulative Percent of PAC Users (%)	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode ⁷ Length ⁷ Per PAC User (days)
			PAC (%)	PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	17,236	79.1	30,827	87.3
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	10,067	69.7	23,365	74.7
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	28,034	104.7	37,217	111.2
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	25,465	102.4	38,918	108.4
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	14,892	70.9	22,291	78.7
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	16,943	81.3	22,712	87.8
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	15,832	77.6	21,455	84.5
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	21,423	79.7	35,228	88.9
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	18,004	85.1	25,985	92.6
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	20,615	83.1	31,292	92.2
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	17,663	81.4	23,756	88.1
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	17,799	81.7	25,015	88.1
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	13,564	75.2	19,362	82.2
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	14,899	81.0	21,232	88.6
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	22,290	94.4	33,597	99.6
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	19,461	82.1	28,654	89.9
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	13,616	76.8	19,419	85.5
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	11,628	65.6	38,362	72.7
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	18,013	74.0	27,760	83.0
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	12,681	69.6	18,437	76.6
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	17,210	78.8	26,170	87.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230)

Section 2-Table 2
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2001
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to		Cumulative Percent of PAC Users (%)	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	9,075	56.4	21,926	64.6
470: Major joint replacement or reattachment of lower extremity w/o MCI	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	7,527	60.7	20,601	65.7
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	18,460	75.2	26,904	81.7
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	17,719	78.2	30,559	84.3
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	7,458	49.5	14,246	57.3
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	9,316	57.2	14,494	63.7
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	8,250	55.3	13,263	62.2
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	9,980	51.1	22,709	60.3
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	6,517	52.7	13,517	60.2
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	7,475	50.1	16,889	59.2
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	9,682	57.2	15,091	63.9
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	11,613	61.9	18,344	68.2
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	7,250	55.0	12,490	62.0
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	7,066	56.2	12,683	63.7
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	16,229	74.7	27,097	80.0
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	8,521	52.3	16,723	60.1
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	5,915	52.7	11,060	61.4
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	7,605	53.3	33,951	60.4
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	8,206	49.0	17,077	58.0
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	7,039	50.6	12,367	57.7
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	6,589	49.2	14,529	58.1

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service us
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital sta
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalizati
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalizati
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episod
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode clai
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230)

Section 2-Table 3
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC Users ³		Cumulative Percent of PAC Users ⁴	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length (days) Per PAC User	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC Users (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	10,651	40.6	23,499	48.8
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	7,701	36.6	20,679	41.6
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	19,086	48.4	27,484	54.9
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	18,402	53.8	31,193	59.8
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	9,163	40.1	15,977	47.9
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	10,453	43.9	15,643	50.4
641: Nutritional & mise metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	9,623	42.1	14,624	49.0
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	12,712	42.9	25,589	52.1
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	9,033	42.4	16,085	49.9
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	10,647	42.4	20,200	51.5
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	11,048	41.3	16,473	48.0
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	12,185	40.2	18,872	46.6
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	7,936	38.9	13,114	45.9
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	7,999	39.8	13,568	47.3
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	16,625	50.5	27,430	55.7
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	11,087	43.2	19,380	51.0
392: Esophagitis, gastroent & mise digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	7,202	36.8	12,298	45.4
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	8,548	32.7	34,831	39.8
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	10,584	41.0	19,546	50.0
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	7,965	39.3	13,276	46.4
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	9,034	40.5	17,067	49.4

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230).

Section 2-Table 4
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length (days) Per PAC User	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	8,165	37.4	20,838	45.6
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	6,831	35.2	19,753	40.3
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	16,314	44.3	24,528	50.9
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	15,903	49.4	28,528	55.4
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	6,858	36.9	13,527	44.6
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	8,400	40.4	13,456	46.9
641: Nutritional & mise metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	7,395	38.8	12,249	45.6
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	9,193	38.0	21,784	47.2
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	5,869	38.7	12,720	46.2
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	6,835	38.0	16,104	47.1
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	8,625	37.8	13,868	44.5
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	10,391	37.6	16,964	44.0
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	6,342	36.6	11,415	43.6
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	6,187	37.1	11,636	44.6
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	14,683	47.1	25,372	52.3
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	7,763	38.8	15,825	46.6
392: Esophagitis, gastroent & mise digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	5,157	34.1	10,116	42.8
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	6,999	30.7	33,161	37.8
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	7,564	37.0	16,314	46.0
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	6,402	36.9	11,627	44.0
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	5,984	36.8	13,792	45.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230).

Section 2-Table 5
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode Length ⁵ (days) Per PAC User	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ (days) Per PAC User
			Percent of PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	7,564	25.0	20,412	33.2
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	6,182	27.2	19,160	32.2
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	13,496	26.5	21,894	33.0
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	12,047	28.6	24,838	34.7
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	6,235	23.9	13,049	31.6
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	6,749	24.8	11,938	31.3
641: Nutritional & mise metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	6,340	24.2	11,341	31.1
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	8,734	24.7	21,611	33.9
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	6,262	25.1	13,315	32.6
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	7,495	25.2	17,049	34.3
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	7,765	25.2	13,190	31.9
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	9,060	24.6	15,747	31.0
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	5,389	23.8	10,567	30.8
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	5,345	24.0	10,914	31.5
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	11,447	28.2	22,252	33.5
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	7,524	25.0	15,816	32.8
392: Esophagitis, gastroent & mise digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	4,800	22.3	9,897	30.9
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	7,035	23.0	33,317	30.1
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	7,479	24.5	16,441	33.5
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	5,428	23.5	10,739	30.5
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	6,396	24.4	14,428	33.3

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230).

Section 2-Table 6
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rate)

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Percent of PAC Users (%)	Cumulative Percent of PAC Users (%)	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length (days) Per PAC User	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	5,745	22.7	18,418	30.9
470: Major joint replacement or reattachment of lower extremity w/o MCC	95,971	90,434	94.2	13.7	13.7	11,120	3.7	1,522	5,490	26.1	18,412	31.2
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	15.8	6,401	5.2	1,057	11,559	24.3	19,773	30.8
481: Hip & femur procedures except major joint w CC	14,368	13,704	95.4	2.1	17.9	10,296	5.5	1,770	10,437	26.6	23,062	32.7
194: Simple pneumonia & pleurisy w CC	35,980	13,064	36.3	2.0	19.9	5,471	5.8	756	4,583	21.6	11,252	29.4
690: Kidney & urinary tract infections w/o MCC	29,536	12,954	43.9	2.0	21.9	4,090	4.5	593	5,364	22.7	10,420	29.2
641: Nutritional & misc metabolic disorders w/o MCC	28,647	9,755	34.1	1.5	23.3	3,763	4.4	609	4,787	22.0	9,640	28.8
299: Peripheral vascular disorders w MCC	19,927	9,752	48.9	1.5	24.8	10,614	7.9	1,380	6,214	21.7	18,805	30.9
292: Heart failure & shock w CC	22,092	8,602	38.9	1.3	26.1	5,414	5.4	868	3,863	21.9	10,713	29.4
291: Heart failure & shock w MCC	19,401	8,561	44.1	1.3	27.4	7,307	7.3	1,297	4,659	21.6	13,928	30.6
552: Medical back problems w/o MCC	14,067	8,113	57.7	1.2	28.6	3,990	4.4	717	6,066	23.0	11,309	29.7
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	13,854	7,965	57.5	1.2	29.9	5,210	3.8	820	7,729	22.9	14,302	29.3
312: Syncope & collapse	29,247	7,926	27.1	1.2	31.1	3,796	3.9	814	4,245	22.2	9,318	29.2
603: Cellulitis w/o MCC	20,521	7,590	37.0	1.2	32.2	4,304	5.2	687	4,111	22.1	9,560	29.6
482: Hip & femur procedures except major joint w/o CC/MCC	7,814	7,216	92.3	1.1	33.3	8,633	4.6	1,570	10,180	26.7	20,869	31.9
683: Renal failure w CC	16,395	6,765	41.3	1.0	34.3	6,464	6.0	1,016	5,140	21.8	13,203	29.6
392: Esophagitis, gastroent & misc digest disorders w/o MCC	42,290	6,683	15.8	1.0	35.3	3,703	4.4	758	3,321	20.1	8,279	28.7
460: Spinal fusion except cervical w/o MCC	13,223	6,649	50.3	1.0	36.3	21,955	4.5	3,860	5,826	21.5	31,988	28.5
193: Simple pneumonia & pleurisy w MCC	14,544	6,507	44.7	1.0	37.3	7,060	7.4	1,134	5,243	21.6	13,993	30.6
195: Simple pneumonia & pleurisy w/o CC/MCC	23,012	6,410	27.9	1.0	38.3	4,372	4.6	529	4,263	21.7	9,487	28.8
190: Chronic obstructive pulmonary disease w MCC	19,088	6,320	33.1	1.0	39.3	6,242	6.8	1,019	4,080	21.3	11,889	30.2

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm230).

Section 2-Table 7
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By Condition Grouping, By Volume
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	11,736	113.1
Other: Medical	57,849	2,781	14.9	9,205	82.3
Orthopedic: Minor Medical	40,669	3,166	17.4	10,777	107.7
Neurologic: Medical	33,344	3,356	19.0	12,920	120.3
Cardiovascular: General	21,438	2,322	15.2	10,488	139.1
Integumentary: Medical	20,783	2,496	17.7	13,374	107.0
Endocrine: Medical	19,050	2,919	22.4	16,093	156.2
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	13,681	131.8
Kidney & Urinary: Medical	6,909	2,086	13.6	14,038	139.8
Respiratory: COPD	6,075	2,412	15.4	12,889	126.5
Cardiovascular: Vascular Medical	5,522	2,449	18.1	16,470	140.5
Respiratory: Medical	4,527	2,165	13.6	9,789	84.7
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	9,606	84.2
Hematologic: Medical	3,113	1,927	12.2	14,009	188.8
Infections: Medical	1,980	2,383	18.1	10,345	92.8
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	12,121	90.1
Orthopedic: Major Medical	549	2,867	16.8	9,105	78.9
Neurologic: Stroke	325	3,339	20.0	14,346	116.4
Infections: Septicemia	100	1,822	11.0	6,328	55.5

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.

3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 8
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By Condition Grouping, By Volume of HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	4,966	87.9
Other: Medical	57,849	2,781	14.9	4,191	65.5
Orthopedic: Minor Medical	40,669	3,166	17.4	5,155	86.0
Neurologic: Medical	33,344	3,356	19.0	6,029	93.7
Cardiovascular: General	21,438	2,322	15.2	4,877	113.3
Integumentary: Medical	20,783	2,496	17.7	4,337	78.2
Endocrine: Medical	19,050	2,919	22.4	7,610	122.9
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	4,388	95.9
Kidney & Urinary: Medical	6,909	2,086	13.6	4,183	100.7
Respiratory: COPD	6,075	2,412	15.4	4,267	90.4
Cardiovascular: Vascular Medical	5,522	2,449	18.1	5,288	101.3
Respiratory: Medical	4,527	2,165	13.6	3,307	64.0
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	3,239	63.0
Hematologic: Medical	3,113	1,927	12.2	4,506	147.1
Infections: Medical	1,980	2,383	18.1	3,709	69.6
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	2,963	63.8
Orthopedic: Major Medical	549	2,867	16.8	3,942	63.6
Neurologic: Stroke	325	3,339	20.0	5,766	82.2
Infections: Septicemia	100	1,822	11.0	2,692	44.7

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.

3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 9

Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By Condition Grouping, By Volume of HHA Initiated Episodes

Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode² Payment Per PAC User (\$)	Mean PAC Episode Length³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	6,446	64.0
Other: Medical	57,849	2,781	14.9	5,798	53.6
Orthopedic: Minor Medical	40,669	3,166	17.4	6,520	64.0
Neurologic: Medical	33,344	3,356	19.0	7,114	67.3
Cardiovascular: General	21,438	2,322	15.2	5,273	73.3
Integumentary: Medical	20,783	2,496	17.7	7,289	63.7
Endocrine: Medical	19,050	2,919	22.4	7,005	75.9
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	6,949	70.4
Kidney & Urinary: Medical	6,909	2,086	13.6	6,363	66.1
Respiratory: COPD	6,075	2,412	15.4	6,701	68.5
Cardiovascular: Vascular Medical	5,522	2,449	18.1	7,607	71.7
Respiratory: Medical	4,527	2,165	13.6	6,029	54.2
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	5,629	52.3
Hematologic: Medical	3,113	1,927	12.2	6,329	78.4
Infections: Medical	1,980	2,383	18.1	6,226	59.8
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	7,765	57.3
Orthopedic: Major Medical	549	2,867	16.8	6,703	54.5
Neurologic: Stroke	325	3,339	20.0	7,572	66.4
Infections: Septicemia	100	1,822	11.0	4,921	36.2

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.

3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 10
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	46,633	101.6
885: Psychoses	672	11,862	25.7	16,486	58.6
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	38.5	84,166	92.8
189: Pulmonary edema & respiratory failure	204	29,113	26.6	62,974	114.4
593: Skin ulcers w CC	196	23,280	26.0	48,163	123.7
592: Skin ulcers w MCC	195	27,465	29.3	55,248	115.0
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	40.1	68,876	131.4
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	37.1	62,879	128.8
057: Degenerative nervous system disorders w/o MCC	136	18,381	23.7	31,290	105.0
299: Peripheral vascular disorders w MCC	103	23,248	23.6	44,941	98.2
603: Cellulitis w/o MCC	84	15,137	18.0	34,513	128.8
945: Rehabilitation w CC/MCC	74	18,601	24.4	44,338	136.6
056: Degenerative nervous system disorders w MCC	73	25,861	28.7	51,075	109.9
300: Peripheral vascular disorders w CC	72	17,994	21.0	41,172	154.4
177: Respiratory infections & inflammations w MCC	70	25,129	22.8	48,737	110.1
190: Chronic obstructive pulmonary disease w MCC	61	20,621	19.3	37,546	91.7
191: Chronic obstructive pulmonary disease w CC	57	16,176	18.1	30,417	90.9
264: Other circulatory system O.R. procedures	55	33,631	30.3	52,152	131.2
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	26.8	54,898	123.4
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	19.1	54,160	64.7
193: Simple pneumonia & pleurisy w MCC	50	21,088	21.2	46,299	121.6

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 11
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	33,467	70.9
885: Psychoses	672	11,862	25.7	14,442	51.0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	38.5	67,030	66.3
189: Pulmonary edema & respiratory failure	204	29,113	26.6	39,524	71.4
593: Skin ulcers w CC	196	23,280	26.0	33,427	84.9
592: Skin ulcers w MCC	195	27,465	29.3	36,081	72.5
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	40.1	52,332	89.6
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	37.1	47,152	81.3
057: Degenerative nervous system disorders w/o MCC	136	18,381	23.7	26,032	87.5
299: Peripheral vascular disorders w MCC	103	23,248	23.6	28,819	65.9
603: Cellulitis w/o MCC	84	15,137	18.0	25,806	96.6
945: Rehabilitation w CC/MCC	74	18,601	24.4	29,488	98.8
056: Degenerative nervous system disorders w MCC	73	25,861	28.7	36,636	81.2
300: Peripheral vascular disorders w CC	72	17,994	21.0	27,649	110.2
177: Respiratory infections & inflammations w MCC	70	25,129	22.8	33,581	77.0
190: Chronic obstructive pulmonary disease w MCC	61	20,621	19.3	27,549	68.1
191: Chronic obstructive pulmonary disease w CC	57	16,176	18.1	23,232	59.2
264: Other circulatory system O.R. procedures	55	33,631	30.3	41,727	107.5
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	26.8	34,097	65.2
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	19.1	31,444	45.5
193: Simple pneumonia & pleurisy w MCC	50	21,088	21.2	29,345	73.1

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 12
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	36,399	57.8
885: Psychoses	672	11,862	25.7	14,572	40.4
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	38.5	76,425	64.2
189: Pulmonary edema & respiratory failure	204	29,113	26.6	45,991	60.7
593: Skin ulcers w CC	196	23,280	26.0	35,280	71.6
592: Skin ulcers w MCC	195	27,465	29.3	39,532	64.6
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	43,306	40.1	52,990	76.4
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	38,791	37.1	49,955	74.0
057: Degenerative nervous system disorders w/o MCC	136	18,381	23.7	25,037	65.9
299: Peripheral vascular disorders w MCC	103	23,248	23.6	34,405	60.8
603: Cellulitis w/o MCC	84	15,137	18.0	26,076	62.0
945: Rehabilitation w CC/MCC	74	18,601	24.4	30,024	66.7
056: Degenerative nervous system disorders w MCC	73	25,861	28.7	39,336	71.6
300: Peripheral vascular disorders w CC	72	17,994	21.0	27,632	62.4
177: Respiratory infections & inflammations w MCC	70	25,129	22.8	36,609	57.0
190: Chronic obstructive pulmonary disease w MCC	61	20,621	19.3	27,339	49.2
191: Chronic obstructive pulmonary disease w CC	57	16,176	18.1	20,960	47.8
264: Other circulatory system O.R. procedures	55	33,631	30.3	44,524	67.7
871: Septicemia w/o MV 96+ hours w MCC	55	26,254	26.8	42,279	66.9
208: Respiratory system diagnosis w ventilator support <96 hours	54	25,136	19.1	47,112	45.0
193: Simple pneumonia & pleurisy w MCC	50	21,088	21.2	31,721	55.5

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 13
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	27,563	92.2
RIC 01: Stroke	1,917	17,031	15.6	33,121	109.2
RIC 06: Neurological Conditions	1,875	13,618	12.7	28,157	98.9
RIC 09: Other Orthopedic	1,648	12,525	12.4	26,450	92.7
RIC 20: Miscellaneous	1,427	13,047	12.0	28,740	93.3
RIC 07: Lower Extremity Fracture	994	12,783	12.5	23,837	82.2
RIC 08: Lower Extremity Joint Replacement	710	6,889	8.5	10,332	48.8
RIC 16: Pain Syndrome	445	11,411	11.1	25,240	85.2
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	27,863	98.3
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	28,522	91.9
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	30,816	89.5
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	26,620	84.1
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	27,506	92.7
RIC 12: Osteoarthritis	260	12,460	12.0	26,702	89.4
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	36,704	117.2
RIC 14: Cardiac	184	9,803	10.2	21,927	63.5
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	27,526	87.4
RIC 15: Pulmonary	107	13,062	11.0	25,633	72.1
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	32,224	83.6
RIC 21: Burns	40	74,151	21.9	93,020	102.0
RIC 19: Guillain-Barre	25	24,546	25.1	48,204	149.3
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	36,171	111.1

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 14
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	19,349	67.1
RIC 01: Stroke	1,917	17,031	15.6	23,843	77.5
RIC 06: Neurological Conditions	1,875	13,618	12.7	19,286	72.0
RIC 09: Other Orthopedic	1,648	12,525	12.4	19,155	69.4
RIC 20: Miscellaneous	1,427	13,047	12.0	18,645	64.9
RIC 07: Lower Extremity Fracture	994	12,783	12.5	17,921	62.2
RIC 08: Lower Extremity Joint Replacement	710	6,889	8.5	8,847	43.6
RIC 16: Pain Syndrome	445	11,411	11.1	16,202	59.2
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	18,240	69.2
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	17,753	63.6
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	21,851	67.6
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	18,692	59.5
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	20,383	71.4
RIC 12: Osteoarthritis	260	12,460	12.0	19,644	69.6
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	27,139	86.8
RIC 14: Cardiac	184	9,803	10.2	12,364	35.2
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	18,197	69.3
RIC 15: Pulmonary	107	13,062	11.0	15,565	47.3
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	26,125	65.9
RIC 21: Burns	40	74,151	21.9	82,452	65.3
RIC 19: Guillain-Barre	25	24,546	25.1	30,498	69.5
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	19,391	78.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 15
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	20,932	47.8
RIC 01: Stroke	1,917	17,031	15.6	24,747	52.5
RIC 06: Neurological Conditions	1,875	13,618	12.7	20,839	49.5
RIC 09: Other Orthopedic	1,648	12,525	12.4	20,772	51.1
RIC 20: Miscellaneous	1,427	13,047	12.0	20,778	48.0
RIC 07: Lower Extremity Fracture	994	12,783	12.5	19,279	48.7
RIC 08: Lower Extremity Joint Replacement	710	6,889	8.5	9,121	30.2
RIC 16: Pain Syndrome	445	11,411	11.1	18,895	46.4
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	20,701	45.0
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	19,476	42.5
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	24,124	46.8
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	20,730	46.1
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	22,477	49.2
RIC 12: Osteoarthritis	260	12,460	12.0	20,612	53.4
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	26,578	46.4
RIC 14: Cardiac	184	9,803	10.2	15,622	36.0
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	19,634	45.9
RIC 15: Pulmonary	107	13,062	11.0	18,140	37.4
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	29,285	48.9
RIC 21: Burns	40	74,151	21.9	85,016	52.9
RIC 19: Guillain-Barre	25	24,546	25.1	35,508	63.2
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	28,032	51.4

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm232).

Section 2-Table 16
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episod

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	17,236	79.1	30,827	87.3
002: Heart transplant or implant of heart assist system w/o MCC	11	5	45.5	0.0	0.0	146,559	15.8	6,612	80,975	75.0	238,772	92.8
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	78,960	116.0	161,198	142.1
970: HIV w extensive O.R. procedure w/o MCC	13	4	30.8	0.0	0.3	21,943	5.3	1,485	74,616	142.0	114,857	146.8
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	73,421	125.1	201,756	159.3
296: Cardiac arrest, unexplained w MCC	21	5	23.8	0.0	0.6	7,342	8.2	1,325	49,506	105.6	63,357	114.6
839: Chemo w acute leukemia as sdw w/o CC/MCC	91	10	11.0	0.0	0.6	17,241	8.1	868	46,106	87.9	69,464	99.7
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.7	36,085	16.1	4,685	45,922	124.1	90,299	140.6
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.7	45,857	15.3	5,372	45,782	112.3	99,857	128.4
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.7	18,025	10.9	2,501	45,204	148.6	68,824	160.1
239: Amputation for circ sys disorders exc upper limb & toe w MCC	783	682	87.1	0.1	0.8	26,037	15.4	3,532	44,964	131.7	78,586	147.8
005: Liver transplant w MCC or intestinal transplant	71	32	45.1	0.0	0.8	100,770	22.4	8,662	44,794	88.7	157,783	112.4
692: Urinary stones w esw lithotripsy w/o CC/MCC	72	3	4.2	0.0	0.8	6,265	6.0	1,119	43,978	238.7	54,490	247.3
028: Spinal procedures w MCC	193	158	81.9	0.0	0.8	31,540	13.2	5,037	43,800	130.4	83,574	144.8
901: Wound debridements for injuries w MCC	30	25	83.3	0.0	0.8	25,802	18.6	3,459	43,291	115.5	76,199	136.5
255: Upper limb & toe amputation for circ system disorders w MCC	303	208	68.6	0.0	0.9	16,325	10.8	2,047	42,197	124.0	65,380	136.0
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.9	40,818	18.2	4,548	41,305	85.7	90,462	104.5
622: Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	89	69	77.5	0.0	0.9	15,677	10.9	1,730	40,194	150.8	61,501	162.5
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.9	69,474	22.1	7,425	38,262	101.1	117,106	123.4
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	1.0	49,794	18.9	5,033	37,459	120.6	94,705	139.8
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	159	132	83.0	0.0	1.0	55,930	12.6	7,903	37,245	108.4	104,857	121.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 17
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmissio

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC	Percent of PAC Users								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	9,075	56.4	21,926	64.6
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	52,002	68.6	131,742	94.6
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	46,950	71.2	172,376	105.4
297: Cardiac arrest, unexplained w CC	3	1	33.3	0.0	0.6	3,964	8.0	933	34,387	101.0	40,160	109.0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.6	18,025	10.9	2,501	28,264	88.4	50,280	100.0
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.6	45,857	15.3	5,372	26,838	72.4	79,416	88.5
028: Spinal procedures w MCC	193	158	81.9	0.0	0.7	31,540	13.2	5,037	26,280	83.7	64,388	98.1
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.7	69,474	22.1	7,425	24,491	66.7	102,169	89.0
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	0.7	49,794	18.9	5,033	24,354	81.1	80,480	100.3
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.8	36,085	16.1	4,685	23,808	64.7	66,200	81.2
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76.1	0.1	0.8	12,682	6.1	1,509	23,509	84.9	38,986	92.1
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	299	229	76.6	0.0	0.9	26,529	9.9	3,210	23,350	82.0	54,527	92.7
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.9	40,818	18.2	4,548	21,948	50.7	69,020	69.4
453: Combined anterior/posterior spinal fusion w MCC	186	150	80.6	0.0	0.9	65,740	11.7	8,933	19,831	71.5	96,025	83.7
480: Hip & femur procedures except major joint w MCC	4,555	4,241	93.1	0.6	1.6	14,803	8.5	2,419	18,709	75.2	36,886	84.1
021: Intracranial vascular procedures w PDX hemorrhage w CC	78	59	75.6	0.0	1.6	49,944	15.6	5,491	18,562	64.2	74,857	81.4
956: Limb reattachment, hip & femur proc for multiple significant trauma	765	721	94.2	0.1	1.7	21,217	8.3	2,536	18,511	73.0	43,073	81.8
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	72.7	0.0	1.7	21,655	12.1	2,652	18,472	49.0	44,048	61.5
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	3.8	6,401	5.2	1,057	18,460	75.2	26,904	81.7
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74.0	0.1	4.0	29,616	13.7	4,583	18,431	59.1	54,198	73.5
471: Cervical spinal fusion w MCC	438	302	68.9	0.0	4.0	26,606	10.8	5,203	18,397	72.8	51,412	84.8

NOTES:

- Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 - PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 - Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 - Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 - Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 - Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 - Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 18
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode Payment Per PAC User (\$)	Mean PAC Episode Length ⁵ Per PAC User (days)	Mean Total Episode Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC	Percent of PAC Users								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	10,651	40.6	23,499	48.8
002: Heart transplant or implant of heart assist system w/o MCC	11	5	45.5	0.0	0.0	146,559	15.8	6,612	70,363	43.2	226,907	61.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	53,576	48.4	133,332	74.5
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	49,829	48.6	175,443	82.9
297: Cardiac arrest, unexplained w CC	3	1	33.3	0.0	0.6	3,964	8.0	933	34,387	101.0	40,160	109.0
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.6	45,857	15.3	5,372	30,685	50.3	83,711	66.3
005: Liver transplant w MCC or intestinal transplant	71	32	45.1	0.0	0.6	100,770	22.4	8,662	29,741	50.9	141,741	74.6
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.6	69,474	22.1	7,425	28,376	50.0	106,399	72.3
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.7	36,085	16.1	4,685	27,898	48.8	70,557	65.3
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.7	18,025	10.9	2,501	27,881	52.7	49,898	64.2
028: Spinal procedures w MCC	193	158	81.9	0.0	0.7	31,540	13.2	5,037	27,723	46.3	65,975	60.7
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.8	40,818	18.2	4,548	26,093	43.7	73,405	62.5
901: Wound debridements for injuries w MCC	30	25	83.3	0.0	0.8	25,802	18.6	3,459	25,382	51.1	56,516	72.1
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	0.8	49,794	18.9	5,033	25,123	51.0	81,231	70.2
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	299	229	76.6	0.0	0.9	26,529	9.9	3,210	23,990	48.0	55,123	58.7
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	16	14	87.5	0.0	0.9	126,523	38.0	8,763	23,646	52.1	158,828	93.2
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76.1	0.1	0.9	12,682	6.1	1,509	23,537	49.2	38,909	56.4
239: Amputation for circ sys disorders exc upper limb & toe w MCC	783	682	87.1	0.1	1.0	26,037	15.4	3,532	23,260	52.6	54,540	68.7
453: Combined anterior/posterior spinal fusion w MCC	186	150	80.6	0.0	1.1	65,740	11.7	8,933	23,114	46.5	99,589	58.7
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74.0	0.1	1.2	29,616	13.7	4,583	22,725	43.5	58,658	57.9
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	72.7	0.0	1.2	21,655	12.1	2,652	22,414	41.0	48,269	53.6

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 19
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissic

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	8,165	37.4	20,838	45.6
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	47,054	43.3	126,304	69.3
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	42,070	42.4	166,997	76.6
297: Cardiac arrest, unexplained w CC	3	1	33.3	0.0	0.6	3,964	8.0	933	34,387	101.0	40,160	109.0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.6	18,025	10.9	2,501	23,486	47.2	45,115	58.8
028: Spinal procedures w MCC	193	158	81.9	0.0	0.7	31,540	13.2	5,037	22,472	40.9	60,231	55.3
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.7	69,474	22.1	7,425	22,241	42.9	99,700	65.2
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	0.7	49,794	18.9	5,033	21,156	44.3	76,990	63.5
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.8	36,085	16.1	4,685	20,981	38.9	63,052	55.5
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.8	45,857	15.3	5,372	20,911	41.0	73,201	57.0
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	299	229	76.6	0.0	0.8	26,529	9.9	3,210	20,839	43.2	51,700	53.9
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76.1	0.1	0.9	12,682	6.1	1,509	20,484	44.9	35,629	52.1
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.9	40,818	18.2	4,548	20,481	37.6	67,323	56.4
453: Combined anterior/posterior spinal fusion w MCC	186	150	80.6	0.0	0.9	65,740	11.7	8,933	18,709	41.6	94,612	53.8
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74.0	0.1	1.1	29,616	13.7	4,583	16,921	37.6	52,364	52.0
480: Hip & femur procedures except major joint w MCC	4,555	4,241	93.1	0.6	1.7	14,803	8.5	2,419	16,811	49.2	34,749	58.1
471: Cervical spinal fusion w MCC	438	302	68.9	0.0	1.8	26,606	10.8	5,203	16,580	42.8	49,351	54.8
956: Limb reattachment, hip & femur proc for multiple significant trauma	765	721	94.2	0.1	1.9	21,217	8.3	2,536	16,573	45.8	40,918	54.6
064: Intracranial hemorrhage or cerebral infarction w MCC	7,715	5,615	72.8	0.9	2.7	9,646	8.1	1,607	16,417	41.7	28,497	50.8
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	72.7	0.0	2.7	21,655	12.1	2,652	16,413	34.7	41,742	47.3
065: Intracranial hemorrhage or cerebral infarction w CC	18,651	13,992	75.0	2.1	4.9	6,401	5.2	1,057	16,314	44.3	24,528	50.9

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 20
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC (%)	Percent of PAC Users (%)								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	7,564	25.0	20,412	33.2
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	36,952	27.6	116,708	53.7
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	35,086	28.3	160,700	62.5
002: Heart transplant or implant of heart assist system w/o MCC	11	5	45.5	0.0	0.6	146,559	15.8	6,612	24,278	25.4	180,823	43.2
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.6	45,857	15.3	5,372	21,975	27.7	75,001	43.7
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.7	36,085	16.1	4,685	20,377	26.9	63,036	43.5
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.7	69,474	22.1	7,425	19,957	27.3	97,980	49.6
028: Spinal procedures w MCC	193	158	81.9	0.0	0.7	31,540	13.2	5,037	19,728	27.4	57,980	41.8
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.7	18,025	10.9	2,501	19,645	27.7	41,662	39.3
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	299	229	76.6	0.0	0.8	26,529	9.9	3,210	18,580	27.0	49,712	37.7
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.8	40,818	18.2	4,548	18,574	26.3	65,886	45.1
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	0.8	49,794	18.9	5,033	18,374	28.2	74,482	47.4
453: Combined anterior/posterior spinal fusion w MCC	186	150	80.6	0.0	0.9	65,740	11.7	8,933	17,540	27.6	94,015	39.8
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	72.7	0.0	0.9	21,655	12.1	2,652	17,367	25.2	43,222	37.8
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76.1	0.1	1.0	12,682	6.1	1,509	17,271	26.8	32,642	34.0
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74.0	0.1	1.1	29,616	13.7	4,583	17,182	26.2	53,115	40.6
082: Traumatic stupor & coma, coma >1 hr w MCC	188	129	68.6	0.0	1.1	14,767	12.6	2,161	16,982	26.4	35,232	39.8
901: Wound debridements for injuries w MCC	30	25	83.3	0.0	1.1	25,802	18.6	3,459	16,580	27.6	47,714	48.6
239: Amputation for circ sys disorders exc upper limb & toe w MCC	783	682	87.1	0.1	1.2	26,037	15.4	3,532	16,264	27.6	47,544	43.7
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	16	14	87.5	0.0	1.2	126,523	38.0	8,763	16,186	27.1	151,368	68.2
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	159	132	83.0	0.0	1.2	55,930	12.6	7,903	16,019	27.3	81,608	40.5

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 21
Medicare Post-Acute Care Episode Payments and Utilization for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 200
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rate)

MS-DRG	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC		Cumulative Percent of PAC Users	Mean Index Acute Hospital Payment Per PAC User	Mean Index Acute Hospital Length of Stay (days) Per PAC User	Mean Payments for Physician Services ³ During Index Acute Hospitalization Per PAC User (\$)	Mean PAC Episode ⁴ Payment Per PAC User (\$)	Mean PAC Episode ⁵ Length ⁵ Per PAC User (days)	Mean Total Episode ⁶ Payment Per PAC User (\$)	Mean Total Episode Length ⁷ Per PAC User (days)
			Percent of PAC	Percent of PAC Users								
All MS-DRGs	1,705,794	659,549	38.7	100.0	100.0	10,572	6.2	1,546	5,745	22.7	18,418	30.9
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,868	1,665	89.1	0.3	0.3	69,697	25.8	6,368	32,328	24.7	111,577	50.7
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,512	2,283	90.9	0.3	0.6	112,399	34.1	9,663	29,547	24.7	154,475	58.9
061: Acute ischemic stroke w use of thrombolytic agent w MCC	245	192	78.4	0.0	0.6	18,025	10.9	2,501	16,599	24.6	38,227	36.2
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	299	229	76.6	0.0	0.7	26,529	9.9	3,210	16,314	24.5	47,175	35.2
028: Spinal procedures w MCC	193	158	81.9	0.0	0.7	31,540	13.2	5,037	16,136	23.7	53,895	38.1
957: Other O.R. procedures for multiple significant trauma w MCC	231	171	74.0	0.0	0.7	49,794	18.9	5,033	15,835	25.2	71,669	44.4
020: Intracranial vascular procedures w PDX hemorrhage w MCC	152	130	85.5	0.0	0.7	69,474	22.1	7,425	15,650	23.8	93,109	46.1
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	445	353	79.3	0.1	0.8	36,085	16.1	4,685	15,611	22.3	57,683	38.8
062: Acute ischemic stroke w use of thrombolytic agent w CC	590	449	76.1	0.1	0.9	12,682	6.1	1,509	15,208	24.6	30,354	31.8
955: Craniotomy for multiple significant trauma	60	50	83.3	0.0	0.9	45,857	15.3	5,372	15,086	23.2	67,376	39.3
453: Combined anterior/posterior spinal fusion w MCC	186	150	80.6	0.0	0.9	65,740	11.7	8,933	14,947	24.8	90,850	37.0
870: Septicemia w MV 96+ hours	480	345	71.9	0.1	0.9	40,818	18.2	4,548	14,431	22.6	61,273	41.3
021: Intracranial vascular procedures w PDX hemorrhage w CC	78	59	75.6	0.0	0.9	49,944	15.6	5,491	14,177	23.1	70,341	40.2
025: Craniotomy & endovascular intracranial procedures w MCC	1,251	926	74.0	0.1	1.1	29,616	13.7	4,583	13,161	22.7	48,604	37.2
094: Bacterial & tuberculous infections of nervous system w MCC	172	125	72.7	0.0	1.1	21,655	12.1	2,652	13,009	21.4	38,338	34.0
471: Cervical spinal fusion w MCC	438	302	68.9	0.0	1.2	26,606	10.8	5,203	12,478	24.4	45,248	36.4
031: Ventricular shunt procedures w MCC	82	58	70.7	0.0	1.2	20,946	9.9	2,573	12,472	23.6	36,915	34.3
082: Traumatic stupor & coma, coma >1 hr w MCC	188	129	68.6	0.0	1.2	14,767	12.6	2,161	12,054	22.8	29,926	36.2
963: Other multiple significant trauma w MCC	215	158	73.5	0.0	1.2	18,628	11.1	2,056	12,011	22.5	33,503	34.8
958: Other O.R. procedures for multiple significant trauma w CC	242	184	76.0	0.0	1.2	30,534	11.1	3,065	11,976	24.0	46,162	36.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. Physician services defined as separately billable Part B physician services rendered during the acute hospital stay.
 4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 5. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
 6. Total episode payment includes index acute hospitalization, PAC, physician services during the index stay and during the PAC episode.
 7. Total episode length of stay is defined as the difference between the admission date on the index acute hospitalization and the discharge date on the last PAC episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm284).

Section 2-Table 22
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	11,736	113.1
Cardiovascular: Vascular Medical	5,522	2,449	18.1	16,470	140.5
Endocrine: Medical	19,050	2,919	22.4	16,093	156.2
Neurologic: Stroke	325	3,339	20.0	14,346	116.4
Kidney & Urinary: Medical	6,909	2,086	13.6	14,038	139.8
Hematologic: Medical	3,113	1,927	12.2	14,009	188.8
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	13,681	131.8
Integumentary: Medical	20,783	2,496	17.7	13,374	107.0
Neurologic: Medical	33,344	3,356	19.0	12,920	120.3
Respiratory: COPD	6,075	2,412	15.4	12,889	126.5
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	12,121	90.1
Orthopedic: Minor Medical	40,669	3,166	17.4	10,777	107.7
Cardiovascular: General	21,438	2,322	15.2	10,488	139.1
Infections: Medical	1,980	2,383	18.1	10,345	92.8
Respiratory: Medical	4,527	2,165	13.6	9,789	84.7
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	9,606	84.2
Other: Medical	57,849	2,781	14.9	9,205	82.3
Orthopedic: Major Medical	549	2,867	16.8	9,105	78.9
Infections: Septicemia	100	1,822	11.0	6,328	55.5

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
 2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
 3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 23
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	4,966	87.9
Endocrine: Medical	19,050	2,919	22.4	7,610	122.9
Neurologic: Medical	33,344	3,356	19.0	6,029	93.7
Neurologic: Stroke	325	3,339	20.0	5,766	82.2
Cardiovascular: Vascular Medical	5,522	2,449	18.1	5,288	101.3
Orthopedic: Minor Medical	40,669	3,166	17.4	5,155	86.0
Cardiovascular: General	21,438	2,322	15.2	4,877	113.3
Hematologic: Medical	3,113	1,927	12.2	4,506	147.1
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	4,388	95.9
Integumentary: Medical	20,783	2,496	17.7	4,337	78.2
Respiratory: COPD	6,075	2,412	15.4	4,267	90.4
Other: Medical	57,849	2,781	14.9	4,191	65.5
Kidney & Urinary: Medical	6,909	2,086	13.6	4,183	100.7
Orthopedic: Major Medical	549	2,867	16.8	3,942	63.6
Infections: Medical	1,980	2,383	18.1	3,709	69.6
Respiratory: Medical	4,527	2,165	13.6	3,307	64.0
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	3,239	63.0
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	2,963	63.8
Infections: Septicemia	100	1,822	11.0	2,692	44.7

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
 2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
 3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 24
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All Condition Groupings	236,307	2,779	16.8	6,446	64.0
GI & Hepatobiliary: Major Medical	1,470	1,995	12.1	7,765	57.3
Cardiovascular: Vascular Medical	5,522	2,449	18.1	7,607	71.7
Neurologic: Stroke	325	3,339	20.0	7,572	66.4
Integumentary: Medical	20,783	2,496	17.7	7,289	63.7
Neurologic: Medical	33,344	3,356	19.0	7,114	67.3
Endocrine: Medical	19,050	2,919	22.4	7,005	75.9
Cardiovascular: Cardiac Medical	9,429	2,387	15.5	6,949	70.4
Orthopedic: Major Medical	549	2,867	16.8	6,703	54.5
Respiratory: COPD	6,075	2,412	15.4	6,701	68.5
Orthopedic: Minor Medical	40,669	3,166	17.4	6,520	64.0
Kidney & Urinary: Medical	6,909	2,086	13.6	6,363	66.1
Hematologic: Medical	3,113	1,927	12.2	6,329	78.4
Infections: Medical	1,980	2,383	18.1	6,226	59.8
Respiratory: Medical	4,527	2,165	13.6	6,029	54.2
Other: Medical	57,849	2,781	14.9	5,798	53.6
GI & Hepatobiliary: Minor Medical	3,149	2,080	12.0	5,629	52.3
Cardiovascular: General	21,438	2,322	15.2	5,273	73.3
Infections: Septicemia	100	1,822	11.0	4,921	36.2

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
 2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
 3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 25
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	46,633	101.6
516: Other musculoskelet sys & conn tiss O.R. proc w CC	1	43,427	38.0	180,423	412.0
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	9,908	12.0	178,104	216.0
876: O.R. procedure w principal diagnoses of mental illness	3	32,750	36.3	162,077	294.0
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	73.0	145,900	168.7
163: Major chest procedures w MCC	2	104,529	52.0	138,876	124.5
256: Upper limb & toe amputation for circ system disorders w CC	1	16,035	17.0	129,097	719.0
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	53,031	39.3	125,279	302.9
459: Spinal fusion except cervical w MCC	1	47,963	24.0	119,225	119.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	54.4	119,091	118.3
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	49.0	118,211	161.0
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	41.0	118,182	101.0
167: Other resp system O.R. procedures w CC	2	39,946	35.0	117,226	185.5
870: Septicemia w MV 96+ hours	5	57,145	28.8	116,535	90.4
289: Acute & subacute endocarditis w CC	3	31,123	32.3	116,201	178.3
381: Complicated peptic ulcer w CC	2	32,327	30.5	107,446	172.0
166: Other resp system O.R. procedures w MCC	33	74,654	44.7	104,559	111.0
918: Poisoning & toxic effects of drugs w/o MCC	1	7,814	10.0	104,123	123.0
902: Wound debridements for injuries w CC	3	45,170	47.3	103,545	258.0
500: Soft tissue procedures w MCC	5	60,098	66.8	103,094	240.4
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	36,824	30.0	101,290	321.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 26
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	33,467	70.9
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	9,908	12.0	177,537	188.0
163: Major chest procedures w MCC	2	104,529	52.0	121,283	97.5
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	54.4	109,507	74.9
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	73.0	97,075	99.3
503: Foot procedures w MCC	1	44,370	39.0	86,944	143.0
054: Nervous system neoplasms w MCC	1	63,218	50.0	84,695	126.0
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	36,824	30.0	83,678	319.0
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	69,266	53.3	82,210	86.3
500: Soft tissue procedures w MCC	5	60,098	66.8	81,894	163.4
166: Other resp system O.R. procedures w MCC	33	74,654	44.7	80,882	66.9
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	41.0	80,024	71.0
604: Trauma to the skin, subcut tiss & breast w MCC	1	31,941	23.0	76,964	250.0
958: Other O.R. procedures for multiple significant trauma w CC	1	55,597	33.0	74,463	76.0
356: Other digestive system O.R. procedures w MCC	3	40,275	40.0	73,474	159.7
987: Non-extensive O.R. proc unrelated to principal diagnosis w MCC	18	55,329	41.6	73,259	103.2
907: Other O.R. procedures for injuries w MCC	3	41,141	42.7	71,989	160.0
576: Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	2	63,059	33.0	69,924	183.5
357: Other digestive system O.R. procedures w CC	1	41,452	36.0	67,411	320.0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	38.5	67,030	66.3
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	49.0	66,167	50.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 27
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All MS-DRGs	4,967	26,414	26.7	36,399	57.8
163: Major chest procedures w MCC	2	104,529	52.0	131,143	109.5
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	49.0	112,056	100.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	101,208	54.4	109,423	72.6
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	88,611	73.0	100,958	106.3
381: Complicated peptic ulcer w CC	2	32,327	30.5	98,232	82.5
289: Acute & subacute endocarditis w CC	3	31,123	32.3	96,959	93.7
166: Other resp system O.R. procedures w MCC	33	74,654	44.7	90,189	70.9
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	69,266	53.3	90,131	89.8
459: Spinal fusion except cervical w MCC	1	47,963	24.0	89,635	65.0
241: Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1	47,587	40.0	89,368	112.0
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	54,357	41.0	85,241	84.0
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	53,031	39.3	84,904	97.1
054: Nervous system neoplasms w MCC	1	63,218	50.0	84,695	126.0
870: Septicemia w MV 96+ hours	5	57,145	28.8	78,187	38.4
503: Foot procedures w MCC	1	44,370	39.0	77,091	73.0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	59,411	38.5	76,425	64.2
444: Disorders of the biliary tract w MCC	1	25,817	26.0	75,762	73.0
958: Other O.R. procedures for multiple significant trauma w CC	1	55,597	33.0	74,119	64.0
167: Other resp system O.R. procedures w CC	2	39,946	35.0	72,941	77.5
356: Other digestive system O.R. procedures w MCC	3	40,275	40.0	72,524	85.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 28
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	27,563	92.2
RIC 21: Burns	40	74,151	21.9	93,020	102.0
RIC 19: Guillain-Barre	25	24,546	25.1	48,204	149.3
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	36,704	117.2
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	36,171	111.1
RIC 01: Stroke	1,917	17,031	15.6	33,121	109.2
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	32,224	83.6
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	30,816	89.5
RIC 20: Miscellaneous	1,427	13,047	12.0	28,740	93.3
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	28,522	91.9
RIC 06: Neurological Conditions	1,875	13,618	12.7	28,157	98.9
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	27,863	98.3
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	27,526	87.4
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	27,506	92.7
RIC 12: Osteoarthritis	260	12,460	12.0	26,702	89.4
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	26,620	84.1
RIC 09: Other Orthopedic	1,648	12,525	12.4	26,450	92.7
RIC 15: Pulmonary	107	13,062	11.0	25,633	72.1
RIC 16: Pain Syndrome	445	11,411	11.1	25,240	85.2
RIC 07: Lower Extremity Fracture	994	12,783	12.5	23,837	82.2
RIC 14: Cardiac	184	9,803	10.2	21,927	63.5

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 29
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	19,349	67.1
RIC 21: Burns	40	74,151	21.9	82,452	65.3
RIC 19: Guillain-Barre	25	24,546	25.1	30,498	69.5
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	27,139	86.8
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	26,125	65.9
RIC 01: Stroke	1,917	17,031	15.6	23,843	77.5
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	21,851	67.6
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	20,383	71.4
RIC 12: Osteoarthritis	260	12,460	12.0	19,644	69.6
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	19,391	78.0
RIC 06: Neurological Conditions	1,875	13,618	12.7	19,286	72.0
RIC 09: Other Orthopedic	1,648	12,525	12.4	19,155	69.4
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	18,692	59.5
RIC 20: Miscellaneous	1,427	13,047	12.0	18,645	64.9
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	18,240	69.2
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	18,197	69.3
RIC 07: Lower Extremity Fracture	994	12,783	12.5	17,921	62.2
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	17,753	63.6
RIC 16: Pain Syndrome	445	11,411	11.1	16,202	59.2
RIC 15: Pulmonary	107	13,062	11.0	15,565	47.3

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

Section 2-Table 30
Medicare Post-Acute Care Episode Payments and Utilization Per PAC User, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Mean Index Payment Per PAC User	Mean Index Length of Stay (days) Per PAC User	Mean PAC Episode ² Payment Per PAC User (\$)	Mean PAC Episode Length ³ Per PAC User (days)
All RICs	11,956	13,833	13.0	20,932	47.8
RIC 21: Burns	40	74,151	21.9	85,016	52.9
RIC 19: Guillain-Barre	25	24,546	25.1	35,508	63.2
RIC 18: MMT With Brain/Spinal	88	20,152	18.5	29,285	48.9
RIC 11: Amputation, Non-Lower Extremity	8	16,459	13.4	28,032	51.4
RIC 04: Spinal Cord Dysfunction, Traumatic	203	21,124	17.8	26,578	46.4
RIC 01: Stroke	1,917	17,031	15.6	24,747	52.5
RIC 02: Brain Dysfunction, Traumatic	373	16,849	15.0	24,124	46.8
RIC 17: MMT Without Brain/Spinal Cord Injury	324	14,611	13.8	22,477	49.2
RIC 06: Neurological Conditions	1,875	13,618	12.7	20,839	49.5
RIC 20: Miscellaneous	1,427	13,047	12.0	20,778	48.0
RIC 09: Other Orthopedic	1,648	12,525	12.4	20,772	51.1
RIC 03: Brain Dysfunction, Non-Traumatic	356	13,866	14.1	20,730	46.1
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	13,202	13.3	20,701	45.0
RIC 12: Osteoarthritis	260	12,460	12.0	20,612	53.4
RIC 13: Rheumatoid And Other Arthritis	152	12,436	11.8	19,634	45.9
RIC 10: Amputation, Lower Extremity	376	14,271	12.8	19,476	42.5
RIC 07: Lower Extremity Fracture	994	12,783	12.5	19,279	48.7
RIC 16: Pain Syndrome	445	11,411	11.1	18,895	46.4
RIC 15: Pulmonary	107	13,062	11.0	18,140	37.4
RIC 14: Cardiac	184	9,803	10.2	15,622	36.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm286).

SECTION 3

2008 CROSS SECTIONAL ANALYSIS: MEDICARE POST-ACUTE CARE EPISODE PAYMENTS AND UTILIZATION BY SERVICE TYPE FOR PAC USERS

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results across all conditions and then by condition for the top conditions by volume, by type of initiating event; by MS-DRG for acute and LTCH, by condition grouping for HHA, and by rehabilitation impairment category (RIC) for IRF. Tables 16-30 provide similar information but for the top conditions by mean PAC episode payment; Tables 16-21 for acute initiated episodes; Tables 22-24 for HHA-initiated episodes; Tables 25-27 for LTCH initiated episodes and Tables 28-30 for IRF-initiated episodes.

For both acute initiated episodes and community entrant episodes, we report the total number of PAC users, and use by service type for HHA, IRF, SNF, outpatient therapy, independent therapists, and acute hospitalizations. This includes the percent of beneficiaries with a claim and the mean use and payment. Mean use refers to visits for HHA and days for institutional settings.

Key findings from the data presented here include the following.

- Overall, in examining the 30 day variable length episode definition, over 60 percent of beneficiaries with acute initiated episodes use HHA during their episode, 9.7 percent use IRF, 48.2 percent use SNF, 2.6 percent use LTCH, 20.3 percent use outpatient therapy, 9.6 percent receive therapy services from an independent therapist, and 28.3 percent have an acute hospital readmission.
- These results highlight the significant differences in types of PAC services used by condition. For example, for acute initiated episodes, 38.8 percent of beneficiaries in MS-DRG 065 (Intracranial hemorrhage or cerebral infarction w CC) used IRF services during the 30 day variable length episode definition compared to 2.9 percent of beneficiaries in MS-DRG 292 (Heart failure & shock w CC).
- The percent of beneficiaries using different types PAC services differs by episode definition. However, the service types with the largest changes across episode definitions are those that generally occur later in an episode. For example, LTCH and IRF are generally a first site of PAC for beneficiaries discharged from an acute hospital. While 2.9 percent of beneficiaries use LTCH in their episode in looking at the longer 30 day

variable length episode definition, this percent decreases only slightly to 2.0 percent when looking at the shorter 30 day fixed length episode definition. In contrast, there are more significant differences in the percent of beneficiaries using services when looking at those that occur later in PAC episodes. For example, 20.3 percent of beneficiaries have an outpatient therapy claim in the 30 day variable length episode compared to 11.5 percent of beneficiaries in the 30 day fixed length episode.

- These tables also highlight differences in readmissions during episodes by condition. For example, 31.4 percent of beneficiaries with acute initiated episodes in MS-DRG 065 (Intracranial hemorrhage or cerebral infarction w CC) have an acute hospital readmission in the 30 day variable length episode definition compared to 11.7 percent of beneficiaries in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC).
- Differences in service use by type of initiating event are also demonstrated in the tables in this section. For example, smaller proportions of beneficiaries initiating PAC episodes in HHA use subsequent services. In the 30 day variable length episode definition, 35.4 percent have another HHA claim in the episode (not including index event), only 9.3 percent use SNF, but 23.1 percent have an acute hospitalizations following the HHA initiating event.
- Beneficiaries with LTCH and IRF initiated episodes use more PAC services in their episodes compared to beneficiaries with HHA-initiated episodes. For example, 32.9 percent of beneficiaries with LTCH-initiated episodes and 24.1 percent of IRF-initiated episodes use SNF during the 30 day variable length episode. A high proportion of beneficiaries with LTCH-initiated and IRF-initiated episodes also had acute hospitalizations during the 30 day variable length episode (29.5 percent and 22.9 percent, respectively).

Section 3-Table 1
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	60.7	25.6	4,230	9.7	14.3	17,518	48.2	39.3	13,646	2.6	31.5	38,932	20.3	1,410	9.6	1,209	28.3	11.3	17,561
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	68.6	17.5	3,538	12.7	10.9	13,021	39.4	23.2	9,347	0.3	29.6	32,298	33.4	1,044	28.8	1,227	11.7	7.2	12,798
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	50.5	39.1	6,513	38.8	18.3	22,339	52.4	52.2	18,839	2.1	29.9	30,594	32.8	2,350	5.1	1,652	31.4	9.7	14,932
481: Hip & femur procedures except major joint w CC	13,704	57.4	30.7	5,426	23.3	14.7	16,763	76.3	50.9	17,842	1.2	28.5	33,249	20.0	1,764	6.6	1,610	27.3	9.5	14,567
194: Simple pneumonia & pleurisy w CC	13,064	51.5	25.4	4,053	2.3	13.6	17,278	55.9	38.6	12,633	1.6	27.9	33,551	15.3	1,466	3.5	1,108	29.7	10.4	15,285
690: Kidney & urinary tract infections w/o MCC	12,954	44.5	31.1	4,878	2.6	15.8	18,666	63.7	45.0	14,717	1.2	31.2	32,842	19.4	1,686	3.2	1,328	29.8	10.1	13,942
641: Nutritional & misc metabolic disorders w/o MCC	9,755	51.7	27.8	4,445	3.0	13.8	16,476	57.4	42.1	13,844	1.3	31.4	33,974	17.8	1,315	4.4	911	29.6	10.3	14,813
299: Peripheral vascular disorders w MCC	9,752	42.2	30.0	4,701	3.8	15.5	19,161	63.5	43.5	14,038	6.0	32.1	39,702	17.6	1,797	2.5	1,273	36.3	12.6	19,501
292: Heart failure & shock w CC	8,602	66.2	29.3	4,422	2.9	13.5	16,744	48.6	39.4	13,222	1.6	29.0	35,233	12.6	1,586	2.7	1,271	41.8	11.9	17,682
291: Heart failure & shock w MCC	8,561	62.3	30.1	4,537	3.8	14.8	18,136	53.9	39.0	13,311	3.1	29.0	32,477	12.1	1,582	1.7	962	44.2	12.9	19,707
552: Medical back problems w/o MCC	8,113	59.7	27.1	4,593	10.0	14.9	16,872	58.2	39.8	14,162	0.9	31.0	35,405	21.2	1,244	8.7	985	27.4	10.2	15,823
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	54.4	29.0	5,103	28.1	15.6	19,417	35.9	42.7	15,413	1.0	32.4	38,767	34.6	1,509	6.8	1,245	22.5	8.7	13,483
312: Syncope & collapse	7,926	62.5	27.1	4,309	4.1	13.9	17,676	43.5	40.3	14,155	0.7	32.6	31,269	18.0	1,343	8.5	1,153	24.0	9.4	14,342
603: Cellulitis w/o MCC	7,590	63.5	29.2	4,350	2.2	15.7	18,287	42.6	42.9	14,255	3.2	26.1	28,133	17.0	1,340	5.0	1,038	27.7	11.6	16,196
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	62.4	28.0	5,011	27.3	13.8	16,124	66.8	46.4	16,570	0.7	29.2	32,300	19.7	1,628	8.8	1,490	21.6	8.8	13,856
683: Renal failure w CC	6,765	52.5	30.3	4,676	3.6	15.1	19,038	60.5	43.3	14,368	1.9	31.2	35,376	15.7	1,723	2.8	921	37.4	12.0	17,862
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	55.1	28.4	4,455	2.5	13.9	16,754	40.6	40.6	13,440	0.7	27.4	30,945	21.6	1,254	10.4	1,009	28.7	11.1	16,329
460: Spinal fusion except cervical w/o MCC	6,649	72.1	17.8	3,295	22.0	11.7	15,363	31.4	22.8	9,013	0.6	30.7	33,056	21.2	1,089	17.2	1,205	14.8	8.8	16,248
193: Simple pneumonia & pleurisy w MCC	6,507	52.5	26.6	4,263	4.0	13.3	17,658	58.4	38.3	12,696	3.3	27.4	33,393	14.4	1,467	2.2	812	35.4	11.7	17,814
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	50.6	24.5	3,877	2.0	12.9	16,068	53.4	38.1	12,167	0.9	28.8	36,546	17.1	1,309	4.7	981	24.9	9.5	13,286
190: Chronic obstructive pulmonary disease w MCC	6,320	65.3	26.5	4,105	3.3	13.3	16,723	46.4	37.8	12,522	3.8	25.5	30,583	11.6	1,407	2.7	862	37.9	12.8	17,979

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 2
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Per Service User (\$)	Percent with Claim	Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	57.1	20.1	3,429	8.9	13.0	15,922	44.5	30.3	10,743	1.8	27.3	35,069	17.0	1,137	8.9	1,125	0.0		
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	66.3	16.0	3,309	12.3	10.3	12,291	38.6	19.8	8,189	0.1	24.0	22,169	31.6	980	27.6	1,176	0.0		
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	45.6	31.4	5,393	37.9	16.9	20,566	47.9	41.4	15,267	1.3	25.3	23,000	27.0	1,931	4.3	1,483	0.0		
481: Hip & femur procedures except major joint w CC	13,704	51.4	26.1	4,759	22.7	13.8	15,736	74.7	42.3	15,087	0.5	24.3	24,880	15.7	1,467	5.8	1,466	0.0		
194: Simple pneumonia & pleurisy w CC	13,064	49.5	19.8	3,236	1.7	11.6	15,298	52.1	29.9	9,972	1.0	21.6	23,862	12.1	1,146	3.2	978	0.0		
690: Kidney & urinary tract infections w/o MCC	12,954	42.6	23.7	3,808	1.9	13.9	16,981	59.4	35.3	11,796	0.5	27.3	28,098	15.9	1,338	2.9	1,113	0.0		
641: Nutritional & misc metabolic disorders w/o MCC	9,755	49.4	21.8	3,576	2.0	12.3	15,206	52.8	33.3	11,107	0.5	28.1	25,610	14.5	1,076	4.0	755	0.0		
299: Peripheral vascular disorders w MCC	9,752	39.3	21.9	3,511	2.9	13.8	16,926	60.0	32.4	10,667	4.6	25.3	32,578	13.5	1,356	2.2	1,115	0.0		
292: Heart failure & shock w CC	8,602	63.3	20.6	3,199	1.8	11.3	14,089	41.0	28.1	9,622	0.8	21.5	22,750	8.6	1,160	2.2	1,306	0.0		
291: Heart failure & shock w MCC	8,561	58.4	21.4	3,321	2.7	13.0	15,906	47.4	27.5	9,654	1.8	21.7	25,254	8.4	1,085	1.4	666	0.0		
552: Medical back problems w/o MCC	8,113	54.7	21.6	3,751	8.4	13.2	14,880	54.2	30.8	11,214	0.3	23.2	25,456	17.1	931	7.7	864	0.0		
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	50.9	23.7	4,275	27.0	14.3	17,732	32.0	34.4	12,632	0.6	24.1	23,322	31.2	1,292	6.2	1,152	0.0		
312: Syncope & collapse	7,926	60.1	22.0	3,537	3.1	12.0	15,372	39.2	31.3	11,114	0.2	26.6	24,571	15.0	1,090	8.0	1,022	0.0		
603: Cellulitis w/o MCC	7,590	61.0	22.5	3,410	1.4	13.5	16,082	37.9	32.0	10,766	2.2	22.2	23,496	13.6	940	4.7	860	0.0		
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	57.4	24.0	4,431	26.8	13.2	15,388	65.1	38.8	14,098	0.3	24.6	22,694	16.2	1,277	8.0	1,438	0.0		
683: Renal failure w CC	6,765	49.4	20.8	3,423	2.7	12.4	15,663	55.6	31.8	10,738	1.0	25.1	27,212	11.0	1,295	2.6	810	0.0		
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	52.4	20.7	3,375	1.4	11.8	14,498	35.1	31.3	10,337	0.2	21.8	22,949	18.5	973	9.9	870	0.0		
460: Spinal fusion except cervical w/o MCC	6,649	68.3	15.5	2,949	21.3	10.6	14,145	29.7	18.1	7,400	0.1	17.3	19,584	19.1	1,005	15.7	1,144	0.0		
193: Simple pneumonia & pleurisy w MCC	6,507	49.6	19.9	3,306	3.4	12.1	15,848	54.5	28.6	9,741	2.2	21.9	26,745	10.9	1,155	1.8	626	0.0		
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	49.2	19.3	3,127	1.5	11.6	14,906	49.6	30.9	10,041	0.5	21.4	25,297	14.4	984	4.4	838	0.0		
190: Chronic obstructive pulmonary disease w MCC	6,320	62.5	19.1	3,077	2.3	11.3	14,819	40.5	26.9	9,053	2.3	21.2	24,441	8.6	1,000	2.2	781	0.0		

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 3
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	52.2	15.8	2,786	9.0	13.5	16,504	45.3	32.3	11,476	2.0	27.4	35,203	11.5	628	6.3	358	14.8	7.4	11,594
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	63.4	14.8	3,132	12.5	10.6	12,596	38.9	20.8	8,562	0.1	23.9	23,017	22.7	588	19.4	418	5.9	5.6	9,496
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	35.8	21.7	3,898	38.0	17.4	21,248	48.3	42.8	15,838	1.5	26.0	24,988	15.1	748	2.3	375	14.4	6.7	10,347
481: Hip & femur procedures except major joint w CC	13,704	31.3	21.0	3,944	22.7	14.2	16,124	75.2	44.5	15,914	0.6	26.2	28,359	4.7	726	1.2	317	12.7	7.0	10,298
194: Simple pneumonia & pleurisy w CC	13,064	46.6	15.3	2,581	1.9	12.1	15,795	53.3	32.0	10,688	1.1	23.6	26,343	8.8	710	2.3	324	15.2	7.1	10,537
690: Kidney & urinary tract infections w/o MCC	12,954	37.6	16.6	2,802	2.0	14.1	17,070	60.6	37.4	12,477	0.5	24.1	26,015	10.8	838	2.4	360	13.8	6.7	9,196
641: Nutritional & misc metabolic disorders w/o MCC	9,755	44.4	16.1	2,716	2.2	12.7	15,445	54.2	35.0	11,740	0.7	26.7	26,708	10.3	727	3.3	280	14.8	6.8	9,793
299: Peripheral vascular disorders w MCC	9,752	35.9	16.0	2,705	3.1	14.2	17,761	60.5	35.3	11,619	4.9	25.6	32,910	9.1	788	1.4	337	19.4	8.3	12,643
292: Heart failure & shock w CC	8,602	60.3	16.2	2,545	2.0	11.9	14,999	43.0	31.2	10,674	0.9	21.5	22,971	6.4	807	1.7	393	21.7	7.0	10,765
291: Heart failure & shock w MCC	8,561	55.5	16.5	2,659	2.9	13.5	16,443	49.2	30.4	10,681	2.0	22.0	25,945	5.7	780	1.0	212	24.2	7.7	11,827
552: Medical back problems w/o MCC	8,113	45.6	16.5	2,955	8.9	13.8	15,559	55.8	32.5	11,848	0.4	25.2	27,761	12.3	490	5.2	303	13.9	6.7	10,951
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	45.3	18.0	3,349	27.2	15.0	18,646	32.8	35.6	13,115	0.6	26.4	27,127	23.9	652	4.6	341	10.5	5.7	9,060
312: Syncope & collapse	7,926	54.9	16.1	2,732	3.3	12.8	16,260	40.2	32.9	11,792	0.3	21.8	21,225	11.4	679	6.5	330	10.8	5.9	9,290
603: Cellulitis w/o MCC	7,590	57.4	16.5	2,562	1.5	13.2	16,200	38.9	33.9	11,458	2.3	22.4	23,837	10.0	526	3.8	271	12.8	7.0	9,464
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	41.1	19.2	3,694	26.9	13.4	15,669	65.6	40.7	14,793	0.4	28.1	29,868	6.3	698	2.5	354	9.9	6.6	10,136
683: Renal failure w CC	6,765	44.7	15.9	2,684	2.9	12.9	16,531	57.3	34.8	11,799	1.1	24.7	28,388	7.5	828	2.1	295	20.6	7.7	11,070
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	49.8	15.1	2,595	1.7	12.1	14,784	36.7	32.7	10,890	0.2	22.1	23,648	15.5	591	9.0	291	14.2	7.4	10,546
460: Spinal fusion except cervical w/o MCC	6,649	66.3	14.0	2,697	21.6	11.0	14,665	30.4	19.3	7,882	0.3	24.0	22,959	11.0	444	8.7	251	9.0	7.1	11,678
193: Simple pneumonia & pleurisy w MCC	6,507	46.1	16.0	2,700	3.5	12.5	16,293	55.5	31.3	10,627	2.3	22.0	27,243	7.1	700	1.3	270	19.5	7.3	11,201
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	46.3	14.7	2,470	1.5	11.7	14,897	50.6	32.3	10,489	0.5	20.8	26,030	10.5	669	3.5	284	12.1	6.4	8,760
190: Chronic obstructive pulmonary disease w MCC	6,320	60.0	15.2	2,504	2.5	11.7	14,985	42.4	29.5	9,978	2.6	22.0	24,840	6.0	697	1.8	293	20.5	7.7	10,915

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 4
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	51.3	15.7	2,768	8.8	12.9	15,825	44.2	29.4	10,518	1.8	27.0	34,861	11.4	620	6.2	358	0.0		
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	62.5	14.7	3,123	12.3	10.3	12,283	38.6	19.6	8,123	0.1	24.4	22,468	22.4	587	19.1	419	0.0		
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	34.8	21.5	3,880	37.7	16.7	20,384	46.7	39.6	14,707	1.3	25.1	22,730	14.8	744	2.3	369	0.0		
481: Hip & femur procedures except major joint w CC	13,704	30.3	20.8	3,934	22.5	13.8	15,692	74.5	41.2	14,797	0.4	24.7	25,157	4.5	710	1.2	299	0.0		
194: Simple pneumonia & pleurisy w CC	13,064	46.1	15.3	2,572	1.7	11.6	15,214	52.0	29.3	9,838	1.0	21.5	23,747	8.7	703	2.3	319	0.0		
690: Kidney & urinary tract infections w/o MCC	12,954	37.1	16.6	2,792	1.8	13.7	16,845	59.3	34.4	11,572	0.4	24.2	25,404	10.7	828	2.4	355	0.0		
641: Nutritional & misc metabolic disorders w/o MCC	9,755	43.9	16.0	2,699	1.9	12.2	15,093	52.6	32.3	10,856	0.5	27.6	25,295	10.1	727	3.2	278	0.0		
299: Peripheral vascular disorders w MCC	9,752	35.2	15.8	2,679	2.9	13.7	16,840	59.5	31.7	10,478	4.6	24.9	32,105	9.0	770	1.4	329	0.0		
292: Heart failure & shock w CC	8,602	59.6	16.1	2,525	1.8	11.3	14,125	40.9	27.6	9,520	0.8	21.1	22,458	6.3	786	1.7	393	0.0		
291: Heart failure & shock w MCC	8,561	54.6	16.4	2,646	2.6	13.0	15,905	47.2	26.9	9,506	1.7	21.8	25,425	5.6	752	1.0	212	0.0		
552: Medical back problems w/o MCC	8,113	44.3	16.4	2,946	8.4	13.1	14,751	54.1	30.0	10,986	0.2	23.1	24,303	12.0	491	5.1	305	0.0		
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	44.5	17.9	3,330	26.9	14.2	17,671	31.6	33.0	12,219	0.6	23.2	22,654	23.5	649	4.6	342	0.0		
312: Syncope & collapse	7,926	54.3	16.0	2,720	3.0	12.0	15,384	39.0	30.4	10,894	0.2	26.1	24,111	11.3	674	6.5	328	0.0		
603: Cellulitis w/o MCC	7,590	56.9	16.4	2,540	1.3	13.1	15,849	37.7	31.0	10,513	2.2	22.2	23,531	10.0	510	3.8	269	0.0		
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	40.2	19.0	3,675	26.8	13.1	15,354	64.9	37.8	13,841	0.3	24.6	22,694	6.2	688	2.4	355	0.0		
683: Renal failure w CC	6,765	44.0	15.8	2,666	2.7	12.2	15,536	55.5	31.0	10,546	0.9	25.0	27,301	7.3	807	2.0	296	0.0		
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	49.1	15.0	2,581	1.4	11.7	14,533	35.0	30.2	10,094	0.2	22.8	24,263	15.4	572	9.0	286	0.0		
460: Spinal fusion except cervical w/o MCC	6,649	64.9	13.8	2,682	21.2	10.6	14,143	29.6	17.7	7,317	0.1	17.3	19,584	10.9	444	8.6	252	0.0		
193: Simple pneumonia & pleurisy w MCC	6,507	45.3	15.8	2,681	3.4	12.1	15,837	54.3	27.9	9,573	2.2	21.8	26,531	6.9	706	1.3	262	0.0		
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	46.1	14.6	2,454	1.4	11.3	14,568	49.4	30.2	9,868	0.5	20.9	25,331	10.4	671	3.5	285	0.0		
190: Chronic obstructive pulmonary disease w MCC	6,320	59.4	15.1	2,489	2.3	11.2	14,803	40.3	26.2	8,879	2.3	21.1	23,968	5.9	671	1.8	286	0.0		

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 5
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	52.2	6.8	1,339	9.0	12.9	15,919	45.3	19.8	7,495	2.0	20.8	27,406	11.5	363	6.3	331	14.8	6.0	9,652
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	63.4	8.7	1,954	12.5	10.5	12,513	38.9	16.2	6,983	0.1	16.8	16,225	22.7	293	19.4	389	5.9	4.9	8,407
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	35.8	6.6	1,302	38.0	16.7	20,525	48.3	19.2	7,475	1.5	20.3	19,818	15.1	370	2.3	334	14.4	5.6	8,865
481: Hip & femur procedures except major joint w CC	13,704	31.3	5.6	1,139	22.7	14.0	15,949	75.2	23.8	9,053	0.6	18.0	19,384	4.7	378	1.2	262	12.7	5.8	8,723
194: Simple pneumonia & pleurisy w CC	13,064	46.6	6.5	1,209	1.9	11.6	15,287	53.3	19.9	7,078	1.1	18.3	20,863	8.8	456	2.3	288	15.2	5.8	8,766
690: Kidney & urinary tract infections w/o MCC	12,954	37.6	6.4	1,181	2.0	13.3	16,271	60.6	22.0	7,852	0.5	18.5	20,163	10.8	535	2.4	325	13.8	5.5	7,661
641: Nutritional & misc metabolic disorders w/o MCC	9,755	44.4	6.3	1,168	2.2	11.9	14,678	54.2	21.3	7,571	0.7	17.8	18,445	10.3	472	3.3	258	14.8	5.6	8,196
299: Peripheral vascular disorders w MCC	9,752	35.9	6.5	1,213	3.1	13.0	16,372	60.5	20.4	7,255	4.9	20.6	26,663	9.1	525	1.4	301	19.4	6.6	10,445
292: Heart failure & shock w CC	8,602	60.3	6.4	1,120	2.0	11.2	14,097	43.0	19.9	7,246	0.9	16.7	18,415	6.4	515	1.7	373	21.7	5.7	9,116
291: Heart failure & shock w MCC	8,561	55.5	6.3	1,128	2.9	12.3	15,302	49.2	19.7	7,334	2.0	18.6	22,083	5.7	514	1.0	206	24.2	6.3	9,646
552: Medical back problems w/o MCC	8,113	45.6	5.9	1,164	8.9	13.1	14,898	55.8	21.1	8,078	0.4	16.7	18,852	12.3	312	5.2	280	13.9	5.6	9,170
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	45.3	6.7	1,337	27.2	14.5	18,053	32.8	19.4	7,531	0.6	20.0	20,311	23.9	358	4.6	317	10.5	4.9	8,019
312: Syncope & collapse	7,926	54.9	6.7	1,254	3.3	12.2	15,629	40.2	21.1	7,968	0.3	16.6	18,412	11.4	431	6.5	307	10.8	4.9	7,989
603: Cellulitis w/o MCC	7,590	57.4	7.0	1,247	1.5	12.0	14,633	38.9	20.4	7,415	2.3	19.6	21,007	10.0	349	3.8	250	12.8	5.6	7,757
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	41.1	6.0	1,233	26.9	13.3	15,571	65.6	22.7	8,814	0.4	18.5	18,433	6.3	342	2.5	310	9.9	5.5	8,680
683: Renal failure w CC	6,765	44.7	6.1	1,153	2.9	12.1	15,477	57.3	21.1	7,624	1.1	20.2	22,848	7.5	541	2.1	268	20.6	6.2	9,241
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	49.8	6.2	1,188	1.7	10.8	13,227	36.7	20.4	7,219	0.2	17.1	18,707	15.5	372	9.0	268	14.2	5.9	8,559
460: Spinal fusion except cervical w/o MCC	6,649	66.3	7.0	1,456	21.6	10.8	14,446	30.4	15.4	6,506	0.3	10.8	10,960	11.0	193	8.7	220	9.0	5.8	9,963
193: Simple pneumonia & pleurisy w MCC	6,507	46.1	6.5	1,222	3.5	12.0	15,716	55.5	19.7	7,155	2.3	18.9	23,355	7.1	444	1.3	242	19.5	6.0	9,321
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	46.3	6.4	1,199	1.5	11.2	14,342	50.6	20.3	7,017	0.5	16.1	19,973	10.5	437	3.5	266	12.1	5.5	7,739
190: Chronic obstructive pulmonary disease w MCC	6,320	60.0	6.4	1,158	2.5	11.1	14,346	42.4	18.9	6,768	2.6	17.5	20,611	6.0	444	1.8	265	20.5	6.5	9,312

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 6
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs by Volume of PAC Users, 2008
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	51.3	6.6	1,304	8.8	12.5	15,378	44.2	18.9	7,169	1.8	21.3	28,144	11.4	359	6.2	330	0.0		
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	62.5	8.7	1,943	12.3	10.2	12,181	38.6	15.7	6,783	0.1	20.5	19,561	22.4	293	19.1	389	0.0		
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	34.8	6.5	1,286	37.7	16.0	19,694	46.7	18.5	7,197	1.3	21.1	20,300	14.8	368	2.3	328	0.0		
481: Hip & femur procedures except major joint w CC	13,704	30.3	5.6	1,140	22.5	13.6	15,525	74.5	22.8	8,684	0.4	22.0	22,992	4.5	372	1.2	251	0.0		
194: Simple pneumonia & pleurisy w CC	13,064	46.1	6.2	1,165	1.7	11.4	15,061	52.0	19.1	6,792	1.0	19.4	21,868	8.7	451	2.3	283	0.0		
690: Kidney & urinary tract infections w/o MCC	12,954	37.1	6.1	1,144	1.8	13.4	16,551	59.3	21.2	7,573	0.4	20.4	21,811	10.7	527	2.4	319	0.0		
641: Nutritional & misc metabolic disorders w/o MCC	9,755	43.9	6.0	1,130	1.9	12.0	14,860	52.6	20.5	7,320	0.5	20.0	19,748	10.1	470	3.2	257	0.0		
299: Peripheral vascular disorders w MCC	9,752	35.2	6.2	1,164	2.9	12.9	16,163	59.5	19.2	6,824	4.6	20.8	27,090	9.0	509	1.4	292	0.0		
292: Heart failure & shock w CC	8,602	59.6	6.0	1,057	1.8	11.1	13,730	40.9	18.9	6,864	0.8	17.5	19,725	6.3	504	1.7	370	0.0		
291: Heart failure & shock w MCC	8,561	54.6	6.0	1,064	2.6	12.4	15,372	47.2	18.5	6,887	1.7	19.0	22,650	5.6	496	1.0	206	0.0		
552: Medical back problems w/o MCC	8,113	44.3	5.8	1,152	8.4	12.8	14,479	54.1	20.4	7,820	0.2	20.2	21,910	12.0	314	5.1	282	0.0		
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	44.5	6.6	1,324	26.9	13.8	17,216	31.6	18.7	7,272	0.6	20.3	20,397	23.5	357	4.6	317	0.0		
312: Syncope & collapse	7,926	54.3	6.5	1,229	3.0	11.9	15,254	39.0	20.4	7,694	0.2	19.6	21,315	11.3	426	6.5	306	0.0		
603: Cellulitis w/o MCC	7,590	56.9	6.9	1,215	1.3	12.8	15,479	37.7	19.8	7,171	2.2	20.2	21,741	10.0	339	3.8	248	0.0		
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	40.2	6.0	1,233	26.8	13.0	15,232	64.9	21.9	8,510	0.3	22.4	20,681	6.2	335	2.4	310	0.0		
683: Renal failure w CC	6,765	44.0	5.8	1,099	2.7	11.7	14,935	55.5	19.9	7,176	0.9	22.0	24,565	7.3	529	2.0	268	0.0		
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	49.1	6.0	1,141	1.4	11.1	13,817	35.0	19.8	7,008	0.2	19.2	20,952	15.4	363	9.0	263	0.0		
460: Spinal fusion except cervical w/o MCC	6,649	64.9	6.9	1,447	21.2	10.5	14,021	29.6	14.7	6,250	0.1	17.2	19,430	10.9	194	8.6	221	0.0		
193: Simple pneumonia & pleurisy w MCC	6,507	45.3	6.2	1,168	3.4	11.7	15,453	54.3	18.6	6,741	2.2	19.1	23,460	6.9	437	1.3	231	0.0		
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	46.1	6.2	1,159	1.4	11.2	14,438	49.4	19.7	6,829	0.5	17.8	22,082	10.4	436	3.5	267	0.0		
190: Chronic obstructive pulmonary disease w MCC	6,320	59.4	6.0	1,100	2.3	11.0	14,472	40.3	17.9	6,426	2.3	17.7	21,028	5.9	433	1.8	260	0.0		

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm239).

Section 3-Table 7
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By Condition Grouping, By Volume of Beneficiaries, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)
		All Condition Groupings	236,307	35.4	64.0	8,465	1.5	16.2	19,238	9.3	47.8	16,517	0.8	33.0	38,520	7.4	1,378	3.4	1,234	23.1
Other: Medical	57,849	24.8	57.6	7,534	1.2	16.1	18,980	7.8	47.7	16,462	0.5	32.2	36,479	7.4	1,380	3.4	1,081	18.3	10.1	14,798
Orthopedic: Minor Medical	40,669	33.4	51.3	7,829	1.6	15.8	18,277	8.7	46.8	16,449	0.6	31.0	36,979	8.4	1,344	5.4	1,381	19.9	9.6	14,402
Neurologic: Medical	33,344	37.0	70.5	9,617	2.0	17.2	20,302	10.2	50.7	17,457	0.8	31.6	38,186	8.7	1,477	2.9	1,423	23.3	9.9	14,372
Cardiovascular: General	21,438	44.1	50.0	7,631	1.4	15.9	18,815	7.5	47.0	16,147	0.6	27.0	32,466	5.0	1,318	3.7	1,427	20.5	9.8	14,766
Integumentary: Medical	20,783	37.5	54.7	7,309	1.4	16.5	19,526	11.9	49.7	17,088	1.8	38.9	41,176	7.5	1,393	2.4	1,066	28.0	12.3	17,783
Endocrine: Medical	19,050	48.5	124.2	12,789	1.7	15.7	20,091	8.6	50.9	17,457	1.1	33.3	41,160	6.3	1,570	3.5	1,149	24.8	11.7	18,290
Cardiovascular: Cardiac Medical	9,429	42.3	49.7	7,386	1.8	15.3	18,305	12.4	45.4	15,615	1.2	31.8	40,949	6.4	1,438	2.0	1,142	31.6	11.4	16,778
Kidney & Urinary: Medical	6,909	40.4	59.7	8,140	1.4	16.1	19,794	11.7	48.1	16,756	1.1	33.0	38,569	7.5	1,373	2.2	741	31.9	12.0	18,366
Respiratory: COPD	6,075	39.9	53.9	7,670	1.6	15.1	18,294	10.4	42.9	14,306	1.2	28.1	39,757	5.9	1,304	2.0	899	30.7	11.9	16,608
Cardiovascular: Vascular Medical	5,522	46.5	72.3	8,932	2.3	16.7	20,744	13.8	51.6	17,838	1.7	35.7	41,416	7.7	1,333	2.6	1,080	31.6	13.4	19,352
Respiratory: Medical	4,527	27.2	42.5	6,325	1.1	13.2	17,394	8.9	36.7	12,813	0.8	41.3	46,587	6.0	1,098	2.6	958	28.3	9.9	14,502
GI & Hepatobiliary: Minor Medical	3,149	26.2	47.8	6,783	1.3	14.5	17,609	7.8	41.8	14,504	0.7	31.3	39,881	8.1	787	2.5	1,747	23.8	11.5	16,762
Hematologic: Medical	3,113	53.5	48.1	7,081	1.4	16.7	18,817	13.0	42.4	14,458	0.8	26.6	28,880	7.6	1,155	2.2	869	35.3	10.7	16,401
Infections: Medical	1,980	34.3	45.6	6,137	1.2	16.2	21,335	8.4	49.8	16,290	1.0	29.2	29,362	7.2	1,199	3.2	776	22.1	11.8	17,366
GI & Hepatobiliary: Major Medical	1,470	31.4	42.7	6,065	0.7	22.3	26,633	9.3	32.4	11,023	0.7	22.5	27,689	5.0	634	1.0	595	39.3	11.2	17,163
Orthopedic: Major Medical	549	25.3	40.9	5,573	2.0	13.5	15,036	11.1	36.2	12,707	0.4	23.0	26,044	7.3	1,610	2.0	1,161	26.8	7.5	10,753
Neurologic: Stroke	325	37.5	59.3	9,312	2.8	18.0	18,636	10.8	46.9	17,329	1.2	22.8	26,007	15.1	1,278	0.9	386	25.5	12.2	18,061
Infections: Septicemia	100	16.0	50.3	7,780	1.0	17.0	18,639	2.0	16.5	6,127	0.0			5.0	858	2.0	809	15.0	9.9	19,291

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 8
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By Condition Grouping, By Volume of Beneficiaries, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All Condition Groupings	236,307	28.2	53.9	7,096	0.2	14.2	15,781	0.4	40.0	12,886	0.1	33.3	31,122	5.1	1,141	3.0	1,181	0.0		
Other Medical	57,849	18.8	50.5	6,522	0.2	13.4	14,828	0.4	40.0	12,688	0.0	27.7	21,311	5.5	1,185	3.1	1,028	0.0		
Orthopedic: Minor Medical	40,669	26.6	43.1	6,667	0.2	13.8	14,106	0.3	43.5	14,249	0.0	30.3	29,100	6.1	1,102	4.8	1,340	0.0		
Neurologic: Medical	33,344	29.9	59.5	8,076	0.3	14.9	17,182	0.6	46.1	14,292	0.1	25.5	23,198	6.2	1,213	2.5	1,345	0.0		
Cardiovascular: General	21,438	37.8	40.6	6,381	0.1	15.3	16,553	0.3	39.9	13,752	0.0	28.2	35,510	3.3	1,054	3.3	1,264	0.0		
Integumentary: Medical	20,783	28.8	42.3	5,707	0.1	15.5	19,343	0.3	45.4	14,522	0.1	37.1	40,190	4.8	1,103	1.9	963	0.0		
Endocrine: Medical	19,050	40.9	108.7	11,007	0.1	14.5	17,334	0.4	37.0	12,030	0.1	32.2	47,148	4.0	1,238	3.0	1,166	0.0		
Cardiovascular: Cardiac Medical	9,429	31.8	38.6	5,862	0.1	14.9	11,214	0.5	30.5	10,015	0.1	26.0	25,125	3.9	1,241	1.6	1,290	0.0		
Kidney & Urinary: Medical	6,909	31.8	45.3	6,156	0.1	14.2	19,229	0.3	36.8	12,529	0.0	28.0	16,994	4.7	1,243	1.5	631	0.0		
Respiratory: COPD	6,075	30.0	39.6	5,860	0.0	9.3	14,842	0.3	27.8	9,823	0.0	27.0	16,318	3.3	1,074	1.6	941	0.0		
Cardiovascular: Vascular Medical	5,522	36.5	59.2	7,240	0.2	11.9	12,049	0.5	26.5	8,522	0.2	33.4	35,393	4.3	1,017	2.1	1,040	0.0		
Respiratory: Medical	4,527	20.0	32.4	4,914	0.1	14.8	17,868	0.4	25.7	8,817	0.1	96.3	29,991	4.7	916	2.2	841	0.0		
GI & Hepatobiliary: Minor Medical	3,149	18.7	40.1	5,444	0.1	9.0	10,066	0.3	34.5	13,234	0.1	18.0	21,186	6.4	665	1.9	1,668	0.0		
Hematologic: Medical	3,113	45.0	37.5	5,430	0.1	13.0	6,338	0.4	35.1	11,435	0.0	23.0	21,227	5.0	1,150	1.7	943	0.0		
Infections: Medical	1,980	26.3	33.7	4,547	0.1	13.0	16,668	0.3	18.2	6,307	0.2	27.7	32,074	4.6	867	2.6	744	0.0		
GI & Hepatobiliary: Major Medical	1,470	20.6	25.5	4,407	0.0			0.6	22.3	5,383	0.0			3.6	610	0.7	594	0.0		
Orthopedic: Major Medical	549	17.1	38.9	5,471	0.2	15.0	14,055	0.2	45.0	13,335	0.0			5.6	1,218	1.8	1,081	0.0		
Neurologic: Stroke	325	27.1	45.3	7,519	1.2	16.8	17,316	0.3	25.0	11,368	0.0			11.7	1,185	0.9	386	0.0		
Infections: Septicemia	100	11.0	47.7	7,515	0.0			0.0			0.0			4.0	1,072	1.0	0	0.0		

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 9
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By Condition Grouping, By Volume of Beneficiaries, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All Condition Groupings	236,307	33.0	18.5	2,711	0.8	14.9	17,772	5.6	36.3	12,863	0.3	29.0	33,213	4.6	657	2.6	458	16.7	7.3	10,563
Other: Medical	57,849	22.5	18.8	2,815	0.7	15.0	17,939	5.2	36.7	12,971	0.2	28.3	32,946	5.1	687	2.8	397	14.3	7.2	10,188
Orthopedic: Minor Medical	40,669	30.8	17.1	2,863	1.0	14.5	16,808	5.6	36.3	13,181	0.2	25.4	27,885	5.7	679	4.4	523	14.6	6.7	9,981
Neurologic: Medical	33,344	34.5	20.2	3,076	1.1	15.7	18,674	6.1	39.1	13,792	0.2	25.2	29,236	5.5	675	2.1	453	16.1	6.7	9,444
Cardiovascular: General	21,438	42.4	14.2	2,307	0.6	14.9	17,593	3.9	35.3	12,584	0.2	21.8	26,877	2.8	661	2.7	517	13.3	6.7	9,819
Integumentary: Medical	20,783	34.6	18.8	2,573	0.7	15.3	18,643	7.3	38.0	13,438	0.8	33.5	37,480	4.2	626	1.7	352	21.0	8.4	11,644
Endocrine: Medical	19,050	46.6	27.3	3,166	0.7	14.5	18,140	4.3	35.6	12,449	0.3	30.2	37,118	3.2	662	2.3	543	15.9	7.7	11,314
Cardiovascular: Cardiac Medical	9,429	39.7	15.1	2,315	0.8	14.3	17,858	7.1	33.5	11,869	0.3	27.7	32,032	3.5	666	1.4	454	23.0	7.5	10,917
Kidney & Urinary: Medical	6,909	38.1	14.9	2,112	0.6	15.3	18,859	6.1	34.8	12,069	0.3	32.6	34,777	3.8	525	1.4	256	21.3	7.9	11,713
Respiratory: COPD	6,075	37.4	15.8	2,387	0.7	14.0	17,721	6.1	32.0	11,086	0.5	21.5	32,480	3.2	652	1.4	324	21.9	8.1	10,938
Cardiovascular: Vascular Medical	5,522	43.2	19.8	2,573	1.3	14.3	16,984	7.2	39.4	13,538	0.7	30.6	35,024	3.7	537	1.6	430	22.1	8.5	11,695
Respiratory: Medical	4,527	25.3	14.7	2,297	0.6	10.6	14,182	6.0	28.0	9,957	0.5	42.0	37,033	4.3	551	2.1	449	23.1	7.3	10,336
GI & Hepatobiliary: Minor Medical	3,149	24.1	16.0	2,422	0.8	13.0	16,552	5.3	30.5	11,047	0.2	30.3	32,293	6.0	414	1.9	566	19.5	8.0	10,988
Hematologic: Medical	3,113	51.7	11.1	1,669	0.5	14.6	15,519	5.6	33.7	11,536	0.2	22.7	25,815	3.4	603	1.3	314	21.3	8.1	12,847
Infections: Medical	1,980	31.9	17.2	2,368	0.7	14.6	20,268	4.9	39.5	12,941	0.5	28.1	29,537	4.4	445	2.7	337	16.8	8.4	12,732
GI & Hepatobiliary: Major Medical	1,470	29.6	13.9	2,163	0.5	16.0	20,806	6.5	25.0	8,259	0.3	21.8	22,439	3.4	507	0.6	381	33.5	9.0	13,106
Orthopedic: Major Medical	549	22.4	18.3	2,696	1.5	12.5	13,224	8.2	31.7	11,707	0.2	17.0	10,779	5.5	788	1.6	435	22.6	6.3	8,901
Neurologic: Stroke	325	35.4	20.9	3,375	2.2	19.1	17,697	5.8	26.4	10,313	0.0			9.8	708	0.9	45	19.7	7.1	10,076
Infections: Septicemia	100	15.0	17.6	2,595	0.0			1.0	19.0	6,953	0.0			5.0	279	2.0	59	14.0	9.9	18,755

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 10
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	4,967	24.1	59.1	7,958	3.5	18.8	21,804	32.9	56.2	16,599	13.3	40.6	38,469	13.5	2,602	1.3	1,362	29.5	14.7	22,291
885: Psychoses	672	9.1	26.5	5,055	0.0			9.7	51.8	13,328	7.9	50.7	19,592	4.3	2,806	0.6	4,156	8.8	10.9	13,497
207: Respiratory system diagnosis w ventilator support 96+ hours	333	18.6	41.1	6,102	10.5	19.8	23,219	26.4	55.9	18,603	12.6	51.1	52,685	9.6	2,106	1.2	561	31.2	16.3	30,122
189: Pulmonary edema & respiratory failure	204	32.8	42.7	7,128	12.3	24.3	29,221	38.2	50.6	17,132	15.7	50.5	58,091	18.1	2,152	2.5	609	37.3	22.4	31,862
593: Skin ulcers w CC	196	20.9	73.2	9,299	0.5	30.0	26,388	52.6	66.3	17,343	20.4	32.0	35,318	12.8	1,882	0.0		37.8	10.7	16,531
592: Skin ulcers w MCC	195	17.9	73.0	9,194	0.0			44.6	63.6	17,634	17.4	53.1	52,291	15.9	3,345	0.5	114	37.9	16.7	22,703
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	16.5	128.4	12,575	1.9	17.0	22,504	47.5	65.3	16,177	20.9	34.0	36,921	17.7	2,894	0.6	0	35.4	13.5	20,232
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	21.8	83.5	9,746	1.4	13.5	14,191	48.6	60.8	15,777	16.9	41.5	41,950	17.6	3,005	0.7	205	37.3	12.7	17,344
057: Degenerative nervous system disorders w/o MCC	136	20.6	49.8	7,269	0.0			43.4	53.8	14,928	7.4	26.4	25,533	16.2	3,966	0.0		23.5	7.8	10,276
299: Peripheral vascular disorders w MCC	103	19.4	56.7	8,514	1.9	15.0	20,734	34.0	53.7	16,086	13.6	39.6	40,437	15.5	1,196	0.0		33.0	18.4	25,716
603: Cellulitis w/o MCC	84	34.5	98.4	10,378	0.0			45.2	61.0	15,908	16.7	39.8	27,855	19.0	1,811	2.4	158	17.9	15.9	20,190
945: Rehabilitation w CC/MCC	74	40.5	72.5	10,526	6.8	15.2	13,720	39.2	61.5	20,832	8.1	53.7	25,405	16.2	5,475	0.0		35.1	16.2	26,843
056: Degenerative nervous system disorders w MCC	73	12.3	60.7	9,200	4.1	19.0	22,089	71.2	53.7	17,267	8.2	25.5	32,980	24.7	2,538	2.7	1,541	28.8	15.6	26,050
300: Peripheral vascular disorders w CC	72	41.7	86.0	9,855	2.8	11.5	14,738	30.6	63.3	15,537	22.2	36.6	36,234	16.7	1,524	4.2	2,200	26.4	13.8	20,905
177: Respiratory infections & inflammations w MCC	70	27.1	47.5	8,950	1.4	21.0	19,391	35.7	66.2	24,038	11.4	37.5	45,534	17.1	5,827	1.4	66	28.6	15.5	21,397
190: Chronic obstructive pulmonary disease w MCC	61	44.3	108.7	10,735	3.3	19.0	25,488	14.8	52.6	18,049	11.5	19.9	24,067	1.6	5,132	1.6	55	27.9	13.5	20,911
191: Chronic obstructive pulmonary disease w CC	57	29.8	46.6	7,441	5.3	14.7	16,436	24.6	46.8	13,628	5.3	63.3	72,318	8.8	2,609	0.0		24.6	13.3	15,368
264: Other circulatory system O.R. procedures	55	34.5	72.9	9,236	3.6	12.0	13,033	30.9	50.8	15,949	14.5	33.1	36,615	16.4	1,849	3.6	323	27.3	11.4	15,715
871: Septicemia w/o MV 96+ hours w MCC	55	32.7	56.8	9,905	0.0			38.2	56.2	17,552	20.0	35.5	39,519	12.7	3,308	0.0		43.6	13.8	23,779
208: Respiratory system diagnosis w ventilator support <96 hours	54	18.5	40.4	6,871	3.7	13.5	17,500	14.8	38.9	15,025	14.8	55.4	74,292	13.0	1,418	0.0		35.2	16.2	38,901
193: Simple pneumonia & pleurisy w MCC	50	34.0	59.8	9,997	4.0	22.0	27,224	34.0	48.8	17,480	18.0	46.8	44,400	14.0	2,469	2.0	1,178	32.0	12.8	20,058

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 11
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)
All MS-DRGs	4,967	20.1	44.7	6,014	2.3	17.8	20,906	28.1	43.3	12,778	4.9	37.7	31,799	8.9	2,120	1.0	1,480	0.0		
885: Psychoses	672	8.3	21.6	4,235	0.0			8.6	40.8	10,161	6.8	51.8	18,349	3.3	2,121	0.6	4,156	0.0		
207: Respiratory system diagnosis w ventilator support 96+ hours	333	12.9	29.6	4,994	8.7	15.4	18,631	23.7	38.2	13,183	5.4	43.5	39,397	6.6	1,422	0.3	0	0.0		
189: Pulmonary edema & respiratory failure	204	27.0	36.9	6,141	10.3	24.6	31,248	32.4	30.3	11,261	4.4	28.7	40,743	7.8	1,151	1.0	784	0.0		
593: Skin ulcers w CC	196	18.9	47.2	5,615	0.0			46.4	54.7	14,272	7.1	26.5	32,544	8.7	1,567	0.0	0	0.0		
592: Skin ulcers w MCC	195	13.8	46.1	6,497	0.0			38.5	45.5	12,533	4.1	70.0	65,234	9.2	2,376	0.5	114	0.0		
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	14.6	87.0	8,593	1.3	16.0	18,288	41.1	48.4	12,294	7.6	26.8	29,755	13.3	1,700	0.6	0	0.0		
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	17.6	38.7	4,760	1.4	13.5	14,191	40.8	44.2	11,871	5.6	40.1	36,912	12.0	3,282	0.7	205	0.0		
057: Degenerative nervous system disorders w/o MCC	136	19.1	42.6	6,592	0.0			42.6	41.8	11,459	4.4	24.5	20,844	14.0	4,186	0.0	0	0.0		
299: Peripheral vascular disorders w MCC	103	17.5	41.1	5,893	1.0	8.0	8,069	29.1	39.4	11,283	2.9	28.7	37,316	8.7	1,021	0.0	0	0.0		
603: Cellulitis w/o MCC	84	28.6	109.8	10,633	0.0			39.3	52.8	14,061	9.5	24.8	18,949	15.5	1,930	2.4	158	0.0		
945: Rehabilitation w CC/MCC	74	32.4	59.5	9,199	5.4	15.5	13,270	32.4	51.7	17,445	1.4	74.0	48,866	10.8	8,032	0.0	0	0.0		
056: Degenerative nervous system disorders w MCC	73	8.2	30.0	6,414	1.4	7.0	8,661	65.8	43.4	13,540	2.7	22.5	28,252	20.5	1,997	2.7	1,541	0.0		
300: Peripheral vascular disorders w CC	72	36.1	74.0	8,057	1.4	12.0	12,283	26.4	53.6	12,954	9.7	27.6	30,494	12.5	799	4.2	2,200	0.0		
177: Respiratory infections & inflammations w MCC	70	24.3	37.9	6,648	1.4	21.0	19,391	31.4	52.0	19,313	0.0			11.4	4,285	1.4	66	0.0		
190: Chronic obstructive pulmonary disease w MCC	61	44.3	88.7	8,808	0.0			9.8	70.7	23,392	3.3	20.0	19,609	1.6	5,132	1.6	55	0.0		
191: Chronic obstructive pulmonary disease w CC	57	28.1	38.8	5,369	1.8	18.0	19,489	21.1	35.3	9,854	1.8	164.0	176,753	5.3	613	0.0	0	0.0		
264: Other circulatory system O.R. procedures	55	30.9	68.4	7,930	0.0			25.5	58.2	18,038	1.8	28.0	41,052	14.5	2,031	3.6	323	0.0		
871: Septicemia w/o MV 96+ hours w MCC	55	23.6	28.7	5,076	0.0			32.7	46.2	15,281	5.5	18.3	28,590	5.5	1,513	0.0	0	0.0		
208: Respiratory system diagnosis w ventilator support <96 hours	54	16.7	39.0	6,674	3.7	13.5	17,500	9.3	32.8	11,455	5.6	68.0	61,955	7.4	609	0.0	0	0.0		
193: Simple pneumonia & pleurisy w MCC	50	34.0	24.5	4,637	2.0	32.0	33,239	28.0	32.3	10,975	6.0	60.0	42,928	10.0	3,432	2.0	1,178	0.0		

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 12
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, By Volume of Beneficiaries, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Payment Per User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per User (\$)
All MS-DRGs	4,967	18.8	22.7	3,188	2.6	17.8	21,303	29.3	43.0	12,861	6.7	35.2	30,881	6.0	1,140	0.7	415	18.6	9.8	15,696
885: Psychoses	672	8.0	8.4	1,411	0.0			9.1	37.3	9,504	6.5	51.3	17,652	1.9	1,180	0.6	1,028	6.0	8.0	9,220
207: Respiratory system diagnosis w ventilator support 96+ hours	333	10.5	22.3	3,077	9.6	18.0	22,295	23.1	40.3	14,013	9.0	47.4	49,801	3.9	646	0.0		24.3	13.4	27,940
189: Pulmonary edema & respiratory failure	204	23.5	22.4	3,511	9.8	22.5	28,177	31.4	33.8	12,199	12.3	31.1	43,867	6.9	985	0.5	103	25.0	10.9	16,072
593: Skin ulcers w CC	196	15.8	23.3	2,597	0.0			50.0	55.4	14,462	6.6	28.9	34,562	4.1	857	0.0		18.4	8.7	11,053
592: Skin ulcers w MCC	195	14.4	30.4	3,615	0.0			40.0	44.2	12,595	7.2	46.0	39,918	5.6	2,396	0.5	114	24.1	11.0	14,557
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	15.2	34.8	3,232	1.3	16.0	18,288	43.7	47.3	11,900	4.4	28.1	33,237	8.9	1,141	0.6	0	19.0	7.7	11,544
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	20.4	23.9	2,626	1.4	13.5	14,191	43.7	43.8	12,141	7.7	35.2	32,900	7.7	1,613	0.7	205	27.5	6.3	8,927
057: Degenerative nervous system disorders w/o MCC	136	16.2	17.7	3,050	0.0			41.2	43.6	12,022	1.5	24.0	23,610	7.4	894	0.0		9.6	6.2	8,373
299: Peripheral vascular disorders w MCC	103	17.5	21.7	3,097	1.9	15.0	20,734	30.1	41.9	12,824	8.7	30.3	26,414	6.8	965	0.0		23.3	10.7	17,081
603: Cellulitis w/o MCC	84	26.2	23.8	3,247	0.0			40.5	49.6	13,392	8.3	47.7	32,088	8.3	909	2.4	57	14.3	7.3	13,418
945: Rehabilitation w CC/MCC	74	29.7	30.0	4,495	4.1	14.7	12,538	32.4	48.5	16,046	4.1	57.0	11,356	5.4	3,373	0.0		24.3	10.0	15,343
056: Degenerative nervous system disorders w MCC	73	6.8	35.2	6,111	2.7	9.0	11,523	68.5	42.0	13,751	1.4	21.0	21,614	8.2	772	1.4	0	15.1	9.3	19,663
300: Peripheral vascular disorders w CC	72	34.7	25.3	3,310	2.8	11.5	14,738	26.4	53.9	13,650	8.3	29.5	23,440	6.9	675	1.4	69	15.3	10.8	16,205
177: Respiratory infections & inflammations w MCC	70	18.6	23.5	4,553	1.4	21.0	19,391	32.9	49.3	18,140	4.3	25.7	32,255	7.1	1,440	0.0		17.1	9.8	16,984
190: Chronic obstructive pulmonary disease w MCC	61	41.0	28.2	3,739	0.0			11.5	61.4	20,335	1.6	14.0	11,318	0.0		1.6	18	14.8	10.1	18,066
191: Chronic obstructive pulmonary disease w CC	57	28.1	23.9	3,164	1.8	14.0	15,789	21.1	38.2	12,195	0.0			1.8	736	0.0		14.0	4.3	7,399
264: Other circulatory system O.R. procedures	55	27.3	19.3	2,557	1.8	16.0	16,573	27.3	53.1	16,778	10.9	23.3	23,743	10.9	1,257	1.8	481	18.2	10.8	14,201
871: Septicemia w/o MV 96+ hours w MCC	55	23.6	21.9	3,718	0.0			36.4	49.4	15,909	18.2	17.0	22,723	5.5	2,117	0.0		29.1	9.0	17,581
208: Respiratory system diagnosis w ventilator support <96 hours	54	13.0	26.9	5,025	3.7	13.5	17,500	9.3	29.2	10,347	14.8	52.1	67,380	9.3	521	0.0		31.5	14.1	30,773
193: Simple pneumonia & pleurisy w MCC	50	32.0	15.8	2,883	2.0	32.0	33,239	28.0	28.9	10,386	12.0	35.5	36,201	4.0	2,975	2.0	386	16.0	6.9	10,414

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 13
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All RICs	11,956	48.1	38.2	6,082	7.8	17.8	20,537	24.1	52.9	17,725	1.5	33.1	34,871	24.3	1,888	5.7	1,370	22.9	11.5	16,910
RIC 01: Stroke	1,917	41.5	50.6	8,005	8.3	21.0	24,543	25.5	60.9	20,915	1.3	33.2	32,890	34.3	2,412	4.2	1,736	24.9	11.7	16,347
RIC 06: Neurological Conditions	1,875	48.3	38.8	6,513	9.1	16.9	18,960	25.6	54.7	18,049	1.5	29.7	32,787	28.5	1,734	4.6	1,313	23.8	11.6	16,810
RIC 09: Other Orthopedic	1,648	61.9	33.6	5,258	7.2	15.7	17,471	32.8	48.3	16,517	1.1	22.1	23,354	19.6	1,523	6.9	1,189	23.3	9.1	14,427
RIC 20: Miscellaneous	1,427	53.0	39.9	6,035	7.6	17.5	20,479	28.2	52.0	17,175	2.2	37.3	33,876	19.5	1,646	4.1	1,018	26.9	12.9	18,526
RIC 07: Lower Extremity Fracture	994	58.6	30.0	5,092	5.4	13.9	15,519	23.8	47.6	15,798	1.6	31.1	39,061	16.5	1,620	5.9	1,625	20.3	9.4	12,155
RIC 08: Lower Extremity Joint Replacement	710	29.6	22.7	3,893	3.4	12.0	13,283	5.4	26.9	9,346	0.6	39.8	35,813	22.0	1,150	14.1	1,011	6.6	7.2	11,262
RIC 16: Pain Syndrome	445	54.4	31.4	4,931	7.6	15.9	17,484	27.4	52.1	17,002	1.6	39.0	32,946	21.3	1,333	5.4	1,136	26.3	11.2	16,303
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	37.4	40.4	6,678	8.4	24.8	24,716	20.9	55.4	19,140	2.0	34.4	44,725	25.9	2,294	7.0	1,966	22.2	12.4	20,035
RIC 10: Amputation, Lower Extremity	376	37.8	41.2	6,919	7.2	14.5	18,881	11.4	51.5	15,883	1.9	26.1	34,456	28.2	1,904	4.8	1,862	22.1	21.5	32,607
RIC 02: Brain Dysfunction, Traumatic	373	39.1	38.4	6,159	9.9	20.5	27,648	19.3	57.6	19,317	1.6	38.8	38,269	31.4	2,358	5.6	1,114	19.0	11.8	19,264
RIC 03: Brain Dysfunction, Non-Traumatic	356	36.5	49.5	7,436	8.4	15.3	22,037	19.9	54.9	18,428	0.6	34.0	36,349	21.9	1,900	4.5	1,277	24.7	9.8	15,487
RIC 17: MMT Without Brain/Spinal Cord Injury	324	57.4	37.6	5,693	10.8	16.5	18,380	21.0	49.3	15,894	1.9	31.5	30,464	17.9	909	7.7	2,217	20.1	10.0	16,982
RIC 12: Osteoarthritis	260	58.1	29.4	4,360	10.0	15.3	16,861	34.6	55.0	16,920	1.2	32.3	31,500	20.4	1,561	3.8	832	27.3	7.7	12,646
RIC 04: Spinal Cord Dysfunction, Traumatic	203	32.0	52.2	8,126	9.4	25.4	27,008	14.3	56.4	18,642	2.5	46.6	41,492	33.5	3,107	4.9	2,495	28.1	11.7	19,950
RIC 14: Cardiac	184	42.9	36.8	5,918	9.2	14.7	17,447	14.7	46.9	15,788	1.6	67.7	76,237	8.7	2,485	0.5	596	23.9	14.5	17,528
RIC 13: Rheumatoid And Other Arthritis	152	52.0	34.1	5,560	7.2	16.5	22,939	27.6	48.6	16,031	2.6	29.5	53,300	18.4	1,747	5.3	1,393	25.7	11.0	16,812
RIC 15: Pulmonary	107	37.4	42.8	6,651	9.3	20.3	25,548	10.3	39.6	12,064	0.0			18.7	977	1.9	773	24.3	20.3	25,761
RIC 18: MMT With Brain/Spinal	88	29.5	62.3	7,258	8.0	31.7	28,053	17.0	66.0	25,498	0.0			19.3	2,704	12.5	1,205	15.9	11.4	16,826
RIC 21: Burns	40	37.5	57.7	6,035	7.5	23.0	34,435	22.5	51.0	15,263	10.0	25.5	31,434	30.0	2,393	5.0	1,546	25.0	15.6	26,600
RIC 19: Guillain-Barre	25	32.0	102.4	15,724	12.0	42.0	37,330	20.0	77.2	28,704	0.0			32.0	4,025	12.0	1,095	28.0	19.9	24,951
RIC 11: Amputation, Non-Lower Extremity	8	75.0	23.5	5,564	12.5	13.0	29,506	12.5	97.0	35,001	0.0			25.0	508	0.0		25.0	15.0	29,395

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 14
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All RICs	11,956	42.6	30.7	5,007	2.0	15.9	16,581	17.4	44.3	14,755	0.3	32.4	28,617	20.4	1,544	5.0	1,240	0.0		
RIC 01: Stroke	1,917	35.6	39.4	6,409	2.2	20.3	22,074	19.4	50.0	17,361	0.3	23.8	23,328	28.5	1,928	3.5	1,568	0.0		
RIC 06: Neurological Conditions	1,875	43.8	32.2	5,482	2.3	13.6	13,417	16.9	46.2	14,848	0.1	25.5	27,777	23.9	1,530	4.2	1,263	0.0		
RIC 09: Other Orthopedic	1,648	55.6	27.7	4,503	1.4	11.5	12,093	24.8	42.6	14,650	0.3	23.0	20,332	16.4	1,224	6.3	1,048	0.0		
RIC 20: Miscellaneous	1,427	46.1	33.6	5,063	1.5	14.2	15,112	19.1	42.0	13,672	0.5	53.0	33,997	15.4	1,413	3.5	870	0.0		
RIC 07: Lower Extremity Fracture	994	52.9	25.0	4,326	1.3	12.8	12,851	18.7	39.8	13,000	0.2	11.0	11,765	14.3	1,111	4.9	1,326	0.0		
RIC 08: Lower Extremity Joint Replacement	710	28.5	19.0	3,474	1.4	13.6	12,824	4.4	21.7	7,515	0.3	37.0	31,063	21.1	1,145	13.2	990	0.0		
RIC 16: Pain Syndrome	445	48.3	25.8	4,110	1.6	15.0	13,844	18.9	37.2	12,206	0.2	29.0	27,435	17.1	996	4.5	1,158	0.0		
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	32.0	33.7	5,593	2.5	16.4	19,672	14.1	40.3	13,343	0.9	43.0	46,743	21.3	1,721	5.4	1,705	0.0		
RIC 10: Amputation, Lower Extremity	376	33.5	25.1	4,878	3.2	14.9	18,053	7.2	37.6	10,749	0.3	23.0	23,724	25.0	1,439	4.3	1,784	0.0		
RIC 02: Brain Dysfunction, Traumatic	373	34.6	27.0	4,743	2.4	14.6	15,850	14.5	49.5	16,138	0.0			27.6	2,126	4.8	1,160	0.0		
RIC 03: Brain Dysfunction, Non-Traumatic	356	31.5	33.2	5,247	2.0	14.4	13,891	15.4	47.4	15,926	0.3	30.0	24,334	18.0	1,829	3.7	1,205	0.0		
RIC 17: MMT Without Brain/Spinal Cord Injury	324	48.5	32.9	5,004	2.8	15.1	14,633	17.3	41.6	13,457	1.2	30.8	26,836	16.0	898	6.2	2,259	0.0		
RIC 12: Osteoarthritis	260	53.8	24.6	3,810	3.8	15.9	16,601	25.4	56.1	16,902	0.0			17.7	1,017	3.1	770	0.0		
RIC 04: Spinal Cord Dysfunction, Traumatic	203	29.1	41.3	6,524	3.9	32.0	35,023	10.3	40.9	14,391	1.0	48.5	42,235	28.6	2,767	3.9	1,104	0.0		
RIC 14: Cardiac	184	34.8	22.8	3,702	1.6	16.7	9,313	8.7	32.9	11,129	0.5	16.0	17,208	5.4	1,046	0.5	596	0.0		
RIC 13: Rheumatoid And Other Arthritis	152	47.4	31.1	5,105	2.0	9.7	11,278	19.7	45.4	14,584	0.0			15.8	1,071	3.9	1,847	0.0		
RIC 15: Pulmonary	107	30.8	33.8	4,889	0.9	26.0	32,278	5.6	39.2	11,165	0.0			13.1	405	1.9	773	0.0		
RIC 18: MMT With Brain/Spinal	88	25.0	44.6	5,869	3.4	22.0	14,220	14.8	59.0	23,722	0.0			15.9	2,307	12.5	1,189	0.0		
RIC 21: Burns	40	25.0	47.5	5,011	5.0	22.0	27,486	17.5	62.0	18,627	7.5	20.7	26,994	27.5	1,135	5.0	1,546	0.0		
RIC 19: Guillain-Barre	25	24.0	57.3	8,570	0.0			12.0	70.3	28,055	0.0			20.0	2,220	8.0	1,053	0.0		
RIC 11: Amputation, Non-Lower Extremity	8	50.0	23.0	5,611	0.0			0.0			0.0			12.5	1,016	0.0		0.0		

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 15
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By RIC, By Volume of Beneficiaries, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
		Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All RICs	11,956	40.0	21.9	3,710	4.4	15.6	17,490	20.3	43.5	14,683	0.7	27.5	27,173	15.7	770	3.1	396	13.7	7.8	11,314
RIC 01: Stroke	1,917	32.9	26.1	4,314	4.3	17.5	19,032	21.9	49.9	17,460	0.4	23.8	22,412	22.4	926	2.3	372	14.0	7.6	9,640
RIC 06: Neurological Conditions	1,875	41.2	21.7	3,846	4.9	15.2	16,722	19.8	44.1	14,474	0.5	31.3	38,789	18.8	752	2.6	427	13.9	7.8	11,584
RIC 09: Other Orthopedic	1,648	49.5	21.7	3,629	4.1	13.2	14,263	29.1	41.8	14,487	0.5	23.5	23,556	10.1	613	3.0	299	13.5	6.9	10,786
RIC 20: Miscellaneous	1,427	44.8	22.1	3,583	3.8	14.5	16,592	22.5	40.0	13,285	1.0	36.1	26,516	10.9	698	2.4	367	16.5	8.5	13,076
RIC 07: Lower Extremity Fracture	994	49.8	21.3	3,762	3.4	13.4	14,316	22.1	38.5	13,007	0.7	25.1	23,485	10.4	735	3.0	398	12.2	6.4	8,217
RIC 08: Lower Extremity Joint Replacement	710	28.3	16.2	3,012	2.5	12.9	13,667	4.5	29.3	10,100	0.3	17.5	21,079	18.5	716	10.3	424	4.5	6.4	7,599
RIC 16: Pain Syndrome	445	47.6	18.8	3,159	4.7	12.5	15,257	22.9	40.2	13,133	1.1	26.0	22,060	12.4	553	2.9	327	17.1	7.2	11,259
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	29.5	21.3	3,752	5.2	20.9	22,824	17.2	43.5	14,693	1.6	27.6	32,781	17.5	772	3.2	485	14.3	9.4	14,002
RIC 10: Amputation, Lower Extremity	376	33.0	17.2	3,433	4.0	15.5	18,463	8.0	37.8	11,441	0.5	18.5	19,962	23.4	650	2.9	512	13.8	10.1	15,548
RIC 02: Brain Dysfunction, Traumatic	373	30.8	20.3	3,775	6.7	18.1	23,729	16.6	46.9	15,569	0.8	17.3	21,455	22.3	986	3.5	481	11.0	8.3	13,861
RIC 03: Brain Dysfunction, Non-Traumatic	356	30.9	24.3	4,085	5.1	13.1	17,277	17.7	46.8	15,868	0.6	34.0	36,349	15.2	739	1.7	501	15.4	7.3	10,323
RIC 17: MMT Without Brain/Spinal Cord Injury	324	44.8	24.5	3,723	8.6	16.3	17,264	18.8	45.0	14,470	1.5	25.6	23,241	9.6	500	2.2	391	13.3	7.2	11,818
RIC 12: Osteoarthritis	260	51.2	19.1	3,095	3.5	15.2	17,482	28.1	49.7	15,256	0.4	25.0	30,366	12.3	588	2.3	408	13.5	7.3	11,010
RIC 04: Spinal Cord Dysfunction, Traumatic	203	24.1	22.1	3,719	3.4	25.1	25,500	10.8	40.9	14,114	0.5	40.0	56,028	25.1	1,001	3.0	452	14.3	6.2	11,245
RIC 14: Cardiac	184	36.4	19.3	3,163	7.1	12.8	14,628	12.5	36.3	12,612	1.6	30.3	26,295	6.5	890	0.5	330	17.9	8.2	8,747
RIC 13: Rheumatoid And Other Arthritis	152	42.1	20.8	3,477	1.3	13.0	21,981	23.7	39.8	12,521	0.0			9.9	613	3.9	476	15.8	9.2	15,200
RIC 15: Pulmonary	107	36.4	19.7	3,053	5.6	13.5	15,726	7.5	44.5	13,150	0.0			13.1	394	1.9	670	15.9	11.1	12,818
RIC 18: MMT With Brain/Spinal	88	25.0	27.3	4,247	8.0	31.7	28,053	14.8	65.1	26,095	0.0			11.4	713	6.8	269	12.5	11.5	15,084
RIC 21: Burns	40	27.5	38.7	3,918	7.5	19.0	26,997	15.0	55.7	15,428	7.5	20.7	26,994	17.5	811	2.5	154	17.5	12.0	18,730
RIC 19: Guillain-Barre	25	24.0	46.5	6,494	4.0	33.0	33,280	16.0	77.3	28,881	0.0			20.0	1,276	8.0	137	24.0	10.3	13,271
RIC 11: Amputation, Non-Lower Extremity	8	50.0	16.0	4,002	12.5	13.0	29,506	12.5	55.0	23,579	0.0			12.5	303	0.0		25.0	10.0	11,595

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm241).

Section 3-Table 16
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All MS-DRGs	659,549	17,236	60.7	25.6	4,230	9.7	14.3	17,518	48.2	39.3	13,646	2.6	31.5	38,932	20.3	1,410	9.6	1,209	28.3	11.3	17,561
002: Heart transplant or implant of heart assist system w/o MCC	5	80,975	80.0	20.0	3,022	20.0	21.0	29,455	0.0			0.0		20.0	375	40.0	126	20.0	115.0	362,705	
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	78,960	32.8	44.7	6,952	13.2	21.0	26,508	50.9	57.3	20,796	68.5	42.6	67,431	19.9	2,290	1.7	1,396	48.8	18.8	32,739
970: HIV w extensive O.R. procedure w/o MCC	4	74,616	75.0	273.3	21,853	0.0			25.0	3.0	1,517	0.0		0.0		25.0	35,806	50.0	33.0	97,792	
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	73,421	42.3	42.9	6,798	24.0	23.7	26,931	50.0	57.1	21,294	61.9	39.4	60,532	25.6	2,453	3.3	1,324	50.8	18.6	30,053
296: Cardiac arrest, unexplained w MCC	5	49,506	60.0	19.7	4,258	20.0	21.0	20,936	100.0	47.4	14,044	20.0	22.0	24,533	20.0	2,613	20.0	0	40.0	33.5	58,225
839: Chemo w acute leukemia as sdx w/o CC/MCC	10	46,106	90.0	24.3	2,807	0.0			10.0	21.0	10,495	0.0		10.0	832	0.0		90.0	20.1	47,163	
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	45,922	39.9	50.0	8,152	52.4	20.2	25,330	61.5	56.0	20,874	11.9	28.7	34,672	39.9	3,278	2.8	1,302	51.6	14.1	21,506
955: Craniotomy for multiple significant trauma	50	45,782	52.0	31.5	6,365	54.0	24.9	25,862	54.0	62.5	28,344	14.0	30.1	31,803	28.0	2,142	8.0	852	40.0	9.5	20,202
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	45,204	53.6	55.8	9,391	54.2	22.2	26,445	59.9	57.6	23,446	8.3	29.9	29,449	43.2	3,658	2.6	1,915	44.8	14.0	17,220
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	44,964	51.2	54.7	7,909	33.3	17.1	23,286	60.6	55.3	17,790	11.1	33.9	36,835	24.3	2,024	2.5	1,047	59.2	17.1	29,996
005: Liver transplant w MCC or intestinal transplant	32	44,794	87.5	23.7	4,131	18.8	11.5	16,153	18.8	36.7	15,502	3.1	35.0	38,017	12.5	621	3.1	902	59.4	22.4	57,179
692: Urinary stones w esw lithotripsy w/o CC/MCC	3	43,978	100.0	67.0	13,382	0.0			33.3	67.0	30,554	0.0		33.3	4,400	33.3	122	66.7	16.5	28,356	
028: Spinal procedures w MCC	158	43,800	56.3	44.4	7,081	45.6	24.1	30,155	55.1	51.5	19,079	12.7	40.6	47,509	31.6	3,087	8.9	990	43.7	11.9	19,433
901: Wound debridements for injuries w MCC	25	43,291	72.0	44.8	5,362	16.0	17.0	20,665	36.0	52.3	18,852	24.0	47.8	59,495	16.0	764	16.0	1,106	48.0	20.8	30,748
255: Upper limb & toe amputation for circ system disorders w MCC	208	42,197	69.2	46.1	5,988	12.5	18.7	24,447	46.2	46.7	15,293	12.5	34.1	34,760	18.8	1,424	1.9	569	58.7	22.3	39,748
870: Septicemia w MV 96+ hours	345	41,305	42.3	29.6	5,013	14.2	15.3	21,453	59.4	44.0	15,488	22.9	39.5	63,026	15.1	2,209	1.2	1,425	45.5	15.0	26,703
622: Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	69	40,194	59.4	56.3	7,207	1.4	15.0	15,484	59.4	56.0	15,416	20.3	39.9	40,717	15.9	2,937	5.8	1,566	53.6	21.5	33,021
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	38,262	50.0	31.4	5,188	53.8	18.6	23,645	53.8	56.9	22,335	8.5	28.6	39,409	28.5	3,136	0.8	0	31.5	12.0	21,187
957: Other O.R. procedures for multiple significant trauma w MCC	171	37,459	60.8	31.3	5,286	48.5	21.4	26,691	53.2	58.2	21,132	7.0	30.1	38,070	30.4	2,322	9.9	1,174	35.1	14.4	18,663
456: Spinal fus exc cerv w spinal curv/malg/infec or 9+ fus w MCC	132	37,245	71.2	27.2	4,891	43.9	15.7	19,782	50.8	49.2	17,820	7.6	38.3	39,576	18.9	1,848	11.4	1,831	46.2	18.1	26,981

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 17
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	9,075	57.1	20.1	3,429	8.9	13.0	15,922	44.5	30.3	10,743	1.8	27.3	35,069	17.0	1,137	8.9	1,125	0.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	52,002	25.0	29.4	4,985	12.1	19.3	24,324	45.0	38.6	14,275	67.2	37.4	61,288	11.1	1,590	1.1	1,251	0.0
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	46,950	31.4	31.3	5,066	22.0	20.6	23,906	42.6	37.5	14,568	60.8	34.8	55,364	14.5	1,683	2.3	949	0.0
297: Cardiac arrest, unexplained w CC	1	34,387	0.0			0.0			100.0	100.0	34,387	0.0		0.0		0.0			0.0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	28,264	40.6	41.4	7,137	53.1	20.0	23,991	52.1	44.8	18,338	7.3	30.6	30,083	31.8	2,619	2.1	2,068	0.0
955: Craniotomy for multiple significant trauma	50	26,838	44.0	27.6	5,777	54.0	18.7	20,300	46.0	45.4	18,939	14.0	30.1	31,803	18.0	652	6.0	883	0.0
028: Spinal procedures w MCC	158	26,280	48.1	33.8	5,352	43.0	21.7	27,618	47.5	40.7	15,675	9.5	34.7	40,173	19.6	2,746	3.8	691	0.0
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	24,491	40.8	25.1	4,329	52.3	16.3	20,520	50.8	45.3	17,583	7.7	24.8	34,918	19.2	1,975	0.0		0.0
957: Other O.R. procedures for multiple significant trauma w MCC	171	24,354	47.4	28.1	4,614	46.8	19.5	24,843	48.0	44.0	16,125	6.4	27.6	35,820	20.5	1,967	8.2	1,304	0.0
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	23,808	27.2	39.5	6,659	50.1	16.9	21,397	51.6	38.8	14,589	9.9	25.3	33,019	24.4	1,844	2.0	1,185	0.0
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	23,509	44.1	35.3	6,213	54.6	17.7	22,898	40.8	45.3	17,015	1.8	35.8	25,783	37.2	1,997	6.2	2,203	0.0
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	23,350	46.3	28.8	5,104	62.0	17.6	22,059	35.4	42.4	16,477	2.6	25.8	27,381	29.7	2,198	7.4	1,495	0.0
870: Septicemia w MV 96+ hours	345	21,948	37.1	22.3	3,844	12.8	14.0	19,366	56.5	29.3	10,911	21.7	31.7	53,886	10.7	1,434	0.9	1,873	0.0
453: Combined anterior/posterior spinal fusion w MCC	150	19,831	62.0	25.3	4,517	54.7	14.5	20,274	33.3	26.7	11,068	4.7	23.4	40,772	19.3	1,142	11.3	1,192	0.0
480: Hip & femur procedures except major joint w MCC	4,241	18,709	43.4	29.5	5,162	21.5	14.9	17,145	78.1	42.6	15,211	2.2	25.4	28,042	14.3	1,592	3.8	1,419	0.0
021: Intracranial vascular procedures w PDX hemorrhage w CC	59	18,562	47.5	19.9	3,220	54.2	17.1	22,075	23.7	43.4	15,188	3.4	31.0	30,248	23.7	1,709	3.4	768	0.0
956: Limb reattachment, hip & femur proc for multiple significant trauma	721	18,511	44.1	24.6	4,634	26.4	15.0	17,312	74.6	40.9	14,530	2.4	28.8	30,828	15.4	1,641	6.7	1,246	0.0
094: Bacterial & tuberculous infections of nervous system w MCC	125	18,472	44.8	18.4	3,439	26.4	16.5	21,830	53.6	30.5	11,469	12.8	25.6	37,208	11.2	1,526	4.0	2,173	0.0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	18,460	45.6	31.4	5,393	37.9	16.9	20,566	47.9	41.4	15,267	1.3	25.3	23,000	27.0	1,931	4.3	1,483	0.0
025: Craniotomy & endovascular intracranial procedures w MCC	926	18,431	42.5	23.1	4,236	47.4	15.2	19,821	40.8	34.9	13,058	4.8	24.6	31,128	23.0	1,631	4.2	1,115	0.0
471: Cervical spinal fusion w MCC	302	18,397	61.6	23.9	4,234	42.1	17.0	21,859	35.8	39.8	14,913	3.0	26.8	26,643	27.2	1,342	8.9	1,179	0.0

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 18
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All MS-DRGs	659,549	10,651	52.2	15.8	2,786	9.0	13.5	16,504	45.3	32.3	11,476	2.0	27.4	35,203	11.5	628	6.3	358	14.8	7.4	11,594
002: Heart transplant or implant of heart assist system w/o MCC	5	70,363	60.0	11.7	2,723	20.0	1.0	2,113	0.0			0.0		20.0	375	0.0			20.0	88.0	341,157
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	53,576	13.4	19.0	3,130	9.4	19.6	25,102	28.0	41.5	15,187	67.5	38.2	62,438	2.6	386	0.4	241	18.4	12.1	23,853
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	49,829	17.2	20.7	3,366	18.0	21.7	26,501	27.2	41.8	16,409	61.1	35.6	56,750	4.0	475	0.8	193	22.4	12.4	23,574
297: Cardiac arrest, unexplained w CC	1	34,387	0.0			0.0			100.0	100.0	34,387	0.0			0.0		0.0		0.0		
955: Craniotomy for multiple significant trauma	50	30,685	24.0	20.6	3,878	52.0	23.3	23,051	42.0	44.0	18,254	14.0	30.1	31,803	4.0	166	2.0	169	26.0	10.1	21,686
005: Liver transplant w MCC or intestinal transplant	32	29,741	81.3	14.0	2,644	15.6	12.6	17,371	18.8	25.7	9,707	3.1	35.0	38,017	3.1	217	3.1	502	40.6	20.6	53,779
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	28,376	28.5	17.4	3,025	51.5	17.5	22,944	50.0	46.4	18,867	8.5	25.5	34,390	12.3	592	0.0		19.2	10.6	17,024
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	27,898	21.5	25.6	4,156	49.0	18.2	23,350	51.6	42.9	16,091	10.2	25.0	32,400	10.8	625	1.1	286	27.8	9.1	14,006
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	27,881	28.1	28.3	4,642	53.1	19.9	23,977	50.5	43.0	18,199	6.8	31.3	30,043	10.9	873	0.5	968	19.8	9.5	12,677
028: Spinal procedures w MCC	158	27,723	27.8	16.8	3,006	42.4	22.9	28,948	43.0	40.6	15,760	10.1	37.6	43,327	8.2	541	2.5	241	24.1	8.6	14,095
870: Septicemia w MV 96+ hours	345	26,093	30.4	17.4	3,113	13.3	13.7	19,608	52.5	34.4	12,726	22.0	31.0	52,908	7.2	907	0.3	491	22.9	9.8	18,048
901: Wound debridements for injuries w MCC	25	25,382	56.0	30.7	3,694	16.0	17.0	20,665	32.0	33.5	11,949	16.0	32.8	53,172	4.0	0	8.0	106	24.0	16.2	31,949
957: Other O.R. procedures for multiple significant trauma w MCC	171	25,123	31.0	23.0	3,742	46.8	20.1	25,587	43.9	48.9	17,829	7.0	25.3	33,403	7.6	274	2.3	79	17.5	7.7	10,295
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	23,990	34.1	21.5	3,958	62.9	17.7	22,139	37.1	43.1	16,561	3.1	27.0	28,320	12.7	671	3.1	294	15.7	6.7	10,267
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	14	23,646	28.6	17.3	4,099	28.6	17.0	19,732	50.0	55.4	21,966	0.0			21.4	910	0.0		21.4	11.0	26,411
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	23,537	34.3	23.6	4,312	54.3	17.9	23,039	40.8	46.0	17,316	2.2	35.2	31,617	20.5	616	2.9	286	13.8	7.8	11,894
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	23,260	33.3	23.9	3,504	30.4	15.3	21,129	54.1	42.8	14,373	7.2	28.3	31,215	9.1	663	0.1	73	31.5	11.0	17,769
453: Combined anterior/posterior spinal fusion w MCC	150	23,114	56.7	21.1	3,865	54.7	14.9	20,755	34.7	29.8	12,046	4.7	25.7	42,422	6.0	422	4.0	212	18.7	12.7	18,153
025: Craniotomy & endovascular intracranial procedures w MCC	926	22,725	36.0	17.6	3,388	47.4	15.8	20,706	41.6	37.5	14,268	4.9	26.2	32,157	13.3	657	1.8	224	22.7	9.0	18,099
094: Bacterial & tuberculous infections of nervous system w MCC	125	22,414	34.4	15.4	2,964	26.4	17.6	22,983	51.2	33.0	12,267	13.6	26.4	37,131	7.2	480	1.6	312	20.8	9.5	19,022

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 19
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes

Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmission

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	659,549	8,165	51.3	15.7	2,768	8.8	12.9	15,825	44.2	29.4	10,518	1.8	27.0	34,861	11.4	620	6.2	358	0.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	47,054	12.6	18.9	3,087	9.2	18.4	23,480	27.2	37.0	13,566	67.0	36.9	60,880	2.4	404	0.4	241	0.0
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	42,070	16.0	20.5	3,339	17.7	20.2	24,626	26.5	36.0	14,260	60.7	34.5	55,028	3.7	471	0.8	185	0.0
297: Cardiac arrest, unexplained w CC	1	34,387	0.0			0.0			100.0	100.0	34,387	0.0		0.0		0.0			0.0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	23,486	27.6	27.4	4,593	52.6	19.0	23,021	49.0	38.7	16,286	6.8	31.3	30,043	10.9	873	0.5	968	0.0
028: Spinal procedures w MCC	158	22,472	27.8	15.8	2,928	42.4	21.8	27,777	41.1	37.9	14,625	9.5	34.7	40,173	8.2	541	1.9	135	0.0
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	22,241	26.9	17.1	3,014	51.5	15.9	20,282	49.2	42.5	16,702	7.7	24.8	34,918	10.0	673	0.0		0.0
957: Other O.R. procedures for multiple significant trauma w MCC	171	21,156	28.7	23.7	3,821	46.8	19.1	24,442	42.7	41.6	15,101	6.4	25.5	33,529	7.6	274	1.8	97	0.0
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	20,981	19.5	26.6	4,279	48.2	16.5	21,208	48.4	35.8	13,597	9.9	25.3	33,019	10.2	653	1.1	286	0.0
955: Craniotomy for multiple significant trauma	50	20,911	24.0	20.6	3,878	52.0	18.5	18,870	38.0	37.5	15,014	14.0	30.1	31,803	4.0	166	2.0	169	0.0
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	20,839	32.3	21.2	3,895	61.6	17.4	21,628	34.1	40.7	16,020	2.6	25.8	27,381	11.8	686	3.1	294	0.0
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	20,484	33.2	23.5	4,295	54.3	17.4	22,531	38.5	43.0	16,162	1.8	35.8	25,783	19.8	602	2.9	286	0.0
870: Septicemia w MV 96+ hours	345	20,481	29.0	17.4	3,108	12.2	13.8	19,796	52.2	28.8	10,865	21.7	30.8	52,609	7.2	881	0.3	491	0.0
453: Combined anterior/posterior spinal fusion w MCC	150	18,709	54.7	21.4	3,900	54.7	14.5	20,274	32.7	26.3	10,889	4.7	23.4	40,772	6.0	422	4.0	212	0.0
025: Craniotomy & endovascular intracranial procedures w MCC	926	16,921	34.2	17.7	3,409	46.9	15.0	19,730	39.3	32.9	12,562	4.8	24.6	31,128	13.1	659	1.6	240	0.0
480: Hip & femur procedures except major joint w MCC	4,241	16,811	23.4	22.7	4,091	21.4	14.8	17,093	77.6	41.4	14,907	2.1	25.5	28,018	4.4	767	0.6	280	0.0
471: Cervical spinal fusion w MCC	302	16,580	46.7	19.9	3,500	41.7	16.9	21,706	34.8	37.5	14,423	3.0	26.8	26,643	16.2	428	5.0	237	0.0
956: Limb reattachment, hip & femur proc for multiple significant trauma	721	16,573	23.2	20.3	3,797	26.2	15.0	17,346	73.9	39.5	14,111	2.2	28.0	29,647	5.0	1,041	1.5	335	0.0
064: Intracranial hemorrhage or cerebral infarction w MCC	5,615	16,417	29.3	20.6	3,689	32.1	16.9	21,052	55.2	36.1	13,505	3.4	24.9	30,927	10.2	682	1.2	341	0.0
094: Bacterial & tuberculous infections of nervous system w MCC	125	16,413	32.8	15.0	2,949	25.6	16.3	21,562	50.4	27.9	10,166	12.8	25.6	37,208	7.2	480	1.6	312	0.0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	16,314	34.8	21.5	3,880	37.7	16.7	20,384	46.7	39.6	14,707	1.3	25.1	22,730	14.8	744	2.3	369	0.0

NOTES:

1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 20
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All MS-DRGs	659,549	7,564	52.2	6.8	1,339	9.0	12.9	15,919	45.3	19.8	7,495	2.0	20.8	27,406	11.5	363	6.3	331	14.8	6.0	9,652
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	36,952	13.4	5.5	1,008	9.4	13.3	18,404	28.0	16.4	6,393	67.5	24.9	44,306	2.6	223	0.4	241	18.4	8.7	18,406
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	35,086	17.2	5.9	1,080	18.0	15.3	19,588	27.2	16.2	6,719	61.1	24.7	41,868	4.0	215	0.8	193	22.4	8.7	17,530
002: Heart transplant or implant of heart assist system w/o MCC	5	24,278	60.0	8.5	2,158	20.0	1.0	2,113	0.0			0.0		20.0	375	0.0			20.0	29.0	112,427
955: Craniotomy for multiple significant trauma	50	21,975	24.0	6.0	1,119	52.0	19.6	20,106	42.0	18.5	8,942	14.0	23.6	24,333	4.0	166	2.0	169	26.0	6.1	15,686
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	20,377	21.5	5.7	1,061	49.0	16.4	21,321	51.6	17.5	7,003	10.2	22.9	29,342	10.8	253	1.1	261	27.8	6.9	11,043
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	19,957	28.5	4.9	1,049	51.5	16.0	21,146	50.0	18.8	7,877	8.5	19.3	25,582	12.3	273	0.0		19.2	8.3	13,642
028: Spinal procedures w MCC	158	19,728	27.8	6.4	1,247	42.4	19.4	24,935	43.0	19.4	7,753	10.1	21.9	24,976	8.2	190	2.5	181	24.1	7.3	12,143
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	19,645	28.1	5.8	1,239	53.1	18.0	21,907	50.5	17.4	7,732	6.8	24.5	25,064	10.9	352	0.5	968	19.8	7.1	10,163
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	18,580	34.1	5.0	1,008	62.9	17.0	21,479	37.1	17.2	6,890	3.1	20.1	21,600	12.7	261	3.1	267	15.7	6.1	9,358
870: Septicemia w MV 96+ hours	345	18,574	30.4	6.2	1,223	13.3	13.1	18,994	52.5	20.1	8,030	22.0	22.3	37,005	7.2	543	0.3	310	22.9	7.6	14,256
957: Other O.R. procedures for multiple significant trauma w MCC	171	18,374	31.0	6.5	1,092	46.8	17.6	22,569	43.9	21.9	8,442	7.0	23.0	30,346	7.6	155	2.3	76	17.5	6.8	9,296
453: Combined anterior/posterior spinal fusion w MCC	150	17,540	56.7	6.4	1,262	54.7	14.0	19,458	34.7	16.6	7,293	4.7	22.0	36,373	6.0	263	4.0	186	18.7	7.2	10,387
094: Bacterial & tuberculous infections of nervous system w MCC	125	17,367	34.4	5.9	1,254	26.4	16.0	20,999	51.2	16.3	6,410	13.6	23.8	34,478	7.2	216	1.6	312	20.8	8.0	16,346
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	17,271	34.3	6.6	1,404	54.3	17.2	22,325	40.8	16.1	6,585	2.2	21.5	21,728	20.5	300	2.9	286	13.8	6.1	10,286
025: Craniotomy & endovascular intracranial procedures w MCC	926	17,182	36.0	5.6	1,199	47.4	15.0	19,804	41.6	18.2	7,403	4.9	20.6	25,020	13.3	358	1.8	185	22.7	6.6	13,306
082: Traumatic stupor & coma, coma >1 hr w MCC	129	16,982	31.0	6.9	1,432	38.0	16.1	19,310	48.8	18.8	7,455	7.0	22.2	24,226	12.4	304	0.8	221	22.5	6.8	17,052
901: Wound debridements for injuries w MCC	25	16,580	56.0	9.1	1,085	16.0	17.0	20,665	32.0	16.1	5,526	16.0	24.8	36,785	4.0	0	8.0	106	24.0	10.0	20,850
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	16,264	33.3	6.4	1,005	30.4	14.5	19,864	54.1	20.5	7,307	7.2	20.8	22,936	9.1	495	0.1	73	31.5	7.7	13,493
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graft	14	16,186	28.6	4.4	1,064	28.6	17.0	19,732	50.0	22.7	9,018	0.0		21.4	356	0.0		21.4	11.0	26,411	
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	132	16,019	47.7	5.2	998	41.7	14.3	18,253	46.2	17.5	6,989	4.5	21.3	23,622	5.3	706	2.3	217	25.0	9.3	14,365

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 21
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG	Mean PAC Payment		Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations		
	Number of PAC Users ¹	Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	
All MS-DRGs	659,549	5,745	51.3	6.6	1,304	8.8	12.5	15,378	44.2	18.9	7,169	1.8	21.3	28,144	11.4	359	6.2	330	0.0	
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	1,665	32,328	12.6	5.3	968	9.2	12.8	17,780	27.2	15.1	5,890	67.0	24.1	43,212	2.4	224	0.4	241	0.0	
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R.	2,283	29,547	16.0	5.7	1,048	17.7	14.4	18,415	26.5	14.5	6,023	60.7	23.7	40,418	3.7	218	0.8	185	0.0	
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	16,599	27.6	5.6	1,188	52.6	17.3	20,993	49.0	16.2	7,202	6.8	24.1	24,489	10.9	352	0.5	968	0.0	
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	16,314	32.3	5.0	1,011	61.6	16.7	20,980	34.1	17.3	6,999	2.6	23.0	24,701	11.8	262	3.1	267	0.0	
028: Spinal procedures w MCC	158	16,136	27.8	5.5	1,138	42.4	18.8	24,288	41.1	18.5	7,428	9.5	22.5	25,756	8.2	190	1.9	135	0.0	
957: Other O.R. procedures for multiple significant trauma w MCC	171	15,835	28.7	6.6	1,081	46.8	16.7	21,539	42.7	20.9	8,066	6.4	23.5	30,954	7.6	155	1.8	97	0.0	
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	15,650	26.9	5.2	1,103	51.5	14.6	18,677	49.2	17.5	7,232	7.7	20.8	27,742	10.0	322	0.0	0.0		
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	15,611	19.5	5.7	1,060	48.2	15.0	19,481	48.4	16.0	6,383	9.9	22.5	29,250	10.2	264	1.1	261	0.0	
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	15,208	33.2	6.5	1,401	54.3	16.7	21,717	38.5	15.5	6,356	1.8	24.8	23,798	19.8	304	2.9	286	0.0	
955: Craniotomy for multiple significant trauma	50	15,086	24.0	6.0	1,119	52.0	17.0	17,460	38.0	17.1	7,621	14.0	21.1	20,229	4.0	166	2.0	169	0.0	
453: Combined anterior/posterior spinal fusion w MCC	150	14,947	54.7	6.5	1,270	54.7	13.5	18,864	32.7	15.3	6,879	4.7	21.4	35,794	6.0	263	4.0	186	0.0	
870: Septicemia w MV 96+ hours	345	14,431	29.0	5.9	1,152	12.2	13.1	19,021	52.2	18.4	7,369	21.7	21.7	36,329	7.2	524	0.3	310	0.0	
021: Intracranial vascular procedures w PDX hemorrhage w CC	59	14,177	42.4	5.5	1,121	54.2	15.8	20,847	18.6	20.6	7,645	3.4	24.5	26,465	20.3	331	1.7	294	0.0	
025: Craniotomy & endovascular intracranial procedures w MCC	926	13,161	34.2	5.5	1,181	46.9	14.1	18,737	39.3	17.3	7,042	4.8	20.1	24,359	13.1	357	1.6	195	0.0	
094: Bacterial & tuberculous infections of nervous system w MCC	125	13,009	32.8	5.3	1,177	25.6	14.7	19,569	50.4	14.9	5,777	12.8	25.2	36,577	7.2	216	1.6	312	0.0	
471: Cervical spinal fusion w MCC	302	12,478	46.7	5.7	1,083	41.7	16.2	20,716	34.8	18.6	7,389	3.0	22.9	23,817	16.2	245	5.0	204	0.0	
031: Ventricular shunt procedures w MCC	58	12,472	43.1	5.1	1,218	32.8	12.2	21,994	46.6	19.7	7,427	1.7	30.0	72,222	12.1	255	3.4	263	0.0	
082: Traumatic stupor & coma, coma >1 hr w MCC	129	12,054	30.2	6.1	1,303	38.0	14.5	17,541	45.7	17.9	7,145	6.2	25.0	27,255	12.4	304	0.8	154	0.0	
963: Other multiple significant trauma w MCC	158	12,011	34.2	5.0	1,066	32.3	14.3	18,602	53.8	18.2	7,538	5.1	22.4	30,831	5.7	313	1.9	412	0.0	
958: Other O.R. procedures for multiple significant trauma w CC	184	11,976	39.7	6.0	1,135	36.4	16.2	20,969	44.0	19.5	7,404	2.2	25.0	27,451	9.8	199	3.8	389	0.0	

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm288).

Section 3-Table 22
 Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
 HHA Initiated Episodes
 Episode Definition A: 30 Day Variable Episode

Condition Grouping	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
																				Mean Payment Per Service User (\$)	Mean Payment Per Service User (\$)
All Condition Groupings	236,307	11,736	35.4	64.0	8,465	1.5	16.2	19,238	9.3	47.8	16,517	0.8	33.0	38,520	7.4	1,378	3.4	1,234	23.1	10.7	15,850
Cardiovascular: Vascular Medical	5,522	16,470	46.5	72.3	8,932	2.3	16.7	20,744	13.8	51.6	17,838	1.7	35.7	41,416	7.7	1,333	2.6	1,080	31.6	13.4	19,352
Endocrine: Medical	19,050	16,093	48.5	124.2	12,789	1.7	15.7	20,091	8.6	50.9	17,457	1.1	33.3	41,160	6.3	1,570	3.5	1,149	24.8	11.7	18,290
Neurologic: Stroke	325	14,346	37.5	59.3	9,312	2.8	18.0	18,636	10.8	46.9	17,329	1.2	22.8	26,007	15.1	1,278	0.9	386	25.5	12.2	18,061
Kidney & Urinary: Medical	6,909	14,038	40.4	59.7	8,140	1.4	16.1	19,794	11.7	48.1	16,756	1.1	33.0	38,569	7.5	1,373	2.2	741	31.9	12.0	18,366
Hematologic: Medical	3,113	14,009	53.5	48.1	7,081	1.4	16.7	18,817	13.0	42.4	14,458	0.8	26.6	28,880	7.6	1,155	2.2	869	35.3	10.7	16,401
Cardiovascular: Cardiac Medical	9,429	13,681	42.3	49.7	7,386	1.8	15.3	18,305	12.4	45.4	15,615	1.2	31.8	40,949	6.4	1,438	2.0	1,142	31.6	11.4	16,778
Integumentary: Medical	20,783	13,374	37.5	54.7	7,309	1.4	16.5	19,526	11.9	49.7	17,088	1.8	38.9	41,176	7.5	1,393	2.4	1,066	28.0	12.3	17,783
Neurologic: Medical	33,344	12,920	37.0	70.5	9,617	2.0	17.2	20,302	10.2	50.7	17,457	0.8	31.6	38,186	8.7	1,477	2.9	1,423	23.3	9.9	14,372
Respiratory: COPD	6,075	12,889	39.9	53.9	7,670	1.6	15.1	18,294	10.4	42.9	14,306	1.2	28.1	39,757	5.9	1,304	2.0	899	30.7	11.9	16,608
GI & Hepatobiliary: Major Medical	1,470	12,121	31.4	42.7	6,065	0.7	22.3	26,633	9.3	32.4	11,023	0.7	22.5	27,689	5.0	634	1.0	595	39.3	11.2	17,163
Orthopedic: Minor Medical	40,669	10,777	33.4	51.3	7,829	1.6	15.8	18,277	8.7	46.8	16,449	0.6	31.0	36,979	8.4	1,344	5.4	1,381	19.9	9.6	14,402
Cardiovascular: General	21,438	10,488	44.1	50.0	7,631	1.4	15.9	18,815	7.5	47.0	16,147	0.6	27.0	32,466	5.0	1,318	3.7	1,427	20.5	9.8	14,766
Infections: Medical	1,980	10,345	34.3	45.6	6,137	1.2	16.2	21,335	8.4	49.8	16,290	1.0	29.2	29,362	7.2	1,199	3.2	776	22.1	11.8	17,366
Respiratory: Medical	4,527	9,789	27.2	42.5	6,325	1.1	13.2	17,394	8.9	36.7	12,813	0.8	41.3	46,587	6.0	1,098	2.6	958	28.3	9.9	14,502
GI & Hepatobiliary: Minor Medical	3,149	9,606	26.2	47.8	6,783	1.3	14.5	17,609	7.8	41.8	14,504	0.7	31.3	39,881	8.1	787	2.5	1,747	23.8	11.5	16,762
Other: Medical	57,849	9,205	24.8	57.6	7,534	1.2	16.1	18,980	7.8	47.7	16,462	0.5	32.2	36,479	7.4	1,380	3.4	1,081	18.3	10.1	14,798
Orthopedic: Major Medical	549	9,105	25.3	40.9	5,573	2.0	13.5	15,036	11.1	36.2	12,707	0.4	23.0	26,044	7.3	1,610	2.0	1,161	26.8	7.5	10,753
Infections: Septicemia	100	6,328	16.0	50.3	7,780	1.0	17.0	18,639	2.0	16.5	6,127	0.0		5.0	858	2.0	809	15.0	9.9	19,291	

NOTES:
 1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 23
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All Condition Groupings	236,307	4,966	28.2	53.9	7,096	0.2	14.2	15,781	0.4	40.0	12,886	0.1	33.3	31,122	5.1	1,141	3.0	1,181	0.0
Endocrine: Medical	19,050	7,610	40.9	108.7	11,007	0.1	14.5	17,334	0.4	37.0	12,030	0.1	32.2	47,148	4.0	1,238	3.0	1,166	0.0
Neurologic: Medical	33,344	6,029	29.9	59.5	8,076	0.3	14.9	17,182	0.6	46.1	14,292	0.1	25.5	23,198	6.2	1,213	2.5	1,345	0.0
Neurologic: Stroke	325	5,766	27.1	45.3	7,519	1.2	16.8	17,316	0.3	25.0	11,368	0.0		11.7	1,185	0.9	386	0.0	
Cardiovascular: Vascular Medical	5,522	5,288	36.5	59.2	7,240	0.2	11.9	12,049	0.5	26.5	8,522	0.2	33.4	35,393	4.3	1,017	2.1	1,040	0.0
Orthopedic: Minor Medical	40,669	5,155	26.6	43.1	6,667	0.2	13.8	14,106	0.3	43.5	14,249	0.0	30.3	29,100	6.1	1,102	4.8	1,340	0.0
Cardiovascular: General	21,438	4,877	37.8	40.6	6,381	0.1	15.3	16,553	0.3	39.9	13,752	0.0	28.2	35,510	3.3	1,054	3.3	1,264	0.0
Hematologic: Medical	3,113	4,506	45.0	37.5	5,430	0.1	13.0	6,338	0.4	35.1	11,435	0.0	23.0	21,227	5.0	1,150	1.7	943	0.0
Cardiovascular: Cardiac Medical	9,429	4,388	31.8	38.6	5,862	0.1	14.9	11,214	0.5	30.5	10,015	0.1	26.0	25,125	3.9	1,241	1.6	1,290	0.0
Integumentary: Medical	20,783	4,337	28.8	42.3	5,707	0.1	15.5	19,343	0.3	45.4	14,522	0.1	37.1	40,190	4.8	1,103	1.9	963	0.0
Respiratory: COPD	6,075	4,267	30.0	39.6	5,860	0.0	9.3	14,842	0.3	27.8	9,823	0.0	27.0	16,318	3.3	1,074	1.6	941	0.0
Other: Medical	57,849	4,191	18.8	50.5	6,522	0.2	13.4	14,828	0.4	40.0	12,688	0.0	27.7	21,311	5.5	1,185	3.1	1,028	0.0
Kidney & Urinary: Medical	6,909	4,183	31.8	45.3	6,156	0.1	14.2	19,229	0.3	36.8	12,529	0.0	28.0	16,994	4.7	1,243	1.5	631	0.0
Orthopedic: Major Medical	549	3,942	17.1	38.9	5,471	0.2	15.0	14,055	0.2	45.0	13,335	0.0		5.6	1,218	1.8	1,081	0.0	
Infections: Medical	1,980	3,709	26.3	33.7	4,547	0.1	13.0	16,668	0.3	18.2	6,307	0.2	27.7	32,074	4.6	867	2.6	744	0.0
Respiratory: Medical	4,527	3,307	20.0	32.4	4,914	0.1	14.8	17,868	0.4	25.7	8,817	0.1	96.3	29,991	4.7	916	2.2	841	0.0
GI & Hepatobiliary: Minor Medical	3,149	3,239	18.7	40.1	5,444	0.1	9.0	10,066	0.3	34.5	13,234	0.1	18.0	21,186	6.4	665	1.9	1,668	0.0
GI & Hepatobiliary: Major Medical	1,470	2,963	20.6	25.5	4,407	0.0			0.6	22.3	5,383	0.0		3.6	610	0.7	594	0.0	
Infections: Septicemia	100	2,692	11.0	47.7	7,515	0.0			0.0			0.0		4.0	1,072	1.0	0	0.0	

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 24
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All Condition Groupings	236,307	6,446	33.0	18.5	2,711	0.8	14.9	17,772	5.6	36.3	12,863	0.3	29.0	33,213	4.6	657	2.6	458	16.7	7.3	10,563
GI & Hepatobiliary: Major Medical	1,470	7,765	29.6	13.9	2,163	0.5	16.0	20,806	6.5	25.0	8,259	0.3	21.8	22,439	3.4	507	0.6	381	33.5	9.0	13,106
Cardiovascular: Vascular Medical	5,522	7,607	43.2	19.8	2,573	1.3	14.3	16,984	7.2	39.4	13,538	0.7	30.6	35,024	3.7	537	1.6	430	22.1	8.5	11,695
Neurologic: Stroke	325	7,572	35.4	20.9	3,375	2.2	19.1	17,697	5.8	26.4	10,313	0.0			9.8	708	0.9	45	19.7	7.1	10,076
Integumentary: Medical	20,783	7,289	34.6	18.8	2,573	0.7	15.3	18,643	7.3	38.0	13,438	0.8	33.5	37,480	4.2	626	1.7	352	21.0	8.4	11,644
Neurologic: Medical	33,344	7,114	34.5	20.2	3,076	1.1	15.7	18,674	6.1	39.1	13,792	0.2	25.2	29,236	5.5	675	2.1	453	16.1	6.7	9,444
Endocrine: Medical	19,050	7,005	46.6	27.3	3,166	0.7	14.5	18,140	4.3	35.6	12,449	0.3	30.2	37,118	3.2	662	2.3	543	15.9	7.7	11,314
Cardiovascular: Cardiac Medical	9,429	6,949	39.7	15.1	2,315	0.8	14.3	17,858	7.1	33.5	11,869	0.3	27.7	32,032	3.5	666	1.4	454	23.0	7.5	10,917
Orthopedic: Major Medical	549	6,703	22.4	18.3	2,696	1.5	12.5	13,224	8.2	31.7	11,707	0.2	17.0	10,779	5.5	788	1.6	435	22.6	6.3	8,901
Respiratory: COPD	6,075	6,701	37.4	15.8	2,387	0.7	14.0	17,721	6.1	32.0	11,086	0.5	21.5	32,480	3.2	652	1.4	324	21.9	8.1	10,938
Orthopedic: Minor Medical	40,669	6,520	30.8	17.1	2,863	1.0	14.5	16,808	5.6	36.3	13,181	0.2	25.4	27,885	5.7	679	4.4	523	14.6	6.7	9,981
Kidney & Urinary: Medical	6,909	6,363	38.1	14.9	2,112	0.6	15.3	18,859	6.1	34.8	12,069	0.3	32.6	34,777	3.8	525	1.4	256	21.3	7.9	11,713
Hematologic: Medical	3,113	6,329	51.7	11.1	1,669	0.5	14.6	15,519	5.6	33.7	11,536	0.2	22.7	25,815	3.4	603	1.3	314	21.3	8.1	12,847
Infections: Medical	1,980	6,226	31.9	17.2	2,368	0.7	14.6	20,268	4.9	39.5	12,941	0.5	28.1	29,537	4.4	445	2.7	337	16.8	8.4	12,732
Respiratory: Medical	4,527	6,029	25.3	14.7	2,297	0.6	10.6	14,182	6.0	28.0	9,957	0.5	42.0	37,033	4.3	551	2.1	449	23.1	7.3	10,336
Other: Medical	57,849	5,798	22.5	18.8	2,815	0.7	15.0	17,939	5.2	36.7	12,971	0.2	28.3	32,946	5.1	687	2.8	397	14.3	7.2	10,188
GI & Hepatobiliary: Minor Medical	3,149	5,629	24.1	16.0	2,422	0.8	13.0	16,552	5.3	30.5	11,047	0.2	30.3	32,293	6.0	414	1.9	566	19.5	8.0	10,988
Cardiovascular: General	21,438	5,273	42.4	14.2	2,307	0.6	14.9	17,593	3.9	35.3	12,584	0.2	21.8	26,877	2.8	661	2.7	517	13.3	6.7	9,819
Infections: Septicemia	100	4,921	15.0	17.6	2,595	0.0			1.0	19.0	6,953	0.0			5.0	279	2.0	59	14.0	9.9	18,755

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 25
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All MS-DRGs	4,967	46,633	24.1	59.1	7,958	3.5	18.8	21,804	32.9	56.2	16,599	13.3	40.6	38,469	13.5	2,602	1.3	1,362	29.5	14.7	22,291
516: Other musculoskelet sys & conn tiss O.R. proc w CC	1	180,423	100.0	57.0	9,743	0.0			100.0	79.0	27,306	100.0	61.0	52,683	0.0		0.0		100.0	56.0	47,264
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	178,104	0.0			0.0			100.0	31.0	9,449	100.0	119.0	158,180	0.0		0.0		100.0	7.0	567
876: O.R. procedure w principal diagnoses of mental illness	3	162,077	33.3	32.0	5,171	0.0			66.7	97.0	25,001	66.7	74.0	128,252	33.3	17,184	0.0		66.7	20.5	29,561
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	145,900	33.3	29.0	5,009	0.0			66.7	55.5	18,417	66.7	38.5	49,399	33.3	3,072	0.0		66.7	5.5	14,077
163: Major chest procedures w MCC	2	138,876	50.0	5.0	2,343	0.0			50.0	100.0	36,807	0.0			50.0	0	0.0	100.0	16.0	14,772	
256: Upper limb & toe amputation for circ system disorders w CC	1	129,097	100.0	417.0	23,631	0.0			100.0	22.0	4,641	100.0	41.0	41,961	100.0	4,286	0.0		100.0	49.0	38,543
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	125,279	42.9	181.0	22,629	14.3	19.0	20,916	57.1	55.8	13,842	57.1	42.8	48,662	14.3	460	0.0		85.7	18.5	27,744
459: Spinal fusion except cervical w MCC	1	119,225	100.0	16.0	2,488	0.0			100.0	40.0	14,054	100.0	16.0	23,062	0.0		0.0		100.0	24.0	31,658
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	119,091	20.0	47.3	9,188	13.3	20.0	24,383	26.7	47.5	13,096	13.3	21.5	23,453	13.3	4,405	6.7	901	20.0	25.3	27,636
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	118,211	0.0			0.0			0.0			100.0	22.0	18,788	100.0	7,361	0.0		100.0	12.0	25,895
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	118,182	0.0			100.0	29.0	25,667	0.0			100.0	16.0	23,117	0.0		0.0		100.0	14.0	15,041
167: Other resp system O.R. procedures w CC	2	117,226	100.0	15.5	1,633	0.0			50.0	99.0	16,872	0.0			50.0	1,929	0.0		50.0	78.0	132,493
870: Septicemia w MV 96+ hours	5	116,535	20.0	90.0	10,418	20.0	23.0	34,510	20.0	3.0	1,035	20.0	84.0	86,159	0.0		0.0		60.0	18.7	54,944
289: Acute & subacute endocarditis w CC	3	116,201	66.7	30.5	5,795	33.3	17.0	22,578	0.0			33.3	14.0	21,016	66.7	711	33.3	0	66.7	45.5	99,315
381: Complicated peptic ulcer w CC	2	107,446	100.0	24.5	4,863	50.0	14.0	15,182	0.0			50.0	66.0	11,546	50.0	501	0.0		100.0	34.5	56,642
166: Other resp system O.R. procedures w MCC	33	104,559	24.2	36.3	4,845	6.1	23.5	23,474	36.4	49.9	19,151	18.2	56.3	45,081	15.2	2,161	0.0		42.4	19.7	27,862
918: Poisoning & toxic effects of drugs w/o MCC	1	104,123	0.0			0.0			100.0	86.0	33,915	0.0			0.0		0.0		100.0	24.0	62,394
902: Wound debridements for injuries w CC	3	103,545	66.7	82.0	11,411	33.3	34.0	30,035	66.7	98.0	34,104	33.3	55.0	14,048	66.7	243	0.0		66.7	17.0	19,763
500: Soft tissue procedures w MCC	5	103,094	40.0	20.0	4,202	0.0			80.0	67.5	17,547	60.0	29.7	26,106	80.0	3,184	0.0		60.0	25.3	15,111
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	101,290	100.0	108.0	8,995	0.0			0.0			100.0	35.0	37,859	0.0		0.0		100.0	10.0	17,612

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 26
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	4,967	33,467	20.1	44.7	6,014	2.3	17.8	20,906	28.1	43.3	12,778	4.9	37.7	31,799	8.9	2,120	1.0	1,480	0.0
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	177,537	0.0			0.0			100.0	31.0	9,449	100.0	119.0	158,180	0.0		0.0		0.0
163: Major chest procedures w MCC	2	121,283	0.0			0.0			50.0	89.0	33,508	0.0		50.0	0	0.0			0.0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	109,507	13.3	27.0	6,457	13.3	20.0	24,383	26.7	29.8	7,540	6.7	24.0	32,418	6.7	226	0.0		0.0
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	97,075	0.0			0.0			66.7	38.0	12,697	0.0		0.0		0.0			0.0
503: Foot procedures w MCC	1	86,944	0.0			100.0	3.0	2,751	100.0	70.0	9,853	100.0	24.0	29,970	0.0		0.0		0.0
054: Nervous system neoplasms w MCC	1	84,695	0.0			0.0			100.0	75.0	21,477	0.0		0.0		0.0			0.0
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	83,678	100.0	108.0	8,995	0.0			0.0			100.0	35.0	37,859	0.0		0.0		0.0
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	82,210	10.3	17.7	2,327	6.9	13.5	9,491	37.9	42.2	14,242	10.3	60.0	63,183	13.8	802	0.0		0.0
500: Soft tissue procedures w MCC	5	81,894	20.0	10.0	2,429	0.0			60.0	46.7	13,988	40.0	30.5	26,665	40.0	5,630	0.0		0.0
166: Other resp system O.R. procedures w MCC	33	80,882	15.2	11.4	1,821	6.1	15.5	17,164	33.3	27.6	10,569	6.1	34.5	22,128	3.0	1,591	0.0		0.0
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	80,024	0.0			100.0	29.0	25,667	0.0		0.0	0.0		0.0		0.0			0.0
604: Trauma to the skin, subcut tiss & breast w MCC	1	76,964	0.0			0.0			100.0	100.0	37,130	0.0		100.0	7,893	0.0			0.0
958: Other O.R. procedures for multiple significant trauma w CC	1	74,463	100.0	2.0	344	0.0			100.0	30.0	18,522	0.0		0.0		0.0			0.0
356: Other digestive system O.R. procedures w MCC	3	73,474	33.3	24.0	4,396	0.0			33.3	79.0	29,066	33.3	34.0	63,285	0.0		33.3	2,850	0.0
987: Non-extensive O.R. proc unrelated to principal diagnosis w MCC	18	73,259	16.7	26.3	4,226	5.6	13.0	21,272	61.1	57.6	15,045	16.7	27.0	34,127	27.8	4,183	0.0		0.0
907: Other O.R. procedures for injuries w MCC	3	71,989	100.0	18.0	3,157	0.0			0.0			33.3	77.0	83,034	33.3	40	0.0		0.0
576: Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	2	69,924	100.0	101.5	6,865	0.0			0.0		0.0	0.0		0.0		0.0			0.0
357: Other digestive system O.R. procedures w CC	1	67,411	100.0	71.0	3,939	0.0			100.0	100.0	17,426	0.0		100.0	4,594	0.0			0.0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	67,030	12.9	29.6	4,994	8.7	15.4	18,631	23.7	38.2	13,183	5.4	43.5	39,397	6.6	1,422	0.3	0	0.0
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167	0.0			0.0			0.0		0.0	0.0		0.0		0.0			0.0

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 27
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
			Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All MS-DRGs	4,967	36,399	18.8	22.7	3,188	2.6	17.8	21,303	29.3	43.0	12,861	6.7	35.2	30,881	6.0	1,140	0.7	415	18.6	9.8	15,696
163: Major chest procedures w MCC	2	131,143	0.0			0.0			50.0	89.0	33,508	0.0			0.0		0.0		50.0	24.0	19,720
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	112,056	0.0			0.0			0.0			100.0	22.0	18,788	100.0	1,206	0.0		100.0	12.0	25,895
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	109,423	13.3	24.5	5,172	13.3	20.0	24,383	26.7	25.0	6,701	0.0			6.7	336	0.0		13.3	18.0	18,484
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	100,958	33.3	12.0	2,565	0.0			66.7	38.0	12,697	0.0			0.0		0.0		33.3	1.0	9,084
381: Complicated peptic ulcer w CC	2	98,232	50.0	13.0	3,213	50.0	14.0	15,182	0.0			0.0			50.0	132	0.0		100.0	34.5	56,642
289: Acute & subacute endocarditis w CC	3	96,959	66.7	13.0	3,024	33.3	17.0	22,578	0.0			33.3	14.0	21,016	0.0		33.3	0	66.7	36.0	73,933
166: Other resp system O.R. procedures w MCC	33	90,189	15.2	13.8	2,135	6.1	23.5	23,474	30.3	32.8	13,402	6.1	34.5	22,128	0.0		0.0		42.4	12.4	19,768
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	90,131	6.9	23.5	4,983	6.9	13.5	9,491	41.4	42.4	14,455	13.8	39.8	41,585	6.9	350	0.0		34.5	16.6	23,564
459: Spinal fusion except cervical w MCC	1	89,635	100.0	16.0	2,488	0.0			0.0			100.0	16.0	23,062	0.0		0.0		100.0	11.0	16,122
241: Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1	89,368	0.0			0.0			100.0	69.0	28,255	0.0			0.0		0.0		100.0	10.0	13,526
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	85,241	0.0			100.0	29.0	25,667	0.0			0.0			0.0		0.0		100.0	13.0	5,217
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	84,904	42.9	31.0	3,613	14.3	19.0	20,916	42.9	28.0	5,493	42.9	28.7	37,275	14.3	460	0.0		71.4	7.8	12,518
054: Nervous system neoplasms w MCC	1	84,695	0.0			0.0			100.0	75.0	21,477	0.0			0.0		0.0		0.0		
870: Septicemia w MV 96+ hours	5	78,187	0.0			20.0	23.0	34,510	20.0	3.0	1,035	0.0			0.0		0.0		60.0	5.3	23,222
503: Foot procedures w MCC	1	77,091	0.0			100.0	3.0	2,751	0.0			100.0	24.0	29,970	0.0		0.0		0.0		
207: Respiratory system diagnosis w ventilator support 96+ hours	333	76,425	10.5	22.3	3,077	9.6	18.0	22,295	23.1	40.3	14,013	9.0	47.4	49,801	3.9	646	0.0		24.3	13.4	27,940
444: Disorders of the biliary tract w MCC	1	75,762	100.0	3.0	275	0.0			0.0			100.0	32.0	36,467	0.0		0.0		100.0	4.0	13,203
958: Other O.R. procedures for multiple significant trauma w CC	1	74,119	0.0			0.0			100.0	30.0	18,522	0.0			0.0		0.0		0.0		
167: Other resp system O.R. procedures w CC	2	72,941	50.0	28.0	2,936	0.0			50.0	4.0	857	0.0			0.0		0.0		50.0	27.0	62,196
356: Other digestive system O.R. procedures w MCC	3	72,524	33.3	24.0	4,396	0.0			33.3	79.0	29,066	33.3	34.0	63,285	0.0		0.0		0.0		

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 28
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations				
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All RICs	11,956	27,563	48.1	38.2	6,082	7.8	17.8	20,537	24.1	52.9	17,725	1.5	33.1	34,871	24.3	1,888	5.7	1,370	22.9	11.5	16,910
RIC 21: Burns	40	93,020	37.5	57.7	6,035	7.5	23.0	34,435	22.5	51.0	15,263	10.0	25.5	31,434	30.0	2,393	5.0	1,546	25.0	15.6	26,600
RIC 19: Guillain-Barre	25	48,204	32.0	102.4	15,724	12.0	42.0	37,330	20.0	77.2	28,704	0.0		32.0	4,025	12.0	1,095	28.0	19.9	24,951	
RIC 04: Spinal Cord Dysfunction, Traumatic	203	36,704	32.0	52.2	8,126	9.4	25.4	27,008	14.3	56.4	18,642	2.5	46.6	41,492	33.5	3,107	4.9	2,495	28.1	11.7	19,950
RIC 11: Amputation, Non-Lower Extremity	8	36,171	75.0	23.5	5,564	12.5	13.0	29,506	12.5	97.0	35,001	0.0		25.0	508	0.0		25.0	15.0	29,395	
RIC 01: Stroke	1,917	33,121	41.5	50.6	8,005	8.3	21.0	24,543	25.5	60.9	20,915	1.3	33.2	32,890	34.3	2,412	4.2	1,736	24.9	11.7	16,347
RIC 18: MMT With Brain/Spinal	88	32,224	29.5	62.3	7,258	8.0	31.7	28,053	17.0	66.0	25,498	0.0		19.3	2,704	12.5	1,205	15.9	11.4	16,826	
RIC 02: Brain Dysfunction, Traumatic	373	30,816	39.1	38.4	6,159	9.9	20.5	27,648	19.3	57.6	19,317	1.6	38.8	38,269	31.4	2,358	5.6	1,114	19.0	11.8	19,264
RIC 20: Miscellaneous	1,427	28,740	53.0	39.9	6,035	7.6	17.5	20,479	28.2	52.0	17,175	2.2	37.3	33,876	19.5	1,646	4.1	1,018	26.9	12.9	18,526
RIC 10: Amputation, Lower Extremity	376	28,522	37.8	41.2	6,919	7.2	14.5	18,881	11.4	51.5	15,883	1.9	26.1	34,456	28.2	1,904	4.8	1,862	22.1	21.5	32,607
RIC 06: Neurological Conditions	1,875	28,157	48.3	38.8	6,513	9.1	16.9	18,960	25.6	54.7	18,049	1.5	29.7	32,787	28.5	1,734	4.6	1,313	23.8	11.6	16,810
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	27,863	37.4	40.4	6,678	8.4	24.8	24,716	20.9	55.4	19,140	2.0	34.4	44,725	25.9	2,294	7.0	1,966	22.2	12.4	20,035
RIC 13: Rheumatoid And Other Arthritis	152	27,526	52.0	34.1	5,560	7.2	16.5	22,939	27.6	48.6	16,031	2.6	29.5	53,300	18.4	1,747	5.3	1,393	25.7	11.0	16,812
RIC 17: MMT Without Brain/Spinal Cord Injury	324	27,506	57.4	37.6	5,693	10.8	16.5	18,380	21.0	49.3	15,894	1.9	31.5	30,464	17.9	909	7.7	2,217	20.1	10.0	16,982
RIC 12: Osteoarthritis	260	26,702	58.1	29.4	4,360	10.0	15.3	16,861	34.6	55.0	16,920	1.2	32.3	31,500	20.4	1,561	3.8	832	27.3	7.7	12,646
RIC 03: Brain Dysfunction, Non-Traumatic	356	26,620	36.5	49.5	7,436	8.4	15.3	22,037	19.9	54.9	18,428	0.6	34.0	36,349	21.9	1,900	4.5	1,277	24.7	9.8	15,487
RIC 09: Other Orthopedic	1,648	26,450	61.9	33.6	5,258	7.2	15.7	17,471	32.8	48.3	16,517	1.1	22.1	23,354	19.6	1,523	6.9	1,189	23.3	9.1	14,427
RIC 15: Pulmonary	107	25,633	37.4	42.8	6,651	9.3	20.3	25,548	10.3	39.6	12,064	0.0		18.7	977	1.9	773	24.3	20.3	25,761	
RIC 16: Pain Syndrome	445	25,240	54.4	31.4	4,931	7.6	15.9	17,484	27.4	52.1	17,002	1.6	39.0	32,946	21.3	1,333	5.4	1,136	26.3	11.2	16,303
RIC 07: Lower Extremity Fracture	994	23,837	58.6	30.0	5,092	5.4	13.9	15,519	23.8	47.6	15,798	1.6	31.1	39,061	16.5	1,620	5.9	1,625	20.3	9.4	12,155
RIC 14: Cardiac	184	21,927	42.9	36.8	5,918	9.2	14.7	17,447	14.7	46.9	15,788	1.6	67.7	76,237	8.7	2,485	0.5	596	23.9	14.5	17,528

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 29
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations			
			Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)
All RICs	11,956	19,349	42.6	30.7	5,007	2.0	15.9	16,581	17.4	44.3	14,755	0.3	32.4	28,617	20.4	1,544	5.0	1,240	0.0		
RIC 21: Burns	40	82,452	25.0	47.5	5,011	5.0	22.0	27,486	17.5	62.0	18,627	7.5	20.7	26,994	27.5	1,135	5.0	1,546	0.0		
RIC 19: Guillain-Barre	25	30,498	24.0	57.3	8,570	0.0			12.0	70.3	28,055	0.0		20.0	2,220	8.0	1,053	0.0			
RIC 04: Spinal Cord Dysfunction, Traumatic	203	27,139	29.1	41.3	6,524	3.9	32.0	35,023	10.3	40.9	14,391	1.0	48.5	42,235	28.6	2,767	3.9	1,104	0.0		
RIC 18: MMT With Brain/Spinal	88	26,125	25.0	44.6	5,869	3.4	22.0	14,220	14.8	59.0	23,722	0.0		15.9	2,307	12.5	1,189	0.0			
RIC 01: Stroke	1,917	23,843	35.6	39.4	6,409	2.2	20.3	22,074	19.4	50.0	17,361	0.3	23.8	23,328	28.5	1,928	3.5	1,568	0.0		
RIC 02: Brain Dysfunction, Traumatic	373	21,851	34.6	27.0	4,743	2.4	14.6	15,850	14.5	49.5	16,138	0.0		27.6	2,126	4.8	1,160	0.0			
RIC 17: MMT Without Brain/Spinal Cord Injury	324	20,383	48.5	32.9	5,004	2.8	15.1	14,633	17.3	41.6	13,457	1.2	30.8	26,836	16.0	898	6.2	2,259	0.0		
RIC 12: Osteoarthritis	260	19,644	53.8	24.6	3,810	3.8	15.9	16,601	25.4	56.1	16,902	0.0		17.7	1,017	3.1	770	0.0			
RIC 11: Amputation, Non-Lower Extremity	8	19,391	50.0	23.0	5,611	0.0			0.0			0.0		12.5	1,016	0.0		0.0			
RIC 06: Neurological Conditions	1,875	19,286	43.8	32.2	5,482	2.3	13.6	13,417	16.9	46.2	14,848	0.1	25.5	27,777	23.9	1,530	4.2	1,263	0.0		
RIC 09: Other Orthopedic	1,648	19,155	55.6	27.7	4,503	1.4	11.5	12,093	24.8	42.6	14,650	0.3	23.0	20,332	16.4	1,224	6.3	1,048	0.0		
RIC 03: Brain Dysfunction, Non-Traumatic	356	18,692	31.5	33.2	5,247	2.0	14.4	13,891	15.4	47.4	15,926	0.3	30.0	24,334	18.0	1,829	3.7	1,205	0.0		
RIC 20: Miscellaneous	1,427	18,645	46.1	33.6	5,063	1.5	14.2	15,112	19.1	42.0	13,672	0.5	53.0	33,997	15.4	1,413	3.5	870	0.0		
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	18,240	32.0	33.7	5,593	2.5	16.4	19,672	14.1	40.3	13,343	0.9	43.0	46,743	21.3	1,721	5.4	1,705	0.0		
RIC 13: Rheumatoid And Other Arthritis	152	18,197	47.4	31.1	5,105	2.0	9.7	11,278	19.7	45.4	14,584	0.0		15.8	1,071	3.9	1,847	0.0			
RIC 07: Lower Extremity Fracture	994	17,921	52.9	25.0	4,326	1.3	12.8	12,851	18.7	39.8	13,000	0.2	11.0	11,765	14.3	1,111	4.9	1,326	0.0		
RIC 10: Amputation, Lower Extremity	376	17,753	33.5	25.1	4,878	3.2	14.9	18,053	7.2	37.6	10,749	0.3	23.0	23,724	25.0	1,439	4.3	1,784	0.0		
RIC 16: Pain Syndrome	445	16,202	48.3	25.8	4,110	1.6	15.0	13,844	18.9	37.2	12,206	0.2	29.0	27,435	17.1	996	4.5	1,158	0.0		
RIC 15: Pulmonary	107	15,565	30.8	33.8	4,889	0.9	26.0	32,278	5.6	39.2	11,165	0.0		13.1	405	1.9	773	0.0			
RIC 14: Cardiac	184	12,364	34.8	22.8	3,702	1.6	16.7	9,313	8.7	32.9	11,129	0.5	16.0	17,208	5.4	1,046	0.5	596	0.0		

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

Section 3-Table 30
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Home Health		IRF			SNF			LTCH			Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations					
	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Percent with Claim	Mean Visits	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)	Percent with Claim	Mean Payment Per Service User (\$)	Percent with Claim	Mean Length of Stay (days)	Mean Payment Per Service User (\$)		
All RICs	11,956	20,932	40.0	21.9	3,710	4.4	15.6	17,490	20.3	43.5	14,683	0.7	27.5	27,173	15.7	770	3.1	396	13.7	7.8	11,314
RIC 21: Burns	40	85,016	27.5	38.7	3,918	7.5	19.0	26,997	15.0	55.7	15,428	7.5	20.7	26,994	17.5	811	2.5	154	17.5	12.0	18,730
RIC 19: Guillain-Barre	25	35,508	24.0	46.5	6,494	4.0	33.0	33,280	16.0	77.3	28,881	0.0		20.0	1,276	8.0	137	24.0	10.3	13,271	
RIC 18: MMT With Brain/Spinal	88	29,285	25.0	27.3	4,247	8.0	31.7	28,053	14.8	65.1	26,095	0.0		11.4	713	6.8	269	12.5	11.5	15,084	
RIC 11: Amputation, Non-Lower Extremity	8	28,032	50.0	16.0	4,002	12.5	13.0	29,506	12.5	55.0	23,579	0.0		12.5	303	0.0		25.0	10.0	11,595	
RIC 04: Spinal Cord Dysfunction, Traumatic	203	26,578	24.1	22.1	3,719	3.4	25.1	25,500	10.8	40.9	14,114	0.5	40.0	56,028	25.1	1,001	3.0	452	14.3	6.2	11,245
RIC 01: Stroke	1,917	24,747	32.9	26.1	4,314	4.3	17.5	19,032	21.9	49.9	17,460	0.4	23.8	22,412	22.4	926	2.3	372	14.0	7.6	9,640
RIC 02: Brain Dysfunction, Traumatic	373	24,124	30.8	20.3	3,775	6.7	18.1	23,729	16.6	46.9	15,569	0.8	17.3	21,455	22.3	986	3.5	481	11.0	8.3	13,861
RIC 17: MMT Without Brain/Spinal Cord Injury	324	22,477	44.8	24.5	3,723	8.6	16.3	17,264	18.8	45.0	14,470	1.5	25.6	23,241	9.6	500	2.2	391	13.3	7.2	11,818
RIC 06: Neurological Conditions	1,875	20,839	41.2	21.7	3,846	4.9	15.2	16,722	19.8	44.1	14,474	0.5	31.3	38,789	18.8	752	2.6	427	13.9	7.8	11,584
RIC 20: Miscellaneous	1,427	20,778	44.8	22.1	3,583	3.8	14.5	16,592	22.5	40.0	13,285	1.0	36.1	26,516	10.9	698	2.4	367	16.5	8.5	13,076
RIC 09: Other Orthopedic	1,648	20,772	49.5	21.7	3,629	4.1	13.2	14,263	29.1	41.8	14,487	0.5	23.5	23,556	10.1	613	3.0	299	13.5	6.9	10,786
RIC 03: Brain Dysfunction, Non-Traumatic	356	20,730	30.9	24.3	4,085	5.1	13.1	17,277	17.7	46.8	15,868	0.6	34.0	36,349	15.2	739	1.7	501	15.4	7.3	10,323
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	20,701	29.5	21.3	3,752	5.2	20.9	22,824	17.2	43.5	14,693	1.6	27.6	32,781	17.5	772	3.2	485	14.3	9.4	14,002
RIC 12: Osteoarthritis	260	20,612	51.2	19.1	3,095	3.5	15.2	17,482	28.1	49.7	15,256	0.4	25.0	30,366	12.3	588	2.3	408	13.5	7.3	11,010
RIC 13: Rheumatoid And Other Arthritis	152	19,634	42.1	20.8	3,477	1.3	13.0	21,981	23.7	39.8	12,521	0.0		9.9	613	3.9	476	15.8	9.2	15,200	
RIC 10: Amputation, Lower Extremity	376	19,476	33.0	17.2	3,433	4.0	15.5	18,463	8.0	37.8	11,441	0.5	18.5	19,962	23.4	650	2.9	512	13.8	10.1	15,548
RIC 07: Lower Extremity Fracture	994	19,279	49.8	21.3	3,762	3.4	13.4	14,316	22.1	38.5	13,007	0.7	25.1	23,485	10.4	735	3.0	398	12.2	6.4	8,217
RIC 16: Pain Syndrome	445	18,895	47.6	18.8	3,159	4.7	12.5	15,257	22.9	40.2	13,133	1.1	26.0	22,060	12.4	553	2.9	327	17.1	7.2	11,259
RIC 15: Pulmonary	107	18,140	36.4	19.7	3,053	5.6	13.5	15,726	7.5	44.5	13,150	0.0		13.1	394	1.9	670	15.9	11.1	12,818	
RIC 14: Cardiac	184	15,622	36.4	19.3	3,163	7.1	12.8	14,628	12.5	36.3	12,612	1.6	30.3	26,295	6.5	890	0.5	330	17.9	8.2	8,747

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm290).

SECTION 4

2008 CROSS SECTIONAL ANALYSIS: MEDICARE POST-ACUTE CARE EPISODE PAYMENTS BY SERVICE TYPE, PER USER, PER PAC USER AND PER HOSPITAL DISCHARGE

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results across all conditions and then by condition for the top conditions by volume, by type of initiating event; by MS-DRG for acute and LTCH, by condition grouping for HHA, and by rehabilitation impairment category (RIC) for IRF. Tables 16-30 provide similar information but for the top conditions by mean PAC episode payment; Tables 16-21 for acute initiated episodes; Tables 22-24 for HHA-initiated episodes; Tables 25-27 for LTCH initiated episodes and Tables 28-30 for IRF-initiated episodes.

For acute initiated episodes, we report the mean payments per service user, the mean payments per PAC user, and the mean payments per hospital discharge to provide information on how these calculations vary depending upon the denominator chosen. Payments are reported by service type for HHA, IRF, SNF, outpatient therapy, independent therapists, and acute hospitalizations. For the community entrant episodes, payments per service user and per PAC user are reported.

Key findings from the data presented here include the following.

- Similar to the data presented in Section 1, the data in this section provide more context for understanding differences in payments per user, payments per PAC user and payments per discharge. LTCH provides the clearest example of the implications of these differences. For beneficiaries with acute initiated episodes, the mean LTCH payments per LTCH user are \$38,932 in the 30 day variable length episode definition. Payments per PAC user for LTCH are \$1,011 and payments per hospital discharge are \$444. Much of these differences are driven by the fact that only 2.9 percent of beneficiaries use LTCH in their episode. The differences in payments highlight the implications of the level at which payments are set and the importance of considering provider supply given that LTCHs are available in some parts of the country, but not in others.
- Smaller differences in per user and per PAC user payments are observed in MS-DRGs or condition groupings with high proportions of beneficiaries using a particular PAC service. For example, 68.6 percent of beneficiaries in MS-DRG 470 (Major joint replacement or

reattachment of lower extremity w/o MCC) use HHA in the 30 day variable length episode definition. Mean payments per HHA user are \$3,538 and mean payments per PAC user are \$2,426.

- Payments per service user for HHA, IRF, and SNF are generally higher for community entrant episodes compared to acute initiated episodes in the 30 day variable length episode.
- While the per PAC user payments reflect differences in the proportion of beneficiaries using different PAC services in their episode overall and by condition, the per hospital discharge payments also reflect the proportion of beneficiaries in the MS-DRG that go on to use any PAC services. For MS-DRGs with a low proportion of beneficiaries discharged to PAC, there are larger differences in the per PAC user and per hospital discharge calculations than there are in MS-DRGs with a higher proportion of beneficiaries discharged to PAC. For example, the in MS-DRG 470 (Major joint replacement or reattachment of lower extremity w/o MCC) where 94 percent of beneficiaries are discharged to PAC, the per PAC user HHA payments were \$2,426 and the per hospital discharge payments were \$2,297 compared to \$2,087 and \$842 for MS-DRG 194 (Simple pneumonia & pleurisy w CC) where 36 percent of beneficiaries are discharged to PAC.

Section 4-Table 1
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
		Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge
All MS-DRGs	659,549	4,230	2,566	1,079	17,518	1,707	706	13,646	6,575	2,703	38,932	1,011	444	1,410	286	117	1,209	116	46	17,561	4,976	3,288
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	3,538	2,426	2,297	13,021	1,652	1,562	9,347	3,685	3,487	32,298	101	99	1,044	348	330	1,227	353	334	12,798	1,502	1,484
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	6,513	3,292	2,520	22,339	8,663	6,580	18,839	9,877	7,533	30,594	652	511	2,350	772	589	1,652	84	64	14,932	4,696	4,024
481: Hip & femur procedures except major joint w CC	13,704	5,426	3,116	2,982	16,763	3,903	3,728	17,842	13,611	13,016	33,249	393	386	1,764	353	340	1,610	106	102	14,567	3,983	3,880
194: Simple pneumonia & pleurisy w CC	13,064	4,053	2,087	842	17,278	395	178	12,633	7,059	2,748	33,551	550	259	1,466	224	86	1,108	39	15	15,285	4,539	2,945
690: Kidney & urinary tract infections w/o MCC	12,954	4,878	2,172	1,042	18,666	487	247	14,717	9,368	4,365	32,842	390	198	1,686	328	154	1,328	42	20	13,942	4,156	2,701
641: Nutritional & misc metabolic disorders w/o MCC	9,755	4,445	2,299	890	16,476	490	209	13,844	7,953	2,942	33,974	439	209	1,315	234	85	911	40	15	14,813	4,378	2,658
299: Peripheral vascular disorders w MCC	9,752	4,701	1,984	1,063	19,161	721	391	14,038	8,908	4,538	39,702	2,386	1,277	1,797	316	159	1,273	32	16	19,501	7,077	4,945
292: Heart failure & shock w CC	8,602	4,422	2,927	1,303	16,744	485	261	13,222	6,424	2,845	35,233	549	295	1,586	199	85	1,271	34	14	17,682	7,385	5,347
291: Heart failure & shock w MCC	8,561	4,537	2,826	1,393	18,136	691	365	13,311	7,175	3,443	32,477	998	565	1,582	192	93	962	16	8	19,707	8,717	6,503
552: Medical back problems w/o MCC	8,113	4,593	2,743	1,682	16,872	1,682	1,077	14,162	8,243	4,997	35,405	310	212	1,244	264	164	985	86	56	15,823	4,336	3,662
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	5,103	2,773	1,662	19,417	5,456	3,245	15,413	5,528	3,283	38,767	394	239	1,509	521	314	1,245	85	51	13,483	3,040	2,354
312: Syncope & collapse	7,926	4,309	2,693	815	17,676	725	240	14,155	6,156	1,848	31,269	205	70	1,343	242	73	1,153	98	30	14,342	3,445	1,844
603: Cellulitis w/o MCC	7,590	4,350	2,760	1,120	18,287	400	193	14,255	6,076	2,453	28,133	904	397	1,340	228	94	1,038	52	20	16,196	4,479	2,540
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	5,011	3,125	2,901	16,124	4,404	4,075	16,570	11,075	10,279	32,300	242	227	1,628	321	300	1,490	132	122	13,856	2,992	2,889
683: Renal failure w CC	6,765	4,676	2,455	1,141	19,038	687	333	14,368	8,686	3,846	35,376	664	368	1,723	271	121	921	26	11	17,862	6,672	4,604
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	4,455	2,457	487	16,754	411	113	13,440	5,452	1,063	30,945	232	98	1,254	271	50	1,009	105	18	16,329	4,689	2,121
460: Spinal fusion except cervical w/o MCC	6,649	3,295	2,376	1,238	15,363	3,385	1,740	9,013	2,833	1,457	33,056	189	130	1,089	231	122	1,205	207	109	16,248	2,407	1,699
193: Simple pneumonia & pleurisy w MCC	6,507	4,263	2,238	1,113	17,658	703	355	12,696	7,418	3,554	33,393	1,114	620	1,467	211	103	812	18	8	17,814	6,313	4,696
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	3,877	1,963	614	16,068	318	119	12,167	6,492	1,954	36,546	331	119	1,309	224	69	981	46	14	13,286	3,308	1,867
190: Chronic obstructive pulmonary disease w MCC	6,320	4,105	2,681	1,022	16,723	545	229	12,522	5,815	2,161	30,583	1,166	484	1,407	163	59	862	23	9	17,979	6,816	4,157

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 2
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations			
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	
All MS-DRGs	659,549	3,429	1,958	759	15,922	1,410	545	10,743	4,781	1,849	35,069	634	245	1,137	193	75	1,125	100	39			0	0
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	3,309	2,195	2,068	12,291	1,516	1,429	8,189	3,162	2,980	22,169	20	19	980	309	291	1,176	325	306			0	0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	5,393	2,461	1,846	20,566	7,799	5,851	15,267	7,311	5,485	23,000	304	228	1,931	522	391	1,483	64	48			0	0
481: Hip & femur procedures except major joint w CC	13,704	4,759	2,444	2,331	15,736	3,565	3,401	15,087	11,275	10,754	24,880	120	114	1,467	230	219	1,466	85	81			0	0
194: Simple pneumonia & pleurisy w CC	13,064	3,236	1,601	584	15,298	266	97	9,972	5,193	1,885	23,862	228	83	1,146	139	51	978	31	11			0	0
690: Kidney & urinary tract infections w/o MCC	12,954	3,808	1,620	715	16,981	316	139	11,796	7,004	3,073	28,098	130	57	1,338	213	93	1,113	33	14			0	0
641: Nutritional & misc metabolic disorders w/o MCC	9,755	3,576	1,765	603	15,206	301	102	11,107	5,863	1,996	25,610	134	46	1,076	156	53	755	30	10			0	0
299: Peripheral vascular disorders w MCC	9,752	3,511	1,380	677	16,926	496	243	10,667	6,399	3,131	32,578	1,497	732	1,356	183	90	1,115	25	12			0	0
292: Heart failure & shock w CC	8,602	3,199	2,024	789	14,089	249	97	9,622	3,941	1,534	22,750	175	68	1,160	100	39	1,306	29	11			0	0
291: Heart failure & shock w MCC	8,561	3,321	1,938	859	15,906	424	188	9,654	4,572	2,017	25,254	442	195	1,085	91	40	666	9	4			0	0
552: Medical back problems w/o MCC	8,113	3,751	2,051	1,184	14,880	1,256	725	11,214	6,083	3,508	25,456	66	38	931	159	92	864	66	38			0	0
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	4,275	2,175	1,252	17,732	4,786	2,752	12,632	4,044	2,325	23,322	132	76	1,292	404	232	1,152	71	41			0	0
312: Syncope & collapse	7,926	3,537	2,124	578	15,372	469	127	11,114	4,352	1,180	24,571	59	16	1,090	163	44	1,022	82	22			0	0
603: Cellulitis w/o MCC	7,590	3,410	2,080	774	16,082	218	81	10,766	4,077	1,508	23,496	523	193	940	127	47	860	40	15			0	0
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	4,431	2,542	2,347	15,388	4,128	3,812	14,098	9,174	8,472	22,694	63	58	1,277	206	191	1,438	115	107			0	0
683: Renal failure w CC	6,765	3,423	1,689	702	15,663	428	177	10,738	5,975	2,465	27,212	265	110	1,295	143	59	810	21	9			0	0
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	3,375	1,770	282	14,498	208	33	10,337	3,626	573	22,949	45	7	973	180	29	870	86	14			0	0
460: Spinal fusion except cervical w/o MCC	6,649	2,949	2,015	1,015	14,145	3,006	1,512	7,400	2,196	1,104	19,584	18	9	1,005	192	97	1,144	179	91			0	0
193: Simple pneumonia & pleurisy w MCC	6,507	3,306	1,641	738	15,848	533	240	9,741	5,307	2,374	26,745	588	263	1,155	126	56	626	11	5			0	0
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	3,127	1,540	430	14,906	219	61	10,041	4,977	1,386	25,297	126	35	984	141	39	838	37	10			0	0
190: Chronic obstructive pulmonary disease w MCC	6,320	3,077	1,922	637	14,819	338	112	9,053	3,664	1,213	24,441	561	186	1,000	86	29	781	18	6			0	0

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 3
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)
All MS-DRGs	659,549	2,786	1,455	590	16,504	1,489	601	11,476	5,204	2,085	35,203	691	283	628	72	29	358	22	9	11,594	1,718	1,655
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	3,132	1,987	1,879	12,596	1,570	1,483	8,562	3,334	3,151	23,017	32	31	588	134	126	418	81	77	9,496	564	587
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	3,898	1,396	1,061	21,248	8,065	6,104	15,838	7,647	5,797	24,988	370	284	748	113	86	375	9	7	10,347	1,486	1,473
481: Hip & femur procedures except major joint w CC	13,704	3,944	1,236	1,182	16,124	3,664	3,500	15,914	11,975	11,449	28,359	180	182	726	34	33	317	4	4	10,298	1,310	1,314
194: Simple pneumonia & pleurisy w CC	13,064	2,581	1,204	464	15,795	294	127	10,688	5,699	2,157	26,343	290	120	710	63	23	324	8	3	10,537	1,606	1,491
690: Kidney & urinary tract infections w/o MCC	12,954	2,802	1,053	485	17,070	333	167	12,477	7,563	3,447	26,015	139	72	838	91	40	360	9	4	9,196	1,266	1,202
641: Nutritional & misc metabolic disorders w/o MCC	9,755	2,716	1,207	443	15,445	342	137	11,740	6,362	2,279	26,708	181	74	727	75	26	280	9	3	9,793	1,449	1,343
299: Peripheral vascular disorders w MCC	9,752	2,705	971	502	17,761	559	290	11,619	7,031	3,520	32,910	1,620	833	788	72	36	337	5	2	12,643	2,455	2,182
292: Heart failure & shock w CC	8,602	2,545	1,535	644	14,999	302	150	10,674	4,586	1,925	22,971	214	111	807	52	21	393	7	3	10,765	2,338	2,522
291: Heart failure & shock w MCC	8,561	2,659	1,476	695	16,443	482	237	10,681	5,254	2,427	25,945	521	267	780	45	21	212	2	1	11,827	2,867	2,966
552: Medical back problems w/o MCC	8,113	2,955	1,347	814	15,559	1,388	879	11,848	6,611	3,945	27,761	103	65	490	60	36	303	16	9	10,951	1,523	1,786
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	3,349	1,516	895	18,646	5,080	3,004	13,115	4,301	2,536	27,127	163	106	652	156	92	341	16	9	9,060	953	1,054
312: Syncope & collapse	7,926	2,732	1,501	435	16,260	535	173	11,792	4,736	1,376	21,225	64	20	679	77	22	330	21	6	9,290	1,001	961
603: Cellulitis w/o MCC	7,590	2,562	1,469	568	16,200	241	109	11,458	4,462	1,732	23,837	556	230	526	53	20	271	10	4	9,464	1,207	1,068
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	3,694	1,520	1,412	15,669	4,215	3,898	14,793	9,705	9,000	29,868	128	122	698	44	41	354	9	8	10,136	1,004	1,032
683: Renal failure w CC	6,765	2,684	1,200	531	16,531	484	220	11,799	6,757	2,894	28,388	302	153	828	62	26	295	6	3	11,070	2,276	2,192
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	2,595	1,292	232	14,784	252	65	10,890	3,992	725	23,648	50	29	591	92	15	291	26	4	10,546	1,498	1,267
460: Spinal fusion except cervical w/o MCC	6,649	2,697	1,787	919	14,665	3,165	1,611	7,882	2,392	1,230	22,959	79	50	444	49	25	251	22	11	11,678	1,054	944
193: Simple pneumonia & pleurisy w MCC	6,507	2,700	1,245	590	16,293	563	274	10,627	5,897	2,735	27,243	636	312	700	50	24	270	4	2	11,201	2,188	2,249
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	2,470	1,145	342	14,897	225	78	10,489	5,308	1,553	26,030	142	47	669	71	20	284	10	3	8,760	1,063	984
190: Chronic obstructive pulmonary disease w MCC	6,320	2,504	1,502	535	14,985	372	147	9,978	4,230	1,488	24,840	649	239	697	42	15	293	5	2	10,915	2,235	1,969

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 4
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
		Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge
All MS-DRGs	659,549	2,768	1,420	549	15,825	1,387	536	10,518	4,644	1,796	34,861	621	240	620	70	27	358	22	9		0	0
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	3,123	1,952	1,839	12,283	1,514	1,427	8,123	3,134	2,954	22,468	19	18	587	132	124	419	80	76		0	0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	3,880	1,349	1,012	20,384	7,688	5,767	14,707	6,864	5,149	22,730	296	222	744	110	82	369	8	6		0	0
481: Hip & femur procedures except major joint w CC	13,704	3,934	1,193	1,138	15,692	3,537	3,374	14,797	11,028	10,518	25,157	110	105	710	32	31	299	4	3		0	0
194: Simple pneumonia & pleurisy w CC	13,064	2,572	1,186	431	15,214	262	95	9,838	5,115	1,857	23,747	227	82	703	61	22	319	7	3		0	0
690: Kidney & urinary tract infections w/o MCC	12,954	2,792	1,037	455	16,845	300	132	11,572	6,859	3,008	25,404	106	46	828	89	39	355	8	4		0	0
641: Nutritional & misc metabolic disorders w/o MCC	9,755	2,699	1,184	403	15,093	289	99	10,856	5,715	1,946	25,295	124	42	727	74	25	278	9	3	0	0	0
299: Peripheral vascular disorders w MCC	9,752	2,679	942	461	16,840	480	235	10,478	6,235	3,051	32,105	1,462	715	770	69	34	329	5	2		0	0
292: Heart failure & shock w CC	8,602	2,525	1,506	586	14,125	248	97	9,520	3,890	1,515	22,458	170	66	786	49	19	393	7	3		0	0
291: Heart failure & shock w MCC	8,561	2,646	1,444	637	15,905	420	185	9,506	4,487	1,980	25,425	440	194	752	42	19	212	2	1		0	0
552: Medical back problems w/o MCC	8,113	2,946	1,305	752	14,751	1,240	715	10,986	5,946	3,429	24,303	60	35	491	59	34	305	16	9		0	0
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	3,330	1,481	851	17,671	4,752	2,732	12,219	3,864	2,222	22,654	125	72	649	152	88	342	16	9		0	0
312: Syncope & collapse	7,926	2,720	1,477	400	15,384	468	127	10,894	4,249	1,151	24,111	52	14	674	76	21	328	21	6		0	0
603: Cellulitis w/o MCC	7,590	2,540	1,445	534	15,849	205	76	10,513	3,965	1,467	23,531	512	189	510	51	19	269	10	4		0	0
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	3,675	1,479	1,366	15,354	4,109	3,794	13,841	8,981	8,293	22,694	63	58	688	43	39	355	9	8		0	0
683: Renal failure w CC	6,765	2,666	1,173	484	15,536	416	172	10,546	5,855	2,416	27,301	254	105	807	59	24	296	6	2		0	0
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	2,581	1,268	200	14,533	202	32	10,094	3,530	558	24,263	44	7	572	88	14	286	26	4		0	0
460: Spinal fusion except cervical w/o MCC	6,649	2,682	1,740	875	14,143	3,003	1,510	7,317	2,168	1,090	19,584	18	9	444	48	24	252	22	11		0	0
193: Simple pneumonia & pleurisy w MCC	6,507	2,681	1,215	544	15,837	531	237	9,573	5,195	2,324	26,531	571	255	706	49	22	262	3	2		0	0
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	2,454	1,130	315	14,568	202	56	9,868	4,875	1,358	25,331	115	32	671	70	19	285	10	3		0	0
190: Chronic obstructive pulmonary disease w MCC	6,320	2,489	1,478	489	14,803	335	111	8,879	3,580	1,185	23,968	546	181	671	40	13	286	5	2		0	0

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 5
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
		Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge
All MS-DRGs	659,549	1,339	699	278	15,919	1,436	573	7,495	3,399	1,348	27,406	538	215	363	42	16	331	21	8	9,652	1,430	1,407
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	1,954	1,240	1,171	12,513	1,560	1,473	6,983	2,719	2,568	16,225	22	22	293	67	63	389	75	71	8,407	500	525
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	1,302	466	353	20,525	7,791	5,888	7,475	3,609	2,732	19,818	293	222	370	56	43	334	8	6	8,865	1,273	1,275
481: Hip & femur procedures except major joint w CC	13,704	1,139	357	341	15,949	3,624	3,462	9,053	6,812	6,506	19,384	123	120	378	18	17	262	3	3	8,723	1,110	1,118
194: Simple pneumonia & pleurisy w CC	13,064	1,209	564	212	15,287	284	119	7,078	3,774	1,411	20,863	230	88	456	40	15	288	7	2	8,766	1,336	1,265
690: Kidney & urinary tract infections w/o MCC	12,954	1,181	444	201	16,271	318	154	7,852	4,759	2,144	20,163	107	53	535	58	26	325	8	3	7,661	1,055	1,035
641: Nutritional & misc metabolic disorders w/o MCC	9,755	1,168	519	186	14,678	325	123	7,571	4,103	1,449	18,445	125	49	472	48	17	258	8	3	8,196	1,212	1,145
299: Peripheral vascular disorders w MCC	9,752	1,213	435	220	16,372	515	264	7,255	4,390	2,187	26,663	1,312	657	525	48	24	301	4	2	10,445	2,029	1,821
292: Heart failure & shock w CC	8,602	1,120	675	275	14,097	284	135	7,246	3,113	1,278	18,415	171	79	515	33	13	373	6	3	9,116	1,980	2,082
291: Heart failure & shock w MCC	8,561	1,128	626	288	15,302	449	216	7,334	3,607	1,646	22,083	444	205	514	30	13	206	2	1	9,646	2,338	2,449
552: Medical back problems w/o MCC	8,113	1,164	531	316	14,898	1,329	832	8,078	4,507	2,662	18,852	70	42	312	38	23	280	15	9	9,170	1,275	1,560
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	1,337	605	354	18,053	4,918	2,899	7,531	2,470	1,455	20,311	122	73	358	85	50	317	15	9	8,019	844	943
312: Syncope & collapse	7,926	1,254	689	194	15,629	515	159	7,968	3,200	908	18,412	56	17	431	49	14	307	20	6	7,989	861	847
603: Cellulitis w/o MCC	7,590	1,247	715	272	14,633	218	94	7,415	2,888	1,102	21,007	490	195	349	35	13	250	10	4	7,757	989	898
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	1,233	507	470	15,571	4,188	3,873	8,814	5,782	5,356	18,433	79	75	342	22	20	310	8	7	8,680	860	882
683: Renal failure w CC	6,765	1,153	516	222	15,477	453	200	7,624	4,366	1,848	22,848	243	114	541	41	17	268	6	2	9,241	1,900	1,843
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	1,188	592	101	13,227	226	53	7,219	2,646	460	18,707	39	13	372	58	9	268	24	4	8,559	1,215	1,075
460: Spinal fusion except cervical w/o MCC	6,649	1,456	965	492	14,446	3,118	1,584	6,506	1,975	1,005	10,960	38	24	193	21	11	220	19	10	9,963	899	831
193: Simple pneumonia & pleurisy w MCC	6,507	1,222	564	260	15,716	543	258	7,155	3,971	1,819	23,355	546	255	444	32	15	242	3	2	9,321	1,821	1,831
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	1,199	556	162	14,342	217	69	7,017	3,551	1,025	19,973	109	36	437	46	13	266	9	3	7,739	939	877
190: Chronic obstructive pulmonary disease w MCC	6,320	1,158	695	240	14,346	356	137	6,768	2,869	995	20,611	538	192	444	27	9	265	5	2	9,312	1,907	1,659

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 6
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG	Number of PAC Users ¹	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
		Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Hospital Discharge
All MS-DRGs	659,549	1,304	669	259	15,378	1,348	521	7,169	3,165	1,224	28,144	501	194	359	41	16	330	20	8	0	0	0
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	1,943	1,215	1,144	12,181	1,501	1,415	6,783	2,617	2,466	19,561	16	15	293	66	62	389	75	70	0	0	0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	1,286	447	335	19,694	7,428	5,572	7,197	3,359	2,520	20,300	264	198	368	54	41	328	7	6	0	0	0
481: Hip & femur procedures except major joint w CC	13,704	1,140	346	330	15,525	3,499	3,338	8,684	6,472	6,173	22,992	101	96	372	17	16	251	3	3	0	0	0
194: Simple pneumonia & pleurisy w CC	13,064	1,165	537	195	15,061	259	94	6,792	3,531	1,282	21,868	209	76	451	39	14	283	7	2	0	0	0
690: Kidney & urinary tract infections w/o MCC	12,954	1,144	425	186	16,551	295	129	7,573	4,489	1,969	21,811	91	40	527	57	25	319	8	3	0	0	0
641: Nutritional & misc metabolic disorders w/o MCC	9,755	1,130	496	169	14,860	285	97	7,320	3,853	1,312	19,748	97	33	470	48	16	257	8	3	0	0	0
299: Peripheral vascular disorders w MCC	9,752	1,164	410	200	16,163	461	225	6,824	4,061	1,987	27,090	1,233	604	509	46	22	292	4	2	0	0	0
292: Heart failure & shock w CC	8,602	1,057	630	245	13,730	241	94	6,864	2,805	1,092	19,725	149	58	504	32	12	370	6	2	0	0	0
291: Heart failure & shock w MCC	8,561	1,064	581	256	15,372	406	179	6,887	3,251	1,435	22,650	392	173	496	28	12	206	2	1	0	0	0
552: Medical back problems w/o MCC	8,113	1,152	510	294	14,479	1,217	702	7,820	4,233	2,441	21,910	54	31	314	38	22	282	14	8	0	0	0
066: Intracranial hemorrhage or cerebral infarction w/o CC/MCC	7,965	1,324	589	338	17,216	4,630	2,662	7,272	2,300	1,322	20,397	113	65	357	84	48	317	15	8	0	0	0
312: Syncope & collapse	7,926	1,229	667	181	15,254	464	126	7,694	3,001	813	21,315	46	12	426	48	13	306	20	5	0	0	0
603: Cellulitis w/o MCC	7,590	1,215	691	256	15,479	200	74	7,171	2,705	1,000	21,741	473	175	339	34	12	248	9	3	0	0	0
482: Hip & femur procedures except major joint w/o CC/MCC	7,216	1,233	496	458	15,232	4,076	3,764	8,510	5,521	5,099	20,681	57	53	335	21	19	310	8	7	0	0	0
683: Renal failure w CC	6,765	1,099	483	199	14,935	400	165	7,176	3,984	1,644	24,565	229	94	529	39	16	268	5	2	0	0	0
392: Esophagitis, gastroent & misc digest disorders w/o MCC	6,683	1,141	561	89	13,817	192	30	7,008	2,451	387	20,952	38	6	363	56	9	263	24	4	0	0	0
460: Spinal fusion except cervical w/o MCC	6,649	1,447	939	472	14,021	2,978	1,497	6,250	1,852	931	19,430	18	9	194	21	11	221	19	10	0	0	0
193: Simple pneumonia & pleurisy w MCC	6,507	1,168	529	237	15,453	518	232	6,741	3,658	1,637	23,460	505	226	437	30	14	231	3	1	0	0	0
195: Simple pneumonia & pleurisy w/o CC/MCC	6,410	1,159	534	149	14,438	200	56	6,829	3,374	940	22,082	100	28	436	45	13	267	9	3	0	0	0
190: Chronic obstructive pulmonary disease w MCC	6,320	1,100	653	216	14,472	327	108	6,426	2,591	858	21,028	479	159	433	26	9	260	5	2	0	0	0

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm248).

Section 4-Table 7
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	8,465	2,996	19,238	293	16,517	1,539	38,520	326	1,378	101	1,234	42	15,850	3,659
Other: Medical	57,849	7,534	1,869	18,980	226	16,462	1,291	36,479	197	1,380	102	1,081	37	14,798	2,702
Orthopedic: Minor Medical	40,669	7,829	2,614	18,277	297	16,449	1,429	36,979	212	1,344	113	1,381	75	14,402	2,871
Neurologic: Medical	33,344	9,617	3,556	20,302	403	17,457	1,781	38,186	312	1,477	129	1,423	42	14,372	3,342
Cardiovascular: General	21,438	7,631	3,364	18,815	260	16,147	1,205	32,466	195	1,318	66	1,427	53	14,766	3,024
Integumentary: Medical	20,783	7,309	2,737	19,526	275	17,088	2,034	41,176	729	1,393	105	1,066	26	17,783	4,972
Endocrine: Medical	19,050	12,789	6,198	20,091	336	17,457	1,508	41,160	449	1,570	99	1,149	40	18,290	4,543
Cardiovascular: Cardiac Medical	9,429	7,386	3,121	18,305	330	15,615	1,936	40,949	491	1,438	92	1,142	23	16,778	5,303
Kidney & Urinary: Medical	6,909	8,140	3,289	19,794	275	16,756	1,967	38,569	435	1,373	103	741	16	18,366	5,867
Respiratory: COPD	6,075	7,670	3,057	18,294	289	14,306	1,481	39,757	465	1,304	76	899	18	16,608	5,090
Cardiovascular: Vascular Medical	5,522	8,932	4,149	20,744	470	17,838	2,455	41,416	705	1,333	102	1,080	29	19,352	6,112
Respiratory: Medical	4,527	6,325	1,723	17,394	196	12,813	1,135	46,587	370	1,098	65	958	25	14,502	4,110
GI & Hepatobiliary: Minor Medical	3,149	6,783	1,779	17,609	235	14,504	1,128	39,881	279	787	64	1,747	44	16,762	3,998
Hematologic: Medical	3,113	7,081	3,785	18,817	272	14,458	1,881	28,880	241	1,155	88	869	20	16,401	5,795
Infections: Medical	1,980	6,137	2,105	21,335	259	16,290	1,374	29,362	282	1,199	86	776	25	17,366	3,833
GI & Hepatobiliary: Major Medical	1,470	6,065	1,906	26,633	199	11,023	1,027	27,689	207	634	31	595	6	17,163	6,748
Orthopedic: Major Medical	549	5,573	1,411	15,036	301	12,707	1,412	26,044	95	1,610	117	1,161	23	10,753	2,879
Neurologic: Stroke	325	9,312	3,496	18,636	516	17,329	1,866	26,007	320	1,278	193	386	4	18,061	4,613
Infections: Septicemia	100	7,780	1,245	18,639	186	6,127	123		0	858	43	809	16	19,291	2,894

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 8
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	7,096	1,998	15,781	26	12,886	51	31,122	18	1,141	59	1,181	35		0
Other: Medical	57,849	6,522	1,228	14,828	22	12,688	52	21,311	10	1,185	65	1,028	32		0
Orthopedic: Minor Medical	40,669	6,667	1,777	14,106	28	14,249	44	29,100	9	1,102	67	1,340	64		0
Neurologic: Medical	33,344	8,076	2,413	17,182	52	14,292	86	23,198	13	1,213	75	1,345	33		0
Cardiovascular: General	21,438	6,381	2,412	16,553	18	13,752	41	35,510	8	1,054	35	1,264	41		0
Integumentary: Medical	20,783	5,707	1,645	19,343	19	14,522	46	40,190	60	1,103	53	963	19		0
Endocrine: Medical	19,050	11,007	4,504	17,334	25	12,030	46	47,148	32	1,238	50	1,166	35		0
Cardiovascular: Cardiac Medical	9,429	5,862	1,862	11,214	8	10,015	49	25,125	13	1,241	49	1,290	21		0
Kidney & Urinary: Medical	6,909	6,156	1,957	19,229	25	12,529	44	16,994	5	1,243	58	631	10		0
Respiratory: COPD	6,075	5,860	1,759	14,842	7	9,823	34	16,318	3	1,074	36	941	15		0
Cardiovascular: Vascular Medical	5,522	7,240	2,643	12,049	22	8,522	39	35,393	71	1,017	43	1,040	21		0
Respiratory: Medical	4,527	4,914	985	17,868	20	8,817	37	29,991	40	916	43	841	19		0
GI & Hepatobiliary: Minor Medical	3,149	5,444	1,018	10,066	6	13,234	46	21,186	13	665	43	1,668	32		0
Hematologic: Medical	3,113	5,430	2,445	6,338	4	11,435	48	21,227	7	1,150	58	943	16		0
Infections: Medical	1,980	4,547	1,194	16,668	8	6,307	16	32,074	49	867	40	744	19		0
GI & Hepatobiliary: Major Medical	1,470	4,407	908		0	5,383	33		0	610	22	594	4		0
Orthopedic: Major Medical	549	5,471	937	14,055	26	13,335	24		0	1,218	69	1,081	20		0
Neurologic: Stroke	325	7,519	2,036	17,316	213	11,368	35		0	1,185	139	386	4		0
Infections: Septicemia	100	7,515	827		0		0		0	1,072	43	0	0		0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 9
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Volume, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	2,711	895	17,772	146	12,863	723	33,213	101	657	30	458	12	10,563	1,760
Other: Medical	57,849	2,815	633	17,939	132	12,971	681	32,946	68	687	35	397	11	10,188	1,457
Orthopedic: Minor Medical	40,669	2,863	881	16,808	169	13,181	739	27,885	47	679	39	523	23	9,981	1,457
Neurologic: Medical	33,344	3,076	1,061	18,674	208	13,792	847	29,236	70	675	37	453	9	9,444	1,525
Cardiovascular: General	21,438	2,307	978	17,593	98	12,584	495	26,877	44	661	18	517	14	9,819	1,303
Integumentary: Medical	20,783	2,573	891	18,643	125	13,438	986	37,480	312	626	26	352	6	11,644	2,447
Endocrine: Medical	19,050	3,166	1,476	18,140	130	12,449	533	37,118	121	662	21	543	12	11,314	1,795
Cardiovascular: Cardiac Medical	9,429	2,315	918	17,858	146	11,869	847	32,032	112	666	23	454	6	10,917	2,509
Kidney & Urinary: Medical	6,909	2,112	804	18,859	106	12,069	732	34,777	116	525	20	256	4	11,713	2,496
Respiratory: COPD	6,075	2,387	892	17,721	131	11,086	675	32,480	166	652	21	324	5	10,938	2,398
Cardiovascular: Vascular Medical	5,522	2,573	1,112	16,984	215	13,538	968	35,024	254	537	20	430	7	11,695	2,582
Respiratory: Medical	4,527	2,297	581	14,182	88	9,957	600	37,033	172	551	23	449	9	10,336	2,390
GI & Hepatobiliary: Minor Medical	3,149	2,422	584	16,552	126	11,047	586	32,293	72	414	25	566	11	10,988	2,146
Hematologic: Medical	3,113	1,669	863	15,519	75	11,536	641	25,815	58	603	20	314	4	12,847	2,740
Infections: Medical	1,980	2,368	755	20,268	143	12,941	641	29,537	134	445	20	337	9	12,732	2,141
GI & Hepatobiliary: Major Medical	1,470	2,163	640	20,806	99	8,259	539	22,439	76	507	17	381	2	13,106	4,395
Orthopedic: Major Medical	549	2,696	604	13,224	193	11,707	960	10,779	20	788	43	435	7	8,901	2,011
Neurologic: Stroke	325	3,375	1,194	17,697	381	10,313	603		0	708	70	45	0	10,076	1,984
Infections: Septicemia	100	2,595	389		0	6,953	70		0	279	14	59	1	18,755	2,626

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 10
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All MS-DRGs	4,967	7,958	1,915	21,804	764	16,599	5,461	38,469	5,135	2,602	352	1,362	18	22,291	6,575
885: Psychoses	672	5,055	459		0	13,328	1,289	19,592	1,545	2,806	121	4,156	25	13,497	1,185
207: Respiratory system diagnosis w ventilator support 96+ hours	333	6,102	1,136	23,219	2,440	18,603	4,916	52,685	6,645	2,106	202	561	7	30,122	9,408
189: Pulmonary edema & respiratory failure	204	7,128	2,341	29,221	3,581	17,132	6,551	58,091	9,112	2,152	390	609	15	31,862	11,870
593: Skin ulcers w CC	196	9,299	1,945	26,388	135	17,343	9,114	35,318	7,208	1,882	240		0	16,531	6,241
592: Skin ulcers w MCC	195	9,194	1,650		0	17,634	7,867	52,291	9,117	3,345	532	114	1	22,703	8,615
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	12,575	2,069	22,504	427	16,177	7,679	36,921	7,711	2,894	513	0	0	20,232	7,171
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	9,746	2,128	14,191	200	15,777	7,666	41,950	7,090	3,005	529	205	1	17,344	6,474
057: Degenerative nervous system disorders w/o MCC	136	7,269	1,497		0	14,928	6,476	25,533	1,877	3,966	641		0	10,276	2,418
299: Peripheral vascular disorders w MCC	103	8,514	1,653	20,734	403	16,086	5,466	40,437	5,496	1,196	186		0	25,716	8,489
603: Cellulitis w/o MCC	84	10,378	3,583		0	15,908	7,197	27,855	4,643	1,811	345	158	4	20,190	3,605
945: Rehabilitation w CC/MCC	74	10,526	4,267	13,720	927	20,832	8,164	25,405	2,060	5,475	888		0	26,843	9,431
056: Degenerative nervous system disorders w MCC	73	9,200	1,134	22,089	908	17,267	12,300	32,980	2,711	2,538	626	1,541	42	26,050	7,494
300: Peripheral vascular disorders w CC	72	9,855	4,106	14,738	409	15,537	4,747	36,234	8,052	1,524	254	2,200	92	20,905	5,517
177: Respiratory infections & inflammations w MCC	70	8,950	2,429	19,391	277	24,038	8,585	45,534	5,204	5,827	999	66	1	21,397	6,114
190: Chronic obstructive pulmonary disease w MCC	61	10,735	4,752	25,488	836	18,049	2,663	24,067	2,762	5,132	84	55	1	20,911	5,828
191: Chronic obstructive pulmonary disease w CC	57	7,441	2,219	16,436	865	13,628	3,347	72,318	3,806	2,609	229		0	15,368	3,775
264: Other circulatory system O.R. procedures	55	9,236	3,190	13,033	474	15,949	4,930	36,615	5,326	1,849	303	323	12	15,715	4,286
871: Septicemia w/o MV 96+ hours w MCC	55	9,905	3,242		0	17,552	6,702	39,519	7,904	3,308	421		0	23,779	10,376
208: Respiratory system diagnosis w ventilator support <96 hours	54	6,871	1,272	17,500	648	15,025	2,226	74,292	11,006	1,418	184		0	38,901	13,687
193: Simple pneumonia & pleurisy w MCC	50	9,997	3,399	27,224	1,089	17,480	5,943	44,400	7,992	2,469	346	1,178	24	20,058	6,418

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 11
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All MS-DRGs	4,967	6,014	1,206	20,906	488	12,778	3,586	31,799	1,569	2,120	189	1,480	15		0
885: Psychoses	672	4,235	353		0	10,161	877	18,349	1,256	2,121	69	4,156	25		0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	4,994	645	18,631	1,623	13,183	3,127	39,397	2,130	1,422	94	0	0		0
189: Pulmonary edema & respiratory failure	204	6,141	1,656	31,248	3,217	11,261	3,643	40,743	1,797	1,151	90	784	8		0
593: Skin ulcers w CC	196	5,615	1,060		0	14,272	6,626	32,544	2,325	1,567	136		0		0
592: Skin ulcers w MCC	195	6,497	900		0	12,533	4,820	65,234	2,676	2,376	219	114	1		0
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	8,593	1,251	18,288	231	12,294	5,058	29,755	2,260	1,700	226	0	0		0
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	4,760	838	14,191	200	11,871	4,849	36,912	2,080	3,282	393	205	1		0
057: Degenerative nervous system disorders w/o MCC	136	6,592	1,260		0	11,459	4,887	20,844	920	4,186	585		0		0
299: Peripheral vascular disorders w MCC	103	5,893	1,030	8,069	78	11,283	3,286	37,316	1,087	1,021	89		0		0
603: Cellulitis w/o MCC	84	10,633	3,038		0	14,061	5,524	18,949	1,805	1,930	299	158	4		0
945: Rehabilitation w CC/MCC	74	9,199	2,983	13,270	717	17,445	5,658	48,866	660	8,032	868		0		0
056: Degenerative nervous system disorders w MCC	73	6,414	527	8,661	119	13,540	8,903	28,252	774	1,997	410	1,541	42		0
300: Peripheral vascular disorders w CC	72	8,057	2,910	12,283	171	12,954	3,419	30,494	2,965	799	100	2,200	92		0
177: Respiratory infections & inflammations w MCC	70	6,648	1,615	19,391	277	19,313	6,070		0	4,285	490	66	1		0
190: Chronic obstructive pulmonary disease w MCC	61	8,808	3,899		0	23,392	2,301	19,609	643	5,132	84	55	1		0
191: Chronic obstructive pulmonary disease w CC	57	5,369	1,507	19,489	342	9,854	2,074	176,753	3,101	613	32		0		0
264: Other circulatory system O.R. procedures	55	7,930	2,451		0	18,038	4,591	41,052	746	2,031	295	323	12		0
871: Septicemia w/o MV 96+ hours w MCC	55	5,076	1,200		0	15,281	5,001	28,590	1,559	1,513	83		0		0
208: Respiratory system diagnosis w ventilator support <96 hours	54	6,674	1,112	17,500	648	11,455	1,061	61,955	3,442	609	45		0		0
193: Simple pneumonia & pleurisy w MCC	50	4,637	1,576	33,239	665	10,975	3,073	42,928	2,576	3,432	343	1,178	24		0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 12
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Volume, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User	Mean Payment Per Service User	Mean Payment Per PAC User
		(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
All MS-DRGs	4,967	3,188	598	21,303	562	12,861	3,770	30,881	2,070	1,140	68	415	3	15,696	2,914
885: Psychoses	672	1,411	113		0	9,504	863	17,652	1,156	1,180	23	1,028	6	9,220	549
207: Respiratory system diagnosis w ventilator support 96+ hours	333	3,077	323	22,295	2,142	14,013	3,240	49,801	4,487	646	25		0	27,940	6,796
189: Pulmonary edema & respiratory failure	204	3,511	826	28,177	2,762	12,199	3,827	43,867	5,376	985	68	103	1	16,072	4,018
593: Skin ulcers w CC	196	2,597	411		0	14,462	7,231	34,562	2,292	857	35		0	11,053	2,030
592: Skin ulcers w MCC	195	3,615	519		0	12,595	5,038	39,918	2,866	2,396	135	114	1	14,557	3,509
573: Skin graft &/or debrid for skn ulcer or cellulitis w MCC	158	3,232	491	18,288	231	11,900	5,197	33,237	1,473	1,141	101	0	0	11,544	2,192
574: Skin graft &/or debrid for skn ulcer or cellulitis w CC	142	2,626	536	14,191	200	12,141	5,301	32,900	2,549	1,613	125	205	1	8,927	2,452
057: Degenerative nervous system disorders w/o MCC	136	3,050	493		0	12,022	4,950	23,610	347	894	66		0	8,373	800
299: Peripheral vascular disorders w MCC	103	3,097	541	20,734	403	12,824	3,860	26,414	2,308	965	66		0	17,081	3,980
603: Cellulitis w/o MCC	84	3,247	850		0	13,392	5,421	32,088	2,674	909	76	57	1	13,418	1,917
945: Rehabilitation w CC/MCC	74	4,495	1,336	12,538	508	16,046	5,204	11,356	460	3,373	182		0	15,343	3,732
056: Degenerative nervous system disorders w MCC	73	6,111	419	11,523	316	13,751	9,418	21,614	296	772	63	0	0	19,663	2,963
300: Peripheral vascular disorders w CC	72	3,310	1,149	14,738	409	13,650	3,602	23,440	1,953	675	47	69	1	16,205	2,476
177: Respiratory infections & inflammations w MCC	70	4,553	846	19,391	277	18,140	5,960	32,255	1,382	1,440	103		0	16,984	2,912
190: Chronic obstructive pulmonary disease w MCC	61	3,739	1,532		0	20,335	2,334	11,318	186		0	18	0	18,066	2,666
191: Chronic obstructive pulmonary disease w CC	57	3,164	888	15,789	277	12,195	2,567		0	736	13		0	7,399	1,038
264: Other circulatory system O.R. procedures	55	2,557	697	16,573	301	16,778	4,576	23,743	2,590	1,257	137	481	9	14,201	2,582
871: Septicemia w/o MV 96+ hours w MCC	55	3,718	879		0	15,909	5,785	22,723	4,131	2,117	115		0	17,581	5,114
208: Respiratory system diagnosis w ventilator support <96 hours	54	5,025	651	17,500	648	10,347	958	67,380	9,982	521	48		0	30,773	9,688
193: Simple pneumonia & pleurisy w MCC	50	2,883	922	33,239	665	10,386	2,908	36,201	4,344	2,975	119	386	8	10,414	1,666

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 13
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	6,082	2,926	20,537	1,603	17,725	4,274	34,871	522	1,888	459	1,370	78	16,910	3,868
RIC 01: Stroke	1,917	8,005	3,320	24,543	2,048	20,915	5,324	32,890	429	2,412	828	1,736	73	16,347	4,068
RIC 06: Neurological Conditions	1,875	6,513	3,147	18,960	1,719	18,049	4,621	32,787	490	1,734	494	1,313	61	16,810	4,007
RIC 09: Other Orthopedic	1,648	5,258	3,254	17,471	1,262	16,517	5,412	23,354	255	1,523	299	1,189	82	14,427	3,362
RIC 20: Miscellaneous	1,427	6,035	3,197	20,479	1,550	17,175	4,838	33,876	760	1,646	321	1,018	42	18,526	4,985
RIC 07: Lower Extremity Fracture	994	5,092	2,981	15,519	843	15,798	3,767	39,061	629	1,620	267	1,625	96	12,155	2,470
RIC 08: Lower Extremity Joint Replacement	710	3,893	1,152	13,283	449	9,346	500	35,813	202	1,150	253	1,011	142	11,262	746
RIC 16: Pain Syndrome	445	4,931	2,682	17,484	1,336	17,002	4,661	32,946	518	1,333	285	1,136	61	16,303	4,286
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	6,678	2,499	24,716	2,074	19,140	3,993	44,725	913	2,294	593	1,966	138	20,035	4,452
RIC 10: Amputation, Lower Extremity	376	6,919	2,613	18,881	1,356	15,883	1,816	34,456	641	1,904	537	1,862	89	32,607	7,198
RIC 02: Brain Dysfunction, Traumatic	373	6,159	2,411	27,648	2,743	19,317	3,729	38,269	616	2,358	740	1,114	63	19,264	3,667
RIC 03: Brain Dysfunction, Non-Traumatic	356	7,436	2,715	22,037	1,857	18,428	3,675	36,349	204	1,900	416	1,277	57	15,487	3,828
RIC 17: MMT Without Brain/Spinal Cord Injury	324	5,693	3,268	18,380	1,986	15,894	3,336	30,464	564	909	163	2,217	171	16,982	3,407
RIC 12: Osteoarthritis	260	4,360	2,532	16,861	1,686	16,920	5,857	31,500	363	1,561	318	832	32	12,646	3,453
RIC 04: Spinal Cord Dysfunction, Traumatic	203	8,126	2,602	27,008	2,528	18,642	2,663	41,492	1,022	3,107	1,041	2,495	123	19,950	5,602
RIC 14: Cardiac	184	5,918	2,541	17,447	1,612	15,788	2,317	76,237	1,243	2,485	216	596	3	17,528	4,191
RIC 13: Rheumatoid And Other Arthritis	152	5,560	2,890	22,939	1,660	16,031	4,430	53,300	1,403	1,747	322	1,393	73	16,812	4,314
RIC 15: Pulmonary	107	6,651	2,487	25,548	2,388	12,064	1,240		0	977	183	773	14	25,761	6,260
RIC 18: MMT With Brain/Spinal	88	7,258	2,144	28,053	2,231	25,498	4,346		0	2,704	522	1,205	151	16,826	2,677
RIC 21: Burns	40	6,035	2,263	34,435	2,583	15,263	3,434	31,434	3,143	2,393	718	1,546	77	26,600	6,650
RIC 19: Guillain-Barre	25	15,724	5,032	37,330	4,480	28,704	5,741		0	4,025	1,288	1,095	131	24,951	6,986
RIC 11: Amputation, Non-Lower Extremity	8	5,564	4,173	29,506	3,688	35,001	4,375		0	508	127		0	29,395	7,349

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 14
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	5,007	2,135	16,581	331	14,755	2,574	28,617	98	1,544	316	1,240	62		0
RIC 01: Stroke	1,917	6,409	2,280	22,074	484	17,361	3,369	23,328	73	1,928	550	1,568	56		0
RIC 06: Neurological Conditions	1,875	5,482	2,403	13,417	315	14,848	2,502	27,777	30	1,530	366	1,263	53		0
RIC 09: Other Orthopedic	1,648	4,503	2,506	12,093	169	14,650	3,627	20,332	62	1,224	201	1,048	65		0
RIC 20: Miscellaneous	1,427	5,063	2,334	15,112	233	13,672	2,616	33,997	167	1,413	218	870	30		0
RIC 07: Lower Extremity Fracture	994	4,326	2,289	12,851	168	13,000	2,433	11,765	24	1,111	159	1,326	65		0
RIC 08: Lower Extremity Joint Replacement	710	3,474	988	12,824	181	7,515	328	31,063	88	1,145	242	990	131		0
RIC 16: Pain Syndrome	445	4,110	1,986	13,844	218	12,206	2,304	27,435	62	996	170	1,158	52		0
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	5,593	1,788	19,672	491	13,343	1,876	46,743	424	1,721	367	1,705	93		0
RIC 10: Amputation, Lower Extremity	376	4,878	1,635	18,053	576	10,749	772	23,724	63	1,439	360	1,784	76		0
RIC 02: Brain Dysfunction, Traumatic	373	4,743	1,640	15,850	382	16,138	2,336		0	2,126	587	1,160	56		0
RIC 03: Brain Dysfunction, Non-Traumatic	356	5,247	1,651	13,891	273	15,926	2,460	24,334	68	1,829	329	1,205	44		0
RIC 17: MMT Without Brain/Spinal Cord Injury	324	5,004	2,425	14,633	406	13,457	2,326	26,836	331	898	144	2,259	139		0
RIC 12: Osteoarthritis	260	3,810	2,051	16,601	639	16,902	4,290		0	1,017	180	770	24		0
RIC 04: Spinal Cord Dysfunction, Traumatic	203	6,524	1,896	35,023	1,380	14,391	1,489	42,235	416	2,767	791	1,104	44		0
RIC 14: Cardiac	184	3,702	1,288	9,313	152	11,129	968	17,208	94	1,046	57	596	3		0
RIC 13: Rheumatoid And Other Arthritis	152	5,105	2,418	11,278	223	14,584	2,878		0	1,071	169	1,847	73		0
RIC 15: Pulmonary	107	4,889	1,508	32,278	302	11,165	626		0	405	53	773	14		0
RIC 18: MMT With Brain/Spinal	88	5,869	1,467	14,220	485	23,722	3,504		0	2,307	367	1,189	149		0
RIC 21: Burns	40	5,011	1,253	27,486	1,374	18,627	3,260	26,994	2,025	1,135	312	1,546	77		0
RIC 19: Guillain-Barre	25	8,570	2,057		0	28,055	3,367		0	2,220	444	1,053	84		0
RIC 11: Amputation, Non-Lower Extremity	8	5,611	2,805		0		0		0	1,016	127		0		0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 15
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Volume, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	3,710	1,486	17,490	772	14,683	2,977	27,173	182	770	121	396	12	11,314	1,549
RIC 01: Stroke	1,917	4,314	1,418	19,032	824	17,460	3,816	22,412	94	926	208	372	9	9,640	1,348
RIC 06: Neurological Conditions	1,875	3,846	1,586	16,722	812	14,474	2,872	38,789	186	752	142	427	11	11,584	1,612
RIC 09: Other Orthopedic	1,648	3,629	1,795	14,263	589	14,487	4,220	23,556	114	613	62	299	9	10,786	1,460
RIC 20: Miscellaneous	1,427	3,583	1,607	16,592	628	13,285	2,988	26,516	260	698	76	367	9	13,076	2,163
RIC 07: Lower Extremity Fracture	994	3,762	1,873	14,316	490	13,007	2,879	23,485	165	735	76	398	12	8,217	1,000
RIC 08: Lower Extremity Joint Replacement	710	3,012	853	13,667	346	10,100	455	21,079	59	716	132	424	44	7,599	342
RIC 16: Pain Syndrome	445	3,159	1,505	15,257	720	13,133	3,010	22,060	248	553	68	327	10	11,259	1,923
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	3,752	1,106	22,824	1,190	14,693	2,532	32,781	520	772	135	485	15	14,002	2,000
RIC 10: Amputation, Lower Extremity	376	3,433	1,132	18,463	737	11,441	913	19,962	106	650	152	512	15	15,548	2,150
RIC 02: Brain Dysfunction, Traumatic	373	3,775	1,164	23,729	1,590	15,569	2,588	21,455	173	986	220	481	17	13,861	1,524
RIC 03: Brain Dysfunction, Non-Traumatic	356	4,085	1,262	17,277	874	15,868	2,808	36,349	204	739	112	501	8	10,323	1,595
RIC 17: MMT Without Brain/Spinal Cord Injury	324	3,723	1,666	17,264	1,492	14,470	2,724	23,241	359	500	48	391	8	11,818	1,568
RIC 12: Osteoarthritis	260	3,095	1,583	17,482	605	15,256	4,283	30,366	117	588	72	408	9	11,010	1,482
RIC 04: Spinal Cord Dysfunction, Traumatic	203	3,719	898	25,500	879	14,114	1,530	56,028	276	1,001	252	452	13	11,245	1,606
RIC 14: Cardiac	184	3,163	1,152	14,628	1,033	12,612	1,576	26,295	429	890	58	330	2	8,747	1,569
RIC 13: Rheumatoid And Other Arthritis	152	3,477	1,464	21,981	289	12,521	2,966		0	613	60	476	19	15,200	2,400
RIC 15: Pulmonary	107	3,053	1,113	15,726	882	13,150	983		0	394	52	670	13	12,818	2,036
RIC 18: MMT With Brain/Spinal	88	4,247	1,062	28,053	2,231	26,095	3,855		0	713	81	269	18	15,084	1,886
RIC 21: Burns	40	3,918	1,078	26,997	2,025	15,428	2,314	26,994	2,025	811	142	154	4	18,730	3,278
RIC 19: Guillain-Barre	25	6,494	1,559	33,280	1,331	28,881	4,621		0	1,276	255	137	11	13,271	3,185
RIC 11: Amputation, Non-Lower Extremity	8	4,002	2,001	29,506	3,688	23,579	2,947		0	303	38		0	11,595	2,899

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm250).

Section 4-Table 16
Medicare Post-Acute Care Episode Payments and Utilization by Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Hospital Discharge (\$)
002: Heart transplant or implant of heart assist system w/o MCC	5	80,975	3,022	2,418	1,250	29,455	5,891	2,678	13,646	6,575	2,703	38,932	1,011	444	1,410	286	117	1,209	116	46	17,561	4,976	3,288
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	78,960	6,952	2,280	2,052	26,508	3,487	3,146	20,796	10,579	9,522	67,431	46,169	41,225	2,290	455	412	1,396	24	22	32,739	15,966	15,091
970: HIV w extensive O.R. procedure w/o MCC	4	74,616	21,853	16,390	5,642	0	0	0	1,517	379	117	0	0	0	0	0	0	35,806	8,951	2,754	97,792	48,896	19,231
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	73,421	6,798	2,873	2,652	26,931	6,476	5,934	21,294	10,652	9,779	60,532	37,491	34,161	2,453	627	576	1,324	44	40	30,053	15,257	14,317
296: Cardiac arrest, unexplained w MCC	5	49,506	4,258	2,555	632	20,936	4,187	997	14,044	14,044	3,344	24,533	4,907	1,168	2,613	523	124	0	0	0	58,225	23,290	9,228
839: Chemo w acute leukemia as sdx w/o CC/MCC	10	46,106	2,807	2,526	601	0	0	0	10,495	1,050	130	0	0	0	832	83	11	0	0	0	47,163	42,447	25,447
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implan	353	45,922	8,152	3,256	2,602	25,330	13,275	10,644	20,874	12,832	10,257	34,672	4,125	3,675	3,278	1,310	1,040	1,302	37	29	21,506	11,088	9,279
955: Craniotomy for multiple significant trauma	50	45,782	6,365	3,310	2,792	25,862	13,966	11,638	28,344	15,306	12,755	31,803	4,452	3,710	2,142	600	500	852	68	57	20,202	8,081	6,893
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	45,204	9,391	5,038	3,981	26,445	14,324	11,226	23,446	14,043	11,005	29,449	2,454	1,923	3,658	1,581	1,239	1,915	50	40	17,220	7,713	6,243
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	44,964	7,909	4,047	3,556	23,286	7,751	6,798	17,790	10,773	9,412	36,835	4,105	3,600	2,024	493	430	1,047	26	23	29,996	17,769	16,451
005: Liver transplant w MCC or intestinal transplant	32	44,794	4,131	3,615	1,802	16,153	3,029	1,365	15,502	2,907	1,310	38,017	1,188	535	621	78	36	902	28	13	57,179	33,950	20,409
692: Urinary stones w esw lithotripsy w/o CC/MCC	3	43,978	13,382	13,382	558	0	0	0	30,554	10,185	424	0	0	0	4,400	1,467	61	122	41	2	28,356	18,904	2,068
028: Spinal procedures w MCC	158	43,800	7,081	3,989	3,419	30,155	13,742	11,410	19,079	10,505	8,845	47,509	6,014	4,990	3,087	977	800	990	88	72	19,433	8,487	8,908
901: Wound debridements for injuries w MCC	25	43,291	5,362	3,860	3,217	20,665	3,306	2,755	18,852	6,787	5,656	59,495	14,279	11,899	764	122	102	1,106	177	147	30,748	14,759	12,673
255: Upper limb & toe amputation for circ system disorders w MCC	208	42,197	5,988	4,145	3,077	24,447	3,056	2,499	15,293	7,058	5,372	34,760	4,345	3,335	1,424	267	212	569	11	8	39,748	23,314	19,922
870: Septicemia w MV 96+ hours	345	41,305	5,013	2,121	1,563	21,453	3,047	2,190	15,488	9,203	6,783	63,026	14,432	10,900	2,209	333	264	1,425	17	12	26,703	12,152	11,149
622: Skin grafts & wound debrid for endoc, nutrit & metab dis w MCC	69	40,194	7,207	4,283	3,478	15,484	224	378	15,416	9,160	7,128	40,717	8,261	6,405	2,937	468	364	1,566	91	70	33,021	17,707	16,098
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	38,262	5,188	2,594	2,219	23,645	12,732	10,889	22,335	12,027	10,286	39,409	3,335	2,852	3,136	893	763	0	0	0	21,187	6,682	5,715
957: Other O.R. procedures for multiple significant trauma w MCC	171	37,459	5,286	3,215	2,380	26,691	12,955	9,590	21,132	11,246	8,440	38,070	2,672	2,091	2,322	706	523	1,174	117	86	18,663	6,549	5,369
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	132	37,245	4,891	3,483	2,918	19,782	8,692	7,216	17,820	9,045	7,509	39,576	2,998	2,489	1,848	350	291	1,831	208	173	26,981	12,469	10,881

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 17
Medicare Post-Acute Care Episode Payments and Utilization by Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Mean PAC Payment Per PAC User (\$)	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations			
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	
All MS-DRGs	659,549	9,075	3,429	1,958	759	15,922	1,410	545	10,743	4,781	1,849	35,069	634	245	1,137	193	75	1,125	100	39			
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	52,002	4,985	1,249	1,113	24,324	2,951	2,630	14,275	6,421	5,724	61,288	41,190	36,714	1,590	177	158	1,251	14	13			
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	46,950	5,066	1,591	1,446	23,906	5,257	4,777	14,568	6,202	5,637	55,364	33,635	30,569	1,683	243	221	949	22	20			
297: Cardiac arrest, unexplained w CC	1	34,387		0	0		0	0	34,387	34,387	11,462		0	0		0	0						
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	28,264	7,137	2,899	2,272	23,991	12,745	9,988	18,338	9,551	7,485	30,083	2,194	1,719	2,619	832	652	2,068	43	34			
955: Craniotomy for multiple significant trauma	50	26,838	5,777	2,542	2,118	20,300	10,962	9,135	18,939	8,712	7,260	31,803	4,452	3,710	652	117	98	883	53	44			
028: Spinal procedures w MCC	158	26,280	5,352	2,574	2,107	27,618	11,886	9,731	15,675	7,441	6,091	40,173	3,814	3,122	2,746	539	441	691	26	21			
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	24,491	4,329	1,765	1,510	20,520	10,733	9,180	17,583	8,927	7,635	34,918	2,686	2,297	1,975	380	325		0	0			
957: Other O.R. procedures for multiple significant trauma w MCC	171	24,354	4,614	2,186	1,618	24,843	11,622	8,603	16,125	7,733	5,724	35,820	2,304	1,706	1,967	403	298	1,304	107	79			
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implan	353	23,808	6,659	1,811	1,437	21,397	10,729	8,511	14,589	7,522	5,967	33,019	3,274	2,597	1,844	449	356	1,185	23	19			
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	23,509	6,213	2,740	2,085	22,898	12,495	9,509	17,015	6,935	5,278	25,783	459	350	1,997	743	565	2,203	137	105			
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	23,350	5,104	2,362	1,809	22,059	13,679	10,476	16,477	5,828	4,464	27,381	717	549	2,198	653	500	1,495	111	85			
870: Septicemia w MV 96+ hours	345	21,948	3,844	1,426	1,025	19,366	2,470	1,775	10,911	6,167	4,433	53,886	11,714	8,420	1,434	154	111	1,873	16	12			
453: Combined anterior/posterior spinal fusion w MCC	150	19,831	4,517	2,800	2,258	20,274	11,083	8,938	11,068	3,689	2,975	40,772	1,903	1,534	1,142	221	178	1,192	135	109			
480: Hip & femur procedures except major joint w MCC	4,241	18,709	5,162	2,241	2,086	17,145	3,683	3,429	15,211	11,883	11,064	28,042	622	579	1,592	227	211	1,419	54	50			
021: Intracranial vascular procedures w PDX hemorrhage w CC	59	18,562	3,220	1,528	1,156	22,075	11,973	9,056	15,188	3,604	2,726	30,248	1,025	776	1,709	406	307	768	26	20			
956: Limb reattachment, hip & femur proc for multiple significant trauma	721	18,511	4,634	2,044	1,926	17,312	4,562	4,300	14,530	10,842	10,219	30,828	727	685	1,641	253	238	1,246	83	78			
094: Bacterial & tuberculous infections of nervous system w MCC	125	18,472	3,439	1,541	1,120	21,830	5,763	4,188	11,469	6,147	4,468	37,208	4,763	3,461	1,526	171	124	2,173	87	63			
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	18,460	5,393	2,461	1,846	20,566	7,799	5,851	15,267	7,311	5,485	23,000	304	228	1,931	522	391	1,483	64	48			
025: Craniotomy & endovascular intracranial procedures w MCC	926	18,431	4,236	1,802	1,334	19,821	9,397	6,956	13,058	5,330	3,945	31,128	1,479	1,095	1,631	375	278	1,115	47	35			
471: Cervical spinal fusion w MCC	302	18,397	4,234	2,608	1,798	21,859	9,192	6,338	14,913	5,333	3,677	26,643	794	547	1,342	364	251	1,179	105	73			

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 18
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

MS-DRG	Number of PAC Users ¹	Mean PAC Payment Per PAC User (\$)	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)
All MS-DRGs	659,549	10,651	2,786	1,455	590	16,504	1,489	601	11,476	5,204	2,085	35,203	691	283	628	72	29	358	22	9	11,594	1,718	1,655
002: Heart transplant or implant of heart assist system w/o MCC	5	70,363	2,723	1,634	743	2,113	423	192	0	0	0	0	0	0	375	75	34	0	0	341,157	68,231	33,440	
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	53,576	3,130	419	381	25,102	2,352	2,108	15,187	4,260	3,821	62,438	42,150	37,629	386	10	9	241	1	1	23,853	4,384	4,511
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	49,829	3,366	578	529	26,501	4,783	4,372	16,409	4,471	4,088	56,750	34,701	31,608	475	19	18	193	2	1	23,574	5,276	5,169
297: Cardiac arrest, unexplained w CC	1	34,387	0	0	0	0	0	0	34,387	34,387	11,462	0	0	0	0	0	0	0	0	0	0	0	0
955: Craniotomy for multiple significant trauma	50	30,685	3,878	931	809	23,051	11,986	9,989	18,254	7,667	6,389	31,803	4,452	3,710	166	7	6	169	3	3	21,686	5,638	4,858
005: Liver transplant w MCC or intestinal transplant	32	29,741	2,644	2,148	1,062	17,371	2,714	1,223	9,707	1,820	820	38,017	1,188	535	217	7	3	502	16	7	53,779	21,848	13,140
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	28,376	3,025	861	736	22,944	11,825	10,113	18,867	9,434	8,068	34,390	2,910	2,489	592	73	62	0	0	17,024	3,274	2,800	
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implant	353	27,898	4,156	895	710	23,350	11,443	9,100	16,091	8,296	6,581	32,400	3,304	2,971	625	67	55	286	3	3	14,006	3,888	3,495
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	27,881	4,642	1,305	1,023	23,977	12,738	9,982	18,199	9,194	7,205	30,043	2,034	1,594	873	95	75	968	5	4	12,677	2,509	2,046
028: Spinal procedures w MCC	158	27,723	3,006	837	697	28,948	12,275	10,049	15,760	6,783	5,581	43,327	4,388	3,592	541	45	36	241	6	5	14,095	3,390	3,792
870: Septicemia w MV 96+ hours	345	26,093	3,113	947	695	19,608	2,614	1,879	12,726	6,676	4,881	52,908	11,655	8,598	907	66	52	491	1	1	18,048	4,133	4,589
901: Wound debridements for injuries w MCC	25	25,382	3,694	2,069	1,724	20,665	3,306	2,755	11,949	3,824	3,186	53,172	8,507	7,090	0	0	0	106	9	7	31,949	7,668	6,764
957: Other O.R. procedures for multiple significant trauma w MCC	171	25,123	3,742	1,160	859	25,587	11,970	8,861	17,829	7,820	5,904	33,403	2,344	1,848	274	21	15	79	2	1	10,295	1,806	1,828
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	23,990	3,958	1,348	1,033	22,139	13,921	10,733	16,561	6,147	4,708	28,320	866	663	671	85	65	294	9	7	10,267	1,614	1,720
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graf	14	23,646	4,099	1,171	1,141	19,732	5,638	4,933	21,966	10,983	9,621	0	0	0	910	195	171	0	0	26,411	5,659	5,554	
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	23,537	4,312	1,479	1,126	23,039	12,520	9,554	17,316	7,057	5,414	31,617	704	536	616	126	96	286	8	6	11,894	1,642	1,571
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	23,260	3,504	1,166	1,016	21,129	6,413	5,615	14,373	7,776	6,784	31,215	2,243	1,953	663	60	53	73	0	0	17,769	5,602	5,739
453: Combined anterior/posterior spinal fusion w MCC	150	23,114	3,865	2,190	1,796	20,755	11,346	9,230	12,046	4,176	3,368	42,422	1,980	1,597	422	25	20	212	8	7	18,153	3,388	3,297
025: Craniotomy & endovascular intracranial procedures w MCC	926	22,725	3,388	1,218	934	20,706	9,816	7,383	14,268	5,932	4,410	32,157	1,563	1,157	657	87	66	224	4	3	18,099	4,105	3,891
094: Bacterial & tuberculous infections of nervous system w MCC	125	22,414	2,964	1,020	754	22,983	6,067	4,766	12,267	6,281	4,778	37,131	5,050	3,670	480	35	25	312	5	4	19,022	3,956	4,058

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 19
Medicare Post-Acute Care Episode Payments and Utilization by Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmission

MS-DRG	Mean PAC Payment Per PAC User (\$)	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations				
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)		
All MS-DRGs	659,549	8,165	2,768	1,420	549	15,825	1,387	536	10,518	4,644	1,796	34,861	621	240	620	70	27	358	22	9			0	0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	47,054	3,087	389	347	23,480	2,158	1,923	13,566	3,691	3,290	60,880	40,806	36,371	404	10	9	241	1	1			0	0
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	42,070	3,339	535	487	24,626	4,347	3,951	14,260	3,785	3,440	55,028	33,383	30,340	471	17	16	185	1	1			0	0
297: Cardiac arrest, unexplained w CC	1	34,387		0	0			0	34,387	34,387	11,462		0	0		0	0		0	0			0	0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	23,486	4,593	1,268	994	23,021	12,110	9,490	16,286	7,974	6,249	30,043	2,034	1,594	873	95	75	968	5	4			0	0
028: Spinal procedures w MCC	158	22,472	2,928	815	667	27,777	11,779	9,643	14,625	6,017	4,926	40,173	3,814	3,122	541	45	36	135	3	2			0	0
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	22,241	3,014	812	694	20,282	10,453	8,940	16,702	8,223	7,032	34,918	2,686	2,297	673	67	58		0	0			0	0
957: Other O.R. procedures for multiple significant trauma w MCC	171	21,156	3,821	1,095	811	24,442	11,435	8,465	15,101	6,447	4,772	33,529	2,157	1,597	274	21	15	97	2	1			0	0
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implan	353	20,981	4,279	836	663	21,208	10,214	8,102	13,597	6,587	5,225	33,019	3,274	2,597	653	67	53	286	3	3			0	0
955: Craniotomy for multiple significant trauma	50	20,911	3,878	931	776	18,870	9,812	8,177	15,014	5,705	4,755	31,803	4,452	3,710	166	7	6	169	3	3			0	0
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	20,839	3,895	1,258	964	21,628	13,317	10,199	16,020	5,457	4,179	27,381	717	549	686	81	62	294	9	7			0	0
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	20,484	4,295	1,425	1,085	22,531	12,244	9,318	16,162	6,227	4,739	25,783	459	350	602	119	91	286	8	6			0	0
870: Septicemia w MV 96+ hours	345	20,481	3,108	901	647	19,796	2,410	1,732	10,865	5,668	4,074	52,609	11,437	8,220	881	64	46	491	1	1			0	0
453: Combined anterior/posterior spinal fusion w MCC	150	18,709	3,900	2,132	1,719	20,274	11,083	8,938	10,889	3,557	2,868	40,772	1,903	1,534	422	25	20	212	8	7			0	0
025: Craniotomy & endovascular intracranial procedures w MCC	926	16,921	3,409	1,167	864	19,730	9,247	6,845	12,562	4,938	3,655	31,128	1,479	1,095	659	86	64	240	4	3			0	0
480: Hip & femur procedures except major joint w MCC	4,241	16,811	4,091	958	892	17,093	3,656	3,404	14,907	11,561	10,764	28,018	601	560	767	33	31	280	2	2			0	0
471: Cervical spinal fusion w MCC	302	16,580	3,500	1,634	1,127	21,706	9,056	6,244	14,423	5,015	3,458	26,643	794	547	428	69	48	237	12	8			0	0
956: Limb reattachment, hip & femur proc for multiple significant trauma	721	16,573	3,797	879	829	17,346	4,547	4,286	14,111	10,432	9,832	29,647	658	620	1,041	52	49	335	5	5			0	0
064: Intracranial hemorrhage or cerebral infarction w MCC	5,615	16,417	3,689	1,081	787	21,052	6,749	4,912	13,505	7,461	5,430	30,927	1,052	766	682	70	51	341	4	3			0	0
094: Bacterial & tuberculous infections of nervous system w MCC	125	16,413	2,949	967	703	21,562	5,520	4,012	10,166	5,124	3,724	37,208	4,763	3,461	480	35	25	312	5	4			0	0
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	16,314	3,880	1,349	1,012	20,384	7,688	5,767	14,707	6,864	5,149	22,730	296	222	744	110	82	369	8	6			0	0

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 20
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

MS-DRG	Mean PAC		Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations		
	Number of PAC Users ¹	Per PAC User (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)	Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Hospital Discharge (\$)
All MS-DRGs	659,549	7,564	1,339	699	278	15,919	1,436	573	7,495	3,399	1,348	27,406	538	215	363	42	16	331	21	8	9,652	1,430	1,407
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	36,952	1,008	135	122	18,404	1,724	1,544	6,393	1,793	1,613	44,306	29,910	26,715	223	6	5	241	1	1	18,406	3,383	3,467
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	35,086	1,080	185	169	19,588	3,535	3,224	6,719	1,830	1,676	41,868	25,601	23,306	215	9	8	193	2	1	17,530	3,924	3,845
002: Heart transplant or implant of heart assist system w/o MCC	5	24,278	2,158	1,295	589	2,113	423	192	0	0	0	0	0	0	375	75	34	0	0	0	112,427	22,485	12,067
955: Craniotomy for multiple significant trauma	50	21,975	1,119	269	258	20,106	10,455	8,713	8,942	3,756	3,130	24,333	3,407	2,839	166	7	6	169	3	3	15,686	4,078	3,558
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implan	353	20,377	1,061	228	181	21,321	10,449	8,311	7,003	3,611	2,864	29,342	2,992	2,531	253	27	22	261	3	2	11,043	3,066	2,794
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	19,957	1,049	299	255	21,146	10,898	9,321	7,877	3,939	3,368	25,582	2,165	1,851	273	34	29	0	0	0	13,642	2,623	2,244
028: Spinal procedures w MCC	158	19,728	1,247	347	289	24,935	10,574	8,656	7,732	3,337	2,760	24,976	2,529	2,071	190	16	13	181	5	4	12,143	2,920	3,390
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	19,645	1,239	348	273	21,907	11,638	9,120	7,732	3,906	3,061	25,064	1,697	1,330	352	39	30	968	5	4	10,163	2,011	1,656
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	18,580	1,008	344	263	21,479	13,506	10,415	6,890	2,558	1,959	21,600	660	506	261	33	25	267	8	6	9,358	1,471	1,520
870: Septicemia w MV 96+ hours	345	18,574	1,223	372	269	18,994	2,533	1,820	8,030	4,213	3,074	37,005	8,152	5,938	543	39	33	310	1	1	14,256	3,264	3,654
957: Other O.R. procedures for multiple significant trauma w MCC	171	18,374	1,092	338	250	22,569	10,559	7,816	8,442	3,703	2,798	30,346	2,130	1,689	155	12	9	76	2	1	9,296	1,631	1,698
453: Combined anterior/posterior spinal fusion w MCC	150	17,540	1,262	715	595	19,458	10,637	8,658	7,293	2,528	2,039	36,373	1,697	1,369	263	16	13	186	7	6	10,387	1,939	2,074
094: Bacterial & tuberculous infections of nervous system w MCC	125	17,367	1,254	431	327	20,999	5,544	4,328	6,410	3,282	2,465	34,478	4,689	3,408	216	16	11	312	5	4	16,346	3,400	3,628
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	17,271	1,404	481	367	22,325	12,132	9,258	6,585	2,684	2,068	21,728	484	368	300	61	47	286	8	6	10,286	1,420	1,383
025: Craniotomy & endovascular intracranial procedures w MCC	926	17,182	1,199	431	327	19,804	9,389	7,045	7,403	3,078	2,290	25,020	1,216	900	358	48	36	185	3	3	13,306	3,018	2,978
082: Traumatic stupor & coma, coma >1 hr w MCC	129	16,982	1,432	444	305	19,310	7,335	5,067	7,455	3,641	2,515	24,226	1,690	1,160	304	38	26	221	2	1	17,052	3,833	3,276
901: Wound debridements for injuries w MCC	25	16,580	1,085	607	506	20,665	3,306	2,755	5,526	1,768	1,474	36,785	5,886	4,905	0	0	0	106	9	7	20,850	5,004	4,481
239: Amputation for circ sys disorders exc upper limb & toe w MCC	682	16,264	1,005	335	291	19,864	6,029	5,269	7,307	3,953	3,454	22,936	1,648	1,435	495	45	39	73	0	0	13,493	4,254	4,337
927: Extensive burns or full thickness burns w MV 96+ hrs w skin graf	14	16,186	1,064	304	308	19,732	5,638	4,933	9,018	4,509	3,957	0	0	0	356	76	67	0	0	0	26,411	5,659	5,554
456: Spinal fus exc cerv w spinal curv/malig/infec or 9+ fus w MCC	132	16,019	998	476	402	18,253	7,605	6,314	6,989	3,230	2,681	23,622	1,074	891	706	37	31	217	5	4	14,365	3,591	3,511

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 21
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, By MS-DRG, Top 20 MS-DRGs By Mean PAC Episode Payment, 2008
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

MS-DRG	Mean PAC Payment Per PAC User (\$)	Home Health			IRF			SNF			LTCH			Hospital Outpatient Therapy			Independent Therapist			Acute Hospitalizations			
		Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Hospital Discharge (\$)	
All MS-DRGs	659,549	5,745	1,304	669	259	15,378	1,348	521	7,169	3,165	1,224	28,144	501	194	359	41	16	330	20	8		0	0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R	1,665	32,328	968	122	109	17,780	1,634	1,456	5,890	1,602	1,428	43,212	28,964	25,816	224	5	5	241	1	1		0	0
003: ECMO or trach w MV 96+ hrs or PDX exc face, mouth & neck w maj O.R	2,283	29,547	1,048	168	153	18,415	3,251	2,954	6,023	1,599	1,453	40,418	24,520	22,285	218	8	7	185	1	1		0	0
061: Acute ischemic stroke w use of thrombolytic agent w MCC	192	16,599	1,188	328	257	20,993	11,043	8,654	7,202	3,526	2,763	24,489	1,658	1,299	352	39	30	968	5	4		0	0
024: Cranio w major dev impl/acute complex CNS PDX w/o MCC	229	16,314	1,011	327	250	20,980	12,918	9,893	6,999	2,384	1,826	24,701	647	496	262	31	24	267	8	6		0	0
028: Spinal procedures w MCC	158	16,136	1,138	317	259	24,288	10,300	8,432	7,428	3,056	2,502	25,756	2,445	2,002	190	16	13	135	3	2		0	0
957: Other O.R. procedures for multiple significant trauma w MCC	171	15,835	1,081	310	229	21,539	10,077	7,459	8,066	3,444	2,549	30,954	1,991	1,474	155	12	9	97	2	1		0	0
020: Intracranial vascular procedures w PDX hemorrhage w MCC	130	15,650	1,103	297	254	18,677	9,626	8,233	7,232	3,560	3,045	27,742	2,134	1,825	322	32	28		0	0		0	0
023: Cranio w major dev impl/acute complex CNS PDX w MCC or chemo implan	353	15,611	1,060	207	164	19,481	9,382	7,442	6,383	3,092	2,453	29,250	2,900	2,301	264	27	21	261	3	2		0	0
062: Acute ischemic stroke w use of thrombolytic agent w CC	449	15,208	1,401	465	354	21,717	11,802	8,981	6,356	2,449	1,864	23,798	424	323	304	60	46	286	8	6		0	0
955: Craniotomy for multiple significant trauma	50	15,086	1,119	269	224	17,460	9,079	7,566	7,621	2,896	2,413	20,229	2,832	2,360	166	7	6	169	3	3		0	0
453: Combined anterior/posterior spinal fusion w MCC	150	14,947	1,270	694	560	18,864	10,312	8,317	6,879	2,247	1,812	35,794	1,670	1,347	263	16	13	186	7	6		0	0
870: Septicemia w MV 96+ hours	345	14,431	1,152	334	240	19,021	2,316	1,664	7,369	3,845	2,764	36,329	7,898	5,676	524	38	27	310	1	1		0	0
021: Intracranial vascular procedures w PDX hemorrhage w CC	59	14,177	1,121	475	359	20,847	11,307	8,553	7,645	1,425	1,078	26,465	897	679	331	67	51	294	5	4		0	0
025: Craniotomy & endovascular intracranial procedures w MCC	926	13,161	1,181	404	299	18,737	8,782	6,500	7,042	2,768	2,049	24,359	1,157	857	357	47	35	195	3	2		0	0
094: Bacterial & tuberculous infections of nervous system w MCC	125	13,009	1,177	386	281	19,569	5,010	3,641	5,777	2,911	2,116	36,577	4,682	3,402	216	16	11	312	5	4		0	0
471: Cervical spinal fusion w MCC	302	12,478	1,083	506	349	20,716	8,643	5,959	7,389	2,569	1,771	23,817	710	489	245	40	27	204	10	7		0	0
031: Ventricular shunt procedures w MCC	58	12,472	1,218	525	371	21,994	7,205	5,096	7,427	3,457	2,445	72,222	1,245	881	255	31	22	263	9	6		0	0
082: Traumatic stupor & coma, coma > 1 hr w MCC	129	12,054	1,303	394	270	17,541	6,663	4,572	7,145	3,268	2,242	27,255	1,690	1,160	304	38	26	154	1	1		0	0
963: Other multiple significant trauma w MCC	158	12,011	1,066	364	268	18,602	6,005	4,413	7,538	4,055	2,980	30,831	1,561	1,147	313	18	13	412	8	6		0	0
958: Other O.R. procedures for multiple significant trauma w CC	184	11,976	1,135	450	342	20,969	7,635	5,805	7,404	3,259	2,478	27,451	597	454	199	19	15	389	15	11		0	0

NOTES:
1. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service u
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm292)

Section 4-Table 22
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

Condition Grouping	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	11,736	8,465	2,996	19,238	293	16,517	1,539	38,520	326	1,378	101	1,234	42	15,850	3,659
Cardiovascular: Vascular Medical	5,522	16,470	8,932	4,149	20,744	470	17,838	2,455	41,416	705	1,333	102	1,080	29	19,352	6,112
Endocrine: Medical	19,050	16,093	12,789	6,198	20,091	336	17,457	1,508	41,160	449	1,570	99	1,149	40	18,290	4,543
Neurologic: Stroke	325	14,346	9,312	3,496	18,636	516	17,329	1,866	26,007	320	1,278	193	386	4	18,061	4,613
Kidney & Urinary: Medical	6,909	14,038	8,140	3,289	19,794	275	16,756	1,967	38,569	435	1,373	103	741	16	18,366	5,867
Hematologic: Medical	3,113	14,009	7,081	3,785	18,817	272	14,458	1,881	28,880	241	1,155	88	869	20	16,401	5,795
Cardiovascular: Cardiac Medical	9,429	13,681	7,386	3,121	18,305	330	15,615	1,936	40,949	491	1,438	92	1,142	23	16,778	5,303
Integumentary: Medical	20,783	13,374	7,309	2,737	19,526	275	17,088	2,034	41,176	729	1,393	105	1,066	26	17,783	4,972
Neurologic: Medical	33,344	12,920	9,617	3,556	20,302	403	17,457	1,781	38,186	312	1,477	129	1,423	42	14,372	3,342
Respiratory: COPD	6,075	12,889	7,670	3,057	18,294	289	14,306	1,481	39,757	465	1,304	76	899	18	16,608	5,090
GI & Hepatobiliary: Major Medical	1,470	12,121	6,065	1,906	26,633	199	11,023	1,027	27,689	207	634	31	595	6	17,163	6,748
Orthopedic: Minor Medical	40,669	10,777	7,829	2,614	18,277	297	16,449	1,429	36,979	212	1,344	113	1,381	75	14,402	2,871
Cardiovascular: General	21,438	10,488	7,631	3,364	18,815	260	16,147	1,205	32,466	195	1,318	66	1,427	53	14,766	3,024
Infections: Medical	1,980	10,345	6,137	2,105	21,335	259	16,290	1,374	29,362	282	1,199	86	776	25	17,366	3,833
Respiratory: Medical	4,527	9,789	6,325	1,723	17,394	196	12,813	1,135	46,587	370	1,098	65	958	25	14,502	4,110
GI & Hepatobiliary: Minor Medical	3,149	9,606	6,783	1,779	17,609	235	14,504	1,128	39,881	279	787	64	1,747	44	16,762	3,998
Other: Medical	57,849	9,205	7,534	1,869	18,980	226	16,462	1,291	36,479	197	1,380	102	1,081	37	14,798	2,702
Orthopedic: Major Medical	549	9,105	5,573	1,411	15,036	301	12,707	1,412	26,044	95	1,610	117	1,161	23	10,753	2,879
Infections: Septicemia	100	6,328	7,780	1,245	18,639	186	6,127	123		0	858	43	809	16	19,291	2,894

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 23
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

Condition Grouping	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	4,966	7,096	1,998	15,781	26	12,886	51	31,122	18	1,141	59	1,181	35		0
Endocrine: Medical	19,050	7,610	11,007	4,504	17,334	25	12,030	46	47,148	32	1,238	50	1,166	35		0
Neurologic: Medical	33,344	6,029	8,076	2,413	17,182	52	14,292	86	23,198	13	1,213	75	1,345	33		0
Neurologic: Stroke	325	5,766	7,519	2,036	17,316	213	11,368	35		0	1,185	139	386	4		0
Cardiovascular: Vascular Medical	5,522	5,288	7,240	2,643	12,049	22	8,522	39	35,393	71	1,017	43	1,040	21		0
Orthopedic: Minor Medical	40,669	5,155	6,667	1,777	14,106	28	14,249	44	29,100	9	1,102	67	1,340	64		0
Cardiovascular: General	21,438	4,877	6,381	2,412	16,553	18	13,752	41	35,510	8	1,054	35	1,264	41		0
Hematologic: Medical	3,113	4,506	5,430	2,445	6,338	4	11,435	48	21,227	7	1,150	58	943	16		0
Cardiovascular: Cardiac Medical	9,429	4,388	5,862	1,862	11,214	8	10,015	49	25,125	13	1,241	49	1,290	21		0
Integumentary: Medical	20,783	4,337	5,707	1,645	19,343	19	14,522	46	40,190	60	1,103	53	963	19		0
Respiratory: COPD	6,075	4,267	5,860	1,759	14,842	7	9,823	34	16,318	3	1,074	36	941	15		0
Other: Medical	57,849	4,191	6,522	1,228	14,828	22	12,688	52	21,311	10	1,185	65	1,028	32		0
Kidney & Urinary: Medical	6,909	4,183	6,156	1,957	19,229	25	12,529	44	16,994	5	1,243	58	631	10		0
Orthopedic: Major Medical	549	3,942	5,471	937	14,055	26	13,335	24		0	1,218	69	1,081	20		0
Infections: Medical	1,980	3,709	4,547	1,194	16,668	8	6,307	16	32,074	49	867	40	744	19		0
Respiratory: Medical	4,527	3,307	4,914	985	17,868	20	8,817	37	29,991	40	916	43	841	19		0
GI & Hepatobiliary: Minor Medical	3,149	3,239	5,444	1,018	10,066	6	13,234	46	21,186	13	665	43	1,668	32		0
GI & Hepatobiliary: Major Medical	1,470	2,963	4,407	908		0	5,383	33		0	610	22	594	4		0
Infections: Septicemia	100	2,692	7,515	827		0		0		0	1,072	43	0	0		0

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 24
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top Condition Groupings By Episode Payment, 2008
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

Condition Grouping	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All Condition Groupings	236,307	6,446	2,711	895	17,772	146	12,863	723	33,213	101	657	30	458	12	10,563	1,760
GI & Hepatobiliary: Major Medical	1,470	7,765	2,163	640	20,806	99	8,259	539	22,439	76	507	17	381	2	13,106	4,395
Cardiovascular: Vascular Medical	5,522	7,607	2,573	1,112	16,984	215	13,538	968	35,024	254	537	20	430	7	11,695	2,582
Neurologic: Stroke	325	7,572	3,375	1,194	17,697	381	10,313	603		0	708	70	45	0	10,076	1,984
Integumentary: Medical	20,783	7,289	2,573	891	18,643	125	13,438	986	37,480	312	626	26	352	6	11,644	2,447
Neurologic: Medical	33,344	7,114	3,076	1,061	18,674	208	13,792	847	29,236	70	675	37	453	9	9,444	1,525
Endocrine: Medical	19,050	7,005	3,166	1,476	18,140	130	12,449	533	37,118	121	662	21	543	12	11,314	1,795
Cardiovascular: Cardiac Medical	9,429	6,949	2,315	918	17,858	146	11,869	847	32,032	112	666	23	454	6	10,917	2,509
Orthopedic: Major Medical	549	6,703	2,696	604	13,224	193	11,707	960	10,779	20	788	43	435	7	8,901	2,011
Respiratory: COPD	6,075	6,701	2,387	892	17,721	131	11,086	675	32,480	166	652	21	324	5	10,938	2,398
Orthopedic: Minor Medical	40,669	6,520	2,863	881	16,808	169	13,181	739	27,885	47	679	39	523	23	9,981	1,457
Kidney & Urinary: Medical	6,909	6,363	2,112	804	18,859	106	12,069	732	34,777	116	525	20	256	4	11,713	2,496
Hematologic: Medical	3,113	6,329	1,669	863	15,519	75	11,536	641	25,815	58	603	20	314	4	12,847	2,740
Infections: Medical	1,980	6,226	2,368	755	20,268	143	12,941	641	29,537	134	445	20	337	9	12,732	2,141
Respiratory: Medical	4,527	6,029	2,297	581	14,182	88	9,957	600	37,033	172	551	23	449	9	10,336	2,390
Other: Medical	57,849	5,798	2,815	633	17,939	132	12,971	681	32,946	68	687	35	397	11	10,188	1,457
GI & Hepatobiliary: Minor Medical	3,149	5,629	2,422	584	16,552	126	11,047	586	32,293	72	414	25	566	11	10,988	2,146
Cardiovascular: General	21,438	5,273	2,307	978	17,593	98	12,584	495	26,877	44	661	18	517	14	9,819	1,303
Infections: Septicemia	100	4,921	2,595	389		0	6,953	70		0	279	14	59	1	18,755	2,626

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 25
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

MS-DRG	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All MS-DRGs	4,967	46,633	7,958	1,915	21,804	764	16,599	5,461	38,469	5,135	2,602	352	1,362	18	22,291	6,575
516: Other musculoskelet sys & conn tiss O.R. proc w CC	1	180,423	9,743	9,743		0	27,306	27,306	52,683	52,683		0		0	47,264	47,264
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	178,104		0		0	9,449	9,449	158,180	158,180		0		0	567	567
876: O.R. procedure w principal diagnoses of mental illness	3	162,077	5,171	1,724		0	25,001	16,667	128,252	85,501	17,184	5,728		0	29,561	19,707
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	145,900	5,009	1,670		0	18,417	12,278	49,399	32,933	3,072	1,024		0	14,077	9,385
163: Major chest procedures w MCC	2	138,876	2,343	1,172		0	36,807	18,404		0	0	0		0	14,772	14,772
256: Upper limb & toe amputation for circ system disorders w CC	1	129,097	23,631	23,631		0	4,641	4,641	41,961	41,961	4,286	4,286		0	38,543	38,543
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	125,279	22,629	9,698	20,916	2,988	13,842	7,910	48,662	27,807	460	66		0	27,744	23,780
459: Spinal fusion except cervical w MCC	1	119,225	2,488	2,488		0	14,054	14,054	23,062	23,062		0		0	31,658	31,658
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	119,091	9,188	1,838	24,383	3,251	13,096	3,492	23,453	3,127	4,405	587	901	60	27,636	5,527
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	118,211		0		0		0	18,788	18,788	7,361	7,361		0	25,895	25,895
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	118,182		0	25,667	25,667		0	23,117	23,117		0		0	15,041	15,041
167: Other resp system O.R. procedures w CC	2	117,226	1,633	1,633		0	16,872	8,436		0	1,929	964		0	132,493	66,247
870: Septicemia w MV 96+ hours	5	116,535	10,418	2,084	34,510	6,902	1,035	207	86,159	17,232		0		0	54,944	32,966
289: Acute & subacute endocarditis w CC	3	116,201	5,795	3,863	22,578	7,526		0	21,016	7,005	711	474	0	0	99,315	66,210
381: Complicated peptic ulcer w CC	2	107,446	4,863	4,863	15,182	7,591		0	11,546	5,773	501	251		0	56,642	56,642
166: Other resp system O.R. procedures w MCC	33	104,559	4,845	1,175	23,474	1,423	19,151	6,964	45,081	8,197	2,161	327		0	27,862	11,820
918: Poisoning & toxic effects of drugs w/o MCC	1	104,123		0		0	33,915	33,915		0		0		0	62,394	62,394
902: Wound debridements for injuries w CC	3	103,545	11,411	7,607	30,035	10,012	34,104	22,736	14,048	4,683	243	162		0	19,763	13,175
500: Soft tissue procedures w MCC	5	103,094	4,202	1,681		0	17,547	14,037	26,106	15,664	3,184	2,548		0	15,111	9,066
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	101,290	8,995	8,995		0		0	37,859	37,859		0		0	17,612	17,612

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 26
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

MS-DRG	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All MS-DRGs	4,967	33,467	6,014	1,206	20,906	488	12,778	3,586	31,799	1,569	2,120	189	1,480	15		0
584: Breast biopsy, local excision & other breast procedures w CC/MCC	1	177,537		0		0	9,449	9,449	158,180	158,180		0		0		0
163: Major chest procedures w MCC	2	121,283		0		0	33,508	16,754		0	0	0		0		0
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	109,507	6,457	861	24,383	3,251	7,540	2,011	32,418	2,161	226	15		0		0
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	97,075		0		0	12,697	8,465		0		0		0		0
503: Foot procedures w MCC	1	86,944		0	2,751	2,751	9,853	9,853	29,970	29,970		0		0		0
054: Nervous system neoplasms w MCC	1	84,695		0		0	21,477	21,477		0		0		0		0
042: Periph & cranial nerve & other nerv syst proc w/o CC/MCC	1	83,678	8,995	8,995		0		0	37,859	37,859		0		0		0
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	82,210	2,327	241	9,491	655	14,242	5,402	63,183	6,536	802	111		0		0
500: Soft tissue procedures w MCC	5	81,894	2,429	486		0	13,988	8,393	26,665	10,666	5,630	2,252		0		0
166: Other resp system O.R. procedures w MCC	33	80,882	1,821	276	17,164	1,040	10,569	3,523	22,128	1,341	1,591	48		0		0
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	80,024		0	25,667	25,667		0		0		0		0		0
604: Trauma to the skin, subcut tiss & breast w MCC	1	76,964		0		0	37,130	37,130		0	7,893	7,893		0		0
958: Other O.R. procedures for multiple significant trauma w CC	1	74,463	344	344		0	18,522	18,522		0		0		0		0
356: Other digestive system O.R. procedures w MCC	3	73,474	4,396	1,465		0	29,066	9,689	63,285	21,095		0	2,850	950		0
987: Non-extensive O.R. proc unrelated to principal diagnosis w MCC	18	73,259	4,226	704	21,272	1,182	15,045	9,194	34,127	5,688	4,183	1,162		0		0
907: Other O.R. procedures for injuries w MCC	3	71,989	3,157	3,157		0		0	83,034	27,678	40	13		0		0
576: Skin graft &/or debrid exc for skin ulcer or cellulitis w MCC	2	69,924	6,865	6,865		0		0		0		0		0		0
357: Other digestive system O.R. procedures w CC	1	67,411	3,939	3,939		0	17,426	17,426		0	4,594	4,594		0		0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	67,030	4,994	645	18,631	1,623	13,183	3,127	39,397	2,130	1,422	94		0		0
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	66,167		0		0		0		0		0		0		0

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 27
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top MS-DRGs By Mean Episode Payment, 2008
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

MS-DRG	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All MS-DRGs	4,967	36,399	3,188	598	21,303	562	12,861	3,770	30,881	2,070	1,140	68	415	3	15,696	2,914
163: Major chest procedures w MCC	2	131,143		0		0	33,508	16,754		0		0		0	19,720	9,860
250: Perc cardiovasc proc w/o coronary artery stent or AMI w MCC	1	112,056		0		0		0	18,788	18,788	1,206	1,206		0	25,895	25,895
004: Trach w MV 96+ hrs or PDX exc face, mouth & neck w/o maj O.R.	15	109,423	5,172	690	24,383	3,251	6,701	1,787		0	336	22		0	18,484	2,465
616: Amputat of lower limb for endocrine,nutrit,& metabol dis w MCC	3	100,958	2,565	855		0	12,697	8,465		0		0		0	9,084	3,028
381: Complicated peptic ulcer w CC	2	98,232	3,213	1,607	15,182	7,591		0		0	132	66		0	56,642	56,642
289: Acute & subacute endocarditis w CC	3	96,959	3,024	2,016	22,578	7,526		0	21,016	7,005		0	0	0	73,933	49,288
166: Other resp system O.R. procedures w MCC	33	90,189	2,135	324	23,474	1,423	13,402	4,061	22,128	1,341		0		0	19,768	8,387
981: Extensive O.R. procedure unrelated to principal diagnosis w MCC	29	90,131	4,983	344	9,491	655	14,455	5,981	41,585	5,736	350	24		0	23,564	8,126
459: Spinal fusion except cervical w MCC	1	89,635	2,488	2,488		0		0	23,062	23,062		0		0	16,122	16,122
241: Amputation for circ sys disorders exc upper limb & toe w/o CC/MCC	1	89,368		0		0	28,255	28,255		0		0		0	13,526	13,526
846: Chemotherapy w/o acute leukemia as secondary diagnosis w MCC	1	85,241		0	25,667	25,667		0		0		0		0	5,217	5,217
239: Amputation for circ sys disorders exc upper limb & toe w MCC	7	84,904	3,613	1,548	20,916	2,988	5,493	2,354	37,275	15,975	460	66		0	12,518	8,942
054: Nervous system neoplasms w MCC	1	84,695		0		0	21,477	21,477		0		0		0		0
870: Septicemia w MV 96+ hours	5	78,187		0	34,510	6,902	1,035	207		0		0		0	23,222	13,933
503: Foot procedures w MCC	1	77,091		0	2,751	2,751		0	29,970	29,970		0		0		0
207: Respiratory system diagnosis w ventilator support 96+ hours	333	76,425	3,077	323	22,295	2,142	14,013	3,240	49,801	4,487	646	25		0	27,940	6,796
444: Disorders of the biliary tract w MCC	1	75,762	275	275		0		0	36,467	36,467		0		0	13,203	13,203
958: Other O.R. procedures for multiple significant trauma w CC	1	74,119		0		0	18,522	18,522		0		0		0		0
167: Other resp system O.R. procedures w CC	2	72,941	2,936	1,468		0	857	429		0		0		0	62,196	31,098
356: Other digestive system O.R. procedures w MCC	3	72,524	4,396	1,465		0	29,066	9,689	63,285	21,095		0		0		0

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 28
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

RIC	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	27,563	6,082	2,926	20,537	1,603	17,725	4,274	34,871	522	1,888	459	1,370	78	16,910	3,868
RIC 21: Burns	40	93,020	6,035	2,263	34,435	2,583	15,263	3,434	31,434	3,143	2,393	718	1,546	77	26,600	6,650
RIC 19: Guillain-Barre	25	48,204	15,724	5,032	37,330	4,480	28,704	5,741		0	4,025	1,288	1,095	131	24,951	6,986
RIC 04: Spinal Cord Dysfunction, Traumatic	203	36,704	8,126	2,602	27,008	2,528	18,642	2,663	41,492	1,022	3,107	1,041	2,495	123	19,950	5,602
RIC 11: Amputation, Non-Lower Extremity	8	36,171	5,564	4,173	29,506	3,688	35,001	4,375		0	508	127		0	29,395	7,349
RIC 01: Stroke	1,917	33,121	8,005	3,320	24,543	2,048	20,915	5,324	32,890	429	2,412	828	1,736	73	16,347	4,068
RIC 18: MMT With Brain/Spinal	88	32,224	7,258	2,144	28,053	2,231	25,498	4,346		0	2,704	522	1,205	151	16,826	2,677
RIC 02: Brain Dysfunction, Traumatic	373	30,816	6,159	2,411	27,648	2,743	19,317	3,729	38,269	616	2,358	740	1,114	63	19,264	3,667
RIC 20: Miscellaneous	1,427	28,740	6,035	3,197	20,479	1,550	17,175	4,838	33,876	760	1,646	321	1,018	42	18,526	4,985
RIC 10: Amputation, Lower Extremity	376	28,522	6,919	2,613	18,881	1,356	15,883	1,816	34,456	641	1,904	537	1,862	89	32,607	7,198
RIC 06: Neurological Conditions	1,875	28,157	6,513	3,147	18,960	1,719	18,049	4,621	32,787	490	1,734	494	1,313	61	16,810	4,007
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	27,863	6,678	2,499	24,716	2,074	19,140	3,993	44,725	913	2,294	593	1,966	138	20,035	4,452
RIC 13: Rheumatoid And Other Arthritis	152	27,526	5,560	2,890	22,939	1,660	16,031	4,430	53,300	1,403	1,747	322	1,393	73	16,812	4,314
RIC 17: MMT Without Brain/Spinal Cord Injury	324	27,506	5,693	3,268	18,380	1,986	15,894	3,336	30,464	564	909	163	2,217	171	16,982	3,407
RIC 12: Osteoarthritis	260	26,702	4,360	2,532	16,861	1,686	16,920	5,857	31,500	363	1,561	318	832	32	12,646	3,453
RIC 03: Brain Dysfunction, Non-Traumatic	356	26,620	7,436	2,715	22,037	1,857	18,428	3,675	36,349	204	1,900	416	1,277	57	15,487	3,828
RIC 09: Other Orthopedic	1,648	26,450	5,258	3,254	17,471	1,262	16,517	5,412	23,354	255	1,523	299	1,189	82	14,427	3,362
RIC 15: Pulmonary	107	25,633	6,651	2,487	25,548	2,388	12,064	1,240		0	977	183	773	14	25,761	6,260
RIC 16: Pain Syndrome	445	25,240	4,931	2,682	17,484	1,336	17,002	4,661	32,946	518	1,333	285	1,136	61	16,303	4,286
RIC 07: Lower Extremity Fracture	994	23,837	5,092	2,981	15,519	843	15,798	3,767	39,061	629	1,620	267	1,625	96	12,155	2,470
RIC 14: Cardiac	184	21,927	5,918	2,541	17,447	1,612	15,788	2,317	76,237	1,243	2,485	216	596	3	17,528	4,191

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 29
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

RIC	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	19,349	5,007	2,135	16,581	331	14,755	2,574	28,617	98	1,544	316	1,240	62		0
RIC 21: Burns	40	82,452	5,011	1,253	27,486	1,374	18,627	3,260	26,994	2,025	1,135	312	1,546	77		0
RIC 19: Guillain-Barre	25	30,498	8,570	2,057		0	28,055	3,367		0	2,220	444	1,053	84		0
RIC 04: Spinal Cord Dysfunction, Traumatic	203	27,139	6,524	1,896	35,023	1,380	14,391	1,489	42,235	416	2,767	791	1,104	44		0
RIC 18: MMT With Brain/Spinal	88	26,125	5,869	1,467	14,220	485	23,722	3,504		0	2,307	367	1,189	149		0
RIC 01: Stroke	1,917	23,843	6,409	2,280	22,074	484	17,361	3,369	23,328	73	1,928	550	1,568	56		0
RIC 02: Brain Dysfunction, Traumatic	373	21,851	4,743	1,640	15,850	382	16,138	2,336		0	2,126	587	1,160	56		0
RIC 17: MMT Without Brain/Spinal Cord Injury	324	20,383	5,004	2,425	14,633	406	13,457	2,326	26,836	331	898	144	2,259	139		0
RIC 12: Osteoarthritis	260	19,644	3,810	2,051	16,601	639	16,902	4,290		0	1,017	180	770	24		0
RIC 11: Amputation, Non-Lower Extremity	8	19,391	5,611	2,805		0		0		0	1,016	127		0		0
RIC 06: Neurological Conditions	1,875	19,286	5,482	2,403	13,417	315	14,848	2,502	27,777	30	1,530	366	1,263	53		0
RIC 09: Other Orthopedic	1,648	19,155	4,503	2,506	12,093	169	14,650	3,627	20,332	62	1,224	201	1,048	65		0
RIC 03: Brain Dysfunction, Non-Traumatic	356	18,692	5,247	1,651	13,891	273	15,926	2,460	24,334	68	1,829	329	1,205	44		0
RIC 20: Miscellaneous	1,427	18,645	5,063	2,334	15,112	233	13,672	2,616	33,997	167	1,413	218	870	30		0
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	18,240	5,593	1,788	19,672	491	13,343	1,876	46,743	424	1,721	367	1,705	93		0
RIC 13: Rheumatoid And Other Arthritis	152	18,197	5,105	2,418	11,278	223	14,584	2,878		0	1,071	169	1,847	73		0
RIC 07: Lower Extremity Fracture	994	17,921	4,326	2,289	12,851	168	13,000	2,433	11,765	24	1,111	159	1,326	65		0
RIC 10: Amputation, Lower Extremity	376	17,753	4,878	1,635	18,053	576	10,749	772	23,724	63	1,439	360	1,784	76		0
RIC 16: Pain Syndrome	445	16,202	4,110	1,986	13,844	218	12,206	2,304	27,435	62	996	170	1,158	52		0
RIC 15: Pulmonary	107	15,565	4,889	1,508	32,278	302	11,165	626		0	405	53	773	14		0
RIC 14: Cardiac	184	12,364	3,702	1,288	9,313	152	11,129	968	17,208	94	1,046	57	596	3		0
																0

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

Section 4-Table 30
Medicare Post-Acute Care Episode Payments and Utilization By Service Type for PAC Users, Top RICs By Mean Episode Payment, 2008
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge From Initiating Event

RIC	Number of PAC Users ¹	Mean PAC Episode Payment Per PAC User (\$)	Home Health		IRF		SNF		LTCH		Hospital Outpatient Therapy		Independent Therapist		Acute Hospitalizations	
			Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)	Mean Payment Per Service User (\$)	Mean Payment Per PAC User (\$)
All RICs	11,956	20,932	3,710	1,486	17,490	772	14,683	2,977	27,173	182	770	121	396	12	11,314	1,549
RIC 21: Burns	40	85,016	3,918	1,078	26,997	2,025	15,428	2,314	26,994	2,025	811	142	154	4	18,730	3,278
RIC 19: Guillain-Barre	25	35,508	6,494	1,559	33,280	1,331	28,881	4,621		0	1,276	255	137	11	13,271	3,185
RIC 18: MMT With Brain/Spinal	88	29,285	4,247	1,062	28,053	2,231	26,095	3,855		0	713	81	269	18	15,084	1,886
RIC 11: Amputation, Non-Lower Extremity	8	28,032	4,002	2,001	29,506	3,688	23,579	2,947		0	303	38		0	11,595	2,899
RIC 04: Spinal Cord Dysfunction, Traumatic	203	26,578	3,719	898	25,500	879	14,114	1,530	56,028	276	1,001	252	452	13	11,245	1,606
RIC 01: Stroke	1,917	24,747	4,314	1,418	19,032	824	17,460	3,816	22,412	94	926	208	372	9	9,640	1,348
RIC 02: Brain Dysfunction, Traumatic	373	24,124	3,775	1,164	23,729	1,590	15,569	2,588	21,455	173	986	220	481	17	13,861	1,524
RIC 17: MMT Without Brain/Spinal Cord Injury	324	22,477	3,723	1,666	17,264	1,492	14,470	2,724	23,241	359	500	48	391	8	11,818	1,568
RIC 06: Neurological Conditions	1,875	20,839	3,846	1,586	16,722	812	14,474	2,872	38,789	186	752	142	427	11	11,584	1,612
RIC 20: Miscellaneous	1,427	20,778	3,583	1,607	16,592	628	13,285	2,988	26,516	260	698	76	367	9	13,076	2,163
RIC 09: Other Orthopedic	1,648	20,772	3,629	1,795	14,263	589	14,487	4,220	23,556	114	613	62	299	9	10,786	1,460
RIC 03: Brain Dysfunction, Non-Traumatic	356	20,730	4,085	1,262	17,277	874	15,868	2,808	36,349	204	739	112	501	8	10,323	1,595
RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	20,701	3,752	1,106	22,824	1,190	14,693	2,532	32,781	520	772	135	485	15	14,002	2,000
RIC 12: Osteoarthritis	260	20,612	3,095	1,583	17,482	605	15,256	4,283	30,366	117	588	72	408	9	11,010	1,482
RIC 13: Rheumatoid And Other Arthritis	152	19,634	3,477	1,464	21,981	289	12,521	2,966		0	613	60	476	19	15,200	2,400
RIC 10: Amputation, Lower Extremity	376	19,476	3,433	1,132	18,463	737	11,441	913	19,962	106	650	152	512	15	15,548	2,150
RIC 07: Lower Extremity Fracture	994	19,279	3,762	1,873	14,316	490	13,007	2,879	23,485	165	735	76	398	12	8,217	1,000
RIC 16: Pain Syndrome	445	18,895	3,159	1,505	15,257	720	13,133	3,010	22,060	248	553	68	327	10	11,259	1,923
RIC 15: Pulmonary	107	18,140	3,053	1,113	15,726	882	13,150	983		0	394	52	670	13	12,818	2,036
RIC 14: Cardiac	184	15,622	3,163	1,152	14,628	1,033	12,612	1,576	26,295	429	890	58	330	2	8,747	1,569

NOTES:
1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
SOURCE: RTI analysis of 2008 Medicare claims data (m3mm294).

SECTION 5

2008 CROSS SECTIONAL DATA MORTALITY ANALYSIS

In addition to the episode descriptives presented in Sections 1 - 4, RTI stratified analyses by type of initiated event (acute, HHA, LTCH, and IRF) and by whether beneficiaries died during the episode. This mortality analysis was conducted for two episode definitions: the 30-day variable-length episode definition and the 30-day fixed-length with any claim initiating within 30 days after discharge from the index event. These episode definitions were chosen because they allow us to look at timing of death and differences in service utilization under a shorter versus longer episode definition. Note that these mortality analyses were conducted to learn more about trajectories of care and service use, and were not intended for quality measurement. Tables 5-1 and 5-2 report on results of the mortality analysis for acute initiated episodes, Tables 5-3 and 5-4 report the results of HHA-initiated episodes, Tables 5-5 and 5-6 report the results of the LTCH-initiated episodes, and Tables 5-7 and 5-8 report the results of IRF-initiated episodes.

- In looking at acute hospital-initiated episodes, 7.7 percent of beneficiaries die in their episode under the 30-day variable-length episode definition. This percentage decreases to 4.4 percent when looking at the shorter 30-day fixed episode definition with any claim initiating within 30 days of discharge from the index acute hospitalization. These tables also indicate that beneficiaries who die in their episodes have higher index acute hospitalization length and payment suggesting that these beneficiaries are likely more complex when they initiate care.
- Compared with beneficiaries with acute initiated episodes who survive until the end of the 30 day variable length episode, a higher proportion of beneficiaries who die before the end of the episode use SNF (76.0 percent versus 45.8 percent), LTCH (10.6 percent versus 1.9 percent), and have an acute hospitalization (68.6 percent versus 25.0 percent). In contrast, a higher proportion of beneficiaries surviving to the end of the episode used IRF, HHA, and therapy services. Similar results were revealed in looking at service use under the shorter 30-day fixed episode definition.
- In the mortality analysis of beneficiaries initiating episodes in HHA, 4.5 percent died under the longer 30-day variable-length episode definition and 2.5 percent died under the shorter 30-day fixed episode definition. Under the 30-day variable-length episode definition, beneficiaries dying during the episode have a higher number of HHA visits in the index event than those who survive, A higher proportion of beneficiaries dying during an HHA-initiated episode used IRF, LTCH, SNF, and had an acute hospitalization. Under the 30-day variable definition, 82.5 percent of beneficiaries dying during the episode have an acute hospitalization during their episode compared with 20.3 percent

of beneficiaries who survive until the end of the episode. Results were similar across the two episode definitions examined.

- Analysis of the LTCH-initiated episode revealed that 17.8 percent of LTCH community entrants die before the end of the episode under the 30-day variable-length definition. This percentage decreases to 13.5 under the shorter 30-day fixed definition. A higher proportion of beneficiaries who survive through the end of the episode use subsequent PAC and have acute hospitalization during the episode. Of those that survive until the end of the episode under the 30-day variable length definition, 26.8 percent of beneficiaries who survive have an acute hospitalization compared with 42.0 percent of those who die.
- A much smaller proportion of beneficiaries with IRF-initiated episodes die during their episode, likely because beneficiaries in IRFs must be willing to participate in 3 hours of therapy per day. In looking at the 30-day variable-length episode definition, 3.9 percent of beneficiaries die and this decreases to 2.0 percent when looking at the shorter episode definition.

Table 5-1. Mortality Analyses, Acute Hospital-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	608,499	51,050
Percent of Beneficiaries	92.3	7.7
Mean Index Acute Hospital Length of Stay ¹	5.9	9.0
Mean Index Acute Hospital Payment ¹	\$10,392	\$12,712
Mean Episode Length of Stay (days) ²	87.5	84.6
Mean Episode Payments ²	\$26,281	\$46,018
Mean PAC Length of Stay (days) ³	79.4	74.5
Mean PAC Payments ³	\$15,888	\$33,306
HHA		
Percent with Claim	62.8	34.6
Mean Visits Per Service User ⁴	25.3	31.2
Mean Payment Per Service User ⁴	\$4,213	\$4,599
IRF		
Percent with Claim	9.9	7.3
Mean Length of Stay Per Service User (days) ⁴	14.3	15.6
Mean Payment Per Service User ⁴	\$17,444	\$18,718
LTCH		
Percent with Claim	1.9	10.6
Mean Length of Stay Per Service User (days) ⁴	32.1	30.3
Mean Payment Per Service User ⁴	\$38,092	\$40,756
SNF		
Percent with Claim	45.8	76.0
Mean Length of Stay Per Service User (days) ⁴	40.2	33.4
Mean Payment Per Service User ⁴	\$13,920	\$11,676
Outpatient Therapy		
Percent with Claim	21.2	9.6
Mean Payment Per Service User ⁴	\$1,410	\$1,409
Independent Therapist		
Percent with Claim	10.3	1.0
Mean Payment Per Service User ⁴	\$1,210	\$1,083
Acute Hospital Readmission		
Percent with Claim	25.0	68.6
Mean Length of Stay Per Service User (days) ⁴	10.5	14.9
Mean Payment Per Service User ⁴	\$15,891	\$24,807

1. An "index acute hospitalization" is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for the index acute hospitalization, SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
3. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim. PAC payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-2. Mortality Analyses, Acute Hospital-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	630,573	28,976
Percent of Beneficiaries	95.6	4.4
Mean Index Acute Hospital Length of Stay (days) ¹	6.0	9.3
Mean Index Acute Hospital Payment ¹	\$10,466	\$12,889
Mean Episode Length of Stay (days) ²	49.2	39.0
Mean Episode Payments ²	\$20,885	\$28,581
Mean PAC Length of Stay (days) ³	41.1	29.0
Mean PAC Payments ³	\$10,420	\$15,693
HHA		
Percent with Claim	53.7	21.0
Mean Visits Per Service User ⁴	15.9	8.8
Mean Payment Per Service User ⁴	\$2,806	\$1,720
IRF		
Percent with Claim	9.2	4.5
Mean Length of Stay Per Service User (days) ⁴	13.5	10.5
Mean Payment Per Service User ⁴	\$16,585	\$12,867
LTCH		
Percent with Claim	1.7	8.2
Mean Length of Stay Per Service User (days) ⁴	28.7	21.6
Mean Payment Per Service User ⁴	\$36,040	\$31,503
SNF		
Percent with Claim	44.0	73.8
Mean Length of Stay Per Service User (days) ⁴	33.3	18.9
Mean Payment Per Service User ⁴	\$11,830	\$6,879
Outpatient Therapy		
Percent with Claim	12.0	2.5
Mean Payment Per Service User ⁴	\$630	\$376
Independent Therapist		
Percent with Claim	6.6	0.2
Mean Payment Per Service User ⁴	\$358	\$289
Acute Hospital Readmission		
Percent with Claim	13.4	45.1
Mean Length of Stay Per Service User (days) ⁴	7.3	8.1
Mean Payment Per Service User ⁴	\$10,963	\$15,680

1. An "index acute hospitalization" is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for the index acute hospitalization, SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
3. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim. PAC payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-3. Mortality Analyses, HHA-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	225,632	10,675
Percent of Beneficiaries	95.5	4.5
Mean Index HHA Visits ¹	16.8	17.3
Mean Index HHA Payment ¹	\$2,791	\$2,529
Mean Episode Length of Stay (days) ²	112.0	135.6
Mean Episode Payments ²	\$10,685	\$33,951
HHA (not including initiating event)³		
Percent with Claim	34.9	45.9
Mean Visits Per Service User ⁴	64.4	58.1
Mean Payment Per Service User ⁴	\$8,530	\$7,423
IRF		
Percent with Claim	1.4	3.7
Mean Length of Stay Per Service User (days) ⁴	16.3	15.2
Mean Payment Per Service User ⁴	\$19,359	\$18,261
LTCH		
Percent with Claim	0.6	6.3
Mean Length of Stay Per Service User (days) ⁴	34.5	30.0
Mean Payment Per Service User ⁴	\$38,546	\$38,467
SNF		
Percent with Claim	8.0	37.1
Mean Length of Stay Per Service User (days) ⁴	50.6	35.3
Mean Payment Per Service User ⁴	\$17,373	\$12,614
Outpatient Therapy		
Percent with Claim	7.3	8.6
Mean Payment Per Service User ⁴	\$1,388	\$1,192
Independent Therapist		
Percent with Claim	3.5	1.5
Mean Payment Per Service User ⁴	\$1,240	\$959
Acute Hospitalization		
Percent with Claim	20.3	82.5
Mean Length of Stay Per Service User (days) ⁴	9.8	15.3
Mean Payment Per Service User ⁴	\$14,204	\$24,397

1. An "initiating event" is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Service use for the initiating event is not included in this calculation.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-4. Mortality Analyses, HHA-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition¹	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	230,357	5,950
Percent of Beneficiaries	97.5	2.5
Mean Index HHA Visits ¹	16.9	12.8
Mean Index HHA Payment ¹	\$2,796	\$2,144
Mean Episode Length of Stay (days) ²	64.4	50.3
Mean Episode Payments ²	\$6,173	\$17,008
HHA (not including initiating event)³		
Percent with Claim	33.5	16.2
Mean Visits Per Service User ⁴	18.6	9.5
Mean Payment Per Service User ⁴	\$2,723	\$1,709
IRF		
Percent with Claim	0.8	1.4
Mean Length of Stay Per Service User (days) ⁴	15.0	12.0
Mean Payment Per Service User ⁴	\$17,875	\$15,496
LTCH		
Percent with Claim	0.2	2.5
Mean Length of Stay Per Service User (days) ⁴	29.7	26.4
Mean Payment Per Service User ⁴	\$33,346	\$32,695
SNF		
Percent with Claim	5.1	24.2
Mean Length of Stay Per Service User (days) ⁴	38.3	20.3
Mean Payment Per Service User ⁴	\$13,530	\$7,368
Outpatient Therapy		
Percent with Claim	4.6	3.8
Mean Payment Per Service User ⁴	\$661	\$454
Independent Therapist		
Percent with Claim	2.7	0.4
Mean Payment Per Service User ⁴	\$459	\$390
Acute Hospitalization		
Percent with Claim	15.2	73.8
Mean Length of Stay Per Service User (days) ⁴	7.0	9.8
Mean Payment Per Service User ⁴	\$9,888	\$15,951

1. An "initiating event" is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Service use for the initiating event is not included in this calculation.
4. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-5. Mortality Analyses, LTCH-Initiated Episodes, 30-Day Variable-Length Episode, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	4,083	884
Percent of Beneficiaries	82.2	17.8
Mean Index LTCH Length of Stay (days) ¹	26.5	27.9
Mean Index LTCH Hospital Payment ¹	\$24,850	\$33,638
Mean Episode Length of Stay (days) ²	108.8	68.2
Mean Episode Payments ²	\$44,387	\$57,006
HHA		
Percent with Claim	26.8	11.4
Mean Visits Per Service User ³	59.9	50.2
Mean Payment Per Service User ³	\$8,088	\$6,556
IRF		
Percent with Claim	3.8	2.3
Mean Length of Stay Per Service User (days) ³	18.5	21.2
Mean Payment Per Service User ³	\$21,436	\$24,642
LTCH (not including initiating event)⁴		
Percent with Claim	12.5	17.1
Mean Length of Stay Per Service User (days) ³	41.4	38.1
Mean Payment Per Service User ³	\$37,122	\$43,034
SNF		
Percent with Claim	33.4	30.7
Mean Length of Stay Per Service User (days) ³	60.1	36.5
Mean Payment Per Service User ³	\$17,544	\$11,850
Outpatient Therapy		
Percent with Claim	15.3	5.4
Mean Payment Per Service User ³	\$2,633	\$2,200
Independent Therapist		
Percent with Claim	1.6	0.2
Mean Payment Per Service User ³	\$1,400	\$110
Acute Hospitalization		
Percent with Claim	26.8	42.0
Mean Length of Stay Per Service User (days) ³	14.6	14.9
Mean Payment Per Service User ³	\$20,996	\$26,110

1. An "initiating event" is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-6. Mortality Analyses, LTCH-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	4,295	672
Percent of Beneficiaries	86.5	13.5
Mean Index LTCH Length of Stay (days) ¹	26.6	27.5
Mean Index LTCH Hospital Payment ¹	\$25,363	\$33,130
Mean Episode Length of Stay (days) ²	60.9	38.1
Mean Episode Payments ²	\$35,565	\$41,728
HHA		
Percent with Claim	21.0	4.2
Mean Visits Per Service User ³	23.1	9.7
Mean Payment Per Service User ³	\$3,226	\$1,974
IRF		
Percent with Claim	2.9	0.7
Mean Length of Stay Per Service User (days) ³	17.8	17.6
Mean Payment Per Service User ³	\$21,422	\$18,300
LTCH (not including initiating event)⁴		
Percent with Claim	6.9	5.7
Mean Length of Stay Per Service User (days) ³	35.1	36.3
Mean Payment Per Service User ³	\$30,095	\$36,978
SNF		
Percent with Claim	31.1	17.7
Mean Length of Stay Per Service User (days) ³	45.3	17.7
Mean Payment Per Service User ³	\$13,446	\$6,289
Outpatient Therapy		
Percent with Claim	6.8	0.7
Mean Payment Per Service User ³	\$1,150	\$568
Independent Therapist		
Percent with Claim	0.8	0.1
Mean Payment Per Service User ³	\$425	\$114
Acute Hospitalization		
Percent with Claim	17.5	25.6
Mean Length of Stay Per Service User (days) ³	10.0	8.6
Mean Payment Per Service User ³	\$14,662	\$20,203

1. An "initiating event" is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-7. Mortality Analyses, IRF-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	11,485	471
Percent of Beneficiaries	96.1	3.9
Mean Index IRF Length of Stay (days) ¹	13.0	12.5
Mean Index IRF Payment ¹	\$13,833	\$13,837
Mean Episode Length of Stay (days) ²	92.0	98.2
Mean Episode Payments ²	\$26,538	\$52,539
HHA		
Percent with Claim	48.5	38.6
Mean Visits Per Service User ³	38.0	45.9
Mean Payment Per Service User ³	\$6,072	\$6,396
IRF (not including initiating event)⁴		
Percent with Claim	7.4	18.3
Mean Length of Stay Per Service User (days) ³	18.0	15.7
Mean Payment Per Service User ³	\$20,674	\$19,188
LTCH		
Percent with Claim	1.2	7.9
Mean Length of Stay Per Service User (days) ³	34.6	27.0
Mean Payment Per Service User ³	\$36,222	\$29,687
SNF		
Percent with Claim	22.7	57.7
Mean Length of Stay Per Service User (days) ³	54.3	39.5
Mean Payment Per Service User ³	\$18,161	\$13,544
Outpatient Therapy		
Percent with Claim	24.8	12.1
Mean Payment Per Service User ³	\$1,898	\$1,411
Independent Therapist		
Percent with Claim	23.3	2.1
Mean Payment Per Service User ³	\$1,369	\$1,441
Acute Hospitalization		
Percent with Claim	20.7	76.6
Mean Length of Stay Per Service User (days) ³	10.6	17.6
Mean Payment Per Service User ³	\$15,043	\$29,189

1. An "initiating event" is defined as an IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined³ as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 5-8. Mortality Analyses, IRF-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition¹	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	11,716	240
Percent of Beneficiaries	98.0	2.0
Mean Index IRF Length of Stay (days) ¹	13.0	11.9
Mean Index IRF Payment ¹	\$13,843	\$13,324
Mean Episode Length of Stay (days) ²	48.1	36.0
Mean Episode Payments ²	\$20,747	\$29,965
HHA		
Percent with Claim	40.5	18.3
Mean Visits Per Service User ³	21.9	17.8
Mean Payment Per Service User ³	\$3,718	\$2,918
IRF (not including initiating event)⁴		
Percent with Claim	4.3	8.8
Mean Length of Stay Per Service User (days) ³	15.9	10.1
Mean Payment Per Service User ³	\$17,741	\$11,416
LTCH		
Percent with Claim	0.6	2.9
Mean Length of Stay Per Service User (days) ³	28.9	13.6
Mean Payment Per Service User ³	\$28,630	\$11,976
SNF		
Percent with Claim	19.8	42.9
Mean Length of Stay Per Service User (days) ³	44.5	21.5
Mean Payment Per Service User ³	\$14,991	\$7,749
Outpatient Therapy		
Percent with Claim	15.9	2.5
Mean Payment Per Service User ³	\$772	\$173
Independent Therapist		
Percent with Claim	3.2	0.0
Mean Payment Per Service User ³	\$396	
Acute Hospitalization		
Percent with Claim	12.8	59.2
Mean Length of Stay Per Service User (days) ³	7.7	8.6
Mean Payment Per Service User ³	\$10,555	\$19,314

1. An "initiating event" is defined as an IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

SECTION 6

2008 CROSS SECTIONAL ANALYSIS: STANDARDIZED POST-ACUTE CARE EPISODE PAYMENTS BASED ON LOCATION OF INDEX PROVIDER, BY STATE

One of the goals of this work was to perform geographic benchmarking analysis to look at the differences in PAC payments across different levels of geography and learn more about differences in patterns of PAC utilization as they relate to differences in the local availability of providers and practice patterns across the country. In conducting the geographic benchmarking analysis, we standardized payments to remove the effects of payment adjustments caused by geography or other policy considerations. By standardizing the payments, we remove payments related to wage adjustments, indirect medical education (IME), and disproportionate share hospital (DSH) payments. This section reports results of the geographic analysis at the state level.

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results by state.

For acute initiated episodes, we report the number of acute hospital discharges, and the number and percent of beneficiaries discharged to PAC. Mean PAC payment per hospital discharge and per PAC user are also reported to provide a sense of how these calculations differ by area of the country, provider supply, and regional practice patterns. Mean PAC episode length of stay is also reported by state. For each of the mean and utilization calculations, the coefficient of variation is also reported (ratio of the standard deviation to the mean).

Key findings from the data presented here include the following.

- These tables reveal the significant differences in the percent of beneficiaries discharged to PAC, the mean PAC payments per discharge and the mean PAC payments per PAC user across states.
- At over \$14,000, Louisiana and Texas have the highest mean payments per PAC user.
- In Louisiana, 35.2 percent of beneficiaries are discharged to PAC, and 38.8 percent are similarly discharged in Texas. Although these percentages are not higher than the national average of 38.7 percent, the mean PAC payments per PAC user are the highest nationally.

- In contrast, the lowest mean PAC payments per PAC user were in Oregon, South Dakota, Montana, Iowa, and Alaska. Each of these states also had lower-than-average percentages of discharge to PAC.
- Patterns of PAC episode length of stay were consistent with payments per PAC user with longer episodes in Texas and Louisiana and shorter episodes in Iowa and Alaska.
- States with the largest number of HHA-initiated episodes included Texas, Florida, and California. States with the highest mean PAC payments per PAC user for HHA-initiated episodes were Louisiana, Oklahoma, and Mississippi. These same states were also among those with the longest episodes.
- States with the largest number of LTCH-initiated episodes included Texas and Louisiana.
- Highest mean PAC episode payments for LTCH-initiated episodes were in Tennessee and South Carolina though these states had fewer than 50 LTCH-initiated episodes in 2008.
- IRF-initiated episodes were most common in Texas, Pennsylvania, and Florida. Highest mean PAC payments for IRF initiated episodes were in Texas and Louisiana.

Section 6-Table 1
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Hospital Discharges ¹	PAC Users ²		(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	7,020	2.5	18,143	1.4	88.8	1.1
Alaska	2,265	491	21.7	3,449	3.0	9,988	1.6	67.8	1.1
Arizona	28,029	8,563	30.6	6,204	2.6	15,670	1.4	62.9	1.0
Arkansas	22,978	7,412	32.3	7,251	2.4	18,005	1.4	76.3	1.2
California	122,598	48,919	39.9	8,847	2.4	18,526	1.5	74.9	1.1
Colorado	18,309	7,266	39.7	7,773	2.4	16,434	1.4	71.7	1.1
Connecticut	22,442	11,631	51.8	10,876	1.9	18,793	1.2	82.1	1.0
Delaware	6,455	2,757	42.7	8,422	2.1	16,622	1.3	70.1	1.0
District of Columbia	4,611	1,641	35.6	8,365	2.5	18,877	1.5	74.8	1.0
Florida	115,156	49,482	43.0	9,004	2.2	17,910	1.4	77.1	1.1
Georgia	48,177	15,553	32.3	7,113	2.5	17,422	1.5	81.1	1.1
Hawaii	4,070	1,056	25.9	5,162	2.5	14,204	1.3	65.7	1.0
Idaho	6,395	2,366	37.0	6,564	2.3	14,430	1.3	72.5	1.1
Illinois	81,874	32,567	39.8	9,195	2.3	19,068	1.4	81.6	1.1
Indiana	45,011	17,038	37.9	9,431	2.3	20,938	1.4	76.3	1.1
Iowa	23,467	8,498	36.2	5,368	2.4	11,546	1.5	54.9	1.1
Kansas	20,676	7,194	34.8	6,826	2.5	15,727	1.5	64.4	1.1
Kentucky	34,176	11,117	32.5	7,998	2.5	19,770	1.4	86.9	1.2
Louisiana	25,991	9,160	35.2	11,437	2.3	27,080	1.3	130.3	1.1
Maine	10,830	4,718	43.6	7,294	2.0	14,387	1.3	67.4	1.0
Maryland	36,016	12,500	34.7	7,090	2.3	16,038	1.3	65.9	1.0
Massachusetts	40,993	20,687	50.5	10,946	2.0	19,205	1.4	81.9	1.1
Michigan	64,498	25,376	39.3	8,445	2.4	17,968	1.5	76.0	1.1
Minnesota	25,580	8,648	33.8	5,885	2.5	13,390	1.5	58.2	1.1
Mississippi	22,699	7,152	31.5	8,578	2.4	21,875	1.3	122.1	1.1
Missouri	45,636	16,991	37.2	7,866	2.5	17,236	1.5	69.8	1.1
Montana	6,951	2,215	31.9	5,020	2.6	12,160	1.5	65.0	1.1
Nebraska	13,239	5,183	39.1	7,047	2.3	15,007	1.4	66.5	1.1
Nevada	10,333	3,853	37.3	10,280	2.5	23,040	1.5	84.2	1.2
New Hampshire	8,026	3,796	47.3	8,888	2.1	16,615	1.4	79.5	1.0
New Jersey	56,970	25,526	44.8	9,806	2.0	18,812	1.3	71.1	1.0
New Mexico	8,370	2,683	32.1	6,471	2.4	16,253	1.3	82.2	1.1

Section 6-Table 1
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Hospital Discharges ¹	PAC Users ²		(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	8,249	2.1	16,263	1.3	74.8	1.1
North Carolina	59,795	21,580	36.1	7,108	2.3	16,033	1.3	72.7	1.1
North Dakota	5,851	2,134	36.5	5,736	2.5	12,307	1.5	53.4	1.2
Ohio	74,372	29,900	40.2	9,506	2.3	19,895	1.4	75.8	1.1
Oklahoma	24,549	8,139	33.2	7,998	2.5	19,708	1.4	101.7	1.2
Oregon	13,782	4,578	33.2	5,308	2.4	12,570	1.4	66.4	1.0
Pennsylvania	76,099	34,517	45.4	9,431	2.2	17,873	1.4	70.3	1.1
Rhode Island	5,232	2,503	47.8	7,977	2.0	14,495	1.3	72.9	1.1
South Carolina	29,542	9,930	33.6	7,469	2.3	17,986	1.3	80.4	1.0
South Dakota	6,502	2,294	35.3	5,254	2.6	12,010	1.6	56.9	1.2
Tennessee	43,915	15,206	34.6	8,586	2.3	20,585	1.3	97.0	1.1
Texas	108,114	41,438	38.3	11,248	2.2	24,813	1.3	115.5	1.1
Utah	7,917	3,320	41.9	7,593	2.1	15,882	1.3	70.0	1.1
Vermont	3,360	1,514	45.1	7,610	2.1	14,417	1.4	80.3	1.1
Virginia	44,241	17,482	39.5	7,885	2.2	16,570	1.4	73.6	1.1
Washington	29,792	10,710	35.9	6,598	2.3	15,077	1.4	69.6	1.1
West Virginia	14,446	4,199	29.1	7,309	2.5	19,323	1.3	79.1	1.0
Wisconsin	33,561	12,742	38.0	7,467	2.3	16,118	1.4	63.6	1.1
Wyoming	3,103	1,045	33.7	6,523	2.5	14,531	1.5	75.0	1.1

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
 2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
 4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
 5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
 6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 2
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	3,226	2.8	10,337	1.3	63.1	1.0
Alaska	2,265	491	21.7	1,510	4.1	6,968	1.7	55.9	1.0
Arizona	28,029	8,563	30.6	2,943	2.8	9,632	1.3	47.6	1.0
Arkansas	22,978	7,412	32.3	3,524	2.7	10,922	1.3	55.3	1.1
California	122,598	48,919	39.9	4,236	2.5	10,613	1.4	54.5	1.0
Colorado	18,309	7,266	39.7	4,152	2.6	10,463	1.4	54.8	1.0
Connecticut	22,442	11,631	51.8	5,491	1.9	10,595	1.2	58.1	1.0
Delaware	6,455	2,757	42.7	4,059	2.2	9,504	1.2	51.0	1.0
District of Columbia	4,611	1,641	35.6	3,643	2.7	10,235	1.4	53.4	1.1
Florida	115,156	49,482	43.0	4,379	2.4	10,188	1.4	54.7	1.0
Georgia	48,177	15,553	32.3	3,341	3.1	10,348	1.6	59.1	1.0
Hawaii	4,070	1,056	25.9	2,548	3.1	9,818	1.3	51.7	1.0
Idaho	6,395	2,366	37.0	3,773	2.5	10,198	1.3	57.9	1.0
Illinois	81,874	32,567	39.8	4,123	2.4	10,361	1.3	56.5	1.0
Indiana	45,011	17,038	37.9	4,861	2.5	12,840	1.3	54.5	1.0
Iowa	23,467	8,498	36.2	2,472	2.8	6,826	1.5	41.0	1.1
Kansas	20,676	7,194	34.8	3,391	2.8	9,744	1.5	48.1	1.0
Kentucky	34,176	11,117	32.5	3,666	2.9	11,265	1.4	60.2	1.1
Louisiana	25,991	9,160	35.2	5,146	2.6	14,594	1.3	86.9	1.2
Maine	10,830	4,718	43.6	3,916	2.1	8,987	1.2	51.5	1.0
Maryland	36,016	12,500	34.7	3,035	2.5	8,745	1.2	46.6	1.0
Massachusetts	40,993	20,687	50.5	5,311	2.0	10,522	1.3	57.1	0.9
Michigan	64,498	25,376	39.3	3,809	2.5	9,677	1.4	53.3	1.0
Minnesota	25,580	8,648	33.8	2,861	2.8	8,463	1.4	44.2	1.1
Mississippi	22,699	7,152	31.5	3,707	2.9	11,757	1.4	82.9	1.2
Missouri	45,636	16,991	37.2	3,639	2.7	9,772	1.4	49.9	1.0
Montana	6,951	2,215	31.9	2,408	3.1	7,553	1.5	50.4	1.1
Nebraska	13,239	5,183	39.1	3,678	2.6	9,395	1.4	50.1	1.0
Nevada	10,333	3,853	37.3	4,711	2.5	12,632	1.3	58.1	1.1
New Hampshire	8,026	3,796	47.3	4,702	2.3	9,933	1.4	59.8	1.0
New Jersey	56,970	25,526	44.8	4,610	2.0	10,288	1.1	48.6	1.0
New Mexico	8,370	2,683	32.1	3,438	2.6	10,713	1.2	64.0	1.1

Section 6-Table 2
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	3,758	2.2	8,945	1.2	53.3	1.1
North Carolina	59,795	21,580	36.1	3,514	2.5	9,735	1.3	54.1	1.0
North Dakota	5,851	2,134	36.5	3,059	2.9	8,387	1.6	43.3	1.1
Ohio	74,372	29,900	40.2	4,537	2.4	11,285	1.3	53.1	1.0
Oklahoma	24,549	8,139	33.2	3,695	2.7	11,130	1.3	70.9	1.2
Oregon	13,782	4,578	33.2	2,679	2.6	8,063	1.3	52.6	1.0
Pennsylvania	76,099	34,517	45.4	4,660	2.3	10,272	1.3	50.2	1.0
Rhode Island	5,232	2,503	47.8	3,923	2.0	8,196	1.2	53.2	1.0
South Carolina	29,542	9,930	33.6	3,735	2.6	11,110	1.2	60.1	0.9
South Dakota	6,502	2,294	35.3	2,844	3.1	8,061	1.6	44.9	1.1
Tennessee	43,915	15,206	34.6	4,030	2.6	11,635	1.3	66.5	1.1
Texas	108,114	41,438	38.3	5,340	2.4	13,882	1.3	79.4	1.2
Utah	7,917	3,320	41.9	4,562	2.2	10,873	1.2	56.5	1.1
Vermont	3,360	1,514	45.1	4,179	2.2	9,270	1.3	62.6	1.1
Virginia	44,241	17,482	39.5	3,783	2.4	9,573	1.3	53.4	1.0
Washington	29,792	10,710	35.9	3,465	2.5	9,637	1.3	53.6	1.0
West Virginia	14,446	4,199	29.1	3,291	3.0	11,313	1.4	56.0	1.0
Wisconsin	33,561	12,742	38.0	3,909	2.5	10,296	1.3	47.7	1.0
Wyoming	3,103	1,045	33.7	3,039	3.0	9,024	1.5	57.8	1.1

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 3
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	4,442	2.3	11,457	1.2	45.0	0.6
Alaska	2,265	491	21.7	2,626	3.1	7,395	1.8	33.8	0.7
Arizona	28,029	8,563	30.6	4,376	2.3	11,097	1.2	33.8	0.6
Arkansas	22,978	7,412	32.3	4,835	2.2	12,043	1.2	39.9	0.7
California	122,598	48,919	39.9	5,696	2.0	12,027	1.2	39.4	0.6
Colorado	18,309	7,266	39.7	5,418	2.1	11,571	1.3	37.4	0.7
Connecticut	22,442	11,631	51.8	6,998	1.6	12,211	1.1	43.6	0.7
Delaware	6,455	2,757	42.7	5,614	1.9	11,189	1.2	36.7	0.6
District of Columbia	4,611	1,641	35.6	5,152	2.1	11,770	1.2	37.6	0.6
Florida	115,156	49,482	43.0	5,772	1.9	11,536	1.2	39.9	0.6
Georgia	48,177	15,553	32.3	4,645	2.3	11,430	1.3	42.2	0.7
Hawaii	4,070	1,056	25.9	3,734	2.3	10,682	1.2	36.1	0.7
Idaho	6,395	2,366	37.0	4,791	2.1	10,780	1.2	39.2	0.7
Illinois	81,874	32,567	39.8	5,770	1.9	12,068	1.2	41.2	0.6
Indiana	45,011	17,038	37.9	6,362	2.0	14,282	1.2	42.2	0.7
Iowa	23,467	8,498	36.2	3,787	2.2	8,092	1.3	32.8	0.8
Kansas	20,676	7,194	34.8	4,796	2.2	11,082	1.3	37.6	0.8
Kentucky	34,176	11,117	32.5	5,044	2.2	12,533	1.3	43.9	0.7
Louisiana	25,991	9,160	35.2	6,291	2.2	14,864	1.3	48.7	0.6
Maine	10,830	4,718	43.6	5,149	1.8	10,200	1.1	38.2	0.6
Maryland	36,016	12,500	34.7	4,681	1.9	10,583	1.1	35.1	0.7
Massachusetts	40,993	20,687	50.5	6,805	1.7	12,002	1.2	43.0	0.6
Michigan	64,498	25,376	39.3	5,306	2.1	11,293	1.3	41.0	0.7
Minnesota	25,580	8,648	33.8	4,242	2.2	9,725	1.3	34.1	0.8
Mississippi	22,699	7,152	31.5	4,836	2.4	12,217	1.4	48.0	0.7
Missouri	45,636	16,991	37.2	5,220	2.1	11,429	1.3	39.6	0.8
Montana	6,951	2,215	31.9	3,525	2.4	8,429	1.4	35.5	0.8
Nebraska	13,239	5,183	39.1	4,976	2.1	10,557	1.3	37.8	0.8
Nevada	10,333	3,853	37.3	6,355	2.1	14,359	1.2	39.6	0.6
New Hampshire	8,026	3,796	47.3	5,950	1.9	11,161	1.3	42.3	0.7
New Jersey	56,970	25,526	44.8	6,394	1.7	12,402	1.0	38.4	0.6
New Mexico	8,370	2,683	32.1	4,528	2.2	11,463	1.2	42.2	0.6

Section 6-Table 3
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	5,358	1.8	10,640	1.1	39.3	0.7
North Carolina	59,795	21,580	36.1	4,852	2.0	11,007	1.2	40.4	0.6
North Dakota	5,851	2,134	36.5	4,462	2.3	9,686	1.4	35.5	1.1
Ohio	74,372	29,900	40.2	6,161	2.0	12,982	1.2	40.5	0.7
Oklahoma	24,549	8,139	33.2	4,761	2.3	11,578	1.3	42.9	0.6
Oregon	13,782	4,578	33.2	3,838	2.1	8,925	1.2	35.7	0.7
Pennsylvania	76,099	34,517	45.4	6,208	1.9	11,849	1.2	38.9	0.7
Rhode Island	5,232	2,503	47.8	5,270	1.7	9,649	1.1	39.4	0.6
South Carolina	29,542	9,930	33.6	5,028	2.1	12,206	1.2	43.3	0.6
South Dakota	6,502	2,294	35.3	3,853	2.4	8,747	1.5	34.0	0.9
Tennessee	43,915	15,206	34.6	5,319	2.2	12,732	1.2	45.4	0.6
Texas	108,114	41,438	38.3	6,453	2.0	14,387	1.2	47.2	0.6
Utah	7,917	3,320	41.9	5,664	2.0	11,833	1.2	39.4	0.6
Vermont	3,360	1,514	45.1	5,250	2.0	9,862	1.3	40.9	0.6
Virginia	44,241	17,482	39.5	5,207	2.0	11,034	1.2	39.0	0.7
Washington	29,792	10,710	35.9	4,689	2.1	10,745	1.2	36.9	0.7
West Virginia	14,446	4,199	29.1	4,718	2.3	12,612	1.2	42.6	0.7
Wisconsin	33,561	12,742	38.0	5,443	2.1	11,834	1.2	37.6	0.8
Wyoming	3,103	1,045	33.7	4,382	2.4	9,932	1.4	39.0	0.9

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 4
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	2,922	2.9	9,365	1.4	42.1	0.7
Alaska	2,265	491	21.7	1,368	4.2	6,311	1.7	32.2	0.7
Arizona	28,029	8,563	30.6	2,723	2.8	8,913	1.3	31.0	0.7
Arkansas	22,978	7,412	32.3	3,222	2.7	9,987	1.3	37.1	0.7
California	122,598	48,919	39.9	3,900	2.4	9,775	1.3	36.3	0.7
Colorado	18,309	7,266	39.7	3,814	2.6	9,612	1.4	34.7	0.8
Connecticut	22,442	11,631	51.8	5,047	1.9	9,738	1.2	39.8	0.7
Delaware	6,455	2,757	42.7	3,728	2.2	8,728	1.2	33.6	0.6
District of Columbia	4,611	1,641	35.6	3,365	2.7	9,454	1.4	34.4	0.7
Florida	115,156	49,482	43.0	4,001	2.3	9,310	1.3	36.9	0.7
Georgia	48,177	15,553	32.3	3,031	3.0	9,390	1.5	39.3	0.7
Hawaii	4,070	1,056	25.9	2,396	3.2	9,236	1.4	33.6	0.8
Idaho	6,395	2,366	37.0	3,470	2.5	9,380	1.3	37.0	0.7
Illinois	81,874	32,567	39.8	3,785	2.4	9,516	1.3	37.5	0.7
Indiana	45,011	17,038	37.9	4,524	2.5	11,951	1.3	38.6	0.8
Iowa	23,467	8,498	36.2	2,326	2.7	6,424	1.4	30.1	0.9
Kansas	20,676	7,194	34.8	3,160	2.8	9,081	1.4	34.7	0.8
Kentucky	34,176	11,117	32.5	3,323	2.9	10,216	1.4	40.4	0.8
Louisiana	25,991	9,160	35.2	4,360	2.7	12,371	1.4	45.7	0.7
Maine	10,830	4,718	43.6	3,657	2.1	8,395	1.2	35.7	0.7
Maryland	36,016	12,500	34.7	2,829	2.4	8,151	1.2	31.5	0.7
Massachusetts	40,993	20,687	50.5	4,867	2.0	9,645	1.2	39.7	0.7
Michigan	64,498	25,376	39.3	3,505	2.5	8,909	1.4	37.7	0.7
Minnesota	25,580	8,648	33.8	2,695	2.8	7,973	1.4	31.3	0.8
Mississippi	22,699	7,152	31.5	3,161	3.1	10,032	1.5	45.1	0.7
Missouri	45,636	16,991	37.2	3,411	2.7	9,163	1.4	36.3	0.8
Montana	6,951	2,215	31.9	2,212	3.1	6,940	1.5	32.9	0.9
Nebraska	13,239	5,183	39.1	3,431	2.6	8,765	1.4	34.9	0.9
Nevada	10,333	3,853	37.3	4,331	2.5	11,615	1.3	36.8	0.7
New Hampshire	8,026	3,796	47.3	4,332	2.3	9,158	1.4	39.5	0.8
New Jersey	56,970	25,526	44.8	4,317	2.0	9,634	1.1	34.2	0.7
New Mexico	8,370	2,683	32.1	3,116	2.6	9,722	1.3	39.9	0.6

Section 6-Table 4
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	3,483	2.2	8,292	1.2	35.7	0.7
North Carolina	59,795	21,580	36.1	3,248	2.5	8,999	1.3	37.5	0.7
North Dakota	5,851	2,134	36.5	2,947	2.9	8,079	1.6	33.1	1.1
Ohio	74,372	29,900	40.2	4,187	2.4	10,413	1.3	36.8	0.7
Oklahoma	24,549	8,139	33.2	3,180	2.8	9,591	1.4	40.3	0.6
Oregon	13,782	4,578	33.2	2,450	2.6	7,376	1.3	33.3	0.7
Pennsylvania	76,099	34,517	45.4	4,317	2.2	9,519	1.3	35.6	0.7
Rhode Island	5,232	2,503	47.8	3,627	2.0	7,581	1.2	36.2	0.6
South Carolina	29,542	9,930	33.6	3,435	2.5	10,219	1.2	40.4	0.6
South Dakota	6,502	2,294	35.3	2,640	3.0	7,483	1.6	32.0	1.0
Tennessee	43,915	15,206	34.6	3,609	2.7	10,422	1.4	42.2	0.7
Texas	108,114	41,438	38.3	4,616	2.4	12,044	1.3	44.1	0.6
Utah	7,917	3,320	41.9	4,155	2.2	9,909	1.2	37.1	0.7
Vermont	3,360	1,514	45.1	3,745	2.3	8,311	1.4	38.5	0.7
Virginia	44,241	17,482	39.5	3,493	2.4	8,841	1.3	35.9	0.7
Washington	29,792	10,710	35.9	3,208	2.5	8,923	1.3	34.2	0.7
West Virginia	14,446	4,199	29.1	3,009	3.0	10,353	1.4	39.3	0.8
Wisconsin	33,561	12,742	38.0	3,708	2.5	9,767	1.3	34.4	0.8
Wyoming	3,103	1,045	33.7	2,822	3.0	8,379	1.6	36.7	1.0

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 5
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	3,223	2.2	8,044	1.2	25.7	0.3
Alaska	2,265	491	21.7	2,055	2.8	5,513	1.7	22.4	0.4
Arizona	28,029	8,563	30.6	3,520	2.2	8,795	1.2	23.9	0.4
Arkansas	22,978	7,412	32.3	3,680	2.1	8,952	1.2	24.5	0.4
California	122,598	48,919	39.9	3,997	1.9	8,223	1.2	24.8	0.3
Colorado	18,309	7,266	39.7	3,960	2.0	8,238	1.2	24.3	0.4
Connecticut	22,442	11,631	51.8	4,776	1.5	8,174	0.9	26.2	0.3
Delaware	6,455	2,757	42.7	4,114	1.8	8,099	1.1	24.9	0.3
District of Columbia	4,611	1,641	35.6	3,867	2.0	8,720	1.2	24.7	0.3
Florida	115,156	49,482	43.0	4,114	1.8	8,053	1.1	25.3	0.3
Georgia	48,177	15,553	32.3	3,333	2.3	7,923	1.3	25.0	0.3
Hawaii	4,070	1,056	25.9	2,663	2.1	7,138	1.1	23.4	0.4
Idaho	6,395	2,366	37.0	3,295	1.9	7,078	1.1	24.2	0.4
Illinois	81,874	32,567	39.8	4,060	1.9	8,240	1.1	25.2	0.3
Indiana	45,011	17,038	37.9	4,268	1.9	9,267	1.1	24.9	0.3
Iowa	23,467	8,498	36.2	2,932	2.1	6,126	1.3	22.3	0.4
Kansas	20,676	7,194	34.8	3,584	2.1	8,089	1.3	23.9	0.4
Kentucky	34,176	11,117	32.5	3,466	2.1	8,205	1.2	25.3	0.3
Louisiana	25,991	9,160	35.2	4,411	2.2	10,112	1.3	25.9	0.3
Maine	10,830	4,718	43.6	3,849	1.7	7,464	1.0	24.7	0.3
Maryland	36,016	12,500	34.7	3,520	1.8	7,787	1.0	24.3	0.4
Massachusetts	40,993	20,687	50.5	4,858	1.7	8,453	1.1	26.2	0.3
Michigan	64,498	25,376	39.3	3,821	2.0	7,905	1.2	25.4	0.3
Minnesota	25,580	8,648	33.8	3,202	2.0	7,117	1.1	22.9	0.4
Mississippi	22,699	7,152	31.5	3,232	2.4	7,697	1.4	25.3	0.3
Missouri	45,636	16,991	37.2	3,719	2.0	7,869	1.2	24.6	0.3
Montana	6,951	2,215	31.9	2,579	2.2	5,927	1.3	22.5	0.4
Nebraska	13,239	5,183	39.1	3,598	2.0	7,399	1.2	24.0	0.4
Nevada	10,333	3,853	37.3	4,874	2.0	10,908	1.2	24.8	0.3
New Hampshire	8,026	3,796	47.3	4,098	1.8	7,507	1.2	25.3	0.3
New Jersey	56,970	25,526	44.8	4,818	1.6	9,255	1.0	25.4	0.3
New Mexico	8,370	2,683	32.1	3,279	2.2	8,056	1.2	24.8	0.3

Section 6-Table 5
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	3,811	1.7	7,401	1.0	24.9	0.3
North Carolina	59,795	21,580	36.1	3,460	1.9	7,583	1.1	25.3	0.3
North Dakota	5,851	2,134	36.5	3,421	2.2	7,180	1.4	21.8	0.4
Ohio	74,372	29,900	40.2	4,385	1.8	9,037	1.1	25.3	0.3
Oklahoma	24,549	8,139	33.2	3,481	2.2	8,232	1.3	24.8	0.3
Oregon	13,782	4,578	33.2	2,879	2.0	6,433	1.0	23.6	0.4
Pennsylvania	76,099	34,517	45.4	4,592	1.8	8,647	1.2	25.1	0.3
Rhode Island	5,232	2,503	47.8	3,831	1.6	6,916	1.0	25.6	0.3
South Carolina	29,542	9,930	33.6	3,531	2.0	8,259	1.1	25.8	0.3
South Dakota	6,502	2,294	35.3	2,833	2.3	6,283	1.4	22.3	0.4
Tennessee	43,915	15,206	34.6	3,627	2.1	8,316	1.2	25.6	0.3
Texas	108,114	41,438	38.3	4,529	2.0	9,876	1.2	25.8	0.3
Utah	7,917	3,320	41.9	3,991	1.8	8,124	1.0	25.1	0.3
Vermont	3,360	1,514	45.1	3,564	1.7	6,555	1.1	25.0	0.3
Virginia	44,241	17,482	39.5	3,768	1.8	7,828	1.1	25.1	0.3
Washington	29,792	10,710	35.9	3,368	1.9	7,458	1.0	24.0	0.4
West Virginia	14,446	4,199	29.1	3,334	2.2	8,527	1.2	24.7	0.3
Wisconsin	33,561	12,742	38.0	3,863	1.9	8,128	1.1	24.1	0.4
Wyoming	3,103	1,045	33.7	3,085	2.2	6,664	1.3	23.3	0.4

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 6
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
Alabama	37,227	11,617	31.2	2,041	2.8	6,540	1.4	23.4	0.4
Alaska	2,265	491	21.7	971	3.9	4,477	1.6	21.1	0.5
Arizona	28,029	8,563	30.6	2,157	2.7	7,062	1.2	21.7	0.4
Arkansas	22,978	7,412	32.3	2,389	2.7	7,408	1.3	22.4	0.4
California	122,598	48,919	39.9	2,655	2.4	6,654	1.3	22.6	0.4
Colorado	18,309	7,266	39.7	2,705	2.4	6,817	1.3	22.3	0.4
Connecticut	22,442	11,631	51.8	3,368	1.7	6,499	1.0	23.7	0.4
Delaware	6,455	2,757	42.7	2,720	2.1	6,369	1.1	22.4	0.4
District of Columbia	4,611	1,641	35.6	2,448	2.5	6,879	1.2	22.1	0.4
Florida	115,156	49,482	43.0	2,780	2.2	6,470	1.2	23.0	0.4
Georgia	48,177	15,553	32.3	2,076	3.0	6,431	1.5	22.8	0.4
Hawaii	4,070	1,056	25.9	1,592	2.8	6,136	1.1	21.6	0.5
Idaho	6,395	2,366	37.0	2,280	2.2	6,163	1.1	22.8	0.4
Illinois	81,874	32,567	39.8	2,572	2.3	6,465	1.2	22.7	0.4
Indiana	45,011	17,038	37.9	2,921	2.3	7,716	1.2	22.7	0.4
Iowa	23,467	8,498	36.2	1,750	2.6	4,833	1.4	20.3	0.5
Kansas	20,676	7,194	34.8	2,307	2.7	6,629	1.4	21.8	0.4
Kentucky	34,176	11,117	32.5	2,155	2.7	6,624	1.3	22.8	0.4
Louisiana	25,991	9,160	35.2	2,947	2.8	8,363	1.5	23.6	0.4
Maine	10,830	4,718	43.6	2,662	1.9	6,110	1.0	22.6	0.4
Maryland	36,016	12,500	34.7	2,092	2.2	6,027	1.0	21.6	0.5
Massachusetts	40,993	20,687	50.5	3,404	1.9	6,745	1.2	23.6	0.4
Michigan	64,498	25,376	39.3	2,425	2.5	6,163	1.4	22.9	0.4
Minnesota	25,580	8,648	33.8	1,980	2.5	5,857	1.2	21.0	0.5
Mississippi	22,699	7,152	31.5	1,963	3.1	6,230	1.6	23.1	0.4
Missouri	45,636	16,991	37.2	2,327	2.5	6,249	1.3	22.2	0.4
Montana	6,951	2,215	31.9	1,552	2.9	4,872	1.4	20.8	0.5
Nebraska	13,239	5,183	39.1	2,401	2.4	6,132	1.3	22.1	0.4
Nevada	10,333	3,853	37.3	3,251	2.4	8,719	1.3	22.3	0.4
New Hampshire	8,026	3,796	47.3	2,889	2.2	6,108	1.3	23.1	0.4
New Jersey	56,970	25,526	44.8	3,249	1.9	7,251	1.0	22.5	0.4
New Mexico	8,370	2,683	32.1	2,129	2.7	6,641	1.3	22.9	0.4

Section 6-Table 6
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By State, All MS-DRGs
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

State	Number of Index Acute Hospital Discharges ¹	Number of PAC Users ²	Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
				(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York	101,573	42,662	42.0	2,408	2.1	5,733	1.1	22.2	0.4
North Carolina	59,795	21,580	36.1	2,220	2.4	6,150	1.2	23.1	0.4
North Dakota	5,851	2,134	36.5	2,148	2.9	5,889	1.6	20.1	0.5
Ohio	74,372	29,900	40.2	2,906	2.2	7,227	1.2	22.8	0.4
Oklahoma	24,549	8,139	33.2	2,245	2.8	6,770	1.4	22.8	0.4
Oregon	13,782	4,578	33.2	1,764	2.4	5,310	1.1	21.9	0.4
Pennsylvania	76,099	34,517	45.4	3,157	2.2	6,961	1.3	22.7	0.4
Rhode Island	5,232	2,503	47.8	2,601	1.8	5,437	1.0	23.2	0.4
South Carolina	29,542	9,930	33.6	2,304	2.4	6,854	1.2	23.7	0.4
South Dakota	6,502	2,294	35.3	1,871	3.0	5,304	1.6	20.8	0.5
Tennessee	43,915	15,206	34.6	2,320	2.6	6,700	1.3	23.3	0.4
Texas	108,114	41,438	38.3	3,156	2.5	8,235	1.3	23.6	0.4
Utah	7,917	3,320	41.9	2,828	2.0	6,743	1.0	23.4	0.4
Vermont	3,360	1,514	45.1	2,483	2.0	5,511	1.1	23.2	0.4
Virginia	44,241	17,482	39.5	2,464	2.2	6,235	1.2	22.7	0.4
Washington	29,792	10,710	35.9	2,211	2.2	6,150	1.1	22.2	0.4
West Virginia	14,446	4,199	29.1	2,025	2.9	6,966	1.3	22.4	0.4
Wisconsin	33,561	12,742	38.0	2,551	2.3	6,718	1.2	22.0	0.4
Wyoming	3,103	1,045	33.7	1,874	2.8	5,564	1.4	21.6	0.5

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 6-Table 7
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	4,901	12,369	1.5	131.9	1.1
Alaska	126	9,078	1.2	91.2	1.3
Arizona	1,559	8,778	1.9	67.6	1.3
Arkansas	2,128	12,918	1.6	121.9	1.2
California	19,251	8,726	2.0	80.9	1.3
Colorado	1,837	9,716	2.1	77.8	1.3
Connecticut	3,441	11,542	1.7	86.9	1.2
Delaware	449	9,223	1.7	73.5	1.3
District of Columbia	361	8,789	2.2	74.3	1.1
Florida	32,359	9,833	1.9	91.5	1.3
Georgia	6,706	11,088	1.7	109.2	1.2
Hawaii	176	8,060	1.7	53.4	1.2
Idaho	891	9,204	1.9	86.8	1.2
Illinois	14,285	11,799	1.8	140.3	1.0
Indiana	3,904	13,374	1.9	107.4	1.2
Iowa	1,114	8,489	1.6	70.8	1.3
Kansas	1,482	10,037	1.8	80.0	1.3
Kentucky	3,847	13,600	1.7	124.6	1.2
Louisiana	5,300	20,172	1.4	237.7	0.9
Maine	1,411	8,628	1.7	68.6	1.2
Maryland	1,973	9,620	1.9	64.8	1.3
Massachusetts	6,716	11,423	1.8	93.6	1.3
Michigan	14,321	10,102	1.8	93.0	1.1
Minnesota	1,306	8,953	2.1	68.4	1.4
Mississippi	3,791	17,011	1.4	198.2	0.9
Missouri	4,311	10,007	1.9	81.0	1.3
Montana	400	7,511	1.6	71.0	1.4
Nebraska	840	10,219	1.8	81.6	1.3
Nevada	1,779	11,806	2.0	101.2	1.2
New Hampshire	1,196	10,030	1.8	82.9	1.3
New Jersey	4,626	10,179	2.1	71.7	1.3
New Mexico	1,140	11,410	1.6	124.8	1.2
New York	10,159	9,402	1.8	79.0	1.3
North Carolina	6,650	10,040	1.7	89.1	1.3
North Dakota	252	7,234	1.6	59.9	1.3
Ohio	7,383	12,337	1.8	103.4	1.2
Oklahoma	4,965	17,155	1.4	204.7	1.0
Oregon	1,733	7,149	1.7	67.0	1.3
Pennsylvania	9,010	10,489	2.0	79.6	1.3
Rhode Island	830	8,530	1.6	73.2	1.3
South Carolina	3,302	10,393	1.6	92.8	1.1
South Dakota	236	8,318	1.6	69.3	1.5
Tennessee	6,354	14,816	1.5	145.6	1.1
Texas	23,528	15,693	1.5	201.6	1.0
Utah	1,872	9,577	1.6	93.2	1.4
Vermont	739	8,544	1.6	95.0	1.3
Virginia	5,366	10,200	1.8	90.7	1.3

Section 6-Table 7
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Washington	3,013	8,593	1.6	70.6	1.3
West Virginia	962	11,575	1.8	96.2	1.1
Wisconsin	1,840	10,275	1.8	82.4	1.4
Wyoming	186	10,468	1.5	100.2	1.3

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 8
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	4,901	5,214	1.0	101.0	1.1
Alaska	126	4,708	0.9	75.2	1.4
Arizona	1,559	3,744	0.7	52.8	1.3
Arkansas	2,128	5,132	1.0	93.3	1.3
California	19,251	4,135	0.8	65.9	1.2
Colorado	1,837	4,208	1.1	61.4	1.3
Connecticut	3,441	3,987	1.0	63.3	1.2
Delaware	449	3,774	0.7	59.0	1.3
District of Columbia	361	3,689	0.7	59.8	1.1
Florida	32,359	4,254	1.0	71.5	1.4
Georgia	6,706	4,728	0.9	85.1	1.2
Hawaii	176	3,580	0.7	44.8	1.4
Idaho	891	4,415	0.9	72.1	1.2
Illinois	14,285	5,319	0.9	112.9	1.0
Indiana	3,904	4,644	1.0	79.9	1.2
Iowa	1,114	3,594	0.8	54.2	1.3
Kansas	1,482	4,229	1.4	60.3	1.3
Kentucky	3,847	4,920	1.0	90.8	1.2
Louisiana	5,300	8,571	1.0	183.7	1.0
Maine	1,411	3,539	0.8	53.3	1.1
Maryland	1,973	3,838	0.7	49.4	1.2
Massachusetts	6,716	4,100	1.0	68.9	1.3
Michigan	14,321	4,556	0.9	74.2	1.0
Minnesota	1,306	3,700	0.7	52.1	1.3
Mississippi	3,791	7,267	1.1	149.3	1.0
Missouri	4,311	3,877	0.9	61.5	1.2
Montana	400	3,961	0.7	55.4	1.2
Nebraska	840	3,624	0.8	58.8	1.2
Nevada	1,779	4,545	0.9	78.1	1.2
New Hampshire	1,196	3,849	0.9	60.5	1.3
New Jersey	4,626	3,872	0.8	53.8	1.3
New Mexico	1,140	5,048	1.0	95.3	1.2
New York	10,159	4,017	0.8	60.8	1.3
North Carolina	6,650	4,086	0.8	67.9	1.3
North Dakota	252	3,568	0.8	50.9	1.3
Ohio	7,383	4,266	0.9	75.5	1.3
Oklahoma	4,965	7,336	1.0	157.2	1.1
Oregon	1,733	3,824	0.7	56.0	1.2
Pennsylvania	9,010	3,705	1.0	58.8	1.2
Rhode Island	830	3,663	0.8	56.3	1.2
South Carolina	3,302	4,484	0.9	73.1	1.1
South Dakota	236	3,711	0.9	51.4	1.6
Tennessee	6,354	5,885	1.0	107.2	1.1

Section 6-Table 8
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Texas	23,528	7,375	1.0	160.3	1.0
Utah	1,872	4,746	1.0	77.5	1.4
Vermont	739	4,182	1.1	72.1	1.2
Virginia	5,366	4,260	0.8	70.2	1.3
Washington	3,013	4,024	0.8	56.1	1.2
West Virginia	962	4,224	0.8	70.5	1.1
Wisconsin	1,840	3,899	0.7	60.2	1.3
Wyoming	186	4,352	1.1	76.6	1.3

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 9
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	4,901	6,828	1.3	74.0	0.5
Alaska	126	6,567	1.0	58.2	0.7
Arizona	1,559	6,121	1.4	47.4	0.7
Arkansas	2,128	6,778	1.3	66.2	0.6
California	19,251	5,690	1.4	55.1	0.7
Colorado	1,837	6,315	1.4	52.4	0.7
Connecticut	3,441	7,333	1.4	56.9	0.7
Delaware	449	6,441	1.3	52.0	0.7
District of Columbia	361	6,155	1.6	56.6	0.6
Florida	32,359	5,745	1.5	55.0	0.7
Georgia	6,706	6,565	1.5	66.4	0.6
Hawaii	176	7,045	1.8	44.9	0.8
Idaho	891	6,121	1.5	58.2	0.7
Illinois	14,285	6,133	1.3	78.6	0.5
Indiana	3,904	7,732	1.6	66.3	0.6
Iowa	1,114	6,112	1.4	49.2	0.7
Kansas	1,482	6,630	1.4	53.4	0.7
Kentucky	3,847	7,128	1.4	67.3	0.6
Louisiana	5,300	7,229	1.4	90.9	0.4
Maine	1,411	6,119	1.3	50.9	0.7
Maryland	1,973	6,638	1.4	46.8	0.7
Massachusetts	6,716	6,998	1.5	58.7	0.7
Michigan	14,321	6,385	1.4	64.7	0.6
Minnesota	1,306	6,162	1.3	48.5	0.7
Mississippi	3,791	7,247	1.4	86.4	0.5
Missouri	4,311	6,413	1.5	55.5	0.7
Montana	400	5,603	1.2	48.8	0.7
Nebraska	840	6,461	1.4	53.8	0.7
Nevada	1,779	6,519	1.6	62.0	0.6
New Hampshire	1,196	6,362	1.4	53.8	0.7
New Jersey	4,626	6,653	1.5	49.5	0.7
New Mexico	1,140	6,188	1.3	67.3	0.6
New York	10,159	6,146	1.4	52.0	0.7
North Carolina	6,650	6,479	1.5	57.4	0.7
North Dakota	252	6,018	1.5	45.5	0.8
Ohio	7,383	7,129	1.6	61.8	0.6
Oklahoma	4,965	7,049	1.3	85.9	0.5
Oregon	1,733	5,239	1.3	49.7	0.7
Pennsylvania	9,010	6,769	1.6	54.3	0.7
Rhode Island	830	5,970	1.3	51.4	0.7
South Carolina	3,302	7,020	1.4	63.4	0.6
South Dakota	236	5,621	1.4	42.5	0.8

Section 6-Table 9
Standardized Episode Payments Based on Location of Index Provider, By State
HHA Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Tennessee	6,354	7,656	1.4	76.1	0.5
Texas	23,528	6,451	1.3	86.6	0.4
Utah	1,872	6,096	1.4	57.7	0.6
Vermont	739	5,580	1.3	59.2	0.7
Virginia	5,366	6,412	1.4	57.8	0.7
Washington	3,013	6,338	1.3	51.3	0.7
West Virginia	962	7,376	1.5	65.2	0.6
Wisconsin	1,840	6,403	1.3	52.6	0.7
Wyoming	186	7,320	1.5	60.7	0.6

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 10
Standardized Episode Payments Based on Location of Index Provider, By State
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of PAC Users ¹	Mean Episode		Mean Episode	
		Payment ² (\$)	CV ³	Length ⁴ (days)	CV ³
Alabama	25	67,493	0.6	110.3	1.1
Alaska	10	36,579	0.3	78.7	1.0
Arizona	22	83,436	0.8	84.0	0.9
Arkansas	63	60,432	0.5	95.5	1.1
California	257	67,937	0.7	103.4	1.0
Colorado	61	64,977	0.5	75.0	1.1
Connecticut	26	52,784	0.6	87.1	1.0
Delaware	1	77,733		39.0	
District of Columbia	17	77,207	0.8	101.6	0.7
Florida	126	65,391	0.7	102.3	1.1
Georgia	92	73,907	0.6	115.2	1.2
Idaho	6	56,797	0.4	54.0	0.4
Illinois	165	40,905	0.9	51.2	1.6
Indiana	88	76,330	0.7	125.0	1.1
Iowa	2	25,704	0.2	21.5	0.0
Kansas	51	77,552	1.0	103.1	1.1
Kentucky	52	65,292	0.5	80.5	1.2
Louisiana	846	48,503	0.9	106.2	1.3
Maryland	37	62,388	1.0	108.6	1.0
Massachusetts	237	46,835	0.7	87.2	0.9
Michigan	75	61,238	0.7	98.1	1.1
Minnesota	36	36,223	0.6	80.6	1.3
Mississippi	120	54,631	0.6	98.2	1.2
Missouri	81	65,104	0.6	100.1	1.0
Montana	1	68,605		163.0	
Nebraska	13	74,629	0.4	103.0	0.8
Nevada	34	77,058	0.7	99.2	1.0
New Jersey	73	36,227	1.0	53.1	1.0
New Mexico	10	83,191	0.9	121.9	1.0
New York	277	33,544	0.7	53.8	1.4
North Carolina	84	60,570	0.9	62.8	1.4
North Dakota	8	75,937	0.6	121.1	0.8
Ohio	105	79,838	0.7	109.5	1.0
Oklahoma	131	59,706	0.6	114.6	1.2
Oregon	2	42,678	0.2	78.0	1.3
Pennsylvania	274	38,234	0.9	75.4	1.2
South Carolina	15	87,078	0.3	136.7	0.9
Tennessee	34	88,265	0.7	145.5	1.1
Texas	1,329	67,153	0.7	126.7	1.1
Utah	10	59,545	0.4	70.5	0.7
Virginia	27	65,841	0.5	69.8	0.8
Washington	12	82,318	0.2	76.7	0.7
West Virginia	4	49,937	0.4	68.3	1.1
Wisconsin	28	63,281	0.7	104.1	1.6

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 11
Standardized Episode Payments Based on Location of Index Provider, By State
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

State	Number of PAC Users ¹	Mean Episode		Mean Episode	
		Payment ² (\$)	CV ³	Length ⁴ (days)	CV ³
Alabama	25	59,253	0.5	67.8	1.1
Alaska	10	34,310	0.3	72.1	1.0
Arizona	22	70,476	0.5	69.2	1.0
Arkansas	63	47,967	0.4	68.1	1.1
California	257	50,082	0.5	77.0	1.1
Colorado	61	56,383	0.4	57.1	1.1
Connecticut	26	40,980	0.4	53.3	1.0
Delaware	1	77,733		39.0	
District of Columbia	17	42,731	0.5	49.8	0.7
Florida	126	48,223	0.5	64.2	1.2
Georgia	92	59,166	0.5	74.3	1.2
Idaho	6	45,110	0.3	35.8	0.7
Illinois	165	33,424	0.8	32.8	1.5
Indiana	88	58,882	0.6	72.2	0.9
Iowa	2	25,704	0.2	21.5	0.0
Kansas	51	48,058	0.6	60.5	0.9
Kentucky	52	57,626	0.5	61.4	1.2
Louisiana	846	36,172	0.7	74.6	1.3
Maryland	37	38,690	0.5	68.4	0.9
Massachusetts	237	39,425	0.5	70.8	0.9
Michigan	75	47,317	0.6	65.0	1.1
Minnesota	36	34,165	0.6	74.4	1.4
Mississippi	120	46,420	0.5	76.0	1.3
Missouri	81	50,466	0.5	72.4	1.0
Montana	1	64,379		122.0	
Nebraska	13	55,010	0.4	54.4	0.9
Nevada	34	53,987	0.5	66.3	1.3
New Jersey	73	31,115	0.8	43.5	0.9
New Mexico	10	58,570	0.5	104.0	1.1
New York	277	28,887	0.6	43.7	1.4
North Carolina	84	48,315	0.8	43.2	1.4
North Dakota	8	63,638	0.7	96.8	0.9
Ohio	105	60,957	0.5	74.0	1.1
Oklahoma	131	47,185	0.5	79.6	1.2
Oregon	2	39,499	0.1	70.0	1.2
Pennsylvania	274	30,346	0.6	59.4	1.3
South Carolina	15	71,576	0.4	112.8	1.1
Tennessee	34	56,604	0.4	73.6	0.9
Texas	1,329	48,512	0.5	84.2	1.1
Utah	10	58,881	0.5	70.2	0.7
Virginia	27	52,569	0.4	55.7	0.9
Washington	12	76,086	0.2	61.6	0.7
West Virginia	4	46,944	0.4	40.8	0.7
Wisconsin	28	49,909	0.7	84.5	1.9

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 12
Standardized Episode Payments Based on Location of Index Provider, By State
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	25	57,582	0.5	55.7	0.6
Alaska	10	34,766	0.3	61.8	0.8
Arizona	22	73,944	0.6	55.3	0.7
Arkansas	63	52,580	0.4	64.0	0.9
California	257	53,912	0.6	65.8	0.7
Colorado	61	58,616	0.5	48.0	0.8
Connecticut	26	46,877	0.5	57.4	0.8
Delaware	1	77,733		39.0	
District of Columbia	17	59,766	0.8	59.4	0.6
Florida	126	52,705	0.5	56.9	0.6
Georgia	92	59,849	0.5	51.3	0.7
Idaho	6	52,559	0.4	45.3	0.3
Illinois	165	37,463	0.9	32.7	1.1
Indiana	88	61,454	0.6	63.6	0.6
Iowa	2	25,704	0.2	21.5	0.0
Kansas	51	54,092	0.7	59.6	0.6
Kentucky	52	56,011	0.4	52.1	0.8
Louisiana	846	37,043	0.7	55.6	0.7
Maryland	37	44,733	0.7	66.5	0.8
Massachusetts	237	40,496	0.5	61.6	0.7
Michigan	75	52,263	0.6	58.0	0.7
Minnesota	36	34,722	0.5	65.7	1.1
Mississippi	120	45,902	0.4	50.4	0.7
Missouri	81	56,711	0.5	69.4	0.7
Montana	1	64,379		122.0	
Nebraska	13	67,742	0.4	63.0	0.6
Nevada	34	66,066	0.6	56.0	0.6
New Jersey	73	34,883	0.9	44.7	0.8
New Mexico	10	55,530	0.4	61.5	0.7
New York	277	31,080	0.6	46.5	1.3
North Carolina	84	54,500	0.7	48.7	1.3
North Dakota	8	50,770	0.4	75.8	0.6
Ohio	105	64,874	0.5	60.9	0.6
Oklahoma	131	48,760	0.4	62.9	0.7
Oregon	2	38,432	0.1	29.0	1.0
Pennsylvania	274	32,245	0.7	53.9	1.1
South Carolina	15	80,534	0.3	89.0	0.6
Tennessee	34	65,471	0.5	66.1	0.6
Texas	1,329	51,363	0.6	63.4	0.6
Utah	10	58,798	0.4	58.4	0.5
Virginia	27	55,512	0.4	53.9	0.8
Washington	12	79,903	0.2	61.3	0.6

Section 6-Table 12
Standardized Episode Payments Based on Location of Index Provider, By State
LTCH Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users¹	Mean Episode Payment² (\$)	CV³	Mean Episode Length⁴ (days)	CV³
West Virginia	4	48,781	0.4	41.5	0.7
Wisconsin	28	51,092	0.5	57.5	1.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 13
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	212	29,619	0.9	87.4	1.2
Alaska	3	16,246	0.3	144.0	1.1
Arizona	214	27,245	0.8	75.5	1.0
Arkansas	499	27,607	0.8	80.2	1.3
California	329	30,822	1.0	94.7	1.2
Colorado	87	26,436	0.8	87.9	1.3
Connecticut	54	28,414	0.6	103.5	0.9
Delaware	16	32,746	0.8	72.4	0.8
District of Columbia	37	27,005	1.0	83.0	1.4
Florida	706	32,570	0.9	94.8	1.1
Georgia	146	26,783	0.8	76.7	1.0
Hawaii	24	15,940	0.5	51.0	1.6
Idaho	43	30,140	1.2	97.6	1.3
Illinois	300	31,014	1.0	87.4	1.1
Indiana	589	27,878	0.9	81.7	1.2
Iowa	46	26,888	0.8	75.2	1.0
Kansas	260	26,535	0.8	74.8	1.0
Kentucky	305	28,295	0.9	90.8	1.2
Louisiana	449	39,380	0.8	139.6	1.1
Maine	83	30,587	0.8	89.6	0.9
Maryland	56	26,237	0.6	83.3	1.0
Massachusetts	575	32,490	0.9	94.7	0.9
Michigan	188	31,406	0.9	86.7	1.0
Minnesota	78	22,483	0.6	55.3	1.0
Mississippi	104	29,457	0.9	119.0	1.1
Missouri	236	27,360	0.8	76.5	1.2
Montana	18	25,468	0.8	75.7	0.7
Nebraska	66	27,476	0.8	84.5	1.1
Nevada	173	31,907	1.0	82.4	1.2
New Hampshire	68	32,395	0.9	107.6	0.9
New Jersey	498	30,423	0.8	77.2	1.1
New Mexico	78	29,302	1.2	87.8	1.2
New York	401	28,585	0.9	87.9	1.2
North Carolina	172	29,149	1.0	79.3	1.3
North Dakota	54	23,835	0.8	48.2	1.2
Ohio	245	25,264	0.8	76.1	1.1
Oklahoma	140	26,323	0.8	81.8	1.2
Oregon	22	21,874	0.6	96.2	1.2
Pennsylvania	924	28,955	0.9	82.4	1.1
Rhode Island	22	28,324	0.9	87.9	1.1
South Carolina	301	32,709	0.9	96.4	1.1
South Dakota	19	20,438	0.8	51.7	0.8
Tennessee	343	27,257	0.8	83.3	1.4

Section 6-Table 13
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Texas	2,117	32,771	1.0	115.0	1.1
Utah	48	29,141	0.8	84.7	0.9
Vermont	14	34,212	0.7	146.0	1.1
Virginia	160	28,510	0.8	75.0	1.2
Washington	120	23,606	0.9	72.2	1.3
West Virginia	252	27,789	0.9	77.3	1.2
Wisconsin	42	28,734	0.8	95.0	1.2
Wyoming	20	24,921	0.6	96.8	1.1

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 14
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	212	22,536	0.7	65.7	1.2
Alaska	3	16,246	0.3	144.0	1.1
Arizona	214	20,046	0.5	53.0	1.0
Arkansas	499	20,614	0.6	58.9	1.3
California	329	21,876	0.6	66.1	1.2
Colorado	87	20,193	0.5	71.4	1.4
Connecticut	54	23,371	0.6	76.6	0.8
Delaware	16	23,667	0.6	51.8	0.7
District of Columbia	37	22,333	0.6	65.9	1.2
Florida	706	23,299	0.5	63.5	1.0
Georgia	146	21,438	0.6	58.0	1.0
Hawaii	24	15,940	0.5	51.0	1.6
Idaho	43	20,000	0.6	70.2	1.4
Illinois	300	21,973	0.6	62.5	1.0
Indiana	589	21,888	0.7	62.7	1.1
Iowa	46	19,699	0.6	57.8	1.1
Kansas	260	20,808	0.5	59.4	0.9
Kentucky	305	20,420	0.7	64.6	1.2
Louisiana	449	29,086	0.7	100.7	1.2
Maine	83	21,360	0.5	63.8	0.9
Maryland	56	21,286	0.5	69.3	1.1
Massachusetts	575	23,101	0.6	68.3	0.9
Michigan	188	22,470	0.7	65.8	1.1
Minnesota	78	19,171	0.4	46.1	1.0
Mississippi	104	22,279	0.6	92.1	1.2
Missouri	236	20,571	0.6	56.3	1.2
Montana	18	21,937	0.8	72.0	0.8
Nebraska	66	22,919	0.7	64.1	1.0
Nevada	173	21,114	0.6	57.6	1.1
New Hampshire	68	22,346	0.6	80.6	1.0
New Jersey	498	22,114	0.5	52.5	1.0
New Mexico	78	20,959	0.5	65.0	0.9
New York	401	21,531	0.6	66.3	1.2
North Carolina	172	20,624	0.6	53.0	1.3
North Dakota	54	17,122	0.6	34.1	1.2
Ohio	245	19,416	0.6	57.7	1.2
Oklahoma	140	19,373	0.6	56.9	1.2
Oregon	22	20,953	0.6	94.7	1.2
Pennsylvania	924	20,714	0.6	57.8	1.0
Rhode Island	22	20,273	0.4	71.5	1.1
South Carolina	301	22,897	0.7	66.5	1.1
South Dakota	19	17,984	0.9	43.6	0.9
Tennessee	343	22,195	0.6	65.8	1.3

Section 6-Table 14
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Texas	2,117	23,103	0.7	84.0	1.1
Utah	48	21,149	0.6	63.6	0.9
Vermont	14	23,039	0.4	78.5	1.3
Virginia	160	21,710	0.5	52.9	1.1
Washington	120	18,380	0.6	54.2	1.2
West Virginia	252	20,881	0.6	55.0	0.9
Wisconsin	42	24,464	0.7	82.6	1.3
Wyoming	20	23,221	0.5	84.1	1.3

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 6-Table 15
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Alabama	212	23,007	0.5	46.9	0.6
Alaska	3	14,129	0.3	31.7	0.7
Arizona	214	23,015	0.6	42.7	0.6
Arkansas	499	21,819	0.6	44.2	0.7
California	329	23,179	0.6	45.6	0.6
Colorado	87	21,468	0.6	45.6	0.6
Connecticut	54	23,274	0.6	55.0	0.6
Delaware	16	27,473	0.6	51.2	0.6
District of Columbia	37	22,380	0.7	44.7	0.8
Florida	706	25,989	0.6	50.8	0.6
Georgia	146	23,047	0.6	44.9	0.6
Hawaii	24	15,375	0.4	29.4	0.6
Idaho	43	20,969	0.6	39.0	0.7
Illinois	300	24,047	0.6	48.8	0.6
Indiana	589	22,997	0.7	45.6	0.7
Iowa	46	21,792	0.6	42.0	0.6
Kansas	260	22,252	0.6	45.3	0.6
Kentucky	305	22,519	0.7	47.0	0.8
Louisiana	449	29,182	0.6	57.9	0.6
Maine	83	23,781	0.5	51.0	0.5
Maryland	56	23,011	0.5	42.7	0.6
Massachusetts	575	25,382	0.6	54.4	0.5
Michigan	188	25,131	0.7	51.3	0.8
Minnesota	78	20,132	0.4	38.4	0.6
Mississippi	104	21,737	0.6	50.7	0.6
Missouri	236	22,842	0.6	44.2	0.7
Montana	18	24,254	0.8	50.4	0.7
Nebraska	66	24,354	0.7	47.6	0.7
Nevada	173	24,220	0.6	44.1	0.7
New Hampshire	68	26,239	0.7	59.4	0.5
New Jersey	498	25,379	0.6	45.7	0.5
New Mexico	78	22,450	0.6	46.3	0.6
New York	401	23,273	0.7	45.5	0.8
North Carolina	172	23,372	0.7	41.4	0.7
North Dakota	54	20,148	0.6	34.2	0.8
Ohio	245	21,376	0.7	43.0	0.7
Oklahoma	140	20,909	0.6	42.3	0.7
Oregon	22	20,456	0.6	48.8	0.5
Pennsylvania	924	22,659	0.6	45.8	0.6
Rhode Island	22	22,034	0.5	42.0	0.7
South Carolina	301	24,146	0.6	48.3	0.7
South Dakota	19	20,276	0.8	39.5	0.7

Section 6-Table 15
Standardized Episode Payments Based on Location of Index Provider, By State
IRF Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from
Initiating Event

State	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Tennessee	343	22,796	0.6	43.1	0.7
Texas	2,117	23,719	0.7	51.9	0.6
Utah	48	24,427	0.7	48.5	0.6
Vermont	14	24,125	0.5	45.3	0.6
Virginia	160	24,044	0.6	44.3	0.6
Washington	120	19,407	0.6	39.3	0.7
West Virginia	252	22,319	0.6	46.2	0.7
Wisconsin	42	25,750	0.7	49.9	0.8
Wyoming	20	23,501	0.6	44.8	0.6

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
 2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
 3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
 4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.
- SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

SECTION 7

2008 CROSS SECTIONAL ANALYSIS: STANDARDIZED POST-ACUTE CARE EPISODE PAYMENTS BASED ON LOCATION OF INDEX PROVIDER, BY CBSA

One of the goals of this work was to perform geographic benchmarking analysis to look at the differences in PAC payments across different levels of geography and learn more about differences in patterns of PAC utilization as they relate to differences in the local availability of providers and practice patterns across the country. In conducting the geographic benchmarking analysis, we standardized payments to remove the effects of payment adjustments caused by geography or other policy considerations. By standardizing the payments, we remove payments related to wage adjustments, indirect medical education (IME), and disproportionate share hospital (DSH) payments. This section reports results of the geographic analysis at the CBSA level.

This section contains summary data on the use of services for beneficiaries in the 2008 cross sectional sample. This sample includes the first initiating event per year per beneficiary in 2008. Initiating events include acute hospitalizations, HHA, LTCH, or IRF.

Tables 1-6 provide data for acute hospital-initiated episodes for each of the six episode definitions examined for these beneficiaries. The remaining tables in this section examine the community entrant episodes, and the three episode definitions examined for community entrants. Tables 7-9 provide data for HHA-initiated episodes, Tables 10-12 for LTCH-initiated episodes, and Tables 13-15 for IRF-initiated episodes. Each table reports results by CBSA for the top 30 CBSAs in terms of number of PAC users.

For acute initiated episodes, we report the number of acute hospital discharges, and the number and percent of beneficiaries discharged to PAC. Mean PAC payment per hospital discharge and per PAC user are also reported to provide a sense of how these calculations differ by area of the country, provider supply, and regional practice patterns. Mean PAC episode length of stay is also reported by CBSA. For each of the mean and utilization calculations, the coefficient of variation is also reported (ratio of the standard deviation to the mean).

Key findings from the data presented here include the following.

- Although New York, Illinois, California, Philadelphia, and Massachusetts were not among the top states in mean PAC payment per PAC user, metropolitan areas within these states are at the top in terms of the numbers of beneficiaries using PAC services.
- Three CBSAs in Texas are among the top 20 nationally in terms of number of beneficiaries using PAC services, including Houston, Dallas, and rural Texas. In looking at these three CBSA areas alone, we see differences in use patterns within Texas. Although 38.3 percent of beneficiaries are discharged to PAC in Texas overall, 37.0

percent were discharged to PAC in Houston, 38.1 percent in rural Texas, and 41.0 percent in Dallas.

- There is significant variation in mean PAC payment per PAC by CBSA using the 30 day fixed episode definition, with Houston having the highest (and fifth highest across all CBSAs) at \$16,188 and Baltimore having the lowest 9 (of the top 20 CBSAs by Volume of PAC users) at \$10,124.
- Although Chicago and Los Angeles have the highest volume of HHA community-initiated episodes, these types of episodes are also common to several different metropolitan areas in Texas and Florida as well as rural areas of Texas, Mississippi, Oklahoma, and North Carolina.
- These results also demonstrate the differences in episode length by CBSA in addition to the differences in episode payments. For example, the mean episode length for beneficiaries with acute initiated episodes was 113.7 days for the 30 day variable length episode in Houston, but was 78.4 days in New York.

Section 7-Table 1
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes
Episode Definition A: 30 Day Variable Episode

CBSA	Number of Index Acute Hospital Discharges ¹		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Number of PAC Users ²			(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	9,519	2.1	18,274	1.3	78.4	1.1
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	10,285	2.2	20,549	1.4	89.3	1.1
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	11,156	2.2	22,004	1.4	85.7	1.0
Philadelphia, PA	21,886	9,986	45.6	9,045	2.2	16,953	1.5	72.1	1.1
Nassau-Suffolk, NY	20,906	9,023	43.2	8,405	2.0	16,560	1.2	77.1	1.1
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	13,050	2.3	29,543	1.4	113.7	1.1
St. Louis, MO-IL	20,260	7,953	39.3	8,343	2.4	17,450	1.5	70.6	1.1
Baltimore-Towson, MD	20,153	6,652	33.0	6,764	2.4	15,631	1.3	65.4	1.1
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	7,804	2.5	18,554	1.5	87.0	1.0
Rural NC	17,905	6,003	33.5	6,826	2.3	16,196	1.3	74.1	1.1
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	9,557	2.2	18,760	1.4	74.7	1.1
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	7,690	2.4	16,598	1.5	70.6	1.1
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	9,160	2.3	18,838	1.4	80.5	1.0
Boston-Quincy, MA	16,389	8,151	49.7	11,163	2.1	19,521	1.4	85.9	1.0
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	10,264	2.3	20,836	1.4	76.8	1.0
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	6,277	2.6	16,014	1.4	64.7	1.0
Edison, NJ	15,222	7,213	47.4	10,282	2.0	18,924	1.3	70.8	1.0
Dallas-Plano-Irving, TX	14,104	5,779	41.0	11,913	2.2	24,928	1.3	114.5	1.1
Rural KY	13,543	3,877	28.6	7,577	2.6	19,812	1.4	94.8	1.2
Rural TX	13,463	5,128	38.1	10,125	2.1	22,352	1.2	121.1	1.2
Newark-Union, NJ-PA	13,273	5,836	44.0	10,008	2.0	19,704	1.3	72.9	1.0
Kansas City, MO-KS	13,041	5,098	39.1	8,291	2.4	17,690	1.5	69.9	1.1
Rural PA	12,476	5,117	41.0	8,773	2.2	17,828	1.3	70.5	1.1
Orlando-Kissimmee, FL	12,373	4,757	38.4	8,781	2.4	19,007	1.4	79.0	1.1
Rural MS	12,345	3,839	31.1	8,498	2.4	22,098	1.3	124.1	1.1
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	8,344	2.4	18,577	1.4	77.2	1.1
Rural IL	11,879	4,470	37.6	7,661	2.2	16,668	1.3	67.8	1.1
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	6,373	2.4	14,003	1.5	61.7	1.1
Rural OH	11,677	4,478	38.3	9,026	2.2	19,647	1.3	74.8	1.1
Indianapolis-Carmel, IN	11,625	4,633	39.9	9,723	2.2	20,681	1.4	72.8	1.0

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 2
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospital Readmission

CBSA	Number of Index Acute Hospital Discharges ¹		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Number of PAC Users ²			(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	4,174	2.1	9,691	1.1	54.5	1.1
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	4,379	2.3	10,596	1.3	60.5	1.0
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	5,025	2.3	11,728	1.3	59.6	1.0
Philadelphia, PA	21,886	9,986	45.6	4,139	2.2	9,070	1.3	50.0	1.0
Nassau-Suffolk, NY	20,906	9,023	43.2	3,914	2.1	9,067	1.1	53.9	1.1
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	5,787	2.4	15,584	1.2	76.5	1.1
St. Louis, MO-IL	20,260	7,953	39.3	3,619	2.6	9,216	1.4	49.2	1.0
Baltimore-Towson, MD	20,153	6,652	33.0	2,704	2.5	8,193	1.2	45.5	1.0
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	3,673	3.3	10,914	1.7	63.5	1.0
Rural NC	17,905	6,003	33.5	3,260	2.7	9,723	1.3	54.0	1.0
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	4,669	2.3	10,512	1.3	51.6	1.0
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	3,447	2.5	9,168	1.3	50.7	1.0
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	3,987	2.4	9,774	1.4	55.3	0.9
Boston-Quincy, MA	16,389	8,151	49.7	5,105	2.1	10,261	1.3	59.1	1.0
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	4,628	2.3	11,089	1.3	51.8	1.0
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	2,918	2.8	9,567	1.3	48.2	1.0
Edison, NJ	15,222	7,213	47.4	4,827	1.9	10,186	1.1	47.1	1.0
Dallas-Plano-Irving, TX	14,104	5,779	41.0	5,853	2.3	14,239	1.2	79.2	1.1
Rural KY	13,543	3,877	28.6	3,152	3.1	11,002	1.4	64.3	1.2
Rural TX	13,463	5,128	38.1	4,718	2.4	12,339	1.3	82.6	1.3
Newark-Union, NJ-PA	13,273	5,836	44.0	4,709	2.0	10,710	1.1	50.4	0.9
Kansas City, MO-KS	13,041	5,098	39.1	3,939	2.5	10,075	1.3	49.6	0.9
Rural PA	12,476	5,117	41.0	4,246	2.4	10,352	1.4	50.9	1.0
Orlando-Kissimmee, FL	12,373	4,757	38.4	3,987	2.5	10,371	1.3	55.3	1.0
Rural MS	12,345	3,839	31.1	3,741	2.9	12,016	1.4	84.0	1.2
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	3,856	2.5	10,276	1.3	54.3	1.0
Rural IL	11,879	4,470	37.6	3,659	2.6	9,717	1.4	47.4	1.0
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	3,082	2.8	8,608	1.4	46.5	1.1
Rural OH	11,677	4,478	38.3	4,606	2.4	12,009	1.3	53.6	1.1
Indianapolis-Carmel, IN	11,625	4,633	39.9	5,006	2.4	12,562	1.3	52.6	1.0

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 3
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes
Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge

CBSA	Number of Index Acute Hospital Discharges ¹		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Number of PAC Users ²			(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	5,998	1.8	11,687	1.1	39.7	0.6
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	6,105	1.9	12,354	1.1	41.9	0.6
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	6,682	1.9	13,320	1.2	43.5	0.6
Philadelphia, PA	21,886	9,986	45.6	5,709	1.9	10,755	1.2	38.2	0.7
Nassau-Suffolk, NY	20,906	9,023	43.2	5,459	1.7	10,757	1.0	37.8	0.6
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	7,072	2.1	16,188	1.2	45.6	0.6
St. Louis, MO-IL	20,260	7,953	39.3	5,373	2.1	11,174	1.3	39.5	0.7
Baltimore-Towson, MD	20,153	6,652	33.0	4,377	2.0	10,124	1.1	34.2	0.6
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	4,943	2.3	11,818	1.3	43.9	0.6
Rural NC	17,905	6,003	33.5	4,641	2.1	11,083	1.2	41.6	0.7
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	6,119	1.9	11,995	1.2	39.7	0.6
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	4,979	2.0	10,794	1.2	36.7	0.7
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	5,591	2.0	11,543	1.2	41.7	0.6
Boston-Quincy, MA	16,389	8,151	49.7	6,735	1.8	11,881	1.2	43.5	0.6
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	6,417	1.8	13,096	1.1	40.5	0.6
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	4,359	2.2	11,138	1.2	33.5	0.6
Edison, NJ	15,222	7,213	47.4	6,676	1.7	12,396	1.0	38.1	0.6
Dallas-Plano-Irving, TX	14,104	5,779	41.0	6,927	1.9	14,685	1.1	46.6	0.6
Rural KY	13,543	3,877	28.6	4,624	2.4	12,375	1.3	46.6	0.8
Rural TX	13,463	5,128	38.1	5,743	2.1	12,789	1.2	48.3	0.6
Newark-Union, NJ-PA	13,273	5,836	44.0	6,518	1.8	12,904	1.0	39.8	0.6
Kansas City, MO-KS	13,041	5,098	39.1	5,435	2.0	11,658	1.2	39.4	0.7
Rural PA	12,476	5,117	41.0	5,805	2.0	11,927	1.2	40.5	0.7
Orlando-Kissimmee, FL	12,373	4,757	38.4	5,498	2.0	11,899	1.2	41.6	0.6
Rural MS	12,345	3,839	31.1	4,809	2.4	12,374	1.3	48.2	0.6
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	5,439	2.1	12,088	1.2	39.9	0.7
Rural IL	11,879	4,470	37.6	5,272	2.0	11,480	1.2	40.2	0.8
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	4,502	2.2	9,949	1.3	34.9	0.7
Rural OH	11,677	4,478	38.3	6,106	2.0	13,441	1.2	42.2	0.7
Indianapolis-Carmel, IN	11,625	4,633	39.9	6,593	2.0	14,074	1.2	40.7	0.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 4
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes

Episode Definition D: 30 Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions

CBSA	Number of Index Acute Hospital Discharges ¹		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Number of PAC Users ²	CV ⁴		(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	3,860	2.1	8,963	1.1	35.6	0.7
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	3,971	2.3	9,612	1.3	37.9	0.7
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	4,638	2.4	10,834	1.3	40.1	0.7
Philadelphia, PA	21,886	9,986	45.6	3,837	2.2	8,409	1.3	34.7	0.7
Nassau-Suffolk, NY	20,906	9,023	43.2	3,615	2.1	8,377	1.2	33.9	0.7
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	5,032	2.5	13,602	1.3	42.4	0.6
St. Louis, MO-IL	20,260	7,953	39.3	3,386	2.6	8,627	1.4	36.0	0.8
Baltimore-Towson, MD	20,153	6,652	33.0	2,510	2.5	7,604	1.2	30.4	0.7
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	3,273	2.9	9,730	1.5	40.9	0.7
Rural NC	17,905	6,003	33.5	3,027	2.7	9,029	1.3	38.4	0.8
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	4,292	2.3	9,664	1.3	36.6	0.7
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	3,196	2.5	8,501	1.3	33.5	0.7
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	3,658	2.4	8,970	1.3	38.0	0.7
Boston-Quincy, MA	16,389	8,151	49.7	4,663	2.1	9,376	1.3	40.0	0.7
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	4,278	2.2	10,250	1.2	36.3	0.7
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	2,680	2.8	8,788	1.3	30.5	0.7
Edison, NJ	15,222	7,213	47.4	4,530	1.9	9,559	1.1	33.8	0.7
Dallas-Plano-Irving, TX	14,104	5,779	41.0	5,003	2.2	12,211	1.2	43.2	0.6
Rural KY	13,543	3,877	28.6	2,845	3.2	9,937	1.5	42.8	0.8
Rural TX	13,463	5,128	38.1	4,039	2.5	10,605	1.3	45.1	0.6
Newark-Union, NJ-PA	13,273	5,836	44.0	4,417	2.0	10,045	1.1	35.5	0.7
Kansas City, MO-KS	13,041	5,098	39.1	3,667	2.4	9,380	1.3	36.0	0.7
Rural PA	12,476	5,117	41.0	3,916	2.4	9,548	1.3	37.1	0.7
Orlando-Kissimmee, FL	12,373	4,757	38.4	3,643	2.4	9,477	1.3	38.2	0.7
Rural MS	12,345	3,839	31.1	3,168	3.0	10,188	1.5	45.2	0.7
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	3,568	2.5	9,509	1.3	36.3	0.7
Rural IL	11,879	4,470	37.6	3,471	2.6	9,224	1.4	36.3	0.9
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	2,863	2.7	7,997	1.4	31.8	0.8
Rural OH	11,677	4,478	38.3	4,257	2.4	11,101	1.3	38.6	0.8
Indianapolis-Carmel, IN	11,625	4,633	39.9	4,645	2.4	11,656	1.3	37.1	0.7

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 5
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes
Episode Definition E: 30 Day Fixed Following Hospital Discharge (pro rated)

CBSA	Number of		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Hospital Discharges ¹	PAC Users ²		(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	4,238	1.7	8,099	1.0	25.1	0.3
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	4,394	1.8	8,680	1.1	25.7	0.3
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	4,454	1.9	8,660	1.2	25.4	0.3
Philadelphia, PA	21,886	9,986	45.6	4,278	1.8	7,950	1.2	25.1	0.3
Nassau-Suffolk, NY	20,906	9,023	43.2	3,865	1.6	7,427	0.9	25.0	0.3
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	5,222	2.1	11,810	1.2	25.5	0.3
St. Louis, MO-IL	20,260	7,953	39.3	3,937	2.0	7,980	1.3	24.9	0.3
Baltimore-Towson, MD	20,153	6,652	33.0	3,346	1.8	7,570	1.0	24.0	0.4
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	3,518	2.3	8,113	1.4	25.6	0.3
Rural NC	17,905	6,003	33.5	3,222	1.9	7,361	1.1	25.1	0.3
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	4,406	1.8	8,448	1.1	25.3	0.3
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	3,728	1.9	7,936	1.1	24.6	0.3
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	4,134	1.9	8,371	1.2	26.0	0.3
Boston-Quincy, MA	16,389	8,151	49.7	4,823	1.7	8,404	1.1	26.3	0.3
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	4,606	1.8	9,227	1.1	25.5	0.3
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	3,528	2.2	8,874	1.2	24.0	0.4
Edison, NJ	15,222	7,213	47.4	5,118	1.6	9,437	1.0	25.2	0.3
Dallas-Plano-Irving, TX	14,104	5,779	41.0	4,804	1.9	10,004	1.1	25.9	0.3
Rural KY	13,543	3,877	28.6	3,029	2.2	7,517	1.3	25.1	0.3
Rural TX	13,463	5,128	38.1	3,631	2.0	7,747	1.2	25.3	0.3
Newark-Union, NJ-PA	13,273	5,836	44.0	4,852	1.7	9,453	1.0	25.9	0.3
Kansas City, MO-KS	13,041	5,098	39.1	3,952	1.8	8,278	1.1	25.0	0.3
Rural PA	12,476	5,117	41.0	4,121	1.9	8,234	1.1	24.9	0.3
Orlando-Kissimmee, FL	12,373	4,757	38.4	3,831	1.9	8,069	1.1	25.8	0.3
Rural MS	12,345	3,839	31.1	3,165	2.4	7,665	1.4	25.1	0.3
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	4,061	1.9	8,868	1.1	25.3	0.3
Rural IL	11,879	4,470	37.6	3,473	1.8	7,240	1.0	24.0	0.4
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	3,451	1.9	7,401	1.1	23.5	0.4
Rural OH	11,677	4,478	38.3	4,102	1.8	8,704	1.0	24.9	0.3
Indianapolis-Carmel, IN	11,625	4,633	39.9	4,545	1.9	9,434	1.2	24.9	0.3

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 6
Standardized Post-Acute Care Episode Payments Based on Location of Index Provider, By CBSA, All MS-DRGs
Acute Initiated Episodes
Episode Definition F: 30 Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (pro rated)

CBSA	Number of Index Acute Hospital Discharges ¹		Percent of Beneficiaries Discharged to PAC (%)	Mean PAC Episode Payment Per Index Acute Hospital Discharge ³		Mean PAC Episode Payment Per PAC User ⁵		Mean PAC Episode Length Per PAC User ⁶	
	Number of PAC Users ²			(\$)	CV ⁴	(\$)	CV ⁴	(days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	53,481	23,031	43.1	2,656	2.0	6,169	1.1	22.2	0.5
Chicago-Naperville-Joliet, IL	46,257	19,111	41.3	2,788	2.2	6,749	1.2	23.0	0.4
Los Angeles-Long Beach-Santa Ana, CA	31,305	13,403	42.8	2,994	2.3	6,994	1.3	23.0	0.4
Philadelphia, PA	21,886	9,986	45.6	2,841	2.2	6,227	1.3	22.4	0.4
Nassau-Suffolk, NY	20,906	9,023	43.2	2,488	1.9	5,766	1.0	22.1	0.4
Houston-Sugar Land-Baytown, TX	20,393	7,544	37.0	3,686	2.6	9,963	1.3	23.3	0.4
St. Louis, MO-IL	20,260	7,953	39.3	2,391	2.5	6,090	1.4	22.3	0.4
Baltimore-Towson, MD	20,153	6,652	33.0	1,895	2.3	5,741	1.0	21.2	0.5
Atlanta-Sandy Springs-Marietta, GA	18,854	6,343	33.6	2,220	3.0	6,599	1.6	23.4	0.4
Rural NC	17,905	6,003	33.5	1,991	2.5	5,939	1.2	22.9	0.4
Tampa-St. Petersburg-Clearwater, FL	16,991	7,546	44.4	3,024	2.1	6,810	1.2	22.9	0.4
Washington-Arlington-Alexandria DC-VA	16,700	6,279	37.6	2,332	2.3	6,204	1.1	22.1	0.4
Warren-Troy-Farmington-Hills, MI	16,617	6,777	40.8	2,638	2.4	6,468	1.3	23.2	0.4
Boston-Quincy, MA	16,389	8,151	49.7	3,266	2.0	6,567	1.2	23.6	0.4
Cleveland-Elyria-Mentor, OH	16,335	6,817	41.7	3,004	2.1	7,199	1.2	22.6	0.4
Phoenix-Mesa-Scottsdale, AZ	16,159	4,928	30.5	2,146	2.7	7,037	1.2	21.6	0.5
Edison, NJ	15,222	7,213	47.4	3,500	1.9	7,385	1.1	22.2	0.4
Dallas-Plano-Irving, TX	14,104	5,779	41.0	3,407	2.2	8,315	1.2	23.7	0.4
Rural KY	13,543	3,877	28.6	1,707	3.2	5,964	1.5	22.5	0.4
Rural TX	13,463	5,128	38.1	2,401	2.6	6,304	1.4	23.0	0.4
Newark-Union, NJ-PA	13,273	5,836	44.0	3,257	1.9	7,408	1.1	23.0	0.4
Kansas City, MO-KS	13,041	5,098	39.1	2,594	2.3	6,635	1.2	22.5	0.4
Rural PA	12,476	5,117	41.0	2,691	2.3	6,561	1.2	22.6	0.4
Orlando-Kissimmee, FL	12,373	4,757	38.4	2,440	2.3	6,346	1.2	23.3	0.4
Rural MS	12,345	3,839	31.1	1,920	3.2	6,174	1.6	22.9	0.4
Cincinnati-Middletown, OH-KY-IN	11,989	4,499	37.5	2,617	2.4	6,974	1.2	22.8	0.4
Rural IL	11,879	4,470	37.6	2,169	2.3	5,764	1.2	21.6	0.5
Minneapolis-St. Paul-Bloomington, MN-WI	11,792	4,222	35.8	2,144	2.4	5,987	1.2	21.4	0.5
Rural OH	11,677	4,478	38.3	2,740	2.2	7,144	1.1	22.8	0.4
Indianapolis-Carmel, IN	11,625	4,633	39.9	3,102	2.3	7,784	1.2	22.7	0.4

NOTES:

1. Index acute hospital discharges are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user. This includes acute hospital readmissions for non-PAC users.
2. PAC users are defined as beneficiaries discharged to LTCH, IRF, SNF, HHA, or therapy services following an acute hospitalization preceded by 30 days without acute, LTCH, IRF, SNF, or HHA service use.
3. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospital readmissions. Note that this does not include the index acute hospitalization.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that this does not include the index acute hospitalization.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm219).

Section 7-Table 7
Standardized Episode Payments Based on Location of Index Provider, By CBSA
HHA Initiated Episodes
Episode Definition A: 30 Day Variable Episode

CBSA	Number of PAC Users¹	Mean Episode Payment² (\$)	CV³	Mean Episode Length⁴ (days)	CV³
Chicago-Naperville-Joliet, IL	11,599	12,176	1.7	153.4	1.0
Los Angeles-Long Beach-Santa Ana, CA	9,124	9,090	2.0	95.9	1.2
Warren-Troy-Farmington-Hills, MI	7,303	9,744	1.8	94.3	1.0
New York-White Plains-Wayne, NY-NJ	6,447	9,098	1.9	77.0	1.3
Miami-Miami Beach-Kendall, FL	5,261	10,137	1.7	125.5	1.4
Tampa-St. Petersburg-Clearwater, FL	5,005	10,246	1.9	85.8	1.3
West Palm Beach-Boca Raton-Boynton FL	4,311	9,164	1.9	82.0	1.3
Houston-Sugar Land-Baytown, TX	4,297	15,845	1.6	189.6	0.9
Dallas-Plano-Irving, TX	3,885	16,293	1.5	218.6	0.9
Ft Lauderdale-Pompano Beach-Deerfield Rural TX	3,136 3,098	9,613 16,478	1.8 1.4	96.5 222.5	1.3 0.9
Atlanta-Sandy Springs-Marietta, GA	2,956	10,546	1.6	106.4	1.1
Philadelphia, PA	2,632	9,651	1.9	84.9	1.2
McAllen-Edinburg-Mission, TX	2,549	14,864	1.3	243.5	0.9
Rural MS	2,415	16,773	1.4	198.6	0.9
Detroit-Livonia-Dearborn, MI	2,408	10,775	1.9	96.7	1.0
St. Louis, MO-IL	2,274	10,543	1.9	85.2	1.2
Jacksonville, FL	2,019	11,898	1.9	105.4	1.2
Rural OK	1,926	18,247	1.2	232.8	0.9
Rural NC	1,893	11,122	1.8	102.1	1.3
Orlando-Kissimmee, FL	1,869	10,071	1.9	86.1	1.2
San Antonio, TX	1,841	11,494	1.7	134.0	1.1
Oklahoma City, OK	1,830	16,724	1.5	188.4	1.0
Pittsburgh, PA	1,803	10,665	1.9	80.9	1.3
Cape Coral-Fort Myers, FL	1,716	8,335	1.9	65.8	1.2
Rural KY	1,698	14,330	1.6	137.3	1.1
Riverside-San Bernardino-Ontario, CA	1,666	9,837	2.1	83.1	1.3
Hartford-West Hartford-East Hartford, C	1,661	11,555	1.7	82.9	1.2
Rural LA	1,655	21,872	1.4	255.1	0.8
Virginia Beach-Norfolk-Newport News, VA	1,591	10,220	1.8	88.6	1.2

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 8
Standardized Episode Payments Based on Location of Index Provider, By CBSA
HHA Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

CBSA	Number of PAC Users¹	Mean Episode Payment² (\$)	CV³	Mean Episode Length⁴ (days)	CV³
Chicago-Naperville-Joliet, IL	11,599	5,632	0.8	124.4	1.0
Los Angeles-Long Beach-Santa Ana, CA	9,124	4,497	0.9	79.3	1.2
Warren-Troy-Farmington-Hills, MI	7,303	4,723	0.9	77.3	1.0
New York-White Plains-Wayne, NY-NJ	6,447	4,006	0.8	60.5	1.3
Miami-Miami Beach-Kendall, FL	5,261	5,619	1.1	104.2	1.4
Tampa-St. Petersburg-Clearwater, FL	5,005	3,999	1.0	65.3	1.3
West Palm Beach-Boca Raton-Boynton FL	4,311	3,792	0.9	62.6	1.2
Houston-Sugar Land-Baytown, TX	4,297	7,822	1.1	154.0	1.0
Dallas-Plano-Irving, TX	3,885	7,878	0.9	179.3	1.0
Ft Lauderdale-Pompano Beach-Deerfield Rural TX	3,136 3,098	4,390 7,415	1.1 1.0	75.4 174.4	1.3 1.0
Atlanta-Sandy Springs-Marietta, GA	2,956	4,649	0.9	85.1	1.1
Philadelphia, PA	2,632	3,639	0.8	63.4	1.1
McAllen-Edinburg-Mission, TX	2,549	8,487	0.9	201.3	0.9
Rural MS	2,415	7,361	1.1	150.3	1.0
Detroit-Livonia-Dearborn, MI	2,408	4,819	0.9	76.8	1.0
St. Louis, MO-IL	2,274	3,990	0.9	64.7	1.2
Jacksonville, FL	2,019	4,447	1.1	78.3	1.2
Rural OK	1,926	7,956	1.0	177.8	1.0
Rural NC	1,893	4,318	0.9	77.7	1.3
Orlando-Kissimmee, FL	1,869	4,064	0.9	67.4	1.2
San Antonio, TX	1,841	5,682	1.1	107.9	1.1
Oklahoma City, OK	1,830	6,844	1.1	143.4	1.1
Pittsburgh, PA	1,803	3,789	1.0	59.0	1.2
Cape Coral-Fort Myers, FL	1,716	3,603	0.7	52.1	1.1
Rural KY	1,698	5,040	1.0	97.8	1.2
Riverside-San Bernardino-Ontario, CA	1,666	4,196	0.9	64.9	1.3
Hartford-West Hartford-East Hartford, C	1,661	3,820	1.1	60.1	1.2
Rural LA	1,655	8,828	1.0	189.6	0.9
Virginia Beach-Norfolk-Newport News, VA	1,591	4,203	0.8	68.8	1.2

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 9
Standardized Episode Payments Based on Location of Index Provider, By CBSA
HHA Initiated Episodes

Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Chicago-Naperville-Joliet, IL	11,599	6,000	1.3	83.7	0.5
Los Angeles-Long Beach-Santa Ana, CA	9,124	5,562	1.3	62.9	0.6
Warren-Troy-Farmington-Hills, MI	7,303	6,158	1.3	67.6	0.6
New York-White Plains-Wayne, NY-NJ	6,447	6,042	1.5	51.3	0.7
Miami-Miami Beach-Kendall, FL	5,261	4,836	1.1	57.7	0.7
Tampa-St. Petersburg-Clearwater, FL	5,005	6,081	1.6	53.3	0.7
West Palm Beach-Boca Raton-Boynton FL	4,311	5,752	1.5	53.2	0.7
Houston-Sugar Land-Baytown, TX	4,297	6,410	1.2	87.9	0.4
Dallas-Plano-Irving, TX	3,885	6,376	1.3	88.3	0.4
Ft Lauderdale-Pompano Beach-Deerfield Rural TX	3,136 3,098	5,548 6,316	1.4 1.2	56.5 88.8	0.7 0.4
Atlanta-Sandy Springs-Marietta, GA	2,956	6,518	1.5	68.0	0.6
Philadelphia, PA	2,632	6,261	1.6	57.8	0.6
McAllen-Edinburg-Mission, TX	2,549	5,475	1.0	92.1	0.4
Rural MS	2,415	7,398	1.4	86.9	0.5
Detroit-Livonia-Dearborn, MI	2,408	6,587	1.5	67.6	0.6
St. Louis, MO-IL	2,274	6,421	1.5	57.2	0.7
Jacksonville, FL	2,019	6,182	1.5	62.7	0.6
Rural OK	1,926	7,134	1.3	89.2	0.4
Rural NC	1,893	6,858	1.6	61.9	0.6
Orlando-Kissimmee, FL	1,869	6,396	1.5	58.4	0.6
San Antonio, TX	1,841	6,366	1.4	74.9	0.5
Oklahoma City, OK	1,830	7,110	1.4	84.4	0.5
Pittsburgh, PA	1,803	6,603	1.4	54.9	0.7
Cape Coral-Fort Myers, FL	1,716	5,714	1.5	48.2	0.7
Rural KY	1,698	7,318	1.4	71.8	0.6
Riverside-San Bernardino-Ontario, CA	1,666	5,889	1.5	54.2	0.7
Hartford-West Hartford-East Hartford, C	1,661	7,501	1.5	55.5	0.7
Rural LA	1,655	7,660	1.6	94.0	0.4
Virginia Beach-Norfolk-Newport News, VA	1,591	6,551	1.4	58.9	0.7

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 10
Standardized Episode Payments Based on Location of Index Provider, By CBSA
LTCH Initiated Episodes
Episode Definition A: 30 Day Variable Episode

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Houston-Sugar Land-Baytown, TX	531	69,887	0.7	126.4	1.1
New York-White Plains-Wayne, NY-NJ	281	34,179	0.7	54.4	1.4
Dallas-Plano-Irving, TX	230	69,527	0.7	145.7	1.0
Baton Rouge, LA	200	34,970	1.0	69.4	1.4
New Orleans-Metairie-Kenner, LA	197	33,903	0.9	91.2	1.4
Shreveport-Bossier City, LA	168	49,282	1.0	114.8	1.2
Chicago-Naperville-Joliet, IL	165	40,905	0.9	51.2	1.6
Boston-Quincy, MA	154	47,937	0.7	88.7	0.9
Fort Worth-Arlington, TX	130	59,029	0.7	113.2	1.0
Rural LA	119	66,188	0.8	153.5	1.2
Pittsburgh, PA	115	34,671	0.8	77.4	1.2
San Diego-Carlsbad-San Marcos, CA	95	68,806	0.7	125.6	1.1
No Assigned CBSA	87	72,844	0.6	108.3	1.0
Philadelphia, PA	78	46,857	0.9	91.9	1.2
San Antonio, TX	77	69,095	0.6	116.5	1.2
Rural MS	72	59,326	0.6	112.1	1.1
Lafayette, LA	68	72,579	0.6	132.8	1.0
Scranton--Wilkes-Barre, PA	65	27,836	1.0	51.2	1.4
Los Angeles-Long Beach-Santa Ana, CA	61	68,190	0.7	97.2	0.8
Austin-Round Rock, TX	60	56,391	0.6	119.0	1.1
Kansas City, MO-KS	60	75,242	1.0	92.5	0.7
Denver-Aurora, CO	59	64,415	0.5	73.2	1.1
Atlanta-Sandy Springs-Marietta, GA	58	76,715	0.6	115.7	1.2
Newark-Union, NJ-PA	58	27,030	1.1	44.1	0.9
Monroe, LA	53	69,468	0.6	134.5	1.1
Indianapolis-Carmel, IN	52	81,404	0.6	129.8	1.1
Amarillo, TX	47	60,213	0.8	116.6	1.2
Fayetteville, NC	47	41,110	0.7	30.4	1.4
Oklahoma City, OK	47	68,393	0.6	138.0	1.2
Jacksonville, FL	41	53,133	0.7	104.3	1.2

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 11
Standardized Episode Payments Based on Location of Index Provider, By CBSA
LTCH Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Houston-Sugar Land-Baytown, TX	531	48,478	0.5	84.2	1.1
New York-White Plains-Wayne, NY-NJ	281	29,473	0.6	44.2	1.4
Dallas-Plano-Irving, TX	230	48,093	0.6	86.3	1.2
Baton Rouge, LA	200	27,444	0.7	49.3	1.1
New Orleans-Metairie-Kenner, LA	197	28,547	0.7	71.0	1.4
Shreveport-Bossier City, LA	168	35,690	0.6	88.6	1.2
Chicago-Naperville-Joliet, IL	165	33,424	0.8	32.8	1.5
Boston-Quincy, MA	154	39,010	0.4	69.5	0.9
Fort Worth-Arlington, TX	130	45,874	0.6	87.1	1.0
Rural LA	119	46,247	0.6	98.5	1.2
Pittsburgh, PA	115	27,799	0.5	60.4	1.1
San Diego-Carlsbad-San Marcos, CA	95	50,098	0.5	96.6	1.2
No assigned CBSA	87	54,225	0.4	72.1	1.0
Philadelphia, PA	78	35,440	0.6	74.8	1.4
San Antonio, TX	77	56,336	0.5	86.8	1.2
Rural MS	72	48,730	0.5	83.5	1.3
Lafayette, LA	68	52,956	0.6	82.8	1.0
Scranton--Wilkes-Barre, PA	65	24,448	0.8	42.6	1.1
Los Angeles-Long Beach-Santa Ana, CA	61	50,241	0.5	70.7	0.8
Austin-Round Rock, TX	60	44,340	0.5	79.5	1.2
Kansas City, MO-KS	60	50,664	0.6	64.8	0.8
Denver-Aurora, CO	59	55,769	0.4	54.7	1.1
Atlanta-Sandy Springs-Marietta, GA	58	61,612	0.6	75.6	1.1
Newark-Union, NJ-PA	58	22,707	0.7	39.9	0.8
Monroe, LA	53	48,694	0.4	84.5	1.1
Indianapolis-Carmel, IN	52	64,189	0.6	81.8	0.8
Amarillo, TX	47	44,017	0.5	88.1	1.4
Fayetteville, NC	47	30,647	0.3	14.4	1.5
Oklahoma City, OK	47	48,908	0.4	82.6	1.1
Jacksonville, FL	41	40,586	0.4	65.3	1.0

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 12
Standardized Episode Payments Based on Location of Index Provider, By CBSA
LTCH Initiated Episodes

Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Houston-Sugar Land-Baytown, TX	531	50,727	0.5	62.8	0.6
New York-White Plains-Wayne, NY-NJ	281	31,749	0.6	47.2	1.3
Dallas-Plano-Irving, TX	230	52,581	0.6	68.5	0.6
Baton Rouge, LA	200	28,742	0.7	45.1	0.7
New Orleans-Metairie-Kenner, LA	197	28,271	0.6	49.3	0.6
Shreveport-Bossier City, LA	168	35,949	0.7	59.5	0.8
Chicago-Naperville-Joliet, IL	165	37,463	0.9	32.7	1.1
Boston-Quincy, MA	154	40,216	0.4	60.9	0.7
Fort Worth-Arlington, TX	130	46,253	0.5	67.1	0.7
Rural LA	119	46,971	0.5	67.5	0.7
Pittsburgh, PA	115	29,225	0.5	53.0	0.6
San Diego-Carlsbad-San Marcos, CA	95	49,282	0.5	66.6	0.7
No assigned CBSA	87	58,599	0.5	63.2	0.6
Philadelphia, PA	78	39,103	0.8	68.1	1.4
San Antonio, TX	77	58,665	0.5	62.0	0.6
Rural MS	72	47,306	0.4	50.4	0.6
Lafayette, LA	68	52,953	0.5	68.7	0.7
Scranton--Wilkes-Barre, PA	65	23,695	0.8	37.5	0.8
Los Angeles-Long Beach-Santa Ana, CA	61	55,366	0.6	70.1	0.6
Austin-Round Rock, TX	60	48,492	0.5	58.1	0.7
Kansas City, MO-KS	60	58,844	0.6	69.2	0.5
Denver-Aurora, CO	59	58,156	0.4	46.3	0.8
Atlanta-Sandy Springs-Marietta, GA	58	63,295	0.5	51.3	0.7
Newark-Union, NJ-PA	58	26,272	1.1	41.1	0.7
Monroe, LA	53	53,090	0.5	64.6	0.5
Indianapolis-Carmel, IN	52	62,808	0.5	68.8	0.6
Amarillo, TX	47	48,790	0.6	61.0	0.7
Fayetteville, NC	47	38,072	0.5	23.0	1.4
Oklahoma City, OK	47	52,093	0.3	65.9	0.6
Jacksonville, FL	41	45,151	0.6	58.1	0.5

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 13
Standardized Episode Payments Based on Location of Index Provider, By CBSA
IRF Initiated Episodes
Episode Definition A: 30 Day Variable Episode

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Houston-Sugar Land-Baytown, TX	403	32,862	1.1	114.9	1.1
San Antonio, TX	372	29,256	0.9	96.7	1.0
Edison, NJ	283	30,724	0.7	74.2	1.0
Dallas-Plano-Irving, TX	265	39,528	1.1	122.1	1.1
Austin-Round Rock, TX	239	33,442	0.9	113.5	1.0
New York-White Plains-Wayne, NY-NJ	237	28,257	0.9	89.0	1.2
Springfield, MA	196	32,305	0.7	88.2	1.0
Rural LA	191	38,955	0.8	128.7	1.1
Fort Worth-Arlington, TX	187	36,064	1.0	122.1	1.0
Chicago-Naperville-Joliet, IL	179	34,467	1.1	99.7	1.1
Boston-Quincy, MA	171	31,664	1.0	103.1	0.9
Scranton--Wilkes-Barre, PA	167	28,046	0.8	86.0	1.2
Worcester, MA	159	33,584	0.9	99.6	0.9
Las Vegas-Paradise, NV	158	31,330	1.0	81.7	1.2
Newark-Union, NJ-PA	152	30,622	0.9	83.0	1.1
Philadelphia, PA	149	28,963	1.1	80.3	1.3
Little Rock-N.Little Rock-Conway,AR	148	25,040	0.7	64.8	0.9
Indianapolis-Carmel, IN	137	27,111	1.0	77.0	1.0
Rural IN	133	26,406	0.9	77.9	1.3
Kokomo, IN	130	32,266	0.7	90.6	0.9
Los Angeles-Long Beach-Santa Ana, CA	121	28,878	1.0	84.3	1.1
Pittsburgh, PA	120	31,807	0.9	91.3	1.1
Tampa-St. Petersburg-Clearwater, FL	119	33,588	0.8	90.5	1.1
Rural AR	118	29,025	0.8	89.2	1.3
St. Louis, MO-IL	117	29,189	0.8	81.5	1.1
Charlotte-Gastonia-Concord, NC-SC	116	31,682	0.9	82.0	1.2
Baton Rouge, LA	107	40,071	0.7	114.7	1.1
Reading, PA	106	29,630	1.0	78.3	1.1
Sarasota-Bradenton-Venice, FL	106	35,284	0.9	102.4	1.1
Memphis, TN-MS-AR	103	25,546	0.9	65.3	1.4

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 14
Standardized Episode Payments Based on Location of Index Provider, By CBSA
IRF Initiated Episodes
Episode Definition B: 30 Day Variable Episode Excluding Acute Hospitalization

CBSA	Number of PAC Users ¹	Mean Episode Payment ² (\$)	CV ³	Mean Episode Length ⁴ (days)	CV ³
Houston-Sugar Land-Baytown, TX	403	21,856	0.7	82.9	1.2
San Antonio, TX	372	23,731	0.7	79.1	1.0
Edison, NJ	283	22,945	0.4	52.3	1.0
Dallas-Plano-Irving, TX	265	24,746	0.7	82.6	1.1
Austin-Round Rock, TX	239	24,465	0.6	84.6	0.9
New York-White Plains-Wayne, NY-NJ	237	20,827	0.6	66.7	1.3
Springfield, MA	196	22,904	0.5	61.3	0.7
Rural LA	191	26,224	0.6	87.2	1.2
Fort Worth-Arlington, TX	187	22,673	0.5	80.9	1.0
Chicago-Naperville-Joliet, IL	179	22,064	0.6	66.7	1.0
Boston-Quincy, MA	171	23,578	0.8	79.4	0.9
Scranton--Wilkes-Barre, PA	167	20,073	0.5	59.2	1.1
Worcester, MA	159	23,307	0.5	69.2	0.9
Las Vegas-Paradise, NV	158	20,751	0.5	56.7	1.2
Newark-Union, NJ-PA	152	21,089	0.6	53.7	1.0
Philadelphia, PA	149	19,658	0.5	51.6	1.1
Little Rock-N.Little Rock-Conway,AR	148	19,648	0.4	51.0	0.9
Indianapolis-Carmel, IN	137	20,925	0.8	57.9	1.0
Rural IN	133	20,796	0.7	59.0	1.2
Kokomo, IN	130	24,675	0.7	68.5	0.9
Los Angeles-Long Beach-Santa Ana, CA	121	19,029	0.5	57.1	1.1
Pittsburgh, PA	120	21,527	0.6	60.3	1.0
Tampa-St. Petersburg-Clearwater, FL	119	22,626	0.5	55.2	1.0
Rural AR	118	19,628	0.5	60.6	1.5
St. Louis, MO-IL	117	19,927	0.5	50.8	1.0
Charlotte-Gastonia-Concord, NC-SC	116	22,444	0.6	52.8	1.0
Baton Rouge, LA	107	31,957	0.7	87.5	1.1
Reading, PA	106	22,171	0.7	59.0	1.0
Sarasota-Bradenton-Venice, FL	106	25,867	0.6	71.2	0.9
Memphis, TN-MS-AR	103	21,055	0.6	54.0	1.3

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

Section 7-Table 15
Standardized Episode Payments Based on Location of Index Provider, By CBSA
IRF Initiated Episodes

Episode Definition C: 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event

CBSA	Number of PAC Users¹	Mean Episode Payment² (\$)	CV³	Mean Episode Length⁴ (days)	CV³
Houston-Sugar Land-Baytown, TX	403	22,967	0.7	52.7	0.5
San Antonio, TX	372	22,940	0.6	50.8	0.6
Edison, NJ	283	25,944	0.5	47.1	0.5
Dallas-Plano-Irving, TX	265	25,470	0.8	51.3	0.6
Austin-Round Rock, TX	239	26,079	0.6	56.9	0.6
New York-White Plains-Wayne, NY-NJ	237	22,618	0.7	44.6	0.7
Springfield, MA	196	25,553	0.5	52.6	0.5
Rural LA	191	27,399	0.6	56.0	0.7
Fort Worth-Arlington, TX	187	24,942	0.6	54.1	0.5
Chicago-Naperville-Joliet, IL	179	24,576	0.6	49.6	0.6
Boston-Quincy, MA	171	24,939	0.6	55.4	0.4
Scranton--Wilkes-Barre, PA	167	22,137	0.5	46.1	0.5
Worcester, MA	159	25,080	0.7	56.1	0.4
Las Vegas-Paradise, NV	158	24,008	0.6	43.1	0.7
Newark-Union, NJ-PA	152	25,192	0.7	45.1	0.6
Philadelphia, PA	149	22,359	0.6	41.8	0.7
Little Rock-N.Little Rock-Conway,AR	148	20,619	0.5	42.4	0.6
Indianapolis-Carmel, IN	137	21,907	0.7	42.6	0.6
Rural IN	133	21,502	0.6	43.4	0.7
Kokomo, IN	130	26,911	0.7	55.0	0.7
Los Angeles-Long Beach-Santa Ana, CA	121	21,596	0.6	43.8	0.6
Pittsburgh, PA	120	22,233	0.5	48.4	0.6
Tampa-St. Petersburg-Clearwater, FL	119	27,171	0.6	49.2	0.5
Rural AR	118	21,494	0.5	46.3	0.6
St. Louis, MO-IL	117	23,526	0.6	45.7	0.6
Charlotte-Gastonia-Concord, NC-SC	116	25,707	0.7	44.8	0.7
Baton Rouge, LA	107	33,183	0.6	62.2	0.6
Reading, PA	106	22,853	0.6	47.3	0.6
Sarasota-Bradenton-Venice, FL	106	27,619	0.6	53.4	0.5
Memphis, TN-MS-AR	103	21,982	0.6	39.5	0.8

NOTES:

1. PAC users are defined as beneficiaries initiating service use following 30 days without acute, LTCH, IRF, SNF, or HHA service use.
2. Episode payments include includes Medicare payments for SNF, IRF, LTCH, HHA, therapy services, and acute hospitalizations. Note that episode payments include payments for the initiating event.
3. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
4. Episode length is defined as the difference between the admission date on the claim for the initiating event and the discharge date on the last episode claim.

SOURCE: RTI analysis of 2008 Medicare claims data (m3mm221).

April 2011

Post-Acute Care Episodes Expanded Analytic File

Final Report

Prepared for

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RTI Project Number 0208824.002.007



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1. BACKGROUND

This study provides an opportunity to explore additional research questions as the Assistant Secretary for Planning and Evaluation (ASPE) and the Centers for Medicare & Medicaid Services (CMS) continue to consider alternatives to the prospective payment silos in post-acute care (PAC). Reports by MedPAC (June, 2008) and The Commonwealth Fund (Schoen et al., 2007) discuss the potential for moving to episode-based payments to better align incentives across providers, and the Patient Protection and Affordable Care Act includes a pilot program for a bundled payment. Episode-based payments may give providers a financial incentive to be more efficient and to coordinate patient services across settings, potentially helping to improve health outcomes and reduce Medicare payments. The work presented here provides more information on episodes of care and on the PAC services that are included and excluded based on different episode definitions. The results of this work can be used to inform discussions around bundled payments and for understanding the service use trajectories of beneficiaries using PAC across the country.

In work with ASPE over the last several years, RTI International has constructed episodes of PAC using 2005 and 2006 five percent Medicare claims data. These episodes were defined as starting with an index hospitalization and included all PAC services as well as Part B physician claims. While episode payments may be a way to improve care coordination across settings and reduce Medicare spending, there is no consensus on the definition of an episode. The 60-day gap variable-length episode that RTI has examined in past work with ASPE (Gage et al., 2009) has been used to explore trends in PAC use. Under this episode definition, all acute and PAC services prior to a 60-day gap in services are included in an episode. However, there are many alternative episode definitions, including fixed-length episode definitions, some of which were examined by RTI and ASPE in 2009 work (Morley et al., 2009). Fixed-length episodes—for example 30 days following discharge from an acute hospitalization—may provide administrative ease, but there is debate on how long episodes should be given that a beneficiary may have several unrelated services during a potential episode. Fixed-length episodes may also exclude services that are related clinically but initiate beyond a fixed period. This issue is of particular relevance for beneficiaries with longer PAC use trajectories. It is important to examine the impact of different definitions as policy makers consider alternatives.

In the current work, RTI has expanded the data file used in the episode analysis in terms of both sample size and the number of years of data used in order to provide more detailed information on the characteristics of PAC episodes under different definitions. The data used in this work include 30 percent of episodes initiating with an acute hospitalization, 30 percent of episodes initiating with home health (HHA), and 100 percent of episodes initiating in a long-term-care hospital (LTCH) or inpatient rehabilitation facility (IRF) in 2006, 2007, and 2008 Medicare claims. Expanding the analytic file provides information on

changes in PAC use over the period 2006-2008, allows for a more detailed understanding of the patterns of PAC use by geography, and provides the opportunity to follow patients over time. This work also differs from past work looking at episodes of care in that it includes analysis of PAC use for beneficiaries without an acute hospitalization at the start of an episode. Although much of the discussion surrounding episodes of care focuses on PAC use after a hospitalization, many beneficiaries are referred to HHA from physician offices, and a smaller number of beneficiaries enter IRF or LTCH without prior acute hospitalizations. Understanding use patterns for these types of beneficiaries is important in establishing context for discussions on how episodes of care are defined.

The next sections of this report describe the data sources, methods, and key findings from this set of analyses. Section 2 describes the analytic samples, the episode definitions explored, and the methods for standardizing payments. Section 3 presents the results of analyses of acute hospital-initiated episodes, including a discussion of the types of cases, episode patterns, and service use under alternative episode definitions. Section 4 presents the results of analyses of community-initiated episodes for beneficiaries entering IRF, LTCH, or HHA without a prior acute hospitalization. For each type of community-initiated episode, we examine the types of cases treated, patterns of care, and use of the range of PAC services under different episode definitions, and we compare these beneficiaries to those with acute hospital-initiated episodes discharged to IRF, LTCH, or HHA as their first PAC setting. Section 5 stratifies episode descriptives based on whether beneficiaries die during their episode in order to compare use patterns for those who die during the episode to against patterns for those who survive to the end of an episode. Section 6 provides detail on how PAC use and PAC episode payments differ by geographic area to demonstrate the implications of setting episode payment policy in different areas of the country. Section 7 presents the results of a cohort analysis where use of acute and PAC services was examined over a 2-year period for beneficiaries with initiating events in 2006. This includes analysis of the percentage of beneficiaries using PAC services in 30-day windows following discharge from their initiating event as well as mean payments per PAC user overall, by type of service, and by Medicare Severity Diagnosis Related Group (MS-DRG). Section 8 includes a discussion of the implications of these results for payment policy.

2. POST-ACUTE CARE EPISODE DEFINITIONS

This section describes the construction of the analytic file used to examine PAC episodes. The file allows for the analysis of a cohort of beneficiaries with an initiating event in 2006 and includes acute, PAC, and physician claims for these beneficiaries for 2006, 2007, and 2008. The analytic file also allows for examination of patterns of use over time by including a cross-sectional sample of the first PAC episode per beneficiary per year in each of the three years of data, 2006, 2007, and 2008. This section describes the analytic samples in greater detail, the definition of an initiating event, and the episode definitions included in the analyses.

2.1 Definition of an Initiating Event

In previous work, RTI has examined PAC episodes initiating with an acute hospitalization. However, as ASPE and CMS begin to consider alternatives to silo-based payments, it is necessary to also consider service use that occurs without the presence of an acute hospitalization, so-called “community entrants.” For example, beneficiaries may enter home health services without having an acute hospital stay. In this work RTI has also constructed episodes that begin with HHA, IRF, and LTCH. The purpose of the community entrant analysis is to provide a baseline understanding of the characteristics of beneficiaries who enter care without an acute hospital stay. **Table 1** summarizes the services that initiate episodes in our analyses.

Table 1. Initiating Events for Post-Acute Care Episodes

Episode Initiating Event	Initiating Claim Type
1. Acute hospital-initiated episode	▪ Acute hospital
2. Community entrant episode	▪ Home Health (HHA) ▪ Inpatient Rehabilitation Hospital (IRF) ▪ Long-Term-Care Hospital (LTCH)

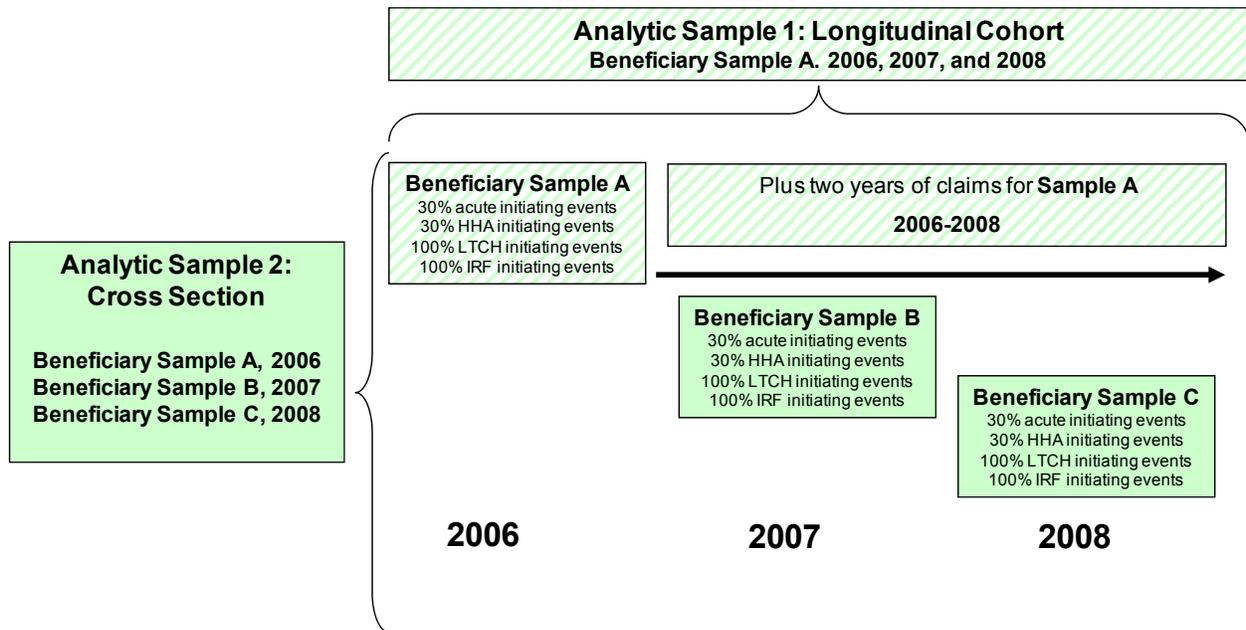
RTI’s past work constructing PAC episodes (Gage et al., 2009; Morley et al., 2009) required a 60-day clean period for an acute hospitalization to initiate an episode of care. This clean period was defined as the absence of acute hospital and PAC services (HHA, LTCH, IRF, and skilled nursing facility [SNF]). In the current work, RTI has replaced the 60-day clean period with a 30-day clean period. The decision to reduce the clean period to 30 days was based on earlier work with ASPE looking at time-based episode definitions. This decrease in the required gap in services prior to initiating an episode is likely to result in inclusion of a broader range of beneficiaries who may be in and out of acute and post-acute care.

2.2 Analytic Samples

One of the main goals of this project was to increase the sample size of the analytic file from the 5 percent Medicare beneficiary sample used in earlier work. The file constructed for this project includes 30 percent of beneficiaries with acute hospital-initiated episodes, 30 percent of beneficiaries with HHA-initiated episodes, plus 100 percent of beneficiaries initiating episodes in LTCH and IRF settings in 2006, 2007, and 2008. Two analytic samples were incorporated into the data files as described below (**Figure 1**).

- **Analytic Sample 1: Longitudinal Cohort**—The longitudinal cohort sample consists of a 30 percent sample of beneficiaries with an initiating event in an acute hospital or in home health in 2006 plus 100 percent of beneficiaries with an initiating event in LTCH or IRF in 2006. To construct the cohort sample, RTI selected the first initiating event in 2006 per beneficiary and then constructed a file of all claims following the initiating event for 2006, 2007, and 2008 for these beneficiaries. This file contains two calendar years of data for each beneficiary in the cohort.
- **Analytic Sample 2: Cross Section**—The cross-sectional samples consist of a 30 percent sample of beneficiaries with an initiating event in an acute hospital or in home health plus 100 percent of beneficiaries with an initiating event in LTCH or IRF in 2006, 2007, and 2008. RTI constructed the first episode per year for these beneficiaries to compare changes in utilization patterns over the 3-year study period.

Figure 1. Analytic Samples: Longitudinal Cohort and Cross Section



2.3 Episode Definitions

RTI constructed 15 PAC episode definitions in the analytic file and constructed episodes for both acute hospital-initiated and community entrant episodes using the following definitions:

- 30-day fixed-length episode, and
- 30-day variable-length episode.

The endpoint of a fixed-length episode was defined using two different methods. The first method allowed any claim initiating within a fixed period to be part of the episode definition. For example, using this method, the entirety of a 60-day home health claim initiating 25 days after acute hospital discharge was included in the 30-day fixed-length episode definition. In the second method, we prorated claims so that only PAC days within the fixed period (and the associated dollars) were included in the episode. Using the example of the 60-day home health claim initiating 25 days after acute hospital discharge, under the prorated methodology, only visits occurring during the first 5 days of the home health claim (up to day 30 after acute hospital discharge) were included in the 30-day fixed episode definition. As in earlier work, prorated payments were estimated by dividing the total claim Medicare payment amount by the total number of visits on the claim (or the number of days on institutional claims).

Figure 2 provides a schematic of the fixed- and variable-length episodes examined in this work. Additionally, **Figure 3** depicts the difference between allowing a claim initiating in a fixed window to finish an episode versus prorating the episode endpoint. Note that an alternative end point to each of the episode definitions is acute hospitalization (a readmission for acute hospital-initiated episodes or the first acute hospitalization for community entrant episodes). Note also that all episode definitions include the initiating event and that episode end points for each of the definitions are calculated based on the discharge date on the claim for the initiating event. For example, in the case of home health community entrants, where a home health claim is the initiating event and may be followed by a series of home health claims for beneficiaries receiving ongoing care, the episode endpoint is calculated using the discharge date from the first home health claim that initiated the episode.

Physician claims were also examined as part of this analysis though only acute and PAC claims were used to define initiating events and episode endpoints. Physician claims with dates of service falling between the admission date on an initiating event and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment analyses.

Figure 2. Fixed-Length versus Variable-Length Episodes

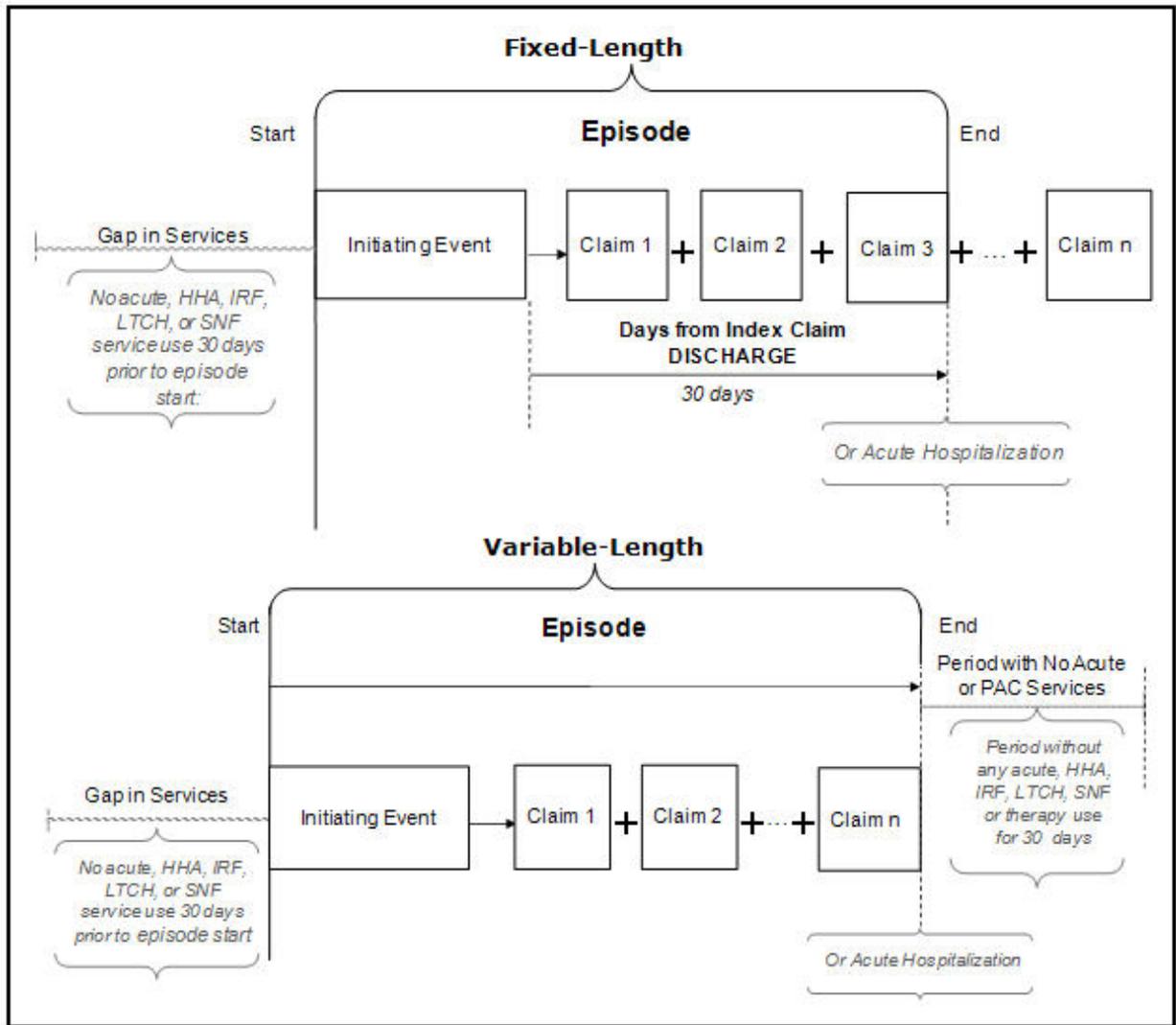
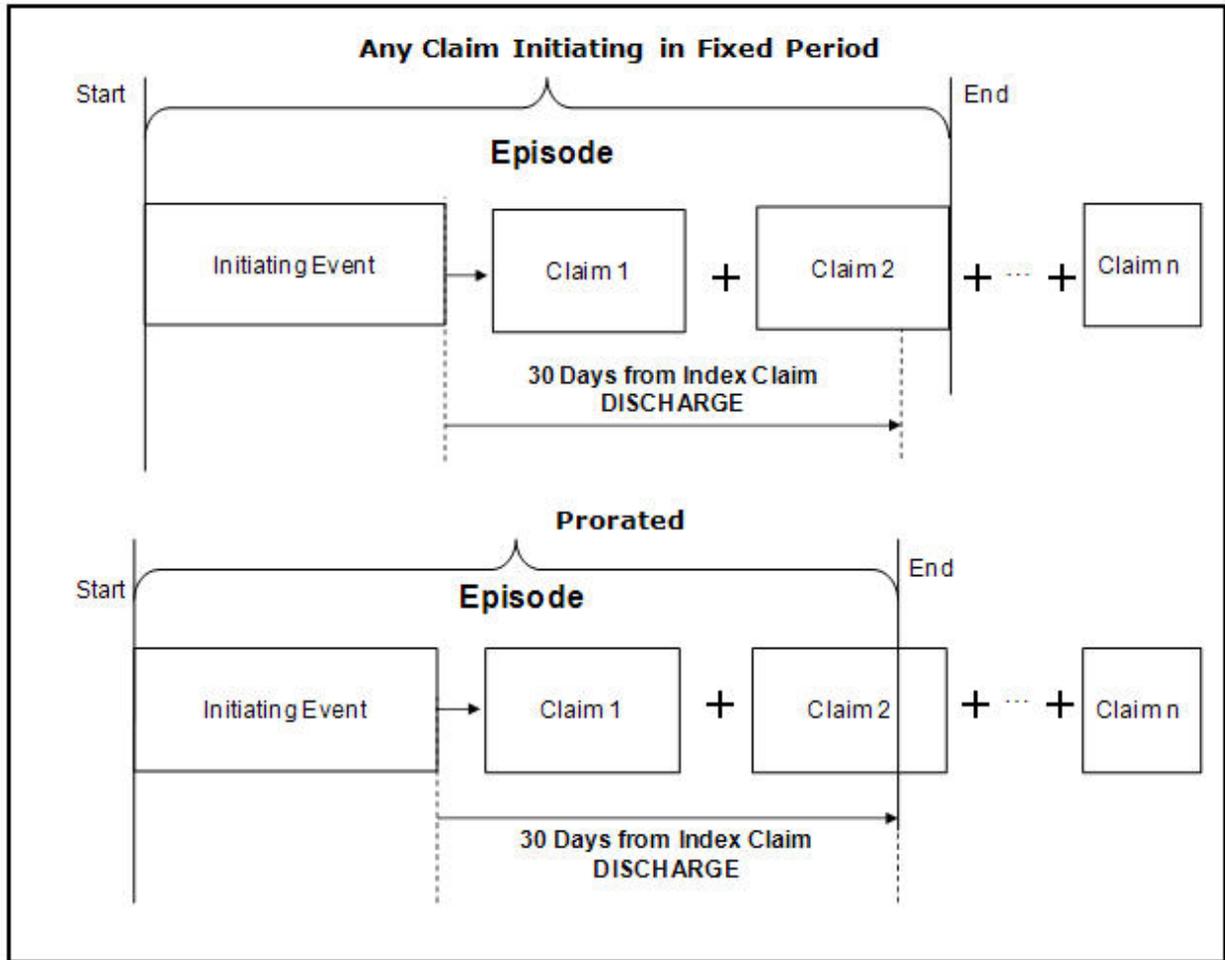


Figure 3. Defining Endpoints of Fixed-Length Episodes

In summary, episodes were constructed on the following dimensions:

1. Episode definition
 - a. 30-day fixed length
 - b. 30-day variable length
2. Initiating event
 - a. Acute hospital
 - b. HHA
 - c. IRF
 - d. LTCH

3. Alternative methods of handling the end of fixed episodes
 - a. Any claim initiating
 - b. Prorated
4. Alternative episode end point of an acute hospitalization.

Based on these dimensions, the total number of episodes examined in this work includes the 15 episode definitions shown in **Table 2**. Using these definitions, RTI examined episode patterns, use of PAC services, and payments for both the acute hospital-initiated and the community entrant episodes.

Table 2. Episode Definitions

Initiating Event	Fixed or Variable Length	Episode End Point
Acute hospitalization	Fixed	Any Claim Starting Within 30 Days After Hospital Discharge
Acute hospitalization	Fixed	Any Claim Starting Within 30 Days After Hospital Discharge, Excluding Acute Hospital Readmissions
Acute hospitalization	Fixed	30-Day Fixed Period Following Hospital Discharge (prorated)
Acute hospitalization	Fixed	30-Day Fixed Period Following Hospital Discharge (prorated), Excluding Acute Hospital Readmissions
Acute hospitalization	Variable	30-Day Variable-Length Episode
Acute hospitalization	Variable	30-Day Variable-Length Episode Excluding Acute Hospital Readmissions
HHA	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
HHA	Variable	30-Day Variable-Length Episode
HHA	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations
IRF	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
IRF	Variable	30-Day Variable-Length Episode
IRF	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations
LTCH	Fixed	Any Claim Starting Within 30 days After Discharge from Initiating Event
LTCH	Variable	30-Day Variable-Length Episode
LTCH	Variable	30-Day Variable-Length Episode Excluding Acute Hospitalizations

2.4 Diagnosis and Severity Adjustment

RTI ran each of the claims initiating episodes through the most recently available 3M Medical Severity Grouper (MS-DRG) software version 27.0. For episodes initiating with an acute hospitalization or an LTCH claim, this allows for consistent comparison of MS-DRGs over time.

Given the analysis of “community entrant” episodes, a different approach was required for HHA- and IRF-initiated episodes by condition. The primary diagnoses on IRF claims are vague and generally not descriptive of the underlying condition for which a patient is receiving care, and HHA claims most often use V-codes to describe the types of services being received.

For IRF-initiated episodes, RTI stratified analyses by the rehabilitation impairment group (RIC) recorded on the IRF claims in the standard analytic file (SAF). RICs represent 21 groups of conditions for which a beneficiary is treated and are the basis for payment for IRFs. Examples of RICs include stroke, neurologic conditions, cardiac, pulmonary, spinal cord dysfunction, brain dysfunction, and amputation.

For HHA-initiated episodes, RTI used a condition grouping algorithm based on Major Diagnostic Category (MDC) and MS-DRGs after running the MS-DRG grouper on all claims including HHA claims. These groupings are highly aggregated but provide an understanding of the broad types of cases entering HHA without a prior acute hospitalization. These groupings are presented in Section 4. In addition, RTI also examined International Classification of Diseases Ninth Revision (ICD-9) coding in the first position of HHA claims and the home health resource group (HHRG) codes recorded on HHA claims for payment purposes. These groups do not reflect specific diagnosis groups but include measures of therapy utilization, clinical severity, functional severity, and service severity.

2.5 Standardizing Payments for Geographic Benchmarking Analysis

One of the goals of this work was to perform geographic benchmarking analysis to look at the differences in PAC payments across different levels of geography and learn more about differences in patterns of PAC utilization as they relate to differences in the local availability of providers and practice patterns across the country. Analyses were conducted at the state and the core-based statistical area (CBSA) levels. Mean PAC episode length and mean PAC payments were calculated per discharge for acute hospital-initiated episodes and per PAC user for both acute hospital-initiated and community entrant episodes.

In conducting the geographic benchmarking analysis, we standardized payments to remove the effects of payment adjustments caused by geography or other policy considerations. By standardizing the payments, we remove payments related to wage adjustments, indirect medical education (IME), and disproportionate share hospital (DSH) payments. Our approach to standardizing payments included using base rate payments and case-mix

weights as published in the *Federal Register* and applying those to our claims using the case-mix weight variables in the standard analytic files. We applied rates and weights according to the payment policies in place for each payment system corresponding to the type of PAC service and the claim date.

The methods used to standardize payments were as follows:

- Acute hospital standardized payment = base rate * MS-DRG weight
- IRF standardized payment = base rate * case-mix group (CMG) weight
- LTCH standardized payment = base rate * LTCH DRG weight
- HHA standardized payment = base rate * home health resource group (HHRG) weight
- SNF standardized payment = per diem * resource utilization group (RUG) weight * days
- Therapy standardized payment = physician fee schedule amount¹ * units

2.6 Cohort Analysis

To learn more about the use patterns of beneficiaries over longer periods of time, ASPE and RTI examined patterns of acute and PAC use for beneficiaries with an initiating event (acute, LTCH, IRF, or HHA) in 2006 and followed these beneficiaries using 2 years of claims data. RTI constructed twenty-four 30-day windows over which to look at service use. Similar to the prorated episode definition described above, claims were prorated so that only days and dollars associated with the portion of the claim in each of the 30-day windows were attributed to the window. As in creating the prorated episode definition, only dollars associated with visits and days in each of the windows were assigned to the windows, and prorated payments per window were estimated by dividing the total claim Medicare payment amount by the total number of visits (or days in the case of institutional claims) on the claim and assigning payments based on those that occurred in each window. Analyses of this sample included examination of the percentage of beneficiaries with a claim, mean total acute and PAC payments, and mean payments per service type. Analyses were conducted by type of initiating event and also included some MS-DRG specific analyses to learn more about how patterns change for beneficiaries with different types of diagnoses.

¹ Because there is no national physician fee schedule, state-level physician fee schedule amounts were used in this calculation. RTI selected one state, Kansas (although any state could have been selected), for the purposes of this analysis and applied Kansas rates to all therapy claims. By applying the rates from one state to all of the data, we were able to achieve the goal of understanding levels of utilization in the absence of wage adjustments and other geographic differences in payments.

3. ACUTE HOSPITAL-INITIATED EPISODES

Analyses of acute hospital-initiated episodes were based on the cross-sectional analytic sample described in Section 2. The analyses focused on understanding the types of cases with acute hospital-initiated episodes, the first site of PAC, and any differences that occur in the 3 years of data examined here. In addition, the analyses looked specifically at episode patterns, episode length, and episode payment under six different episode definitions. Overall, episode summary statistics are shown here for each of the 3 years of data, although only 2008 data are shown for the episode pattern and service-specific utilization under different episode definitions. The key findings from the analyses of acute hospital-initiated episodes are summarized below.

Table 3 summarizes the top 10 MS-DRGs for beneficiaries initiating a PAC episode with an acute hospitalization as well as the percentage of all PAC users with the MS-DRG. This table also provides data on the ranking of these same MS-DRGs in the earlier years of data included in our analysis. The most common MS-DRG among beneficiaries discharged to PAC is MS-DRG 470, “Major joint replacement or reattachment of lower extremity w/o MCC” (13.7 percent of PAC users in 2008). Other MS-DRGs in the top five include MS-DRG 194, “Simple pneumonia & pleurisy w CC”; MS-DRG 690, “Kidney & urinary tract infections w/o CC”; MS-DRG 065, “Intracranial hemorrhage or cerebral infarction w CC”; and MS-DRG 481, “Hip & femur procedures except major joint w CC.” The top 10 MS-DRGs account for close to 30 percent of all PAC users in 2008. This analysis reveals that the top five MS-DRGs among PAC users have been consistent over the 3 years of data examined, 2006-2008.

The proportion of beneficiaries with acute hospital-initiated episodes discharged to each site of PAC is shown in **Table 4**. The percentage of beneficiaries discharged to each PAC setting is similar across the 3 years of data, with the largest proportion of beneficiaries discharged to SNF (42.2 percent in 2008) and HHA (37.4 percent in 2008) and a smaller proportion discharged to LTCH (1.7 percent in 2008), IRF (8.6 percent in 2008), and therapy services (10.1 percent in 2008). These results indicate that there has been a slight decrease in the percentage of beneficiaries discharged to IRF and a slight increase in the percentage discharged to SNF over the period 2006-2008. This change is of particular note when looking at specific MS-DRGs. For example, 17.9 percent of beneficiaries in MS-DRG 470, “major joint replacement” were discharged to IRF in 2006, and this decreased to 12.2 percent of beneficiaries in this MS-DRG in 2008. The decrease is likely a result of the phase-in of the 60 percent rule in the IRF payment system—a rule that requires 60 percent of a provider’s admissions meet certain classification criteria in order for the provider to be eligible for IRF payment.

Table 5 displays the top 30 episode patterns for beneficiaries with acute hospital-initiated episodes. Each letter in the sequence represents a type of service: A = acute hospital,

S = SNF, H = HHA, I = IRF, L = LTCH, O = hospital outpatient therapy, and T = independent therapist. Note that a single letter may represent one claim or multiple claims of the same type. This episode pattern analysis was conducted on the 30-day variable-length episode definition to provide an understanding of the complete clinical trajectory of service use related to an index event. Analysis of episode patterns for beneficiaries with acute hospital-initiated episodes indicate that as expected, acute to HHA (AH) and acute to SNF (AS) are the most common episode patterns (36.8 percent of all PAC episodes in 2008), and that the top 30 episode patterns account for over 82 percent of all episode patterns for beneficiaries discharged to PAC. Given that a small proportion of beneficiaries use LTCH nationally, there is only one episode pattern in that top 30 that includes LTCH. The episode pattern acute to LTCH (AL) is the 26th most common episode pattern, and it is common to 0.5 percent of beneficiaries with acute hospital-initiated episodes.

Summary statistics looking at index, PAC, and total episode payments, by episode definition are presented in **Tables 6 to 9**. Mean payments were calculated using three different methods—payments per service use, payments per PAC user, and payments per hospital discharge—to demonstrate the differences in mean payments across different beneficiary samples. These different calculations are described below.

- Payments per service user indicate the mean Medicare payments for those beneficiaries who use the specific PAC service (average payments per SNF admission for those who had an SNF admission).
- Payments per PAC user indicate the mean Medicare payments across all beneficiaries who use any PAC, regardless of whether or not they use a specific PAC service.
- Payments per hospital discharge indicate the mean Medicare payments across all beneficiaries with an index acute hospital stay, regardless of whether they use a PAC service. Note that the per-hospital discharge calculations include rehospitalizations and a small amount of subsequent service use for beneficiaries not discharged to PAC from their acute hospital initiating event.

As also demonstrated in earlier work, episode length and payments differ significantly by episode definition. For example, in 2008, the mean PAC payment per PAC user under the longest episode definition, the 30-day variable-length episode definition, was \$17,236 in 2008 compared with \$10,651 under the episode definition that includes any claim initiating within 30 days after hospital discharge (**Table 6**). Payments per discharge, as opposed to payments per PAC user, depend on the proportion of beneficiaries discharged to PAC. Among beneficiaries with acute hospital-initiated episodes in 2008, 38.7 percent were discharged to PAC and the mean PAC payment per hospital discharge was \$8,384 under the 30-day variable-length episode definition. **Table 7** displays episode summary statistics for the top five MS-DRGs by volume of PAC users to demonstrate the differences in PAC utilization by MS-DRG and to demonstrate the differences in the per-PAC-user and per-discharge calculations by MS-DRG given differences in the proportion of beneficiaries discharged to PAC by MS-DRG. For example, for MS-DRG 470, the mean PAC payment per

discharge and the mean payment per PAC user were very similar across episode definitions (\$9,593 versus \$10,067 for the 30-day variable episode) because 94.2 percent of beneficiaries in this MS-DRG are discharged to PAC. In contrast, only 36.3 percent of beneficiaries in MS-DRG 194 are discharged to PAC, and therefore there are significant differences in the per-PAC-user and per-hospital-discharge calculations for PAC payments (\$7,072 versus \$14,892 for the 30-day variable episode). In addition to summary statistics for PAC users, **Table 8** also shows the mean length of stay associated with each of the episode definitions in each of the 3 years of data. In general, the patterns in episode length are consistent with the patterns we observe for payment, with significant variation in the PAC and total episode length depending on whether we look at a shorter fixed-length definition or a longer variable-length definition. These patterns were consistent across the 3 years of data examined.

The percentage of beneficiaries using specific PAC services also varies by episode definition as shown in **Table 9**. In this table, we report the percentage of beneficiaries using each type of service, the mean claim length of stay, mean payment per service user, mean payment per PAC user, and mean payment per hospital discharge for each of the six episode definitions examined. The results indicate that the percentage of beneficiaries using HHA and SNF services increases under longer episode definitions because these services may be used directly after discharge from an acute hospitalization or later in an episode of care such as following an LTCH or IRF admission. Use of LTCH and IRF services is less sensitive to episode definitions because these services most often occur directly following an acute hospitalization. Table 8 also demonstrates the differences in acute hospital readmission during an episode-by-episode definition. Under the episode definition including any claim starting within 30 days after hospital discharge, 14.8 percent of beneficiaries had a readmission during an episode, but this increases to 28.6 percent under a 30-day variable-length episode definition again indicating differences in service use and policy implications for different episode definitions.

The per-service-user, per-PAC-user, and per-hospital-discharge calculations highlight the sensitivity of these calculations to the episode definition selected and the population over which payments are averaged. This is demonstrated most clearly by examining the LTCH utilization. Under the episode definition including any claim starting within 30 days after hospital discharge, mean payment per beneficiary using LTCH is \$35,203. When calculated per PAC user, the mean payment is \$691, and when calculated per hospital discharge, the payment is \$283. These sharp differences indicate the importance of understanding service use patterns in thinking about episode-based payment. This includes consideration of issues related to geography and provider supply in areas of the country with access to LTCHs compared with those without LTCHs in their area.

Physician service use is another topic of interest to episode bundling discussions. Use of physician services in the week prior to the episode initiating event, during the initiating

event, and during the episode is presented in **Table 10**. To reveal more about differences in use prior to the start of an episode for different types of cases (for example, medical versus surgical), these data are presented both overall and for the top five MS-DRGs by volume of PAC users. Overall, 49.9 percent of beneficiaries with acute hospital-initiated episodes had at least one physician claim in the week prior to the start of an episode, although this finding varied from 34.5 percent for beneficiaries in MS-DRG 481, “hip & femur procedures,” to 54.2 percent for beneficiaries in MS-DRG 470, “major joint replacement or reattachment of lower extremity.” Total episode payments for physician services were higher for beneficiaries receiving surgical procedures and for beneficiaries with stroke compared with beneficiaries being treated for pneumonia or kidney and urinary tract infections.

Table 3. Top 10 MS-DRGs for Acute Hospital-Initiated Episodes for Beneficiaries Discharged to PAC

Rank 2008	Rank 2007	Rank 2006	MS-DRG	N 2008	Percent 2008	Cumulative Percent 2008
1	1	1	470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	13.7	13.7
2	2	2	065: Intracranial hemorrhage or cerebral infarction w CC	13,992	2.1	15.8
3	4	4	481: Hip & femur procedures except major joint w CC	13,704	2.1	17.9
4	3	3	194: Simple pneumonia & pleurisy w CC	13,064	2.0	19.9
5	5	5	690: Kidney & urinary tract infections w/o MCC	12,954	2.0	21.9
6	7	11	641: Nutritional & misc metabolic disorders w/o MCC	9,755	1.5	23.3
7	6	6	299: Peripheral vascular disorders w MCC	9,752	1.5	24.8
8	9	7	292: Heart failure & shock w CC	8,602	1.3	26.1
9	15	17	291: Heart failure & shock w MCC	8,561	1.3	27.4
10	12	14	552: Medical back problems w/o MCC	8,113	1.2	28.6

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143).

Table 4. First Site of PAC, Acute Hospital-Initiated Episodes, Overall and for Top 5 MS-DRGs by Volume of PAC Users, 2006-2008

MS-DRG	N	% Discharged to PAC	% Discharged to LTCH	% Discharged to IRF	% Discharged to SNF	% Discharged to HHA	% Discharged to Therapy
All MS-DRGs 2008	659,549	38.7	1.7	8.6	42.2	37.4	10.1
470: Major joint replacement or reattachment of lower extremity w/o MCC	90,434	94.2	0.1	12.2	37.4	37.4	12.9
065: Intracranial hemorrhage or cerebral infarction w CC	13,992	75.0	1.2	37.0	36.8	17.3	7.7
481: Hip & femur procedures except major joint w CC	13,704	95.4	0.4	22.1	68.0	7.7	1.8
194: Simple pneumonia & pleurisy w CC	13,604	36.3	0.9	1.7	51.1	37.8	8.5
690: Kidney & urinary tract infections w/o MCC	12,954	43.9	0.4	1.7	58.3	28.9	10.7
All MS-DRGs 2007	661,958	37.9	1.7	8.9	42.2	37.1	10.0
470: Major joint replacement or reattachment of lower extremity w/o MCC	91,259	93.9	0.1	14.2	37.1	36.2	12.4
065: Intracranial hemorrhage or cerebral infarction w CC	14,433	75.1	1.3	36.7	38.1	16.4	7.4
481: Hip & femur procedures except major joint w CC	13,558	95.0	0.7	23.1	66.8	7.7	1.8
194: Simple pneumonia & pleurisy w CC	15,044	36.1	1.2	1.5	50.7	38.8	7.8
690: Kidney & urinary tract infections w/o MCC	13,704	43.9	0.4	1.8	59.8	28.0	10.1
All MS-DRGs 2006	667,784	37.1	1.8	9.7	42.1	36.4	9.9
470: Major joint replacement or reattachment of lower extremity w/o MCC	91,621	94.0	0.2	17.9	36.2	33.7	12.0
065: Intracranial hemorrhage or cerebral infarction w CC	15,459	74.7	1.6	35.5	39.0	16.3	7.5
481: Hip & femur procedures except major joint w CC	13,846	94.8	0.8	23.1	66.8	7.3	1.9
194: Simple pneumonia & pleurisy w CC	16,638	35.7	1.2	1.7	51.6	38.3	7.3
690: Kidney & urinary tract infections w/o MCC	13,724	43.3	0.5	1.8	60.8	27.3	9.7

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143, M3MM156).

Table 5. Episode Patterns: Acute Hospital-Initiated Episodes, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	AH	150,850	22.9	22.9
2	AS	91,928	13.9	36.8
3	ASH	56,661	8.6	45.4
4	AO	34,141	5.2	50.6
5	AHA	24,512	3.7	54.3
6	AT	18,485	2.8	57.1
7	ASO	17,931	2.7	59.8
8	AIH	14,900	2.3	62.1
9	ASAS	14,687	2.2	64.3
10	AHO	14,655	2.2	66.5
11	AHT	14,467	2.2	68.7
12	ASA	13,841	2.1	70.8
13	AHAH	8,839	1.3	72.2
14	ASHO	6,632	1.0	73.2
15	ASHT	6,115	0.9	74.1
16	AIO	5,961	0.9	75.0
17	ASHA	5,221	0.8	75.8
18	AI	4,902	0.7	76.5
19	ASASH	4,446	0.7	77.2
20	AST	4,282	0.6	77.8
21	ASASA	3,453	0.5	78.4
22	ASASAS	3,353	0.5	78.9
23	AIHO	3,158	0.5	79.4
24	ASASO	3,135	0.5	79.8
25	AHAS	3,071	0.5	80.3
26	AL	3,004	0.5	80.8
27	AHAHA	2,488	0.4	81.1
28	AOA	2,482	0.4	81.5
29	AISH	2,337	0.4	81.9
30	AHASH	2,290	0.3	82.2

Note: Episode pattern is based on a 30-day variable episode definition. Each letter indicates a type of service use, but a single letter may represent one claim or multiple claims of the same type of service. A = acute hospital, S = SNF, H = HHA, I= IRF, L= LTCH, O = outpatient department therapy, T = independent therapist.

Source: RTI analysis of 2008 Medicare claims (M3MM157).

Table 6. Episode Summary Statistics: Acute Hospital-Initiated Episodes, 2006-2008

Episode Definition	Mean Index Acute Hospital Payment Per Discharge ¹	Mean Index Acute Hospital Physician Payment Per Discharge ^{1,2}	Mean PAC Payment Per Discharge ^{1,3}	Mean Episode Payment Per Discharge ^{1,4}	Mean Index Acute Hospital Payment Per PAC User ^{1,5}	Mean Index Acute Hospital Physician Payment Per PAC User ^{2,5}	Mean PAC Payment Per PAC User ^{3,5}	Mean Episode Payment Per PAC User ^{5,5}
2008 (N=659,549)								
A. 30-Day Variable Episode	\$8,531	\$1,172	\$8,384	\$18,847	\$10,572	\$1,524	\$17,236	\$30,827
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	\$8,531	\$1,172	\$3,511	\$13,472	\$10,572	\$1,524	\$9,075	\$21,926
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	\$8,531	\$1,172	\$5,252	\$15,355	\$10,572	\$1,524	\$10,651	\$23,499
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	\$8,531	\$1,172	\$3,157	\$13,048	\$10,572	\$1,524	\$8,165	\$20,838
E. 30-Day Fixed Following Hospital Discharge (prorated)	\$8,531	\$1,172	\$3,845	\$13,948	\$10,572	\$1,524	\$7,564	\$20,412
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	\$8,531	\$1,172	\$2,221	\$12,113	\$10,572	\$1,524	\$5,745	\$18,418
2007 (N=661,958)								
A. 30-Day Variable Episode	\$8,205	\$1,161	\$7,725	\$17,807	\$10,062	\$1,524	\$16,145	\$29,156
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	\$8,205	\$1,161	\$3,259	\$12,865	\$10,062	\$1,524	\$8,596	\$20,904
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	\$8,205	\$1,161	\$4,905	\$14,656	\$10,062	\$1,524	\$10,100	\$22,416
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	\$8,205	\$1,161	\$2,945	\$12,489	\$10,062	\$1,524	\$7,772	\$19,918
E. 30-Day Fixed Following Hospital Discharge (prorated)	\$8,205	\$1,161	\$3,612	\$13,363	\$10,062	\$1,524	\$7,217	\$19,533
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	\$8,205	\$1,161	\$2,088	\$11,632	\$10,062	\$1,524	\$5,510	\$17,656

(continued)

Table 6. Episode Summary Statistics: Acute Hospital-Initiated Episodes, 2006-2008 (continued)

Episode Definition	Mean Index Acute Hospital Payment Per Discharge ¹	Mean Index Acute Hospital Physician Payment Per Discharge ^{1,2}	Mean PAC Payment Per Discharge ^{1,3}	Mean Episode Payment Per Discharge ^{1,4}	Mean Index Acute Hospital Payment Per PAC User ^{1,5}	Mean Index Acute Hospital Physician Payment Per PAC User ^{2,5}	Mean PAC Payment Per PAC User ^{3,5}	Mean Episode Payment Per PAC User ^{4,5}
2006 (N=667,784)								
A. 30-Day Variable Episode	\$7,941	\$1,127	\$7,208	\$16,953	\$9,644	\$1,482	\$15,236	\$27,720
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	\$7,941	\$1,127	\$3,045	\$12,339	\$9,644	\$1,482	\$8,200	\$20,015
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	\$7,941	\$1,127	\$4,617	\$14,052	\$9,644	\$1,482	\$9,604	\$21,426
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	\$7,941	\$1,127	\$2,754	\$11,991	\$9,644	\$1,482	\$7,422	\$19,086
E. 30-Day Fixed Following Hospital Discharge (prorated)	\$7,941	\$1,127	\$3,425	\$12,860	\$9,644	\$1,482	\$6,909	\$18,731
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	\$7,941	\$1,127	\$1,967	\$11,203	\$9,644	\$1,482	\$5,300	\$16,964

1. Index acute hospitalizations are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per-hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user (use of PAC services following discharge from an index acute hospitalization). This includes acute hospital readmissions for non-PAC users.
2. Physician payment is defined as separately billable Part B physician services rendered during the index acute hospital stay.
3. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospital readmissions are also included in PAC payments for episode definitions A, C, and E.
4. Episode payment includes the index acute hospital stay, PAC, physician services during the index acute hospital stay and during the PAC episode.
5. PAC users are defined as beneficiaries discharged to SNF, IRF, LTCH, HHA, or therapy following discharge from an index acute hospitalization. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143, M3MM149, M3MM216, M3MM237).

Table 7. Episode Summary Statistics: Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008

Episode Definition	Mean Index Acute Hospital Payment Per Discharge ¹	Mean Index Acute Hospital Physician Payment Per Discharge ^{1,2}	Mean PAC Payment Per Discharge ^{1,3}	Mean Episode Payment Per Discharge ^{1,4}	Mean Index Acute Hospital Payment Per PAC User ^{1,5}	Mean Index Acute Hospital Physician Payment Per PAC User ^{2,5}	Mean PAC Payment Per PAC User ^{3,5}	Mean Episode Payment Per PAC User ^{4,5}
A. 30-day Variable Episode								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$9,593	\$22,802	\$11,120	\$1,505	\$10,067	\$23,365
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$21,822	\$30,587	\$6,401	\$1,038	\$28,034	\$37,217
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$24,434	\$37,817	\$10,296	\$1,750	\$25,465	\$38,918
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$7,072	\$13,681	\$5,471	\$749	\$14,892	\$22,291
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$8,727	\$13,859	\$4,090	\$586	\$16,943	\$22,712
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$7,093	\$20,079	\$11,120	\$1,505	\$7,527	\$20,601
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$13,849	\$21,974	\$6,401	\$1,038	\$18,460	\$26,904
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$16,900	\$29,687	\$10,296	\$1,750	\$17,719	\$30,559
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$2,710	\$8,895	\$5,471	\$749	\$7,458	\$14,246
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$4,092	\$8,814	\$4,090	\$586	\$9,316	\$14,494

(continued)

Table 7. Episode Summary Statistics: Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008 (continued)

Episode Definition	Mean Index Acute Hospital Payment Per Discharge ¹	Mean Index Acute Hospital Physician Payment Per Discharge ^{1,2}	Mean PAC Payment Per Discharge ^{1,3}	Mean Episode Payment Per Discharge ^{1,4}	Mean Index Acute Hospital Payment Per PAC User ^{1,5}	Mean Index Acute Hospital Physician Payment Per PAC User ^{2,5}	Mean PAC Payment Per PAC User ^{3,5}	Mean Episode Payment Per PAC User ^{4,5}
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$7,335	\$20,238	\$11,120	\$1,505	\$7,701	\$20,679
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$14,812	\$22,960	\$6,401	\$1,038	\$19,086	\$27,484
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$17,664	\$30,413	\$10,296	\$1,750	\$18,402	\$31,193
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$4,385	\$10,711	\$5,471	\$749	\$9,163	\$15,977
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$5,418	\$10,247	\$4,090	\$586	\$10,453	\$15,642
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$6,437	\$19,279	\$11,120	\$1,505	\$6,831	\$19,753
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$12,239	\$20,191	\$6,401	\$1,038	\$16,314	\$24,528
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$15,168	\$27,749	\$10,296	\$1,750	\$15,903	\$28,528
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$2,490	\$8,631	\$5,471	\$749	\$6,858	\$13,527
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$3,684	\$8,352	\$4,090	\$586	\$8,400	\$13,456

(continued)

Table 7. Episode Summary Statistics: Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008 (continued)

Episode Definition	Mean Index Acute Hospital Payment Per Discharge¹	Mean Index Acute Hospital Physician Payment Per Discharge^{1,2}	Mean PAC Payment Per Discharge^{1,3}	Mean Episode Payment Per Discharge^{1,4}	Mean Index Acute Hospital Payment Per PAC User^{1,5}	Mean Index Acute Hospital Physician Payment Per PAC User^{2,5}	Mean PAC Payment Per PAC User^{3,5}	Mean Episode Payment Per PAC User^{4,5}
E. 30-Day Fixed Following Hospital Discharge (prorated)								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$5,893	\$18,796	\$11,120	\$1,505	\$6,182	\$19,160
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$10,520	\$18,667	\$6,401	\$1,038	\$13,496	\$21,894
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$11,567	\$24,316	\$10,296	\$1,750	\$12,047	\$24,838
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$3,112	\$9,438	\$5,471	\$749	\$6,235	\$13,049
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$3,615	\$8,444	\$4,090	\$586	\$6,749	\$11,938
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)								
470: Major joint replacement or reattachment of lower extremity w/o MCC	\$11,079	\$1,484	\$5,173	\$18,016	\$11,120	\$1,505	\$5,490	\$18,412
065: Intracranial hemorrhage or cerebral infarction w CC	\$6,392	\$979	\$8,672	\$16,624	\$6,401	\$1,038	\$11,559	\$19,773
481: Hip & femur procedures except major joint w CC	\$10,295	\$1,734	\$9,955	\$22,536	\$10,296	\$1,750	\$10,437	\$23,062
194: Simple pneumonia & pleurisy w CC	\$5,347	\$631	\$1,664	\$7,805	\$5,471	\$749	\$4,583	\$11,252
690: Kidney & urinary tract infections w/o MCC	\$3,989	\$513	\$2,353	\$7,021	\$4,090	\$586	\$5,364	\$10,420

(continued)

Table 7. Episode Summary Statistics: Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008 (continued)

1. Index acute hospitalizations are defined as hospital admissions following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Note that per-hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user (use of PAC services following discharge from an index acute hospitalization). This includes acute hospital readmissions for non-PAC users.
2. Physician payment is defined as separately billable Part B physician services rendered during the index acute hospital stay.
3. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospital readmissions are also included in PAC payments for episode definitions A, C, and E.
4. Episode payment includes the index acute hospital stay, PAC, physician services during the index acute hospital stay and during the PAC episode.
5. PAC users are defined as beneficiaries discharged to SNF, IRF, LTCH, HHA, or therapy following discharge from an index acute hospitalization. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.

Source: RTI analysis of 2008 Medicare claims (M3MM143, M3MM149, M3MM237).

Table 8. Episode Length of Stay: Acute Hospital-Initiated Episodes, 2006-2008

Episode Definition	N	Percent of Beneficiaries Discharged to PAC¹	Mean Index Acute Hospital LOS² (days)	Mean Index Acute Hospital Payment²	Mean PAC LOS³ (days)	Mean PAC Payment⁴	Mean Episode LOS⁵ (days)	Mean Episode Payment⁵
2008								
A. 30-Day Variable Episode	659,549	38.7	6.2	\$10,572	79.1	\$17,236	87.3	\$30,827
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	659,549	38.7	6.2	\$10,572	56.4	\$9,075	64.6	\$21,926
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	659,549	38.7	6.2	\$10,572	40.6	\$10,651	48.8	\$23,499
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	659,549	38.7	6.2	\$10,572	37.4	\$8,165	45.6	\$20,838
E. 30-Day Fixed Following Hospital Discharge (prorated)	659,549	38.7	6.2	\$10,572	25.0	\$7,564	33.2	\$20,412
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	659,549	38.7	6.2	\$10,572	22.7	\$5,745	30.9	\$18,418
2007								
A. 30-Day Variable Episode	661,958	37.9	6.3	\$10,062	77.9	\$16,145	86.2	\$29,156
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	661,958	37.9	6.3	\$10,062	55.8	\$8,596	64.0	\$20,904
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	661,958	37.9	6.3	\$10,062	41.2	\$10,100	49.5	\$22,416
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	661,958	37.9	6.3	\$10,062	38.0	\$7,772	46.2	\$19,918
E. 30-Day Fixed Following Hospital Discharge (prorated)	661,958	37.9	6.3	\$10,062	24.9	\$7,217	33.2	\$19,533
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	661,958	37.9	6.3	\$10,062	22.6	\$5,510	30.9	\$17,656

(continued)

Table 8. Episode Length of Stay: Acute Hospital-Initiated Episodes, 2006-2008 (continued)

Episode Definition	N	Percent of Beneficiaries Discharged to PAC ¹	Mean Index Acute Hospital LOS ² (days)	Mean Index Acute Hospital Payment ²	Mean PAC LOS ³ (days)	Mean PAC Payment ⁴	Mean Episode LOS ⁵ (days)	Mean Episode Payment ⁵
2006								
A. 30-Day Variable Episode	667,784	37.1	6.4	\$9,644	75.4	\$15,236	83.8	\$27,720
B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	667,784	37.1	6.4	\$9,644	53.2	\$8,200	61.5	\$20,015
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	667,784	37.1	6.4	\$9,644	39.2	\$9,604	47.6	\$21,426
D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	667,784	37.1	6.4	\$9,644	36.1	\$7,422	44.5	\$19,086
E. 30-Day Fixed Following Hospital Discharge (prorated)	667,784	37.1	6.4	\$9,644	24.7	\$6,909	33.1	\$18,731
F. 30-Day Fixed Following Hospital Discharge Excluding Acute Hospital Readmissions (prorated)	667,784	37.1	6.4	\$9,644	22.4	\$5,300	30.8	\$16,964

1. PAC users are defined as beneficiaries discharged to SNF, IRF, LTCH, HHA, or therapy following discharge from an index acute hospitalization.
2. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
3. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim.
4. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospital readmissions are also included in PAC payments for episode definitions A, C, and E.
5. Episode length of stay is the difference between the admission date on the index acute hospital claim and the last episode claim. Episode payment includes the index acute hospital stay, PAC, physician services during the index acute hospital stay and during the PAC episode.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143, M3MM149, M3MM237).

Table 9. Service-Specific Episode Summary Statistics, Acute Hospital-Initiated Episodes, 2008

Service Use (N = 659,549)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
HHA						
Percent with Claim	60.7	57.1	52.2	51.3	52.2	51.3
Mean Visits	25.6	20.1	15.8	15.7	6.8	6.6
Mean Claim Length (days)	60.4	47.5	35.3	35.1	19.9	18.6
Mean Payment Per Service User ¹	\$4,230	\$3,429	\$2,786	\$2,768	\$1,339	\$1,304
Mean Payment Per PAC User ²	\$2,566	\$1,958	\$1,455	\$1,420	\$699	\$669
Mean Payment Per Hospital Discharge ³	\$1,079	\$759	\$590	\$549	\$278	\$259
SNF						
Percent with Claim	48.2	44.5	45.3	44.2	45.3	44.2
Mean LOS (days)	39.3	30.3	32.3	29.4	19.8	18.9
Mean Payment Per Service User ¹	\$13,646	\$10,743	\$11,476	\$10,518	\$7,495	\$7,169
Mean Payment Per PAC User ²	\$6,575	\$4,781	\$5,204	\$4,644	\$3,399	\$3,165
Mean Payment Per Hospital Discharge ³	\$2,703	\$1,849	\$2,085	\$1,796	\$1,348	\$1,224
IRF						
Percent with Claim	9.7	8.9	9.0	8.8	9.0	8.8
Mean LOS (days)	14.3	13.0	13.5	12.9	12.9	12.5
Mean Payment Per Service User ¹	\$17,518	\$15,922	\$16,504	\$15,825	\$15,919	\$15,378
Mean Payment Per PAC User ²	\$1,707	\$1,410	\$1,489	\$1,387	\$1,436	\$1,348
Mean Payment Per Hospital Discharge ³	\$706	\$545	\$601	\$536	\$573	\$521

(continued)

Table 9. Service-Specific Episode Summary Statistics, Acute Hospital-Initiated Episodes, 2008 (cont.)

Service Use	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
LTCH						
Percent with Claim	2.6	1.8	2.0	1.8	2.0	1.8
Mean LOS (days)	31.5	27.3	27.4	27.0	20.8	21.3
Mean Payment Per Service User ¹	\$38,932	\$35,069	\$35,203	\$34,861	\$27,406	\$28,144
Mean Payment Per PAC User ²	\$1,011	\$634	\$691	\$621	\$538	\$501
Mean Payment Per Hospital Discharge ³	\$444	\$245	\$283	\$240	\$215	\$194
Outpatient Department Therapy						
Percent with Claim	20.3	17.0	11.5	11.4	11.5	11.4
Mean Payment Per Service User ¹	\$1,410	\$1,137	\$628	\$620	\$363	\$359
Mean Payment Per PAC User ²	\$286	\$193	\$72	\$70	\$42	\$41
Mean Payment Per Hospital Discharge ³	\$117	\$75	\$29	\$27	\$16	\$16
Independent Therapist						
Percent with Claim	9.6	8.9	6.3	6.2	6.3	6.2
Mean Payment Per Service User ¹	\$1,209	\$1,125	\$358	\$358	\$331	\$330
Mean Payment Per PAC User ²	\$116	\$100	\$22	\$22	\$21	\$20
Mean Payment Per Hospital Discharge ³	\$46	\$39	\$9	\$9	\$8	\$8

(continued)

Table 9. Service-Specific Episode Summary Statistics, Acute Hospital-Initiated Episodes, 2008 (cont.)

Service Use	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
Acute Hospital Readmission						
Percent with Claim	28.3	—	14.8	—	14.8	—
Mean LOS (days)	11.3	—	7.4	—	6.0	—
Mean Payment Per Service User ¹	\$17,561	—	\$11,594	—	\$9,652	—
Mean Payment Per PAC User ²	\$4,976	—	\$1,718	—	\$1,430	—
Mean Payment Per Hospital Discharge ³	\$3,288	—	\$1,655	—	\$1,407	—

1. "Per service user" indicates mean Medicare payments for those beneficiaries who use the specific PAC service.
2. "Payments per PAC user" indicate the mean Medicare payments across all beneficiaries who use any PAC, regardless of whether or not they use a specific PAC service.
3. "Payments per hospital discharge" indicate the mean Medicare payments across all beneficiaries with an index acute hospitalization, regardless of whether they use a PAC service. Note that per-hospital discharge calculations include acute hospital readmissions and a small amount of subsequent service use for beneficiaries not discharged to PAC from their acute hospital initiating event. Note that 13.3 percent of non-PAC users had an acute hospital readmission under episode definition A, and 13.2 percent had an acute hospital readmission under episode definition C and E.

Source: RTI analysis of 2008 Medicare claims (M3MM143, M3MM149, M3MM215).

Table 10. Physician Service Use, Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008

MS-DRG	7 Days Prior to Index Acute Hospitalization¹	Index Acute Hospitalization¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
All MS-DRGs								
Percent with Claim	49.9	98.6	98.9	98.9	98.9	98.8	98.9	98.8
Mean Payment Per Service User ²	\$207	\$1,546	\$3,052	\$2,305	\$2,302	\$2,125	\$2,302	\$2,125
Mean Payment Per PAC User ³	\$103	\$1,524	\$3,019	\$2,279	\$2,275	\$2,101	\$2,275	\$2,101
Mean Payment Per Hospital Discharge ⁴	\$107	\$1,137	\$1,931	\$1,430	\$1,572	\$1,360	\$1,572	\$1,360
470: Major joint replacement or reattachment of lower extremity w/o MCC								
Percent with Claim	54.2	98.9	99.0	99.7	99.0	99.0	99.0	99.0
Mean Payment Per Service User ²	\$156	\$1,522	\$2,200	\$1,974	\$1,877	\$1,820	\$3,104	\$1,820
Mean Payment Per PAC User ³	\$85	\$1,505	\$2,178	\$1,954	\$1,858	\$1,801	\$1,858	\$1,801
Mean Payment Per Hospital Discharge ⁴	\$83	\$1,484	\$2,130	\$1,906	\$1,824	\$1,763	\$1,824	\$1,763

(continued)

Table 10. Physician Service Use, Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008 (continued)

MS-DRG	7 Days Prior to Index Acute Hospitalization ¹	Index Acute Hospitalization ¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
065: Intracranial hemorrhage or cerebral infarction w CC								
Percent with Claim	37.0	98.2	98.4	98.4	98.4	98.3	98.4	98.3
Mean Payment Per Service User ²	\$217	\$1,057	\$2,827	\$2,077	\$2,030	\$1,843	\$2,030	\$1,843
Mean Payment Per PAC User ³	\$80	\$1,038	\$2,782	\$2,043	\$1,997	\$1,812	\$1,997	\$1,812
Mean Payment Per Hospital Discharge ⁴	\$81	\$979	\$2,373	\$1,733	\$1,756	\$1,560	\$1,756	\$1,560
481: Hip & femur procedures except major joint w CC								
Percent with Claim	34.5	98.8	99.0	99.0	98.9	98.9	98.9	98.9
Mean Payment Per Service User ²	\$181	\$1,770	\$3,189	\$2,571	\$2,522	\$2,354	\$2,522	\$2,354
Mean Payment Per PAC User ³	\$62	\$1,750	\$3,157	\$2,545	\$2,496	\$2,329	\$2,496	\$2,329
Mean Payment Per Hospital Discharge ⁴	\$62	\$1,734	\$3,089	\$2,492	\$2,455	\$2,287	\$2,455	\$2,287

(continued)

Table 10. Physician Service Use, Acute Hospital-Initiated Episodes, by MS-DRG for Top 5 MS-DRGs by Volume of PAC Users, 2008 (continued)

MS-DRG	7 Days Prior to Index Acute Hospitalization ¹	Index Acute Hospitalization ¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge	D. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions	E. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge (prorated)	F. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge Excluding Acute Hospital Readmissions (prorated)
194: Simple pneumonia & pleurisy w CC								
Percent with Claim	45.0	99.1	99.3	99.2	99.2	99.2	99.2	99.2
Mean Payment Per Service User ²	\$178	\$756	\$1,942	\$1,328	\$1,353	\$1,207	\$1,353	\$1,207
Mean Payment Per PAC User ³	\$80	\$749	\$1,928	\$1,318	\$1,343	\$1,198	\$1,343	\$1,198
Mean Payment Per Hospital Discharge ⁴	\$85	\$631	\$1,262	\$838	\$979	\$794	\$654	\$794
690: Kidney & urinary tract infections w/o MCC								
Percent with Claim	43.0	98.9	99.1	99.1	99.1	99.1	99.1	99.1
Mean Payment Per Service User ²	\$167	\$593	\$1,694	\$1,098	\$1,109	\$975	\$1,109	\$975
Mean Payment Per PAC User ³	\$72	\$586	\$1,679	\$1,864	\$1,099	\$966	\$1,099	\$966
Mean Payment Per Hospital Discharge ⁴	\$82	\$513	\$1,143	\$734	\$840	\$679	\$840	\$679

1. An "index acute hospitalization" is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use. Seven days prior to index acute hospitalization does not define the start of the episode.
2. "Per service user" indicates mean Medicare payments for those beneficiaries who use physician services.
3. "Payments per PAC user" indicate the mean Medicare payments across all beneficiaries who use any PAC, regardless of whether or not they use physician services.
4. "Payments per hospital discharge" indicate the mean Medicare payments across all beneficiaries with an index acute hospital stay, regardless of whether they use a PAC service.
5. Physician claims with dates of service falling between the admission date on an index acute hospitalization and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment calculations.

Source: RTI analysis of 2008 Medicare claims (M3MM216).

4. COMMUNITY-INITIATED EPISODES

Similar to the analyses of acute hospital-initiated episodes, the community-initiated episode analyses were based on the cross-sectional analytic sample described in Section 2. The analyses focused on understanding the types of cases with community-initiated episodes and any differences that occur in the 3 years of data examined here. In addition, the analyses looked more specifically at episode patterns, episode length, and episode payment under three different episode definitions. Overall episode summary statistics are shown here for each of the 3 years of data, though only 2008 data are shown for the episode pattern and service-specific utilization under different episode definitions. The key findings from the analyses of acute hospital-initiated analyses are summarized below. First we present the results of HHA-initiated episode analyses, followed by the results of the LTCH-initiated episode analyses and the IRF-initiated episode analyses.

4.1 HHA-Initiated Episodes

Table 11 shows the distribution of cases for beneficiaries entering HHA without a prior acute hospitalization by diagnosis grouping as discussed in Section 2. There is no single, obvious way to classify home health community entrant episodes by diagnosis. While MS-DRGs have been developed for acute hospital and LTCH payment, HHA payment is based more on the services provided (nursing and therapy) rather than on the primary diagnosis for which the beneficiary is receiving care. RTI developed a grouping algorithm based on MDC and MS-DRG after running the MS-DRG grouper on all claims including HHA claims. These groupings are more highly aggregated than the MS-DRG but may provide an understanding of the broad types of cases entering HHA without a prior acute hospitalization. With this grouping approach, close to one quarter of HHA-initiated episodes are in an “other” condition grouping, but other large groupings include orthopedic minor medical, neurologic medical, and cardiovascular general, which account for a total of 40 percent of HHA-initiated episodes in 2008.

In addition to looking at HHA episodes by condition grouping, RTI also examined the top 10 ICD-9 codes in the first position on HHA claims for beneficiaries with acute hospital-initiated episodes discharged to HHA and for beneficiaries with HHA-initiated episodes (**Table 12**) as well as the HHRG coded on HHA claims for these two groups of beneficiaries (**Table 13**). The results of these analyses indicate that the most common ICD-9 code for beneficiaries initiating care in an acute hospital was V54.81 “Aftercare following joint replacement” (11.5 percent) while the most common ICD-9 code for the HHA-initiated beneficiaries was V57.1 “Other physical therapy” (10.3 percent). In general, the top ICD-9 codes for the acute initiated episodes were for aftercare related to surgery whereas the top ICD-9 codes for the HHA-initiated episodes were for more chronic conditions such as hypertension, congestive heart failure, diabetes, and Alzheimer’s. The top ten ICD-9 codes accounted for 43.6

percent of all episodes for beneficiaries initiating care in an acute hospital and discharged to HHA and 35.1 percent of all HHA-initiated episodes. The HHRG analysis also indicated some differences in these two populations. Based on the top 10 HHRGs in each group of beneficiaries, a higher proportion of beneficiaries initiating an episode in an acute hospital and discharged to HHA were in higher case-mix weight HHRGs indicating higher clinical severity, functional severity, and service severity compared to beneficiaries with HHA-initiated episodes. One of the top ten HHRGs for HHA-initiated episodes included 14-19 therapies while all others included 0-13 therapies. These results suggest a lower intensity, but chronic patient in the HHA-initiated episodes.

In **Table 14**, episode patterns for beneficiaries initiating care in HHA are shown. Over 70 percent of HHA community entrant beneficiaries have “HHA only” episodes and do not go on to use other PAC services. The second most frequent episode pattern is HHA to acute hospital (HA), which is common to 5.9 percent of the HHA community entrants. To learn more about the difference between HHA community entrants and beneficiaries with acute hospital-initiated episodes discharged to HHA as their first site of PAC, we ran an episode pattern analysis on the second set of beneficiaries as well (**Table 15**). A smaller proportion of beneficiaries in the acute hospital-initiated group use HHA only (61.2 percent), and a higher proportion of beneficiaries go on to use subsequent services—a pattern more clearly illustrated in the next set of tables.

Summary statistics for the HHA-initiated episodes are shown in **Table 16** by year and episode definition. The mean number of visits in the initial index HHA claim is 16.8 visits, and this is consistent across the 3 years of data examined. As with the acute hospital-initiated episodes, episode length and payments are sensitive to the episode definition we look at. For example, under Episode Definition C (any claim initiating within 30 days following discharge from the initiating event), the mean episode length of stay is 64.0 days, but this increases to 113.1 days under the longer 30-day variable-length episode definition. **Table 17** presents the difference in total HHA utilization for beneficiaries with acute-initiated episodes discharged to HHA and for beneficiaries with HHA-initiated episodes for 2006-2008. Beneficiaries with HHA initiated episodes have a higher number of HHA visits, more claim days in HHA, and higher HHA payments compared to beneficiaries with acute initiated episodes discharged to HHA.

Table 18 and **Table 19** show more clearly the service-specific utilization under different episode definitions for HHA community entrants (Table 18) and for beneficiaries initiating a PAC episode in an acute hospital but discharged to HHA for their first site of PAC (Table 19). In Table 18, we can see that 35.4 percent of beneficiaries with an HHA-initiated episode have more than one HHA claim in their care trajectory under the 30-day variable-length episode. Over 9 percent go on to use SNF, and 23.1 percent have an acute hospitalization under this same episode definition. Among those beneficiaries initiating care in an acute hospital but discharged to HHA as the first setting of PAC, a similar proportion of

beneficiaries goes on to use SNF and have an acute hospitalization. Under the same episode definition, 7.3 percent of beneficiaries have an SNF claim and only a slightly higher proportion of beneficiaries have a rehospitalization (25.9 percent). In **Table 20**, we see the proportion of beneficiaries using physician services in the week prior to the start of an episode and during the episode. A higher proportion of beneficiaries with HHA-initiated episodes have at least one physician claim in the week prior to the start of the episodes, compared with beneficiaries with acute hospital-initiated episodes (57.2 percent and 49.9 percent, respectively).

4.2 LTCH-Initiated Episodes

Table 21 presents the frequency of the LTCH MS-DRG variable for beneficiaries with LTCH-initiated episodes, and **Table 22** presents the frequency of the LTCH MS-DRG variable for beneficiaries initiating an episode of care in an acute hospital, but discharged to LTCH as their first site of PAC. These two tables indicate significant differences in the types of cases entering the LTCH from the community versus those who enter following discharge from an acute hospital. Most notably, the most common MS-DRG among beneficiaries with LTCH-initiated episodes is MS-DRG 885, "Psychoses," which was common to 13.5 percent of the LTCH community entrant sample in 2008. Other common MS-DRGs among community entrants included respiratory system diagnosis with ventilator support at 6.7 percent (MS-DRG 207), skin ulcers at 7.8 percent (MS-DRGs 592 and 593), and skin grafts at 6.1 percent (MS-DRGs 573 and 574). The relative frequency of these MS-DRGs was similar across the 3 years of data examined. In contrast, beneficiaries initiating an episode in an acute hospital and discharged to LTCH as their first site of PAC were more likely to have respiratory and medical diagnoses including MS-DRG 207 (14.2 percent of beneficiaries); MS-DRG 189, "pulmonary edema & respiratory failure" (7.8 percent of beneficiaries); and MS-DRG 871, "Septicemia w/o MV 96+ hours w MCC" (4.5 percent).

Table 23 and **Table 24** describe the episode patterns for beneficiaries with LTCH-initiated episodes (Table 23) and beneficiaries with acute hospital-initiated episodes discharged to LTCH as their first site of PAC (Table 24). A higher proportion of beneficiaries used LTCH only in their episode among the community entrant sample (40.3 percent) compared with the acute hospital-initiated sample of beneficiaries discharged to LTCH (26.2 percent). More detail on the episode- and service-specific utilization between these two groups is presented in the next set of tables.

Similar to the acute and HHA-initiated episodes, episode length and payments vary by each of the episode definitions (**Table 25**). Under episode definition C, any claim initiating within 30 days of discharge, the mean episode length of stay for beneficiaries with LTCH-initiated episodes is 57.8 days. In comparison, under the longer definition A, 30-day variable length, the mean episode length is 101.6 days. In **Table 26**, the total LTCH utilization per episode is shown for beneficiaries with acute hospital-initiated episodes discharged to LTCH and for

beneficiaries with LTCH-initiated episodes. Though there was not much difference in the mean LTCH days per episode, the mean payments were higher for beneficiaries initiated their episodes in an acute hospital indicating that these beneficiaries are in higher weight MS-DRGs.

In **Table 27** and **Table 28**, we compare the service-specific utilization in the episode for beneficiaries initiating care in the LTCH (Table 27) to the utilization for beneficiaries who initiate care in an acute hospital-initiated episode and are discharged to LTCH (Table 28). Patterns of service-specific utilization do vary for these two samples, particularly when examining episode definition A, the 30-day variable-length episode. Beneficiaries with acute hospital-initiated episodes discharged to LTCH as their first setting of PAC have a higher proportion of service use of all types compared with the community-initiated entrants. For example, 38.6 percent of beneficiaries with acute hospital-initiated episodes discharged to LTCH used HHA during the episode compared with 24.1 percent among the LTCH community entrants; SNF utilization was 38.5 percent compared with 32.9 percent and acute hospitalizations was 42.7 percent compared with 29.5 percent. The differences in use during episodes between the community entrant and the acute hospital-initiated LTCH user likely reflect the types of cases in each group—the more complex medical conditions versus psychoses and skin cases, as demonstrated in Table 21 and Table 22. Use of physician services during episodes is presented in **Table 29**. Over 54 percent of beneficiaries with LTCH-initiated episodes have at least one physician claim in the week prior to the initiating event. Payments associated with physician services during LTCH-initiated episodes varied significantly by MS-DRG, with highest payments associated with beneficiaries in MS-DRG 207, “respirator system diagnosis w ventilator support 96+ hours,” and MS-DRG 199, “pulmonary edema & respiratory failure,” compared with far lower physician service payments for beneficiaries in MS-DRG 885, “psychoses.”

4.3 IRF-Initiated Episodes

The final set of community-initiated analyses presented is for beneficiaries entering IRF without a prior acute hospitalization. In **Table 30** we show the proportion of cases of IRF-initiated episodes falling into the top 10 RICs. As discussed in Section 2, RICs are recorded on the IRF claims and represent 21 different types of conditions for which a beneficiary may be admitted to an IRF, for example, stroke, neurologic conditions, cardiac, pulmonary, spinal cord dysfunction, brain dysfunction, and amputation. **Table 31** shows the proportion of beneficiaries with acute hospital-initiated episodes discharged to IRF as their first site of care by the RIC on the IRF claim as a comparison to the IRF community entrant. The most common RIC in both samples is stroke, although a higher proportion of the acute hospital-initiated sample is in this RIC compared with the community-initiated beneficiaries (21.3 percent versus 16.0 percent). A significantly higher proportion of beneficiaries are admitted for RIC 7 and RIC 8 (the lower extremity fracture and joint replacement RICs) in the acute

hospital-initiated sample (37.5) compared with the community entrant sample (14.2 percent). The higher proportion of beneficiaries admitted to IRF directly from the community for neurologic conditions, pain, and amputation suggests that these patients may be more likely to be receiving care for an ongoing condition compared with beneficiaries with acute hospital-initiated episodes.

As observed in the other types of community entrants, a higher proportion of beneficiaries initiating care in an IRF use only IRF services in their episode (**Table 32**) compared with beneficiaries initiating their episode in acute hospitals and discharged to IRF as their first setting of PAC (**Table 33**) (24.3 percent versus 8.7 percent, respectively). A similar proportion of beneficiaries in each sample are discharged to HHA only following their episode, 22.6 percent among community-initiated episodes and 26.4 percent among beneficiaries initiating their episode in an acute hospital.

Table 34 presents the IRF-initiated episode summary statistics per year of analysis and by episode definition. The mean episode length under episode definition C, any claim initiating within 30 days was 47.8 days, but this increased to 92.2 days under the longer 30-day variable-length episode definition. Patterns of use and payment per episode definition were similar across the years of data. In **Table 35**, the total IRF utilization per episode is shown for beneficiaries with acute hospital-initiated episodes discharged to IRF and for beneficiaries with IRF-initiated episodes. Across the episode definitions and years of data shown here, beneficiaries with IRF-initiated episodes had slightly longer mean episode length of stay, but slightly lower mean episode payments compared to beneficiaries with acute hospital-initiated episodes discharged to IRF.

In examining the service-specific utilization for IRF community entrants (**Table 36**) and for beneficiaries initiating their episodes in an acute hospital and discharged to IRF (**Table 37**), a higher proportion of beneficiaries with acute hospital-initiated episodes used HHA under the 30-day variable-length episode definition (62.7 percent compared with 48.1 percent) and had an acute hospitalization (29.3 percent compared with 22.9 percent), again demonstrating the likely differences in medical complexity between these two groups of beneficiaries. Physician service use for beneficiaries with IRF-initiated episodes is presented in **Table 38**. Of beneficiaries with IRF-initiated episodes, 65 percent had at least one physician claim in the week prior to the initiating event, and over 80 percent of beneficiaries with IRF-initiated episodes in RIC 09 (Other Orthopedic) had at least one physician claim prior to the start of the episode.

4.4 Conclusion

The community entrant episode analyses presented here provide an important complement to the work looking at acute hospital-initiated episodes. As policy makers consider different ways to define a PAC episode, it is necessary to understand beneficiaries who enter PAC

service use without an acute event. Although the number of IRF and LTCH community entrants is relatively small, a significant number of beneficiaries enter HHA from the community. These analyses reveal that the types of cases and the trajectories of PAC use differ for community entrants compared with acute hospital-initiated episodes and that the community entrant episodes appear to involve patients with less severe conditions and lower service utilization in an episode; however, the cohort analyses (Section 7) looking at 2 years of claims utilization for beneficiaries with different types of initiating events provide additional context to understanding the longer term utilization and characteristics of these beneficiaries.

Table 11. Top 10 Condition Groupings: HHA-Initiated Episodes, 2006-2008

Rank 2008	Rank 2007	Rank 2006	Condition Grouping	N 2008	Percent 2008	Cumulative Percent 2008
1	1	1	Other, Medical	57,849	24.48	24.5
2	2	2	Orthopedic, Minor Medical	40,669	17.21	41.7
3	3	3	Neurologic, Medical	33,344	14.11	55.8
4	6	6	Cardiovascular, General	21,438	9.07	64.9
5	4	4	Integumentary, Medical	20,783	8.79	73.7
6	5	5	Endocrine, Medical	19,050	8.06	81.7
7	7	7	Cardiovascular, Cardiac Medical	9,429	3.99	85.7
8	8	8	Kidney & Urinary, Medical	6,909	2.92	88.6
9	10	11	Respiratory, COPD	6,075	2.57	91.2
10	9	9	Cardiovascular, Vascular Medical	5,522	2.34	93.5

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM204).

Table 12. Top 10 ICD-9 Codes (Primary) Coded on HHA Claims, Acute Hospital-Initiated Episodes for Beneficiaries Discharged to HHA and HHA-Initiated Episodes, 2008

Rank	ICD-9 Code	N	Percent	Cumulative Percent
Acute Hospital-Initiated Episodes, Beneficiaries Discharged to HHA				
1	V54.81: Aftercare following joint replacement	28,244	11.5	11.5
2	V57.1: Other physical therapy	14,552	5.9	17.4
3	428.0: Congestive heart failure, unspecified	13,116	5.3	22.7
4	V58.73: Aftercare following surgery of the circulatory system, NEC	12,439	5.0	27.7
5	486: Pneumonia, organism unspecified	7,841	3.2	30.9
6	491.21: Obstructive chronic bronchitis with (acute) exacerbation	7,252	2.9	33.8
7	V58.42: Aftercare following surgery for neoplasm	7,108	2.9	36.7
8	V58.78: Aftercare following surgery of the musculoskeletal system, NEC	6,388	2.6	39.3
9	V58.75: Aftercare following surgery of the teeth, oral cavity and digestive system	5,449	2.2	41.5
10	401.9: Essential hypertension, unspecified	5,224	2.1	43.6
HHA-Initiated Episodes				
1	V57.1: Other physical therapy	24,218	10.3	10.3
2	401.9: Essential hypertension, unspecified	14,399	6.1	16.3
3	781.2: Abnormality of gait	9,312	3.9	20.3
4	250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled	8,534	3.6	23.9
5	428.0: Congestive heart failure, unspecified	5,652	2.4	26.3
6	250.02: Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled	5,388	2.3	28.6
7	728.87: Muscle weakness (generalized)	5,388	2.3	30.8
8	331.0: Alzheimer's disease	3,715	1.6	32.4
9	V57.89: Other specified rehabilitation procedure, Other (multiple training or therapy)	3,244	1.4	33.8
10	332.0: Paralysis agitans (Parkinson's disease)	3,119	1.3	35.1

Source: RTI analysis of 2008 Medicare claims (M3MM256).

Table 13. Top 10 HHRGs Coded on HHA Claims, Acute Hospital-Initiated Episodes for Beneficiaries Discharged to HHA and HHA-Initiated Episodes, 2008

Rank	HHRG	Case Mix Weight	N	Percent	Cumulative Percent
Acute Hospital-Initiated Episodes, Beneficiaries Discharged to HHA					
1	1CGK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 2, Service Severity Level 1	0.9896	24,521	9.9	9.9
2	1BFK: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 1, Service Severity Level 1	0.7335	19,884	8.1	18.0
3	1CFK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 1, Service Severity Level 1	0.901	19,849	8.0	26.1
4	1BGK: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 2, Service Severity Level 1	0.8221	19,551	7.9	34.0
5	1AFK: Early Episode, 0-13 therapies, Clinical Severity Level 1, Functional Severity Level 1, Service Severity Level 1	0.5827	12,585	5.1	39.1
6	1AGK: Early Episode, 0-13 therapies, Clinical Severity Level 1, Functional Severity Level 2, Service Severity Level 1	0.6713	8,982	3.6	42.7
7	1BGM: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 2, Service Severity Level 3	1.2993	7,938	3.2	45.9
8	1BGP: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 2, Service Severity Level 5	1.69	7,005	2.8	48.8
9	1CHK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 3, Service Severity Level 1	1.0733	6,742	2.7	51.5
10	1AGM: Early Episode, 0-13 therapies, Clinical Severity Level 1, Functional Severity Level 2, Service Severity Level 3	1.1485	6,466	2.6	54.1

(continued)

Table 13. Top 10 HHRGs Coded on HHA Claims, Acute Hospital-Initiated Episodes for Beneficiaries Discharged to HHA and HHA-Initiated Episodes, 2008 (continued)

Rank	HHRG	Case Mix Weight	N	Percent	Cumulative Percent
HHA-Initiated Episodes					
1	1CGK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 2, Service Severity Level 1	0.9896	25,829	10.9	10.9
2	1CFK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 1, Service Severity Level 1	0.901	21,635	9.2	20.1
3	1BFK: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 1, Service Severity Level 1	0.7335	15,057	6.4	26.5
4	1BGK: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 2, Service Severity Level 1	0.8221	14,876	6.3	32.8
5	1CHK: Early Episode, 0-13 therapies, Clinical Severity Level 3, Functional Severity Level 3, Service Severity Level 1	1.0733	11,522	4.9	37.6
6	1AFK: Early Episode, 0-13 therapies, Clinical Severity Level 1, Functional Severity Level 1, Service Severity Level 1	0.5827	10,317	4.4	42.0
7	1AGK: Early Episode, 0-13 therapies, Clinical Severity Level 1, Functional Severity Level 2, Service Severity Level 1	0.6713	6,361	2.7	44.7
8	1BGP: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 2, Service Severity Level 5	1.69	5,119	2.2	46.9
9	2BGK: Early Episode, 14-19 therapies, Clinical Severity Level 2, Functional Severity Level 3, Service Severity Level 1	0.8221	4,894	2.1	48.9
10	1BHK: Early Episode, 0-13 therapies, Clinical Severity Level 2, Functional Severity Level 3, Service Severity Level 1	0.9058	4,522	1.9	50.8

Source: RTI analysis of 2008 Medicare claims (M3MM257, M3MM258).

Table 14. Episode Patterns: HHA-Initiated Episodes, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	H	165,702	70.1	70.1
2	HA	14,033	5.9	76.1
3	HAH	8,681	3.7	79.7
4	HO	7,130	3.0	82.8
5	HAS	4,336	1.8	84.6
6	HT	4,293	1.8	86.4
7	HASH	3,099	1.3	87.7
8	HAHA	1,682	0.7	88.4
9	HOH	1,544	0.7	89.1
10	HAHAH	1,357	0.6	89.7

Note: Episode pattern is based on a 30-day variable episode definition. Each letter indicates a type of service use, but a single letter may represent one claim or multiple claims of the same type of service. A = acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist.

Source: RTI analysis of 2008 Medicare claims (M3MM157).

Table 15. Episode Patterns: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to HHA, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	AH	150,850	61.2	61.2
2	AHA	24,512	9.9	71.1
3	AHO	14,655	5.9	77.1
4	AHT	14,467	5.9	82.9
5	AHAH	8,839	3.6	86.5
6	AHAS	3,071	1.2	87.8
7	AHAHA	2,488	1.0	88.8
8	AHASH	2,290	0.9	89.7
9	AHAHAH	1,430	0.6	90.3
10	AHASA	1,060	0.4	90.7

Note: Episode pattern is based on a 30-day variable episode definition. Each letter indicates a type of service use, but a single letter may represent one claim or multiple claims of the same type of service. A = acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist.

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 16. Episode Summary Statistics: HHA-Initiated Episodes, 2006-2008

Episode Definition	N	Mean Visits During Initiating Event¹	Mean Index Claim Length (days)	Mean Initiating Event Payment¹	Mean Episode LOS (days)²	Mean Episode Payment²
2008						
A. 30-Day Variable Episode	236,307	16.8	101.0	\$2,779	113.1	\$11,736
B. 30-Day Variable Episode Excluding Acute Hospitalization	236,307	16.8	83.7	\$2,779	87.9	\$4,966
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	236,307	16.8	59.4	\$2,779	64.0	\$6,446
2007						
A. 30-Day Variable Episode	223,915	17.2	96.7	\$2,690	108.9	\$10,957
B. 30-Day Variable Episode Excluding Acute Hospitalization	223,915	17.2	80.2	\$2,690	84.3	\$4,773
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	223,915	17.2	57.6	\$2,690	62.6	\$6,155
2006						
A. 30-Day Variable Episode	212,780	16.8	103.5	\$2,555	116.0	\$11,313
B. 30-Day Variable Episode Excluding Acute Hospitalization	212,780	16.8	82.2	\$2,555	86.3	\$4,678
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	212,780	16.8	56.4	\$2,555	61.3	\$5,924

1. An "initiating event" is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospitalizations are also included in episode payments for episode definitions A and C.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM100, M3MM102, M3MM260).

Table 17. HHA Utilization, HHA Initiated Episodes versus Beneficiaries With Acute Hospital-Initiated Episodes Discharged to HHA, 2006-2008

Episode Definition	Mean HHA Visits per HHA Initiated Episode	Mean HHA Claim Length (days) per HHA Initiated Episode	Mean HHA Payment per Episode per HHA Initiated Episode	Mean HHA Visits per Acute Episode Initiated Discharged to HHA	Mean HHA Claim Length (days) per Acute Episode Initiated Discharged to HHA	Mean HHA Payment per Episode per Acute Episode Initiated Discharged to HHA
2008						
A. 30 Day Variable Episode	64.7	101.0	\$5,776	22.6	57.8	\$3,697
B. 30 Day Variable Episode Excluding Acute Hospitalization	57.2	83.7	\$4,777	17.9	45.7	\$3,030
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	48.2	59.4	\$3,675	14.8	34.9	\$2,571
2007						
A. 30 Day Variable Episode	65.2	96.7	\$5,521	22.5	55.9	\$3,462
B. 30 Day Variable Episode Excluding Acute Hospitalization	57.6	80.2	\$4,597	18.0	44.4	\$2,852
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	47.7	57.6	\$3,530	14.9	34.5	\$2,440
2006						
A. 30 Day Variable Episode	68.0	103.5	\$5,657	23.4	57.1	\$3,416
B. 30 Day Variable Episode Excluding Acute Hospitalization	57.8	82.2	\$4,504	18.1	44.0	\$2,755
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	46.7	56.4	\$3,321	14.8	34.2	\$2,343

1. Visit, claim length, and payments include index event plus subsequent service use in the episode.

Source: RTI Analysis of 2006, 2007, and 2008 Medicare Claims (M3MM260, M3MM261).

Table 18. Service-Specific Episode Summary Statistics: HHA-Initiated Episodes, 2008

Service Use (N = 236,307)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalization	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event
HHA (not including initiating event)¹			
Percent with Claim	35.4	28.2	33.0
Mean Visits	64.0	53.9	18.5
Mean Claim Length (days)	166.4	148.1	51.6
Mean Payment Per Service User	\$8,465	\$7,096	\$2,711
SNF			
Percent with Claim	9.3	0.4	5.6
Mean LOS (days)	47.8	40.0	36.3
Mean Payment Per Service User	\$16,517	\$12,886	\$12,863
IRF			
Percent with Claim	1.5	0.2	0.8
Mean LOS (days)	16.2	14.2	14.9
Mean Payment Per Service User	\$19,238	\$15,781	\$17,772
LTCH			
Percent with Claim	0.8	0.1	0.3
Mean LOS (days)	33.0	33.3	29.0
Mean Payment Per Service User	\$38,520	\$31,122	\$33,213
Outpatient Department Therapy			
Percent with Claim	7.4	5.1	4.6
Mean Payment Per Service User	\$1,378	\$1,141	\$657
Independent Therapist			
Percent with Claim	3.4	3.0	2.6
Mean Payment Per Service User	\$1,234	\$1,181	\$458
Acute Hospitalization²			
Percent with Claim	23.1	—	16.7
Mean LOS (days)	10.7	—	7.3
Mean Payment Per Service User	\$15,850	—	\$10,563

1. Service use for the initiating event is not included in this calculation. HHA use following first claim reported here.
2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM143, M3MM215).

Table 19. Service-Specific Episode Summary Statistics: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to HHA, 2008

Service Use (N = 246,595)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalizations	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge
HHA			
Percent with Claim ¹	100.0	100.0	100.0
Mean Visits	22.6	17.9	14.8
Mean Claim Length (days)	57.8	45.7	34.9
Mean Payment Per Service User	\$3,697	\$3,030	\$2,571
SNF			
Percent with Claim	7.3	0.7	2.8
Mean LOS (days)	39.7	30.5	26.4
Mean Payment Per Service User	\$14,135	\$10,323	\$9,679
IRF			
Percent with Claim	1.3	0.1	0.4
Mean LOS (days)	15.3	12.9	12.9
Mean Payment Per Service User	\$19,184	\$15,294	\$16,065
LTCH			
Percent with Claim	0.8	0.0	0.2
Mean LOS (days)	30.0	25.2	23.8
Mean Payment Per Service User	\$35,925	\$26,896	\$28,227
Outpatient Department Therapy			
Percent with Claim	9.3	7.5	4.2
Mean Payment Per Service User	\$1,016	\$881	\$424
Independent Therapist			
Percent with Claim	7.5	6.9	4.2
Mean Payment Per Service User	\$1,168	\$1,124	\$299
Acute Hospitalization²			
Percent with Claim	25.9	—	14.0
Mean LOS (days)	11.4	—	7.1
Mean Payment Per Service User	\$18,205	—	\$11,322

1. By definition, 100 percent of beneficiaries with acute initiated episodes discharged to HHA have at least one HHA claim in their episode. Note that 18.9 percent of beneficiaries in episode definition A, 10.2 percent in episode definition B, and 1.6 percent of beneficiaries in episode definition C have more than one HHA claim in their PAC episode.

2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 20. Physician Service Use, by Condition Grouping and by Episode Definition: HHA-Initiated Episodes, 2008

Condition Grouping	7 Days Prior to Initiating Event¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalizations	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge
All Condition Groupings				
Percent with Claim	57.2	83.0	81.8	82.3
Mean Payment Per Service User	\$259	\$1,679	\$1,018	\$960
Other, Medical				
Percent with Claim	60.2	78.8	77.5	78.3
Mean Payment Per Service User	\$349	\$1,367	\$842	\$875
Orthopedic, Minor Medical				
Percent with Claim	58.2	84.0	82.9	83.3
Mean Payment Per Service User	\$507	\$1,431	\$913	\$825
Neurologic, Medical				
Percent with Claim	51.7	82.6	81.4	81.7
Mean Payment Per Service User	\$488	\$1,507	\$903	\$821
Cardiovascular, General				
Percent with Claim	54.0	86.7	85.9	85.7
Mean Payment Per Service User	\$494	\$1,532	\$994	\$816
Integumentary, Medical				
Percent with Claim	57.9	83.0	81.5	82.2
Mean Payment Per Service User	\$629	\$1,876	\$1,024	\$1,092

1. An initiating event is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Physician claims with dates of service falling between the admission date on an index acute hospitalization and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment calculations.

Source: RTI analysis of 2008 Medicare claims (M3MM216).

Table 21. Top 10 MS-DRGs for LTCH-Initiated Episodes, 2006-2008

Rank 2008	Rank 2007	Rank 2006	MS-DRG	N 2008	Percent 2008	Cumulative Percent 2008
1	1	1	885: Psychoses	672	13.5	13.5
2	2	2	207: Respiratory system diagnosis w ventilator support 96+ hours	333	6.7	20.2
3	5	6	189: Pulmonary edema & respiratory failure	204	4.1	24.3
4	3	3	593: Skin ulcers w CC	196	3.9	28.3
5	7	7	592: Skin ulcers w MCC	195	3.9	32.2
6	6	8	573: Skin graft &/or debrid for skin ulcer or cellulitis w MCC	158	3.2	35.4
7	4	4	574: Skin graft &/or debrid for skin ulcer or cellulitis w CC	142	2.9	38.3
8	8	5	057: Degenerative nervous system disorders w/o MCC	136	2.7	41.0
9	10	9	299: Peripheral vascular disorders w MCC	103	2.1	43.1
10	13	12	603: Cellulitis w/o MCC	84	1.7	44.8

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143).

Table 22. Top 10 MS-DRGs for Acute Hospital-Initiated Episodes, Beneficiaries Discharged to LTCH, 2008

Rank	MS-DRG	N	Percent	Cumulative Percent
1	207: Respiratory system diagnosis w ventilator support 96+ hours	1,628	14.2	14.2
2	189: Pulmonary edema & respiratory failure	899	7.8	22.1
3	871: Septicemia w/o MV 96+ hours w MCC	519	4.5	26.6
4	949: Aftercare w CC/MCC	401	3.5	30.1
5	177: Respiratory infections & inflammations w MCC	388	3.4	33.5
6	208: Respiratory system diagnosis w ventilator support <96 hours	291	2.5	36.0
7	193: Simple pneumonia & pleurisy w MCC	246	2.1	38.2
8	945: Rehabilitation w CC/MCC	236	2.1	40.2
9	190: Chronic obstructive pulmonary disease w MCC	223	1.9	42.2
10	057: Degenerative nervous system disorders w/o MCC	208	1.8	44.0

Source: RTI analysis of 2008 Medicare claims (M3MM143).

Table 23. Episode Patterns: LTCH-Initiated Episodes, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	L	2,002	40.3	40.3
2	LS	531	10.7	51.0
3	LH	425	8.6	59.6
4	LA	206	4.1	63.7
5	LO	132	2.7	66.4
6	LSO	92	1.9	68.2
7	LSA	90	1.8	70.0
8	LSH	79	1.6	71.6
9	LSAS	78	1.6	73.2
10	LHA	55	1.1	74.3

Note: Episode pattern is based on a 30-day variable episode definition. A = Acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist

Source: RTI analysis of 2008 Medicare claims (M3MM157).

Table 24. Episode Patterns: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to LTCH 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	AL	3,004	26.2	26.2
2	ALH	1,352	11.8	38.0
3	ALS	872	7.6	45.6
4	ALA	643	5.6	51.3
5	ALSH	344	3.0	54.3
6	ALHA	281	2.5	56.7
7	ALSA	264	2.3	59.0
8	ALSAS	205	1.8	60.8
9	ALSO	183	1.6	62.4
10	ALO	158	1.4	63.8

Note: Episode pattern is based on a 30-day variable episode definition. A = Acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 25. Episode Summary Statistics: LTCH-Initiated Episodes, 2006-2008

Episode Definition	N	Mean Initiating Event LOS (days)¹	Mean Initiating Event Payment¹	Mean Episode LOS (days)²	Mean Episode Payment²
2008					
A. 30-Day Variable Episode	4,967	26.7	\$26,414	101.6	\$46,633
B. 30-Day Variable Episode Excluding Acute Hospitalization	4,967	26.7	\$26,414	70.9	\$33,467
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	4,967	26.7	\$26,414	57.8	\$36,399
2007					
A. 30-Day Variable Episode	4,587	28.0	\$26,803	98.0	\$45,447
B. 30-Day Variable Episode Excluding Acute Hospitalization	4,587	28.0	\$26,803	81.3	\$12,751
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	4,587	28.0	\$26,803	58.5	\$36,209
2006					
A. 30-Day Variable Episode	4,821	27.9	\$26,679	93.3	\$42,851
B. 30-Day Variable Episode Excluding Acute Hospitalization	4,821	27.9	\$26,679	65.5	\$32,028
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	4,821	27.9	\$26,679	55.7	\$34,972

1. An initiating event is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospitalizations are also included in episode payments for episode definitions A and C.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143).

Table 26. LTCH Utilization, LTCH Initiated Episodes versus Beneficiaries With Acute Initiated Episodes Discharged to LTCH, 2006-2008

Episode Definition	Mean LTCH Length of Stay (days) per LTCH Initiated Episode	Mean LTCH Payment per Episode per LTCH Initiated Episode	Mean LTCH Length of Stay (days) per Acute Initiated Episode Discharged to LTCH	Mean LTCH Payment per Episode per Acute Initiated Episode Discharged to LTCH
2008				
A. 30 Day Variable Episode	32.2	\$31,549	31.2	\$39,621
B. 30 Day Variable Episode Excluding Acute Hospitalization	28.6	\$27,983	27.3	\$35,291
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	29.1	\$28,484	27.6	\$35,784
2007				
A. 30 Day Variable Episode	32.8	\$31,429	31.5	\$38,413
B. 30 Day Variable Episode Excluding Acute Hospitalization	29.4	\$28,029	27.8	\$34,536
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	29.9	\$28,658	28.0	\$34,920
2006				
A. 30 Day Variable Episode	32.6	\$30,998	31.8	\$38,286
B. 30 Day Variable Episode Excluding Acute Hospitalization	29.4	\$27,896	28.0	\$34,526
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	29.9	\$28,558	28.3	\$34,957

1. Length of stay and payments include index event plus subsequent service use in the episode.

Source: RTI Analysis of 2006, 2007, and 2008 Medicare Claims (M3MM260, M3MM261).

Table 27. Service-Specific Episode Summary Statistics: LTCH-Initiated Episodes, 2008

Service Use (N = 4,967)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalization	C. 30-Day Fixed: Any Claim Starting Within 30 Days After LTCH Discharge
HHA			
Percent with Claim	24.1	20.1	18.8
Mean Visits	59.1	44.7	22.7
Mean Claim Length (days)	137.4	105.6	48.2
Mean Payment Per Service User	\$7,958	\$6,014	\$3,188
SNF			
Percent with Claim	32.9	28.1	29.3
Mean LOS (days)	56.2	43.3	43.0
Mean Payment Per Service User	\$16,599	\$12,778	\$12,861
IRF			
Percent with Claim	3.5	2.3	2.6
Mean LOS (days)	18.8	17.8	17.8
Mean Payment Per Service User	\$21,804	\$20,906	\$21,303
LTCH (not including initiating event)¹			
Percent with Claim	13.3	4.9	6.7
Mean LOS (days)	40.6	37.7	35.2
Mean Payment Per Service User	\$38,469	\$31,799	\$30,881
Outpatient Department Therapy			
Percent with Claim	13.5	8.9	6.0
Mean Payment Per Service User	\$2,602	\$2,120	\$1,140
Independent Therapist			
Percent with Claim	1.3	1.0	0.7
Mean Payment Per Service User	\$1,362	\$1,480	\$415
Acute Hospitalization²			
Percent with Claim	29.5	—	18.6
Mean LOS (days)	14.7	—	9.8
Mean Payment Per Service User	\$22,291	—	\$15,696

1. Service use for the initiating event is not included in this calculation. LTCH use following first claim reported here.

2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM143, M3MM213).

Table 28. Service-Specific Episode Summary Statistics: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to LTCH, 2008

Service Use (N = 11,454)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalization	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Acute Hospital Discharge
HHA			
Percent with Claim	38.6	31.1	17.2
Mean Visits	51.3	36.6	21.6
Mean Claim Length (days)	113.7	81.0	44.9
Mean Payment Per Service User	\$7,499	\$5,429	\$3,325
SNF			
Percent with Claim	38.5	30.5	18.0
Mean LOS (days)	57.0	41.7	40.1
Mean Payment Per Service User	\$19,550	\$14,546	\$14,002
IRF			
Percent with Claim	8.0	5.9	4.0
Mean LOS (days)	20.0	18.2	17.5
Mean Payment Per Service User	\$21,776	\$19,890	\$19,862
LTCH			
Percent with Claim ¹	100.0	100.0	100.0
Mean LOS (days)	31.2	27.3	27.6
Mean Payment Per Service User	\$39,621	\$35,291	\$35,784
Outpatient Department Therapy			
Percent with Claim	14.5	8.2	1.4
Mean Payment Per Service User	\$2,467	\$1,857	\$582
Independent Therapist			
Percent with Claim	1.7	1.0	0.1
Mean Payment Per Service User	\$1,218	\$1,091	\$171
Acute Hospitalization²			
Percent with Claim	42.7	-	13.7
Mean LOS (days)	16.1	-	10.8
Mean Payment Per Service User	\$25,010	-	\$19,878

1. By definition, 100 percent of beneficiaries with acute initiated episodes discharged to LTCH have at least one LTCH claim in their episode. Note that 10.4 percent of beneficiaries in episode definition A, 0.9 percent in episode definition B, and 1.8 percent of beneficiaries in episode definition C have more than one LTCH claim in their PAC episode.
2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 29. Physician Service Use, by MS-DRG and by Episode Definition: LTCH-Initiated Episodes, 2008

MS-DRG	7 Days Prior to Initiating Event¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge
All MS-DRGs				
Percent with Claim	54.2	92.8	92.3	92.6
Mean Payment Per Service User	\$401	\$4,306	\$2,908	\$3,084
885: Psychoses				
Percent with Claim	56.5	96.4	96.4	96.4
Mean Payment Per Service User	\$174	\$1,718	\$1,523	\$1,454
207: Respirator system diagnosis w ventilator support 96+ hours				
Percent with Claim	42.6	85.3	84.4	85.3
Mean Payment Per Service User	\$820	\$6,691	\$4,638	\$5,556
189: Pulmonary edema & respiratory failure				
Percent with Claim	48.5	87.3	86.3	86.3
Mean Payment Per Service User	\$580	\$6,596	\$3,624	\$4,084
593: Skin ulcers w CC				
Percent with Claim	53.6	96.4	95.9	95.9
Mean Payment Per Service User	\$217	\$3,665	\$2,551	\$2,559
592: Skin ulcers w MCC				
Percent with Claim	50.8	97.9	97.9	97.9
Mean Payment Per Service User	\$269	\$5,552	\$3,432	\$3,698

1. An initiating event is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Physician claims with dates of service falling between the admission date on an index acute hospitalization and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment calculations.

Table 30. Top 10 RICs, IRF-Initiated Episodes, 2006-2008

Rank 2008	Rank 2007	Rank 2006	RIC	N 2008	Percent 2008	Cumulative Percent 2008
1	1	1	RIC 01: Stroke	1,917	16.0	16.0
2	2	2	RIC 06: Neurological Conditions	1,875	15.7	31.7
3	3	4	RIC 09: Other Orthopedic	1,648	13.8	45.5
4	4	3	RIC 20: Miscellaneous	1,427	11.9	57.4
5	5	5	RIC 07: Lower Extremity Fracture	994	8.3	65.7
6	6	6	RIC 08: Lower Extremity Joint Replacement	710	5.9	71.7
7	8	7	RIC 16: Pain Syndrome	445	3.7	75.4
8	9	8	RIC 05: Spinal Cord Dysfunction, Non-Traumatic	441	3.7	79.1
9	7	9	RIC 10: Amputation, Lower Extremity	376	3.1	82.2
10	11	11	RIC 02: Brain Dysfunction, Traumatic	373	3.1	85.4

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM155).

Table 31. Top 10 RICs, Acute Hospital-Initiated Episodes, Beneficiaries Discharged to IRF, 2008

Rank	RIC	N	Percent	Cumulative Percent
1	RIC 01: Stroke	12,010	21.3	21.3
2	RIC 07: Lower Extremity Fracture	10,644	18.9	40.1
3	RIC 08: Lower Extremity Joint Replacement	10,516	18.6	58.8
4	RIC 20: Miscellaneous	4,921	8.7	67.5
5	RIC 09: Other Orthopedic	3,463	6.1	73.6
6	RIC 06: Neurological Conditions	3,248	5.8	79.4
7	RIC 14: Cardiac	2,173	3.9	83.2
8	RIC 03: Brain Dysfunction, Non-Traumatic	2,039	3.6	86.8
9	RIC 05: Spinal Cord Dysfunction, Non-Traumatic	2,000	3.5	90.4
10	RIC 02: Brain Dysfunction, Traumatic	1,598	2.8	93.2

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 32. Episode Patterns: IRF-Initiated Episodes, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	I	2,910	24.3	24.3
2	IH	2,708	22.6	47.0
3	IO	1,220	10.2	57.2
4	IS	594	5.0	62.2
5	ISH	442	3.7	65.9
6	IHO	328	2.7	68.6
7	IT	214	1.8	70.4
8	IA	194	1.6	72.0
9	IHA	164	1.4	73.4
10	ISO	155	1.3	74.7

Note: Episode pattern is based on a 30-day variable episode definition. A = Acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist.

Source: RTI analysis of 2008 Medicare claims (M3MM157).

Table 33. Episode Patterns: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to IRF, 2008

Rank	Episode Pattern	N	Percent	Cumulative Percent
1	AIH	14,900	26.4	26.4
2	AIO	5,961	10.6	37.0
3	AI	4,902	8.7	45.6
4	AIHO	3,158	5.6	51.2
5	AISH	2,337	4.1	55.4
6	AIHT	2,268	4.0	59.4
7	AIS	1,826	3.2	62.6
8	AIT	1,775	3.1	65.8
9	AIHA	1,410	2.5	68.3
10	AIA	1,114	2.0	70.3

Note: Episode pattern is based on a 30-day variable episode definition. A = Acute hospital, S = SNF, H = HHA, I = IRF, L = LTCH, O = outpatient department therapy, T = independent therapist.

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 34. Summary Statistics: IRF-Initiated Episodes, 2006-2008

Episode Definition	N	Mean Initiating Event LOS (days)¹	Mean Initiating Event Payment¹	Mean Episode LOS (days)²	Mean Episode Payment²
2008					
A. 30-Day Variable Episode	11,956	13.0	\$13,833	92.2	\$27,563
B. 30-Day Variable Episode Excluding Acute Hospitalization	11,956	13.0	\$13,833	67.1	\$19,349
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	11,956	13.0	\$13,833	47.8	\$20,932
2007					
A. 30-Day Variable Episode	11,564	13.2	\$13,836	91.1	\$26,734
B. 30-Day Variable Episode Excluding Acute Hospitalization	11,564	13.2	\$13,836	66.9	\$19,001
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	11,564	13.2	\$13,836	48.3	\$20,622
2006					
A. 30-Day Variable Episode	11,936	13.2	\$13,391	89.7	\$25,486
B. 30-Day Variable Episode Excluding Acute Hospitalization	11,936	13.2	\$13,391	63.5	\$18,055
C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	11,936	13.2	\$13,391	46.4	\$19,537

1. An initiating event is defined as a IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, and therapy. Note that acute hospitalizations are also included in episode payments for episode definitions A and C.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM143).

Table 35. IRF Utilization, IRF Initiated Episodes versus Beneficiaries With Acute Initiated Episodes Discharged to IRF, 2006-2008

Episode Definition	Mean IRF Length of Stay (days) per IRF Initiated Episode	Mean IRF Payment per Episode per IRF Initiated Episode	Mean IRF Length of Stay (days) per Acute Initiated Episode Discharged to IRF	Mean IRF Payment per Episode per Acute Initiated Episode Discharged to IRF
2008				
A. 30 day Variable Episode	14.4	\$15,436	14.1	\$17,224
B. 30 Day Variable Episode Excluding Acute Hospitalization	13.3	\$14,164	12.9	\$15,836
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	13.7	\$14,605	13.4	\$16,453
2007				
A. 30 day Variable Episode	14.5	\$15,310	13.9	\$16,850
B. 30 Day Variable Episode Excluding Acute Hospitalization	13.5	\$14,113	12.8	\$15,551
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	13.8	\$14,539	13.2	\$16,138
2006				
A. 30 day Variable Episode	14.4	\$14,795	13.5	\$15,946
B. 30 Day Variable Episode Excluding Acute Hospitalization	13.4	\$13,666	12.5	\$14,763
C. 30 Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event	13.8	\$14,093	13.0	\$15,291

1. Length of stay and payments include index event plus subsequent service use in the episode.

Source: RTI Analysis of 2006, 2007, and 2008 Medicare Claims (M3MM260, M3MM261).

Table 36. Service-Specific Summary Statistics: IRF-Initiated Episodes, 2008

Service Use (N = 11,956)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalization	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Discharge from Initiating Event
HHA			
Percent with Claim	48.1	42.6	40.0
Mean Visits	38.2	30.7	21.9
Mean Claim Length (days)	81.5	65.9	41.9
Mean Payment Per Service User	\$6,082	\$5,007	\$3,710
SNF			
Percent with Claim	24.1	17.4	20.3
Mean LOS (days)	52.9	44.3	43.5
Mean Payment Per Service User	\$17,725	\$14,755	\$14,683
IRF (not including initiating event)¹			
Percent with Claim	7.8	2.0	4.4
Mean LOS (days)	17.8	15.9	15.6
Mean Payment Per Service User	\$20,537	\$16,581	\$17,490
LTCH			
Percent with Claim	1.5	0.3	0.7
Mean LOS (days)	33.1	32.4	27.5
Mean Payment Per Service User	\$34,871	\$28,617	\$27,173
Outpatient Department Therapy			
Percent with Claim	24.3	20.4	15.7
Mean Payment Per Service User	\$1,888	\$1,544	\$770
Independent Therapist			
Percent with Claim	5.7	5.0	3.1
Mean Payment Per Service User	\$1,370	\$1,240	\$396
Acute Hospitalization²			
Percent with Claim	22.9	—	13.7
Mean LOS (days)	11.5	—	7.8
Mean Payment Per Service User	\$16,910	—	\$11,314

1. Service use for the initiating event is not included in this calculation. IRF use following first claim reported here.
2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM143, M3MM213).

Table 37. Service-Specific Episode Summary Statistics: Acute Hospital-Initiated Episodes, Beneficiaries Discharged to IRF, 2008

Service Use (N = 56,439)	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospitalization	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge
HHA			
Percent with Claim	62.7	55.2	49.6
Mean Visits	34.1	27.3	21.0
Mean Claim Length (days)	68.1	53.5	38.0
Mean Payment Per Service User	\$5,712	\$4,714	\$3,777
SNF			
Percent with Claim	24.4	16.8	18.8
Mean LOS (days)	51.7	42.1	39.7
Mean Payment Per Service User	\$18,287	\$15,016	\$14,326
IRF			
Percent with Claim ¹	100.0	100.0	100.0
Mean LOS (days)	14.1	12.9	13.4
Mean Payment Per Service User	\$17,224	\$15,836	\$16,453
LTCH			
Percent with Claim	1.4	0.2	0.5
Mean LOS (days)	32.6	27.3	28.4
Mean Payment Per Service User	\$33,777	\$27,479	\$30,960
Outpatient Department Therapy			
Percent with Claim	28.5	23.7	14.0
Mean Payment Per Service User	\$1,769	\$1,484	\$640
Independent Therapist			
Percent with Claim	11.1	9.8	4.9
Mean Payment Per Service User	\$1,577	\$1,496	\$405
Acute Hospitalization²			
Percent with Claim	29.3	—	14.7
Mean LOS (days)	11.5	—	7.9
Mean Payment Per Service User	\$17,801	—	\$12,376

1. By definition, 100 percent of beneficiaries with acute initiated episodes discharged to IRF have at least one IRF claim in their episode. Note that 6.6 percent of beneficiaries in episode definition A, 0.5 percent in episode definition B, and 3.6 percent of beneficiaries in episode definition C have more than one IRF claim in their PAC episode.

2. Episode definition B excludes acute hospitalizations. Therefore values for acute hospitalization are missing for this episode definition.

Source: RTI analysis of 2008 Medicare claims (M3MM187).

Table 38. Physician Service Use, by RIC and by Episode Definition: IRF-Initiated Episodes, 2008

RIC	7 Days Prior to Initiating Event¹	A. 30-Day Variable Episode	B. 30-Day Variable Episode Excluding Acute Hospital Readmissions	C. 30-Day Fixed: Any Claim Starting Within 30 Days After Hospital Discharge
All RICs				
Percent with Claim	65.0	89.5	89.3	89.3
Mean Payment Per Service User	\$532	\$2,172	\$1,385	\$1,433
RIC 1: Stroke				
Percent with Claim	58.0	86.9	86.6	86.8
Mean Payment Per Service User	\$438	\$2,400	\$1,445	\$1,448
RIC 06: Neurological Conditions				
Percent with Claim	61.8	94.2	94.0	94.1
Mean Payment Per Service User	\$359	\$2,237	\$1,442	\$1,459
RIC 09: Other Orthopedic				
Percent with Claim	80.8	95.6	95.3	95.5
Mean Payment Per Service User	\$578	\$1,990	\$1,389	\$1,431
RIC 20: Miscellaneous				
Percent with Claim	70.5	93.6	93.4	93.5
Mean Payment Per Service User	\$411	\$2,288	\$1,327	\$1,481
RIC 07: Lower Extremity Fracture				
Percent with Claim	72.7	89.9	89.8	89.7
Mean Payment Per Service User	\$719	\$2,228	\$1,253	\$1,292

1. An initiating event is defined as an IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.

2. Physician claims with dates of service falling between the admission date on an index acute hospitalization and the last date of episode were identified from the Medicare Carrier claims using physician specialty codes and the dollars associated with these services were included in episode payment calculations.

Source: RTI analysis of 2008 Medicare claims (M3MM226).

5. MORTALITY ANALYSES

In addition to the episode descriptives presented in Sections 3 and 4, RTI stratified analyses by type of initiated event (acute, HHA, LTCH, and IRF) and by whether beneficiaries died during the episode. This mortality analysis was conducted for two episode definitions: the 30-day variable-length episode definition and the 30-day fixed-length with any claim initiating within 30 days after discharge from the index event. These episode definitions were chosen because they allow us to look at timing of death and differences in service utilization under a shorter versus longer episode definition. Note that these mortality analyses were conducted to learn more about trajectories of care and service use, and were not intended for quality measurement.

In looking at acute hospital-initiated episodes, 7.7 percent of beneficiaries die in their episode under the 30-day variable-length episode definition (**Table 39**). This percentage decreases to 4.4 percent when looking at the shorter 30-day fixed episode definition with any claim initiating within 30 days of discharge from the index acute hospitalization (**Table 40**). These tables also indicate that beneficiaries who die in their episodes have higher index acute hospitalization length and payment suggesting that these beneficiaries are likely more complex when they initiate care. However, mean episode length does not differ substantially between beneficiaries dying during the episode under the 30-day variable-length episode definition (87.5 days for those who are alive at the end of the episode and 84.6 days for those who die before the end of the episode). Compared with beneficiaries who survive until the end of the episode, a higher proportion of beneficiaries who die before the end of the episode use SNF (76.0 percent versus 45.8 percent), LTCH (10.6 percent versus 1.9 percent), and have an acute hospitalization (68.6 percent versus 25.0 percent). In contrast, a higher proportion of beneficiaries surviving to the end of the episode used IRF, HHA, and therapy services. Similar results were revealed in looking at service use under the shorter 30-day fixed episode definition with any claim initiating within 30 days of discharge from the index acute hospitalization.

In the mortality analysis of beneficiaries initiating episodes in HHA, 4.5 percent died under the longer 30-day variable-length episode definition (**Table 41**) and 2.5 percent died under the shorter 30-day fixed episode definition (**Table 42**). Under the 30-day variable-length episode definition, beneficiaries dying during the episode have a higher number of HHA visits in the index event than those who survive, but under the shorter 30-day fixed definition, beneficiaries who die have fewer visits during their index HHA claim. A higher proportion of beneficiaries dying during an HHA-initiated episode used IRF, LTCH, SNF, and had an acute hospitalization. Under the 30-day variable definition, 82.5 percent of beneficiaries dying during the episode have an acute hospitalization during their episode compared with 20.3 percent of beneficiaries who survive until the end of the episode. Results were similar across the two episode definitions examined.

Analysis of the LTCH-initiated episode revealed that 17.8 percent of LTCH community entrants die before the end of the episode under the 30-day variable-length definition (**Table 43**). This percentage decreases to 13.5 under the shorter 30-day fixed definition (**Table 44**). Mean index LTCH length of stay is similar across those who die and those who survive, but under the 30-day variable-length episode the total episode length of stay is much shorter for beneficiaries who die during the episode (68.2 days compared with 108.8 days). A higher proportion of beneficiaries who survive through the end of the episode use subsequent PAC and have acute hospitalization during the episode. Of those that survive until the end of the episode under the 30-day variable length definition, 26.8 percent of beneficiaries who survive have an acute hospitalization compared with 42.0 percent of those who die. Similar results were found in looking at the shorter episode definition; however, the proportion of beneficiaries using each service was lower.

A much smaller proportion of beneficiaries with IRF-initiated episodes die during their episode, likely because beneficiaries in IRFs must be willing to participate in 3 hours of therapy per day. In looking at the 30-day variable-length episode definition, 3.9 percent of beneficiaries die (**Table 45**) and this decreases to 2.0 percent when looking at the shorter episode definition (**Table 46**). A higher proportion of beneficiaries with IRF-initiated episodes who die during their episode have more than one IRF claim in their episode, use SNF or LTCH, or have an acute hospitalization compared with those who survive. A higher proportion of beneficiaries surviving until the end of their episode use HHA and therapy services, and these patterns are consistent across the longer and shorter episode definitions.

The mortality analyses conducted here provide important information on the proportion of beneficiaries who die under each type of initiated episode and the episode payment associated with these beneficiaries. Given the finding that episode payments are substantially higher for beneficiaries who die in an episode, these results demonstrate the important implications of mortality status on total episode utilization and payments.

Table 39. Mortality Analyses, Acute Hospital-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	608,499	51,050
Percent of Beneficiaries	92.3	7.7
Mean Index Acute Hospital Length of Stay ¹	5.9	9.0
Mean Index Acute Hospital Payment ¹	\$10,392	\$12,712
Mean Episode Length of Stay (days) ²	87.5	84.6
Mean Episode Payments ²	\$26,281	\$46,018
Mean PAC Length of Stay (days) ³	79.4	74.5
Mean PAC Payments ³	\$15,888	\$33,306
HHA		
Percent with Claim	62.8	34.6
Mean Visits Per Service User ⁴	25.3	31.2
Mean Payment Per Service User ⁴	\$4,213	\$4,599
IRF		
Percent with Claim	9.9	7.3
Mean Length of Stay Per Service User (days) ⁴	14.3	15.6
Mean Payment Per Service User ⁴	\$17,444	\$18,718
LTCH		
Percent with Claim	1.9	10.6
Mean Length of Stay Per Service User (days) ⁴	32.1	30.3
Mean Payment Per Service User ⁴	\$38,092	\$40,756
SNF		
Percent with Claim	45.8	76.0
Mean Length of Stay Per Service User (days) ⁴	40.2	33.4
Mean Payment Per Service User ⁴	\$13,920	\$11,676
Outpatient Therapy		
Percent with Claim	21.2	9.6
Mean Payment Per Service User ⁴	\$1,410	\$1,409
Independent Therapist		
Percent with Claim	10.3	1.0
Mean Payment Per Service User ⁴	\$1,210	\$1,083
Acute Hospital Readmission		
Percent with Claim	25.0	68.6
Mean Length of Stay Per Service User (days) ⁴	10.5	14.9
Mean Payment Per Service User ⁴	\$15,891	\$24,807

1. An "index acute hospitalization" is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for the index acute hospitalization, SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
3. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim. PAC payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 40. Mortality Analyses, Acute Hospital-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	630,573	28,976
Percent of Beneficiaries	95.6	4.4
Mean Index Acute Hospital Length of Stay (days) ¹	6.0	9.3
Mean Index Acute Hospital Payment ¹	\$10,466	\$12,889
Mean Episode Length of Stay (days) ²	49.2	39.0
Mean Episode Payments ²	\$20,885	\$28,581
Mean PAC Length of Stay (days) ³	41.1	29.0
Mean PAC Payments ³	\$10,420	\$15,693
HHA		
Percent with Claim	53.7	21.0
Mean Visits Per Service User ⁴	15.9	8.8
Mean Payment Per Service User ⁴	\$2,806	\$1,720
IRF		
Percent with Claim	9.2	4.5
Mean Length of Stay Per Service User (days) ⁴	13.5	10.5
Mean Payment Per Service User ⁴	\$16,585	\$12,867
LTCH		
Percent with Claim	1.7	8.2
Mean Length of Stay Per Service User (days) ⁴	28.7	21.6
Mean Payment Per Service User ⁴	\$36,040	\$31,503
SNF		
Percent with Claim	44.0	73.8
Mean Length of Stay Per Service User (days) ⁴	33.3	18.9
Mean Payment Per Service User ⁴	\$11,830	\$6,879
Outpatient Therapy		
Percent with Claim	12.0	2.5
Mean Payment Per Service User ⁴	\$630	\$376
Independent Therapist		
Percent with Claim	6.6	0.2
Mean Payment Per Service User ⁴	\$358	\$289
Acute Hospital Readmission		
Percent with Claim	13.4	45.1
Mean Length of Stay Per Service User (days) ⁴	7.3	8.1
Mean Payment Per Service User ⁴	\$10,963	\$15,680

1. An "index acute hospitalization" is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for the index acute hospitalization, SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
3. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim. PAC payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmissions.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 41. Mortality Analyses, HHA-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	225,632	10,675
Percent of Beneficiaries	95.5	4.5
Mean Index HHA Visits ¹	16.8	17.3
Mean Index HHA Payment ¹	\$2,791	\$2,529
Mean Episode Length of Stay (days) ²	112.0	135.6
Mean Episode Payments ²	\$10,685	\$33,951
HHA (not including initiating event)³		
Percent with Claim	34.9	45.9
Mean Visits Per Service User ⁴	64.4	58.1
Mean Payment Per Service User ⁴	\$8,530	\$7,423
IRF		
Percent with Claim	1.4	3.7
Mean Length of Stay Per Service User (days) ⁴	16.3	15.2
Mean Payment Per Service User ⁴	\$19,359	\$18,261
LTCH		
Percent with Claim	0.6	6.3
Mean Length of Stay Per Service User (days) ⁴	34.5	30.0
Mean Payment Per Service User ⁴	\$38,546	\$38,467
SNF		
Percent with Claim	8.0	37.1
Mean Length of Stay Per Service User (days) ⁴	50.6	35.3
Mean Payment Per Service User ⁴	\$17,373	\$12,614
Outpatient Therapy		
Percent with Claim	7.3	8.6
Mean Payment Per Service User ⁴	\$1,388	\$1,192
Independent Therapist		
Percent with Claim	3.5	1.5
Mean Payment Per Service User ⁴	\$1,240	\$959
Acute Hospitalization		
Percent with Claim	20.3	82.5
Mean Length of Stay Per Service User (days) ⁴	9.8	15.3
Mean Payment Per Service User ⁴	\$14,204	\$24,397

1. An "initiating event" is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Service use for the initiating event is not included in this calculation.
4. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 42. Mortality Analyses, HHA-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition¹	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	230,357	5,950
Percent of Beneficiaries	97.5	2.5
Mean Index HHA Visits ¹	16.9	12.8
Mean Index HHA Payment ¹	\$2,796	\$2,144
Mean Episode Length of Stay (days) ²	64.4	50.3
Mean Episode Payments ²	\$6,173	\$17,008
HHA (not including initiating event)³		
Percent with Claim	33.5	16.2
Mean Visits Per Service User ⁴	18.6	9.5
Mean Payment Per Service User ⁴	\$2,723	\$1,709
IRF		
Percent with Claim	0.8	1.4
Mean Length of Stay Per Service User (days) ⁴	15.0	12.0
Mean Payment Per Service User ⁴	\$17,875	\$15,496
LTCH		
Percent with Claim	0.2	2.5
Mean Length of Stay Per Service User (days) ⁴	29.7	26.4
Mean Payment Per Service User ⁴	\$33,346	\$32,695
SNF		
Percent with Claim	5.1	24.2
Mean Length of Stay Per Service User (days) ⁴	38.3	20.3
Mean Payment Per Service User ⁴	\$13,530	\$7,368
Outpatient Therapy		
Percent with Claim	4.6	3.8
Mean Payment Per Service User ⁴	\$661	\$454
Independent Therapist		
Percent with Claim	2.7	0.4
Mean Payment Per Service User ⁴	\$459	\$390
Acute Hospitalization		
Percent with Claim	15.2	73.8
Mean Length of Stay Per Service User (days) ⁴	7.0	9.8
Mean Payment Per Service User ⁴	\$9,888	\$15,951

1. An "initiating event" is defined as an HHA claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Service use for the initiating event is not included in this calculation.
4. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 43. Mortality Analyses, LTCH-Initiated Episodes, 30-Day Variable-Length Episode, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	4,083	884
Percent of Beneficiaries	82.2	17.8
Mean Index LTCH Length of Stay (days) ¹	26.5	27.9
Mean Index LTCH Hospital Payment ¹	\$24,850	\$33,638
Mean Episode Length of Stay (days) ²	108.8	68.2
Mean Episode Payments ²	\$44,387	\$57,006
HHA		
Percent with Claim	26.8	11.4
Mean Visits Per Service User ³	59.9	50.2
Mean Payment Per Service User ³	\$8,088	\$6,556
IRF		
Percent with Claim	3.8	2.3
Mean Length of Stay Per Service User (days) ³	18.5	21.2
Mean Payment Per Service User ³	\$21,436	\$24,642
LTCH (not including initiating event)⁴		
Percent with Claim	12.5	17.1
Mean Length of Stay Per Service User (days) ³	41.4	38.1
Mean Payment Per Service User ³	\$37,122	\$43,034
SNF		
Percent with Claim	33.4	30.7
Mean Length of Stay Per Service User (days) ³	60.1	36.5
Mean Payment Per Service User ³	\$17,544	\$11,850
Outpatient Therapy		
Percent with Claim	15.3	5.4
Mean Payment Per Service User ³	\$2,633	\$2,200
Independent Therapist		
Percent with Claim	1.6	0.2
Mean Payment Per Service User ³	\$1,400	\$110
Acute Hospitalization		
Percent with Claim	26.8	42.0
Mean Length of Stay Per Service User (days) ³	14.6	14.9
Mean Payment Per Service User ³	\$20,996	\$26,110

1. An "initiating event" is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 44. Mortality Analyses, LTCH-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	4,295	672
Percent of Beneficiaries	86.5	13.5
Mean Index LTCH Length of Stay (days) ¹	26.6	27.5
Mean Index LTCH Hospital Payment ¹	\$25,363	\$33,130
Mean Episode Length of Stay (days) ²	60.9	38.1
Mean Episode Payments ²	\$35,565	\$41,728
HHA		
Percent with Claim	21.0	4.2
Mean Visits Per Service User ³	23.1	9.7
Mean Payment Per Service User ³	\$3,226	\$1,974
IRF		
Percent with Claim	2.9	0.7
Mean Length of Stay Per Service User (days) ³	17.8	17.6
Mean Payment Per Service User ³	\$21,422	\$18,300
LTCH (not including initiating event)⁴		
Percent with Claim	6.9	5.7
Mean Length of Stay Per Service User (days) ³	35.1	36.3
Mean Payment Per Service User ³	\$30,095	\$36,978
SNF		
Percent with Claim	31.1	17.7
Mean Length of Stay Per Service User (days) ³	45.3	17.7
Mean Payment Per Service User ³	\$13,446	\$6,289
Outpatient Therapy		
Percent with Claim	6.8	0.7
Mean Payment Per Service User ³	\$1,150	\$568
Independent Therapist		
Percent with Claim	0.8	0.1
Mean Payment Per Service User ³	\$425	\$114
Acute Hospitalization		
Percent with Claim	17.5	25.6
Mean Length of Stay Per Service User (days) ³	10.0	8.6
Mean Payment Per Service User ³	\$14,662	\$20,203

1. An "initiating event" is defined as an LTCH claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. "Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 45. Mortality Analyses, IRF-Initiated Episodes, 30-Day Variable-Length Episode Definition, 2008

30-Day Variable-Length Episode Definition	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	11,485	471
Percent of Beneficiaries	96.1	3.9
Mean Index IRF Length of Stay (days) ¹	13.0	12.5
Mean Index IRF Payment ¹	\$13,833	\$13,837
Mean Episode Length of Stay (days) ²	92.0	98.2
Mean Episode Payments ²	\$26,538	\$52,539
HHA		
Percent with Claim	48.5	38.6
Mean Visits Per Service User ³	38.0	45.9
Mean Payment Per Service User ³	\$6,072	\$6,396
IRF (not including initiating event)⁴		
Percent with Claim	7.4	18.3
Mean Length of Stay Per Service User (days) ³	18.0	15.7
Mean Payment Per Service User ³	\$20,674	\$19,188
LTCH		
Percent with Claim	1.2	7.9
Mean Length of Stay Per Service User (days) ³	34.6	27.0
Mean Payment Per Service User ³	\$36,222	\$29,687
SNF		
Percent with Claim	22.7	57.7
Mean Length of Stay Per Service User (days) ³	54.3	39.5
Mean Payment Per Service User ³	\$18,161	\$13,544
Outpatient Therapy		
Percent with Claim	24.8	12.1
Mean Payment Per Service User ³	\$1,898	\$1,411
Independent Therapist		
Percent with Claim	23.3	2.1
Mean Payment Per Service User ³	\$1,369	\$1,441
Acute Hospitalization		
Percent with Claim	20.7	76.6
Mean Length of Stay Per Service User (days) ³	10.6	17.6
Mean Payment Per Service User ³	\$15,043	\$29,189

1. An "initiating event" is defined as an IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined³ as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

Table 46. Mortality Analyses, IRF-Initiated Episodes, 30-Day Fixed-Length Episode Definition, 2008

30-Day Fixed-Length Episode Definition¹	Beneficiaries Alive at End of Episode	Beneficiaries Dying During Episode
Number of Beneficiaries	11,716	240
Percent of Beneficiaries	98.0	2.0
Mean Index IRF Length of Stay (days) ¹	13.0	11.9
Mean Index IRF Payment ¹	\$13,843	\$13,324
Mean Episode Length of Stay (days) ²	48.1	36.0
Mean Episode Payments ²	\$20,747	\$29,965
HHA		
Percent with Claim	40.5	18.3
Mean Visits Per Service User ³	21.9	17.8
Mean Payment Per Service User ³	\$3,718	\$2,918
IRF (not including initiating event)⁴		
Percent with Claim	4.3	8.8
Mean Length of Stay Per Service User (days) ³	15.9	10.1
Mean Payment Per Service User ³	\$17,741	\$11,416
LTCH		
Percent with Claim	0.6	2.9
Mean Length of Stay Per Service User (days) ³	28.9	13.6
Mean Payment Per Service User ³	\$28,630	\$11,976
SNF		
Percent with Claim	19.8	42.9
Mean Length of Stay Per Service User (days) ³	44.5	21.5
Mean Payment Per Service User ³	\$14,991	\$7,749
Outpatient Therapy		
Percent with Claim	15.9	2.5
Mean Payment Per Service User ³	\$772	\$173
Independent Therapist		
Percent with Claim	3.2	0.0
Mean Payment Per Service User ³	\$396	
Acute Hospitalization		
Percent with Claim	12.8	59.2
Mean Length of Stay Per Service User (days) ³	7.7	8.6
Mean Payment Per Service User ³	\$10,555	\$19,314

1. An "initiating event" is defined as an IRF claim following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
2. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.
3. Per service user" indicates mean Medicare payments for those beneficiaries who use the service.
4. Service use for the initiating event is not included in this calculation.

Source: RTI analysis of 2008 Medicare claims (M3MM155).

6. GEOGRAPHIC BENCHMARKING

After exploring episode utilization and payments by type of initiating event and by episode definition, and looking at the relationship between episode utilization and mortality, ASPE and RTI also stratified the episode descriptives by geographic area to illustrate the differences across the country due to PAC provider supply and differences in practice patterns. In these analyses, we stratified episode descriptives by state and by core-based statistical area (CBSA) based on the location of the index provider. In many cases the location of the index provider and beneficiary residence are the same, but some beneficiaries cross state lines and metropolitan areas to receive care. Analyses conducted in 2009 generated the geographic descriptive based both on the location of the index provider and on the location of the beneficiary and found little difference in the mean PAC payment per PAC user or per discharge (Morley et al. 2009; Gage et al., 2009). For this reason, we provide the episode descriptives in this report based only on the location of the index provider. Provider state and county were identified using the Provider of Service (POS) file, and CBSA was assigned using a county-to-CBSA crosswalk available from CMS. Standardized payment amounts were used here to remove the effects of wages and other adjustments that vary by geography. These analyses were performed on the 30-day fixed-episode definition, including any claim initiating within 30 days after discharge from the initiating event.

Table 47 contains the results of the first geographic analysis. This table reports the number and percentage of beneficiaries with acute hospital-initiated episodes discharged to PAC in different states, along with the mean payment per hospital discharge, the mean payment per PAC user, and the mean PAC length of stay for 2008. In terms of mean PAC payment per PAC user, the states included in this table are the top 5, the middle 10, and the bottom 5. These states were selected to demonstrate the range in payments per PAC user across the country. At over \$14,000, Louisiana and Texas have the highest mean payments per PAC user. In Louisiana, 35.2 percent of beneficiaries are discharged to PAC, and 38.8 percent are similarly discharged in Texas.² Although these percentages are not higher than the national average of 38.7 percent, the mean PAC payments per PAC user are the highest nationally. In contrast, the lowest mean PAC payments per PAC user were in Oregon, South Dakota, Montana, Iowa, and Alaska. Each of these states also had lower-than-average percentages of discharge to PAC. Patterns of PAC episode length of stay were

² Note that in the November 2009 report by Morley, Gage, Smith et al., the proportion of beneficiaries discharged to PAC in Texas was reported to be 29.2 percent. The authors acknowledged the unexpected results and reported that future analysis would examine this issue further. In the file construction effort for the current report, RTI identified a data issue where some providers in Texas were inadvertently excluded from the earlier analytic data file. These analyses reflect the corrected totals.

consistent with payments per PAC user with longer episodes in Texas and Louisiana and shorter episodes in Iowa and Alaska.

By displaying the mean PAC payment per PAC user and the mean PAC payment per discharge, we can see the effect of using different denominators over which to calculate mean payments at the state level. Comparing both calculations highlights the impact of the percentage of beneficiaries discharged to PAC as well as the use per PAC user. In **Figure 4** these differences are shown graphically for 10 states. The states shown here represent two from the top 5 in terms of mean PAC payment per PAC user (Texas and Ohio), three from the middle 10 (Florida, Michigan, and New Hampshire), and 2 from the bottom five (Oregon and Montana). In addition to these 7, we also chose to include Massachusetts, California, and New York in this figure because of their population size and the differences in supply and practice patterns that they represent. The figure displays both the mean payment per PAC user and the mean payment per discharge in these 10 states. By presenting both of these numbers in the same graph, we can see that though Texas has the highest mean PAC payment per PAC user of the states shown here, and Massachusetts has a higher mean payment per discharge due to the higher proportion of beneficiaries in Massachusetts discharged to PAC (50.5%). The dotted lines across the figure represent the mean payment per PAC user based on the mean and median nationally. The national mean and median are shown here to provide benchmarks for comparing state payments to national payments. Six of the 10 states shown here have mean payments per PAC user lower than the national average, and four states have higher mean payments per PAC user than the national average. Differences in provider supply and practice patterns are clearly an important consideration in developing an episode-based payment.

Although the state-level PAC episode analysis reveals important differences across geographic areas, the CBSA-level analysis highlights additional variation within states and across metropolitan areas. **Table 48** contains PAC episode descriptives for acute hospital-initiated episodes for the top 20 CBSAs in terms of the number of PAC users. Although New York, Illinois, California, Philadelphia, and Massachusetts were not among the top states in mean PAC payment per PAC user, metropolitan areas within these states are at the top in terms of the numbers of beneficiaries using PAC services. Three CBSAs in Texas are among the top 20 nationally, including Houston, Dallas, and rural Texas. In looking at these three CBSA areas alone, we see differences in use patterns within Texas. Although 38.3 percent of beneficiaries are discharged to PAC in Texas overall, 37.0 percent were discharged to PAC in Houston, 38.1 percent in rural Texas, and 41.0 percent in Dallas. There is significant variation in mean PAC payment per PAC user among the CBSAs shown here, with Houston having the highest (and fifth highest across all CBSAs) at \$16,188 and Baltimore having the lowest at \$10,124.

In addition to the geographic analysis for acute hospital-initiated episodes, we also performed geographic analysis for HHA-initiated episodes. Because of the small numbers of

beneficiaries with LTCH- and IRF-initiated episodes at the state and CBSA levels, geographic analyses for these types of episodes are not presented here. **Table 49** shows the mean PAC payment per user for the top 5 states, the middle 10 states, and the bottom 5 states. The states with the highest payments per HHA-initiated episode are Indiana and Tennessee, and the states with the lowest payments are Vermont and Oregon. Although there is variation in the PAC episode payment across states, there is also significant variation in the number of beneficiaries with HHA-initiated episodes in each of the states shown in Table 49 with Texas, California, and Michigan among the top. To reveal more about the geographic areas with the highest volume of these types of cases, **Table 50** presents the top 20 CBSAs in terms of the number of HHA-initiated episodes. Although Chicago and Los Angeles have the highest volume of HHA community-initiated episodes, these types of episodes are also common to several different metropolitan areas in Texas and Florida as well as rural areas of Texas, Mississippi, Oklahoma, and North Carolina.

Table 47. Standardized Post-Acute Care Payments for Acute Hospital-Initiated Episodes, by State, 2008, Episode Definition 30-Day Fixed: Any Claim Starting Within 30 Days

State	Number of PAC Users ¹	Percent of Beneficiaries Discharged to PAC ² (%)	Mean PAC Payment Per Discharge ³ (\$)	CV ⁴	Mean PAC Payment Per PAC User ⁵ (\$)	CV ⁴	Mean PAC LOS Per PAC User ⁶ (days)	CV ⁴
Top 5 States for Mean PAC Payment Per PAC User								
LA	9,160	35.2	\$6,291	2.2	\$14,864	1.3	48.7	0.6
TX	41,438	38.3	\$6,453	2.0	\$14,387	1.2	47.2	0.6
NV	3,853	37.3	\$6,355	2.1	\$14,359	1.2	39.6	0.6
IN	17,038	37.9	\$6,362	2.0	\$14,282	1.2	42.2	0.7
OH	29,900	40.2	\$6,161	2.0	\$12,982	1.2	40.5	0.7
Middle 10 States for Mean PAC Payment Per PAC User								
CO	7,266	39.7	\$5,418	2.1	\$11,571	1.3	37.4	0.7
FL	49,482	43.0	\$5,772	1.9	\$11,536	1.2	39.9	0.6
NM	2,683	32.1	\$4,528	2.2	\$11,463	1.2	42.2	0.6
AL	11,617	31.2	\$4,442	2.3	\$11,457	1.2	45.0	0.6
GA	15,553	32.3	\$4,645	2.3	\$11,430	1.3	42.2	0.7
MO	16,991	37.2	\$5,220	2.1	\$11,429	1.3	39.6	0.8
MI	25,376	39.3	\$5,306	2.1	\$11,293	1.3	41.0	0.7
DE	2,757	42.7	\$5,614	1.9	\$11,189	1.2	36.7	0.6
NH	3,796	47.3	\$4,528	2.2	\$11,161	1.3	42.3	0.7
AZ	8,563	30.6	\$4,376	2.3	\$11,097	1.2	33.8	0.6

(continued)

Table 47. Standardized Post-Acute Care Payments for Acute Hospital-Initiated Episodes, by State, 2008, Episode Definition of 30-Day Fixed: Any Claim Starting Within 30 Days (continued)

State	Number of PAC Users ¹	Percent of Beneficiaries Discharged to PAC ² (%)	Mean PAC Payment Per Discharge ³ (\$)	CV ⁴	Mean PAC Payment Per PAC User ⁵ (\$)	CV ⁴	Mean PAC LOS Per PAC User ⁶ (days)	CV ⁴
Bottom 5 States for Mean PAC Payment Per PAC User								
OR	4,578	33.2	\$3,838	2.1	\$8,925	1.2	35.7	0.6
SD	2,294	35.3	\$3,853	2.4	\$8,747	1.5	34.0	0.9
MT	2,215	31.9	\$3,525	2.4	\$8,429	1.4	35.5	0.8
IA	8,498	36.2	\$3,787	2.2	\$8,092	1.3	32.8	0.8
AK	491	21.7	\$2,626	3.1	\$7,395	1.8	33.8	0.7

1. PAC users are defined as beneficiaries discharged to SNF, IRF, LTCH, HHA, or therapy following discharge from an index acute hospitalization.
2. Percentage of beneficiaries discharged to PAC is calculated as the proportion of PAC user of beneficiaries with an index acute hospitalization. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
3. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy and acute hospital readmission. Note that per-hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user (use of PAC services following discharge from an index acute hospitalization). This includes acute hospital readmissions for non-PAC users.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmission. Per-PAC user calculations include only beneficiaries discharged to PAC.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim.

Source: RTI analysis of 2008 Medicare claims (M3MM200).

Table 48. Standardized Post-Acute Care Payments for Acute Hospital-Initiated Episodes, by CBSA, 2008, Episode Definition of 30-Day Fixed: Any Claim Starting Within 30 Days

Top 20 CBSAs by Volume of PAC Users	Number of PAC Users ¹	Percent of Beneficiaries Discharged to PAC ² (%)	Mean PAC Payment Per Discharge ³ (\$)	CV ⁴	Mean PAC Payment Per PAC User ⁵ (\$)	CV ⁴	Mean PAC LOS Per PAC User ⁶ (days)	CV ⁴
New York-White Plains-Wayne, NY-NJ	23,031	43.1	\$5,998	1.7	\$11,687	1.1	39.7	0.6
Chicago-Naperville-Joliet, IL	19,111	41.3	\$6,105	1.9	\$12,354	1.1	41.9	0.6
Los Angeles-Long Beach-Santa Ana, CA	13,403	42.8	\$6,682	1.9	\$13,320	1.2	43.5	0.6
Philadelphia, PA	9,986	45.6	\$5,709	1.9	\$10,755	1.2	38.2	0.7
Nassau-Suffolk, NY	9,023	43.2	\$5,459	1.7	\$10,757	1.0	37.8	0.6
Boston-Quincy, MA	8,151	49.7	\$6,735	1.8	\$11,881	1.2	43.5	0.6
St. Louis, MO-IL	7,953	39.3	\$5,373	2.1	\$11,174	1.3	39.5	0.7
Tampa-St. Petersburg-Clearwater, FL	7,546	44.4	\$6,119	1.9	\$11,995	1.2	39.7	0.6
Houston-Sugar Land-Baytown, TX	7,544	37.0	\$7,072	2.1	\$16,188	1.2	45.6	0.6
Edison, NJ	7,213	47.4	\$6,676	1.7	\$12,396	1.0	38.1	0.6
Cleveland-Elyria-Mentor, OH	6,817	41.7	\$6,417	1.8	\$13,096	1.1	40.5	0.6
Warren-Troy-Farmington-Hills, MI	6,777	40.8	\$5,591	2.0	\$11,543	1.2	41.7	0.6
Baltimore-Towson, MD	6,652	33.0	\$4,377	2.0	\$10,124	1.1	34.2	0.6
Atlanta-Sandy Springs-Marietta, GA	6,343	33.6	\$4,943	2.3	\$11,818	1.3	43.9	0.6
Washington-Arlington-Alexandria DC-VA	6,279	37.6	\$4,979	2.0	\$10,794	1.2	36.7	0.7
Rural NC	6,003	33.5	\$4,641	2.1	\$11,083	1.2	41.6	0.7
Newark-Union, NJ-PA	5,836	44.0	\$6,518	1.8	\$12,904	1.0	39.8	0.6
Dallas-Plano-Irving, TX	5,779	41.0	\$6,927	1.9	\$14,685	1.1	46.6	0.6

(continued)

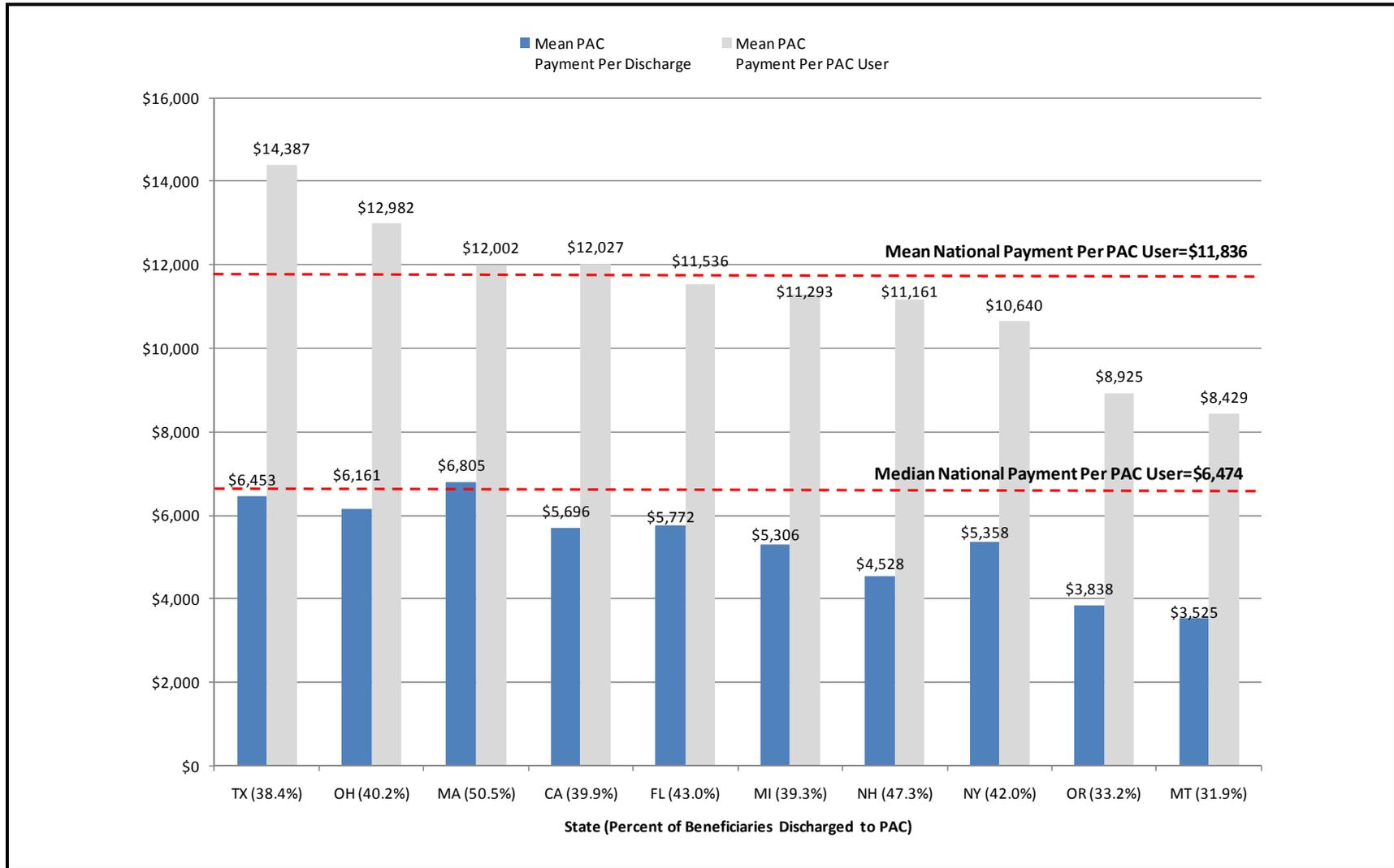
Table 48. Standardized Post-Acute Care Payments for Acute Hospital-Initiated Episodes, by CBSA, 2008, Episode Definition 30-Day Fixed: Any Claim Starting Within 30 Days (continued)

Top 20 CBSAs by Volume of PAC Users	Number of PAC Users ¹	Percent of Beneficiaries Discharged to PAC ² (%)	Mean PAC Payment Per Discharge ³ (\$)	CV ⁴	Mean PAC Payment Per PAC User ⁵ (\$)	CV ⁴	Mean PAC LOS Per PAC User ⁶ (days)	CV ⁴
Pittsburgh, PA	5,360	47.0	\$6,696	1.9	\$12,362	1.2	39.2	0.6
Rural TX	5,128	38.1	\$5,743	2.1	\$12,789	1.2	48.3	0.6

1. PAC users are defined as beneficiaries discharged to SNF, IRF, LTCH, HHA, or therapy following discharge from an index acute hospitalization.
2. Percentage of beneficiaries discharged to PAC is calculated as the proportion of PAC user of beneficiaries with an index acute hospitalization. An index acute hospitalization is defined as a hospital admission following a 30-day period without acute, LTCH, SNF, IRF, or HHA service use.
3. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmission. Note that per-hospital discharge calculations include use of acute and post-acute care services for beneficiaries who do not meet the criteria of PAC user (use of PAC services following discharge from an index acute hospitalization). This includes acute hospital readmissions for non-PAC users.
4. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.
5. Post-acute care includes Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospital readmission. Per-PAC user calculations include only beneficiaries discharged to PAC.
6. Post-acute care length of stay is defined as the difference between the admission date on the first PAC episode claim and the discharge date on the last PAC episode claim. Note that for some beneficiaries there may be a gap in service use between the discharge date on the index acute hospital claim and the admission date on the first PAC episode claim.

Source: RTI analysis of 2008 Medicare claims (M3MM200).

Figure 4. Benchmarking Analysis: Mean PAC Episode Payment Per PAC User, and Per Discharge for Acute Initiated Episodes, By State, Episode Definition 30-day Fixed Any Claim Starting Within 30 Days, 2008



Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM200).

Table 49. Standardized Post-Acute Care Payments for HHA-Initiated Episodes, by State, 2008, Episode Definition of 30-Day Fixed: Any Claim Starting Within 30 Days

State	N	Mean Episode Payment ¹ (\$)	CV ²	Mean Episode LOS ¹ (days)	CV ²
Top 5 States for Mean Episode Payment Per User					
IN	3,904	\$7,732	1.6	66.3	0.6
TN	6,354	\$7,656	1.4	76.1	0.5
WV	962	\$7,376	1.5	65.2	0.6
CT	3,441	\$7,333	1.4	56.9	0.7
WY	186	\$7,320	1.5	60.7	0.6
Middle 10 States for Mean Episode Payment Per User					
GA	6,706	\$6,565	1.5	66.4	0.6
NV	1,779	\$6,519	1.6	62.0	0.6
NC	6,650	\$6,479	1.5	57.4	0.7
NE	840	\$6,461	1.4	53.8	0.7
TX	23,528	\$6,451	1.3	86.6	0.4
DE	449	\$6,441	1.3	52.0	0.7
MO	4,311	\$6,413	1.5	55.5	0.7
VA	5,366	\$6,412	1.4	57.8	0.7
WI	1,840	\$6,403	1.3	52.6	0.7
MI	14,321	\$6,385	1.4	64.7	0.6
Bottom 5 States for Mean Episode Payment Per User					
CA	19,251	\$5,690	1.4	55.1	0.7
SD	236	\$5,621	1.4	42.5	0.8
MT	400	\$5,603	1.2	48.8	0.7
VT	739	\$5,580	1.3	59.2	0.7
OR	1,733	\$5,239	1.3	49.7	0.7

1. Episode length of stay is defined as the difference between the admission date on the first episode claim and the discharge date on the last episode claim. Episode payments include Medicare payments for SNF, IRF, LTCH, HHA, therapy, and acute hospitalizations.

2. Coefficient of variation (CV) is the ratio of the standard deviation to the mean.

Source: RTI analysis of 2008 Medicare claims (M3MM200).

Table 50. Standardized Post-Acute Care Payments for HHA-Initiated Episodes, by CBSA, 2008, Episode Definition of 30-Day Fixed: Any Claim Starting Within 30 Days

CBSA	Number of PAC Users	Mean PAC Payment Per PAC User (\$)	CV	Mean PAC LOS Per PAC User (days)	CV
Chicago-Naperville-Joliet, IL	11,599	\$6,000	1.8	83.7	0.4
Los Angeles-Long Beach-Santa Ana, CA	9,124	\$5,562	1.7	62.9	0.5
Warren-Troy-Farmington-Hills, MI	7,303	\$6,158	1.5	67.6	0.5
New York-White Plains-Wayne, NY-NJ	6,447	\$6,042	1.6	51.3	0.6
Miami-Miami Beach-Kendall, FL	5,261	\$4,836	1.6	57.7	0.5
Tampa-St. Petersburg-Clearwater, FL	5,005	\$6,081	1.6	53.3	0.6
West Palm Beach-Boca Raton-Boynton FL	4,311	\$5,752	1.6	53.2	0.6
Houston-Sugar Land-Baytown, TX	4,297	\$6,410	1.6	87.9	0.4
Dallas-Plano-Irving, TX	3,885	\$6,376	1.8	88.3	0.3
Ft Lauderdale-Pompano Beach-Deerfield	3,136	\$5,548	1.7	56.5	0.6
Rural TX	3,098	\$6,316	1.5	88.8	0.4
Atlanta-Sandy Springs-Marietta, GA	2,956	\$6,518	1.7	68.0	0.5
Philadelphia, PA	2,632	\$6,261	1.6	57.8	0.6
McAllen-Edinburg-Mission, TX	2,549	\$5,475	1.5	92.1	0.3
Rural MS	2,415	\$7,398	1.8	86.9	0.4
Detroit-Livonia-Dearborn, MI	2,408	\$6,587	1.7	67.6	0.6
St. Louis, MO-IL	2,274	\$6,421	1.5	57.2	0.6
Jacksonville, FL	2,019	\$6,182	1.6	62.7	0.5
Rural OK	1,926	\$7,134	1.7	89.2	0.4
Rural NC	1,893	\$6,858	1.6	61.9	0.6

Source: RTI Analysis of 2008 Medicare Claims (M3MM200).

7. LONGITUDINAL COHORT ANALYSES

The final set of analyses was conducted on the longitudinal cohort analytic sample described in Section 2. This analytic sample was developed to allow us to follow beneficiary utilization patterns over a 2-year period to learn more about patterns of service use for different types of beneficiaries beyond what we observe in the first episode. The analyses presented here provide information on utilization and payments for twenty-four 30-day windows following discharge from an initiating event. Data are presented by initiating event (acute, HHA, LTCH, and IRF). For beneficiaries with acute hospital-initiated episodes, additional information on service-specific utilization and utilization by index acute MS-DRG is also presented.

Figure 5 shows the proportion of beneficiaries with an acute or PAC claim (HHA, SNF, IRF, LTCH, or therapy) in each of the twenty-four 30-day windows following discharge from an initiating event. Data are shown here for beneficiaries with acute, HHA, LTCH, and IRF-initiated episodes. Within the first 90 days following discharge from an initiating event, beneficiaries with acute hospital-initiated episodes have the highest proportion of beneficiaries using acute or PAC service, followed by beneficiaries with an IRF-initiated episode. Of beneficiaries with an acute hospital-initiated event, 100 percent had a claim in the first window (days 1 to 30 following discharge from the acute initiating event) because our sample focused on PAC users. After 90 days, the proportion of beneficiaries with acute hospital-initiated episodes with an acute or PAC claim decreases significantly and is lower than among any of the beneficiaries with community-initiated episodes. After day 90 and for the remainder of the 2-year period examined here, beneficiaries with HHA-initiated episodes have the highest proportion of beneficiaries with an acute or PAC claim, indicating that these beneficiaries may be more likely to be chronically ill and in need of ongoing care.

While Figure 5 provides information on the percentage of beneficiaries using different services following discharge from an initiating event, **Figure 6** provides information on the payment associated with that service use by type of initiating event. Payments are presented per PAC user, so the denominator is constant across each window and includes all beneficiaries with an initiating event. Mean payments per PAC user are highest for beneficiaries with acute hospital-initiated episodes in the first 30 days following discharge from the initiating event, but for the remainder of the analysis period, beneficiaries with LTCH-initiated episodes have the highest payments per PAC user. Although beneficiaries with HHA-initiated episodes had the highest proportion of beneficiaries with at least one acute or PAC claim after 90 days (as seen in Figure 5), the payments associated with this use are low and likely indicative of ongoing HHA and therapy services.

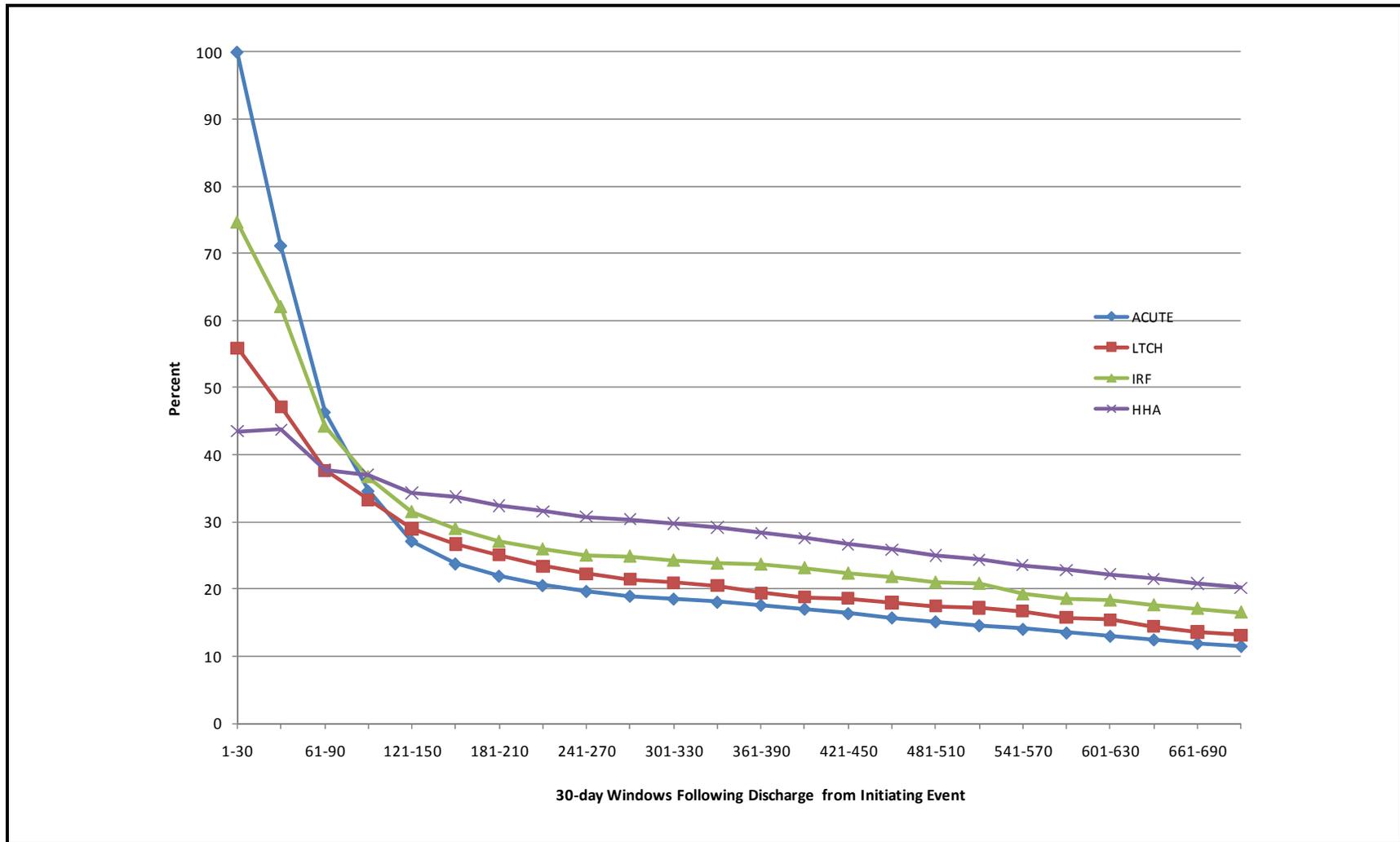
For beneficiaries with acute hospital-initiated episodes, **Figure 7** and **Figure 8** provide more detail on the percentage of beneficiaries with a claim by service type and the mean

payments per PAC user by service type. Although physician service use is not included in Figure 5 or Figure 6, these services were included in Figure 7 and Figure 8 to demonstrate the high proportion of physician service use following discharge from an acute hospital-initiated episode and the continued use of these services over the 2-year period. In looking specifically at PAC services, HHA and SNF service use is relatively high compared with other PAC services in the first 90 days following discharge from an acute hospitalization. While 10 percent of beneficiaries use IRF in the first 30 days after discharge, this percentage decreases to less than 1 percent for the remainder of the analysis period. The proportion of beneficiaries with an acute hospitalization is highest in the first 90 days following discharge from the index hospitalization and then decreases for the remainder of the analysis period. After day 90, use of HHA and acute hospitalization are most common among beneficiaries with acute hospital-initiated episodes. The payments per PAC user shown in Figure 8 reveal that the payments per PAC user for SNF are highest up until day 60, but the payments per PAC user for acute hospitalizations are highest for the remainder of the analysis period. Although a high proportion of beneficiaries use physician services in each window, the payments associated with these services are very low.

To learn more about the differences in use patterns over a 2-year period for beneficiaries with different diagnoses in their acute initiating event, we looked at the mean acute and PAC payments for beneficiaries in the top five MS-DRGs in terms of volume of discharges to PAC (**Figure 9**). Beneficiaries in MS-DRG 065, "Intracranial hemorrhage or cerebral infarction w CC," and beneficiaries in MS-DRG 481, "Hip & femur procedures except major joint w CC," had the highest payments per PAC user for the first 90 days following discharge from the index acute hospitalization. Payments per PAC user for beneficiaries in MS-DRG 470 decreased at the fastest rate and were lowest among the top five MS-DRGs starting at 30 days following discharge from the index hospitalization.

Figure 10 and **Figure 11** show the mean payment per PAC user by service type for the top two MS-DRGs for beneficiaries with acute hospital-initiated episodes (MS-DRG 470, "Major joint replacement or reattachment of lower extremity w/o MCC" and MS-DRG 194, "Simple pneumonia & pleurisy w CC") to reveal more about differences in service-specific utilization for a rehabilitative diagnosis versus a medical diagnosis. Figures 10 and 11 use the same scale on the vertical axis to enable comparison of the mean payments across these two MS-DRGs. Most notably, the mean payments per PAC user for SNF and for acute hospitalizations were higher for beneficiaries in MS-DRG 194 across the analysis period compared with beneficiaries in MS-DRG 470. Mean payments per PAC user for HHA were higher for beneficiaries in MS-DRG 470 in the first 30 days following discharge from the index hospitalization, but were similar to that seen for beneficiaries in MS-DRG 194 after day 30. These two figures highlight differences in longer term utilization patterns for beneficiaries with different types of index diagnoses.

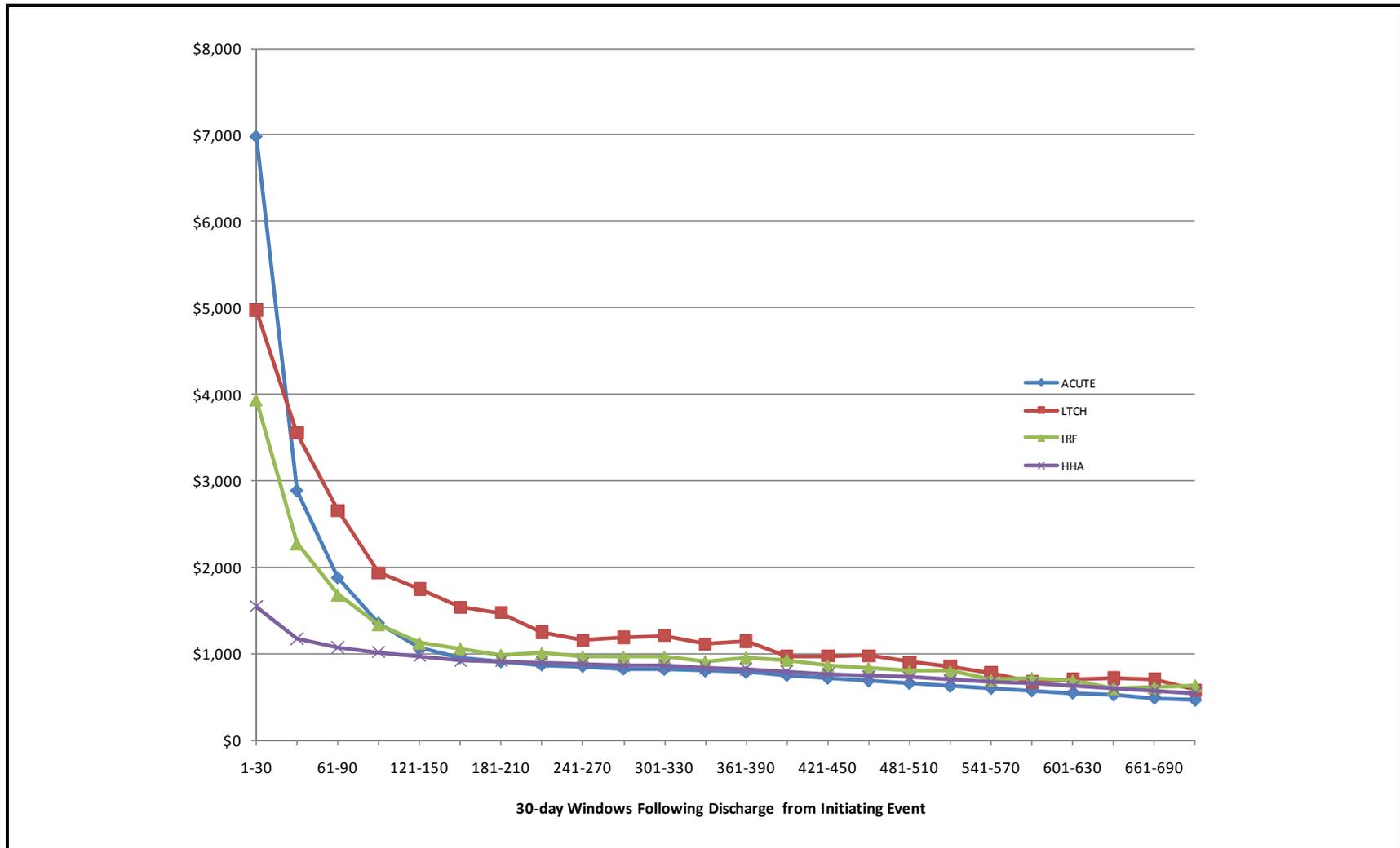
Figure 5. Percentage of Beneficiaries With an Acute or PAC Claim Following Discharge From Initiating Event, by Type of Initiating Event



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM197).

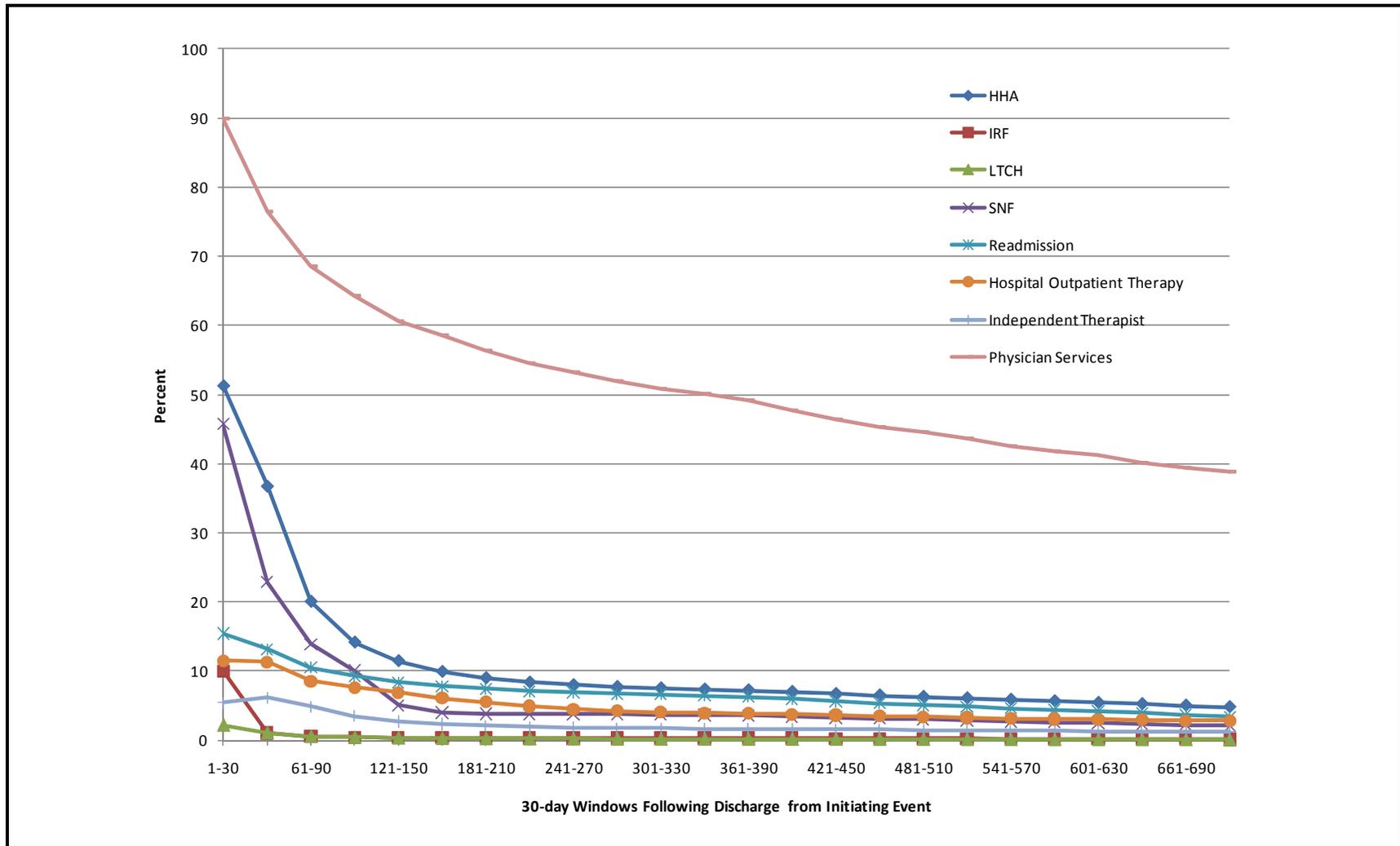
Figure 6. Mean Acute and PAC Payments Per PAC User Following Discharge From Initiating Event, by Type of Initiating Event



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM197).

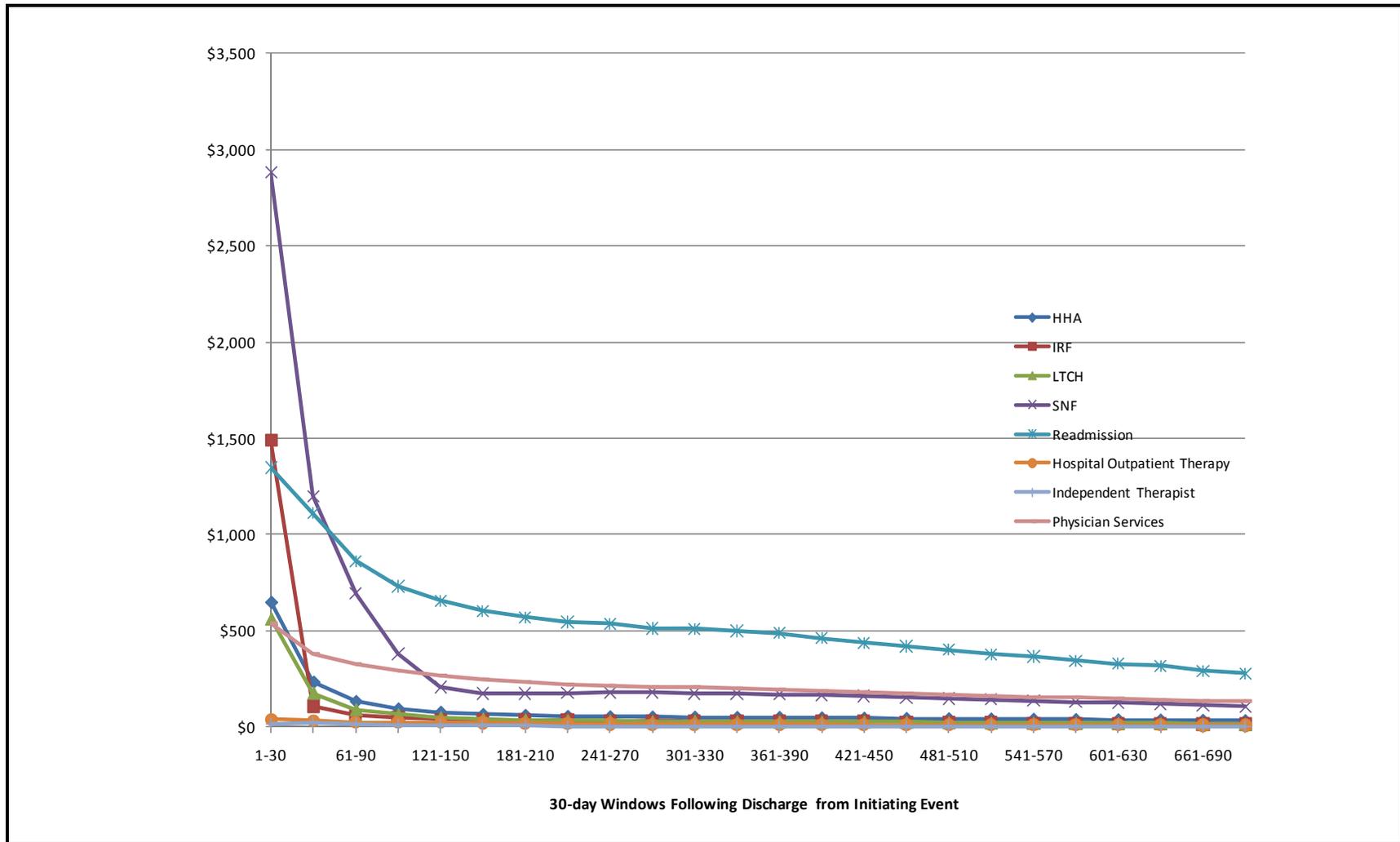
Figure 7. Percentage of Beneficiaries With an Acute, PAC, or Physician Claim Following Discharge From an Acute Initiating Event, by Type of Claim



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM181).

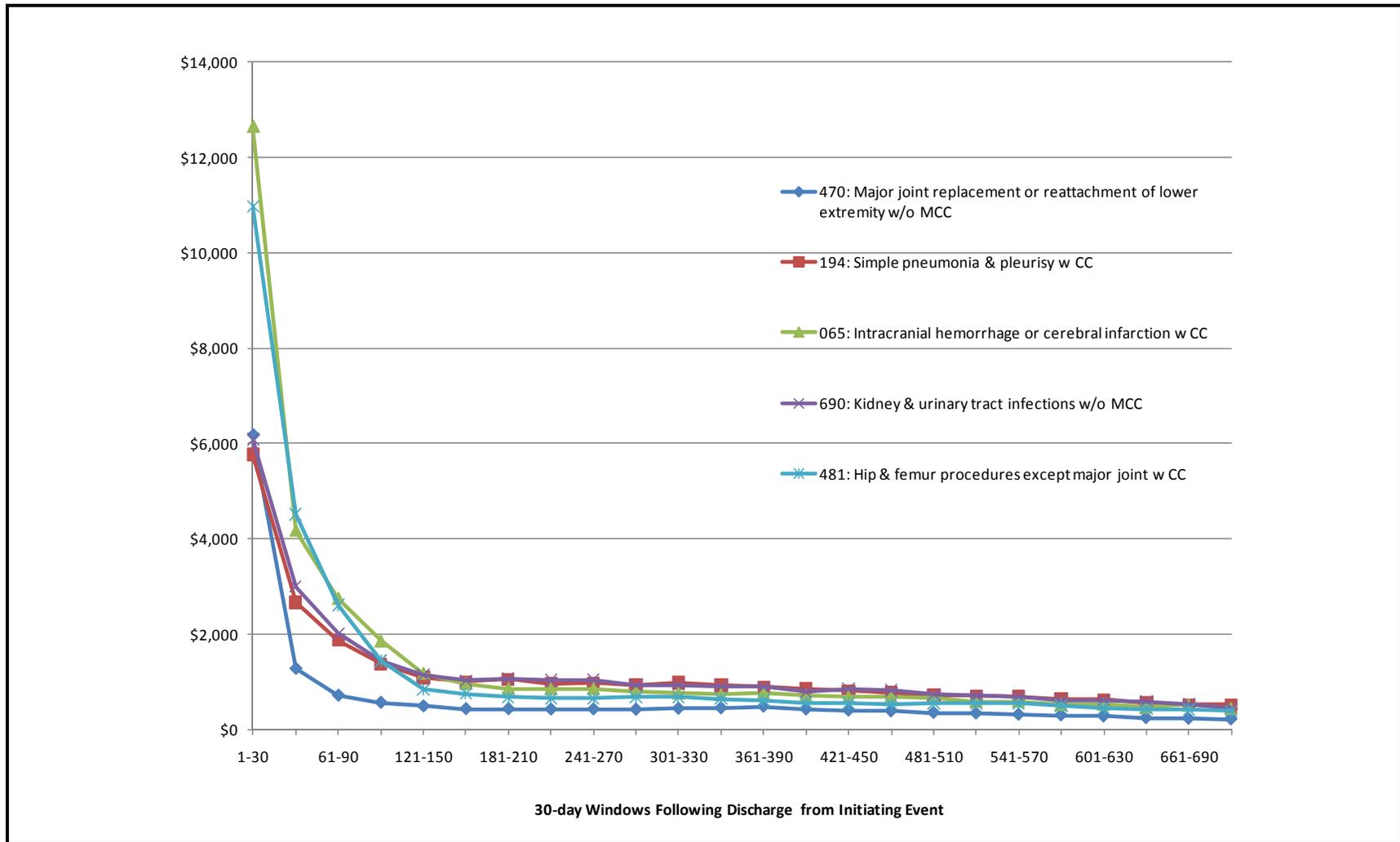
Figure 8. Mean Acute, PAC, and Physician Payments Per User PAC User Following Discharge From an Acute Hospital-Initiated Event, by Type of Claim



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM181).

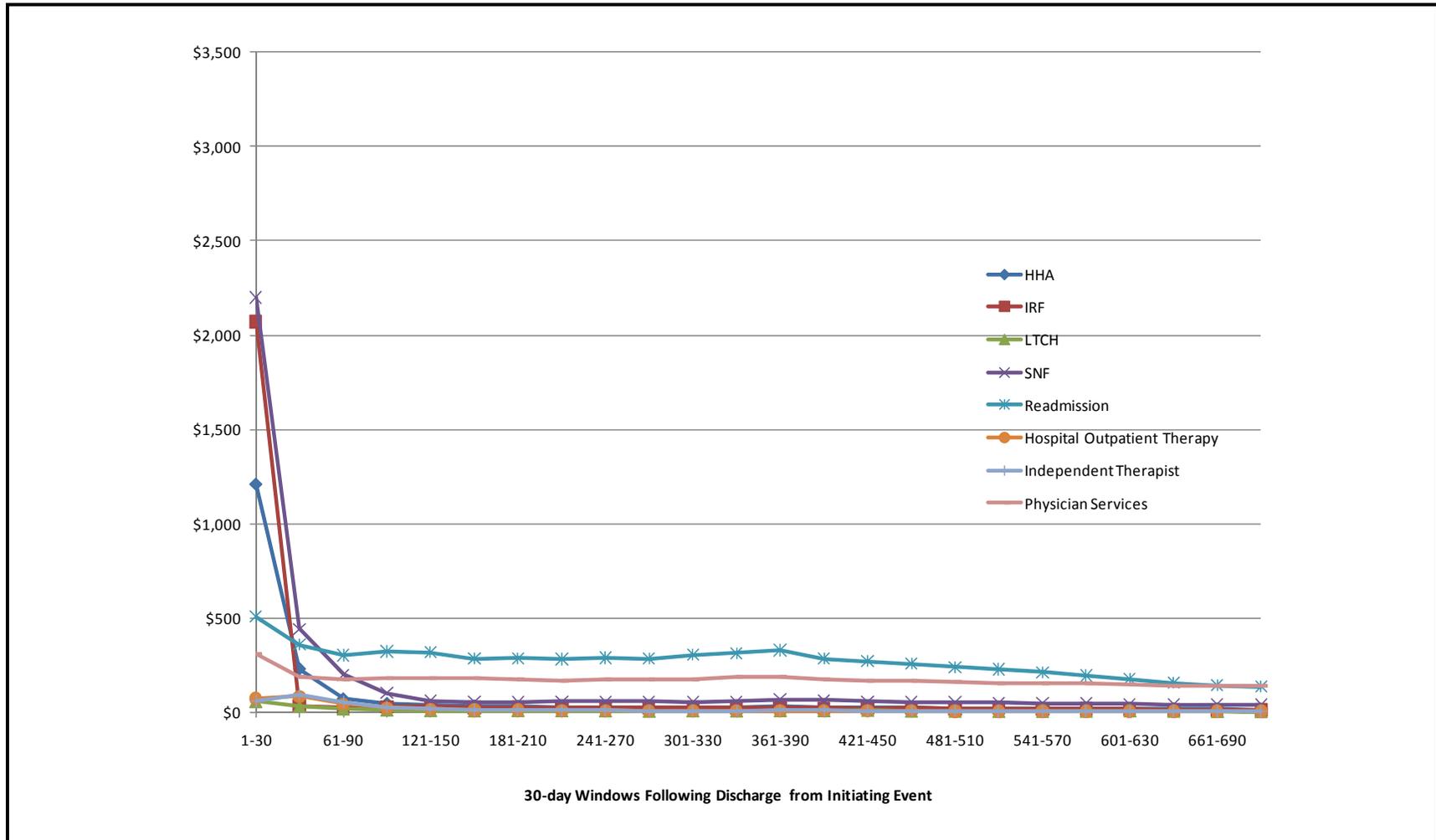
Figure 9. Mean Acute and PAC Payments Per PAC User Following Discharge From an Acute Initiating Event, by MS-DRG



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM181).

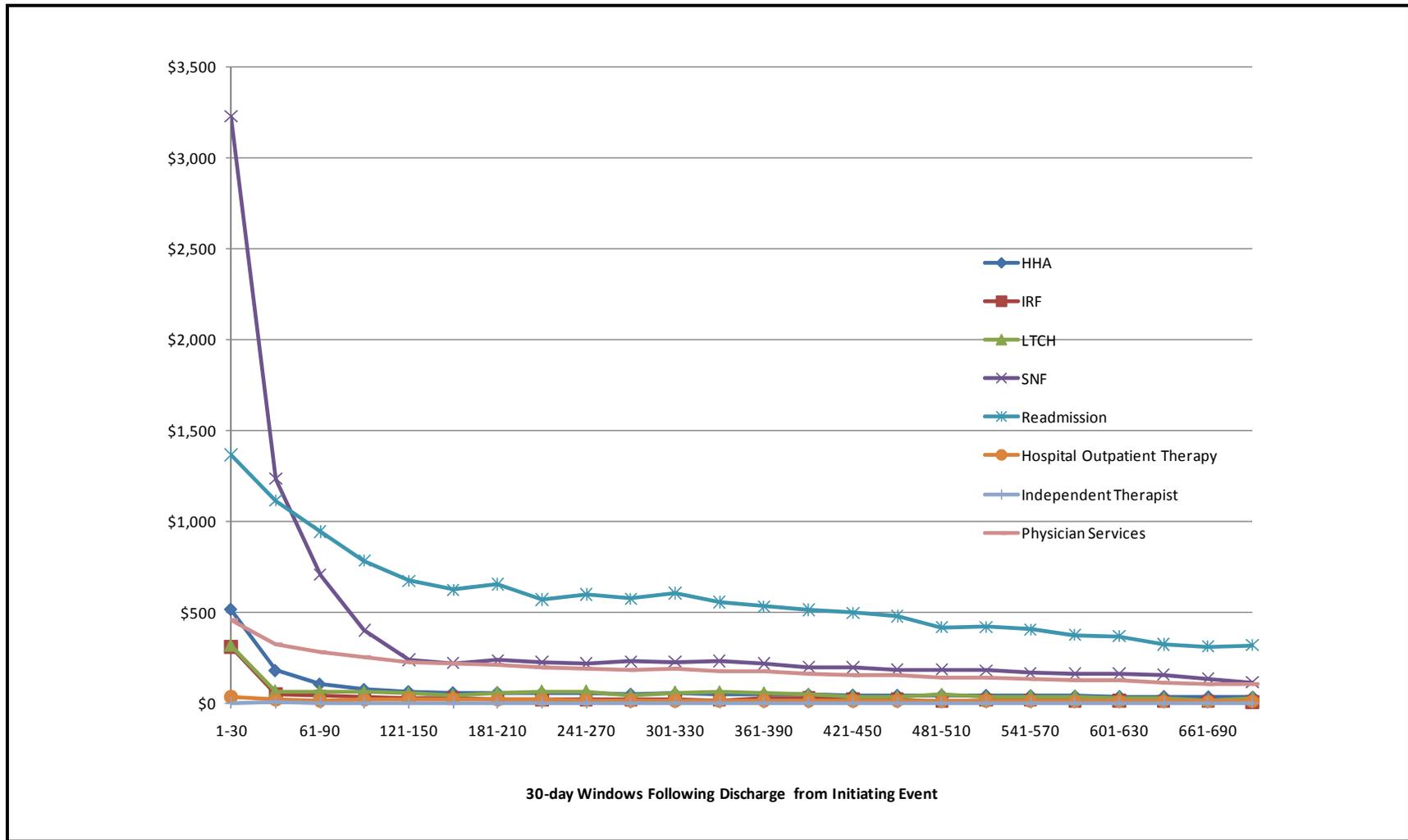
Figure 10. Mean Acute, PAC, and Physician Payments Per User PAC User Following Discharge From an Acute Initiating Event, by Type of Claim, MS-DRG 470, "Major Joint Replacement or Reattachment of Lower Extremity w/o MCC"



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM181).

Figure 11. Mean Acute, PAC, and Physician Payments Per User PAC User Following Discharge From an Acute Initiating Event, by Type of Claim, MS-DRG 194, "Simple Pneumonia & Pleurisy w CC"



Note: All initiating events occurred in 2006. Twenty-four 30-day windows were constructed following discharge from the initiating event to follow service use for 2 years.

Source: RTI analysis of 2006, 2007, and 2008 Medicare claims (M3MM181).

8. DISCUSSION AND POLICY IMPLICATIONS

The analyses presented in this report demonstrate the differences in episode composition and payments associated with beneficiaries initiating their PAC episode with an acute hospitalization versus the community entrants who initiate PAC use without a prior hospitalization. This work is an important complement to earlier work by ASPE and RTI looking at PAC utilization following an acute hospitalization. The current work highlights differences in the types of diagnoses and patterns of service use within episodes for those initiating services with an acute hospitalization compared with community entrants. The diagnoses of community entrants are in general more characteristic of chronic conditions and the need for ongoing care while the diagnoses for beneficiaries with acute hospital-initiated episodes are more acute in nature. The longitudinal cohort analysis also provides additional detail on the longer term use patterns for beneficiaries initiating PAC service use in different settings beyond what we observe in the first episode of care. Together, these analyses demonstrate the shorter term, higher cost nature of service use for beneficiaries initiating a PAC episode with an acute hospitalization compared with the longer term, relatively lower cost service use of those entering PAC directly from the community. Although these community entrants are a small proportion of total PAC users, their service use patterns are unique and indicative of longer term service use.

As in earlier work, the results looking at the impact of different episode definitions reveal substantial differences in the services included and the associated episode payments across the definitions examined. Because LTCH and IRF are most often the first sites of PAC for beneficiaries using these services, use and payments for LTCH and IRF are less sensitive to the shorter fixed-length episode definitions than HHA and SNF services, which are also often first sites of PAC but are often used following discharge from LTCH and IRF. Although a higher proportion of beneficiaries may use SNF and HHA under the longer, variable-length episode definitions, this proportion decreases when looking at the fixed-length definitions or definitions that exclude readmissions and subsequent PAC user. The inclusion or exclusion of readmissions and subsequent PAC use has a significant impact on total episode length of stay and episode payments when comparing across definitions. The illustration of these differences and their impact can help inform policy discussions on whether a readmission is part of an episode or the start of a new episode.

Another important contribution of this work is in the ability to track PAC use patterns over time using the cross-sectional analytic samples. In examining beneficiary episode utilization in 2006, 2007, and 2008, it is possible to see the slight changes in use. For example, there has been a slight increase in the percentage of beneficiaries discharged to PAC nationally (from 37.1 percent in 2006 to 38.7 percent in 2008). But of particular note is the slight change in the proportion of beneficiaries discharged to the different PAC settings over the 3-year period—specifically, the percentage of beneficiaries discharged to IRF. In 2006, 9.7

percent of beneficiaries were discharged to IRF, but this decreased to 8.6 percent in 2008, and MS-DRG-specific analysis highlighted the significant decrease in the proportion of beneficiaries with joint replacement (MS-DRG 470) discharged to IRF. These small changes are likely a result of CMS's phasing in changes in compliance criteria associated with IRF payment, but the ability to detect these changes is an important benefit of the analytic file.

The increased sample size of this work has also provided a valuable opportunity to look at differences in PAC use and payments at smaller geographic levels. The data provided here allow for more detailed analysis of MS-DRG level utilization at the state and CBSA level than were possible using the 5 percent files in earlier work. The results of this geographic analysis again highlight that provider supply and geography are significant drivers of PAC utilization and spending and that policy discussions related to PAC episode payment must recognize these issues and include discussions of the implications of benchmarking given different practice patterns and provider supply. This concept is also highlighted in the use per user, use per PAC user, and use per hospital discharge calculations of mean payments per service type. In areas of the country with LTCHs, a beneficiary using an LTCH may have mean payments of over \$33,000 although the mean LTCH use per hospital discharge can be closer to \$250 (depending on the episode definition examined). This raises important policy considerations if an episode payment were to be set based on national per-discharge use patterns.

The results of this work are meant to inform the larger discussion of PAC episodes and bundled payment policy. The information presented provides additional context to what episodes of care look like by different types of initiating events (acute versus community entrant) and what the implications are for setting an episode one way versus another. Although there has been much discussion of episode definitions that include service use for 30 days following hospital discharge, it is important to point out that "30 days following hospital discharge" can mean different things, and more precise language may be necessary. Does this include any service initiating within 30 days of acute hospital discharge? Or is it prorated to exclude service use after day 30? Are readmissions included or excluded? What about episodes that do not start with an acute hospitalization? The work presented here shows the impact of these different dimensions and the importance of these considerations as policy makers continue to consider bundled payment.

This work also demonstrates that the services in a beneficiary's trajectory included or excluded from an episode do vary by MS-DRG. For example, over three quarters of PAC payments for the 30-day variable episode (episode definition A) are also captured by the 30-day fixed-length episode definition where any claim initiating in the 30-days following acute discharge is included in the episode (episode definition C) for MS-DRG 470, "major joint replacement or reattachment," but this decreases to less than two thirds of PAC payments for beneficiaries in MS-DRG 194, "simple pneumonia & pleurisy w CC," and MS-DRG 690, "kidney & urinary tract infections." However, under the 30-day fixed-length

episode definition where services are prorated to reflect 30 calendar days of use, less than half of the PAC payments associated with the 30-day variable episode definition are captured for four out of the five top MS-DRGs by volume of PAC use. This indicates that in considering an episode definition, it is important to consider the proportion of services (and dollars associated with this use) in a clinical trajectory that the episode definition is actually capturing. It is also necessary to consider how service use will be paid for after an episode is complete, particularly if an episode includes 30 calendar days and payment for a service may be only partially covered under a bundle. The MS-DRG-specific analysis for acute hospital-initiated episodes also indicates that the decision to pay a bundle per hospital discharge versus per PAC user will have different implications for different MS-DRGs. A per-discharge bundle means something different for an MS-DRG with a high proportion of beneficiaries discharged to PAC services compared with an MS-DRG with a lower proportion of beneficiaries going on to use PAC services.

Next steps in ASPE and RTI's exploration of PAC episodes include work related to episode risk adjustment. This work is in collaboration with CMS and uses data from the Post Acute Care Payment Reform Demonstration, including the uniform patient assessment instrument and the Continuity Assessment Record and Evaluation (CARE) data. The goal of this work is to learn more about how patient assessment data can be used to predict episode utilization and payments. Additional work with ASPE will also examine the potential to use data from current assessment instruments and claims data. This work is part of ongoing research at ASPE on PAC episodes.

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