SECTION 3D

Long-term care hospital services

RECOMMENDATION

3D The Secretary should eliminate the update to the payment rate for long-term care hospitals for rate year 2011.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

SECTION 3D

Long-term care hospital services

Section summary

Long-term care hospitals (LTCHs) furnish care to patients with clinically complex problems—such as multiple acute or chronic conditions—who need hospital-level care for relatively extended periods. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. Medicare is the predominant payer for LTCH services, accounting for about two-thirds of LTCH discharges. In 2008, Medicare spent $4.6 billion on care furnished in an estimated 386 LTCHs nationwide. About 115,000 beneficiaries had almost 131,000 LTCH stays.

Assessment of payment adequacy

Our payment adequacy indicators for LTCHs, discussed below, suggest that LTCHs are able to operate at the current level of payment. We therefore recommend that the Secretary eliminate the update to payment rates for LTCH services for rate year 2011. We make this recommendation to the Secretary rather than the Congress because the Secretary has the authority to determine updates to payment rates for LTCHs.

Beneficiaries' access to care—We have no direct measures of beneficiaries' access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services furnished.

In this section

- ***Capacity and supply of providers***—The Medicare, Medicaid, and SCHIP Extension Act imposed a three-year limited moratorium on new LTCHs and new beds in existing LTCHs. While certain exemptions allowed some new LTCHs to open in 2008, the overall number of LTCHs filing cost reports declined about 1 percent. Counts of LTCHs are sensitive to the data used, however, and some data suggest an increase in LTCHs in 2008.
- ***Volume of services***—Controlling for change in the number of fee-for-service (FFS) beneficiaries, we found that the number of LTCH cases rose 3.6 percent between 2007 and 2008, suggesting that access to care was maintained during that period.

Quality of care—Unlike most other health care facilities, LTCHs do not submit quality data to CMS. Existing measures of quality are not reliable for LTCHs, and new ones need to be developed. The Commission instead uses unadjusted aggregate trends in in-facility mortality, mortality within 30 days of discharge, and readmission to the acute care hospital. Across all diagnoses, rates of death and readmission have remained stable and readmission rates have been stable or declining for the most frequently occurring LTCH diagnoses. The Commission plans to explore the feasibility of developing meaningful quality measures for LTCHs and the data needed for measurement.

Providers' access to capital—Relatively little equity has been raised by LTCH chains in recent months, likely due, at least in part, to the moratorium on new LTCHs, which has reduced opportunities for expansion and therefore reduced the need for capital.

Medicare payments and providers' costs—Between 2007 and 2008, spending per FFS beneficiary climbed 4.7 percent. Even before controlling for FFS enrollment, Medicare spending for LTCH services increased 2.4 percent. Over the same period, costs per case grew 2.1 percent.

The 2008 Medicare margin for LTCHs was 3.4 percent. Due to recent congressional rollbacks of CMS regulations that were designed to reduce payments to LTCHs and to anticipated improvements in provider documentation and coding, we expect payments per discharge to increase in 2010 without corresponding growth in provider costs. As a result, we estimate LTCHs' aggregate Medicare margin will be 5.8 percent in 2010. ■

Background

Patients with clinically complex problems, such as multiple acute or chronic conditions, may need hospital-level care for relatively extended periods. Some are treated in long-term care hospitals (LTCHs). These facilities can be either freestanding or colocated with other hospitals as hospitals within hospitals (HWHs) or satellites. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals and have an average length of stay greater than 25 days for its Medicare patients. (By comparison, the average Medicare length of stay in acute care hospitals is about five days.) Because of the relatively long stays and the level of care provided, care in LTCHs is expensive. Medicare is the predominant payer for LTCH services, accounting for about two-thirds of LTCH discharges. In 2008, Medicare spent $4.6 billion on LTCH care.

Since October 2002, Medicare has paid LTCHs prospective per discharge rates based primarily on the patient's diagnosis and the facility's wage index.[1] The prospective payment system (PPS) pays differently for patients who are high-cost outliers and for those whose lengths of stay are substantially shorter than the LTCH average. CMS reduced payment for very short stays in 2006 and again for a smaller group of the very shortest stays in 2007. The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) suspended the 2007 changes until December 29, 2010. (This policy is discussed in detail in the text box on payment for short-stay outliers (p. 253).)

LTCH payment rates are based on the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) patient classification system, which groups patients based primarily on diagnoses and procedures. MS–LTC–DRGs are the same groups used in the acute inpatient PPS but have relative weights specific to LTCH patients, reflecting the average relative costliness of cases in the group compared with that for the average LTCH case.

LTCH discharges are concentrated in a relatively small number of diagnosis groups. In fiscal year 2008, the top 20 LTCH diagnoses made up 55 percent of all LTCH discharges (Table 3D-1, p. 245). The most frequently occurring diagnosis was MS–LTC–DRG 207, respiratory diagnosis with ventilator support for 96 or more hours. Eight of the top 20 diagnoses, representing 30 percent of LTCH patients, were respiratory conditions.

Some LTCHs—both freestanding and those located within acute care hospitals—may function as de facto units of acute care hospitals. Research by the Commission and others has found that patients who use LTCHs have shorter acute care hospital lengths of stay than similar patients who do not use these facilities, suggesting that LTCHs substitute for at least part of the acute care hospital stay.[2] The Commission has long been concerned about the nature of the services furnished by LTCHs and how patient outcomes compare with those of other, less costly, providers. As a result, the Commission favors using criteria to define the level of care typically furnished in LTCHs (as well as in step-down units of many acute care hospitals and some specialized skilled nursing and inpatient rehabilitation facilities) and to help ensure that beneficiaries receive appropriate, high-quality care in the least costly setting consistent with their clinical conditions.

To discourage patient shifting between host hospitals and their HWHs and satellites, CMS established a new policy—the so-called 25 percent rule—in fiscal year 2005.[3] The 25 percent rule uses payment adjustments to limit the percentage of Medicare patients who are admitted from an HWH's or satellite's host hospital and paid for at full LTCH payment rates.[4] Until criteria can be developed, the 25 percent rule may be a useful, if blunt, tool. But it is a flawed one. Under the 25 percent rule, an LTCH's decision on whether to admit a patient may be based not only on the patient's clinical condition but also on how close the facility is to exceeding its threshold. In addition, as the Commission has previously noted, setting thresholds for only certain types of LTCHs is inequitable, especially given that the distinction between HWHs or satellites and freestanding LTCHs may not be meaningful.[5] Some HWHs admit patients from a wide network of referring acute care hospitals, while some freestanding LTCHs admit patients primarily from just one acute care hospital.

Beginning in July 2007, CMS extended the 25 percent rule to apply to all LTCHs, thus limiting the percentage of patients who could be admitted to an LTCH from any one referring acute care hospital during a cost-reporting period without being subject to a payment adjustment. However, MMSEA prevented the Secretary from phasing in the application of the 25 percent rule to freestanding LTCHs (see text box on recent legislation affecting LTCHs, p. 244).

Provisions of recent legislation for long-term care hospitals

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) included several provisions related to long-term care hospitals (LTCHs), including changes to the 25 percent rule and changes to the short-stay outlier policy. The American Recovery and Reinvestment Act of 2009 (ARRA) revised some of MMSEA's provisions.

The 25 percent rule

The MMSEA rolled back the phased-in implementation of the 25 percent rule for hospitals within hospitals (HWHs) and satellites, limiting the proportion of Medicare patients who can be admitted from an HWH's or satellite's host hospital during a cost-reporting period to not more than 50 percent and holding it at this level for three years. (The applicable threshold for HWHs and satellites in rural and urban areas with a single or dominant acute care hospital is 75 percent.) ARRA revised the implementation dates for the rollback of the 25 percent rule to July 1, 2007, or October 1, 2007, depending on facilities' cost-reporting periods. The MMSEA prohibits the Secretary from applying the 25 percent rule to freestanding LTCHs until December 29, 2010.

Short-stay outliers

As discussed in the text box (p. 253), Medicare applies different payment rules for LTCH cases with the shortest lengths of stay (so-called "very short-stay outliers"). The MMSEA prohibits the Secretary from applying these rules until December 29, 2010.

Moratorium on new LTCHs

The MMSEA also imposes a three-year moratorium on new facilities and new beds in existing facilities, upon enactment of the Act. The ARRA modified the effective date to July 1, 2007, or October 1, 2007, depending on facilities' cost-reporting periods. Exemptions from the moratorium are allowed for: (1) LTCHs that began their qualifying period demonstrating an average Medicare length of stay greater than 25 days on or before December 29, 2007; (2) entities that had a binding written agreement with an unrelated party for the construction, renovation, lease, or demolition of an LTCH, with at least 10 percent of the estimated cost of the project already expended by or before December 29, 2007; (3) entities that had obtained a state certificate of need on or before December 29, 2007; and (4) existing LTCHs that had obtained a certificate of need for an increase in beds issued on or after April 1, 2005, and before December 29, 2007.

CMS report to the Congress on LTCH facility and patient criteria

The MMSEA requires the Secretary to conduct a study on the use of LTCH facility and patient criteria to determine medical necessity and appropriateness of admission to and continued stay at LTCHs, considering both the Secretary's ongoing work on the subject and Commission recommendations (Medicare Payment Advisory Commission 2004). As this report goes to press, CMS's report was pending. ■

Are Medicare payments adequate in 2010?

To address whether payments for the current year (2010) are adequate to cover the costs providers incur and how much providers' costs should change in the coming year (2011), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of LTCH providers and changes over time in the volume of services furnished, quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs. Overall, the Medicare payment adequacy indicators signal that LTCHs are able to operate at the current level of payment without an update for 2011.

TABLE 3D–1 **The top 20 MS–LTC–DRGs made up more than half of LTCH discharges in 2008**

MS–LTC–DRG	Description	Discharges	Percent
207	Respiratory system diagnosis with ventilator support 96+ hours	14,986	11.5%
189	Pulmonary edema and respiratory failure	8,745	6.7
871	Septicemia or severe sepsis without ventilator support 96+ hours with MCC	6,482	5.0
177	Respiratory infections and inflammations with MCC	4,340	3.3
592	Skin ulcers with MCC	4,004	3.1
949	Aftercare with CC/MCC	3,752	2.9
193	Simple pneumonia and pleurisy with MCC	2,696	2.1
593	Skin ulcers with CC	2,590	2.0
190	Chronic obstructive pulmonary disease with MCC	2,558	2.0
208	Respiratory system diagnosis with ventilator support <96 hours	2,486	1.9
945	Rehabilitation with CC/MCC	2,275	1.7
178	Respiratory infections & inflammations with CC	1,964	1.5
559	Aftercare, musculoskeletal system & connective tissue with MCC	1,944	1.5
573	Skin graft and/or debridement for skin ulcer or cellulitis with MCC	1,912	1.5
539	Osteomyelitis with MCC	1,903	1.5
682	Renal failure with MCC	1,738	1.3
166	Other respiratory system OR procedures with MCC	1,693	1.3
291	Heart failure & shock with MCC	1,688	1.3
862	Postoperative & post-traumatic infections with MCC	1,672	1.3
919	Complications of treatment with MCC	1,659	1.3
	Top 20 MS–LTC–DRGs	71,087	54.3
	Total	130,869	100.0

Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), CC (complication or comorbidity), OR (operating room). MS–LTC–DRGs are the case-mix system for these facilities. Columns may not sum due to rounding.

Source: MedPAC analysis of MedPAR data from CMS.

Beneficiaries' access to care: Difficult to assess but minimal change in capacity and rise in volume of services indicate favorable access

We have no direct measures of beneficiaries' access to LTCH services. Instead, we consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish.

Capacity and supply of providers: Difficult to assess

As described in the text box, the MMSEA imposed a three-year limited moratorium on new LTCHs and new beds in existing LTCHs. We examined Medicare cost report data to assess the number of LTCHs and found that, though exemptions allowed some new LTCHs to open in fiscal year 2008, overall the number of LTCHs filing Medicare cost reports declined by a net of three facilities or about 1 percent (Table 3D-2, p. 246).

Use of Medicare's Provider of Service (POS) data, however, depicts a more favorable picture of LTCH capacity and supply. These data show that exemptions from the moratorium allowed 20 new LTCHs to open in fiscal year 2008, while 8 facilities closed, for a net gain of about 3 percent. Examination of POS data for fiscal year 2009 shows that an additional 19 new LTCHs opened last year, while 4 closed.

There are a number of reasons why the two data sources differ. Some Medicare-certified LTCHs may not yet have filed a cost report for 2008 when we undertook our analysis. LTCHs with very low Medicare patient

TABLE 3D–2

Number of LTCHs by type, 2003–2008

Type of LTCH	2003	2004	2005	2006	2007	2008	Average annual change 2003–2005	Average annual change 2005–2007	Average annual change 2007–2008
All	284	322	373	379	389	386	14.6%	2.1%	–0.8%
Urban	272	307	350	355	363	357	13.4	1.8	–1.7
Rural	12	15	23	24	24	23	38.4	2.2	–4.2
Freestanding	192	207	233	236	238	239	10.2	1.1	0.4
Hospital within hospital	92	115	140	143	151	147	23.4	3.9	–2.6
Nonprofit	64	74	87	86	85	84	16.6	–1.2	–1.2
For profit	200	227	262	269	280	281	14.5	3.4	0.4
Government	20	21	24	24	24	21	9.5	0.0	–12.5
Total certified beds	21,834	23,103	26,534	26,413	26,880	26,578	10.2	0.6	–1.1

Note: LTCH (long-term care hospital). Numbers may not sum to total due to missing data.

Source: MedPAC analysis of Medicare cost report data from CMS.

volume may be exempt from filing cost reports. In both cases, the LTCHs would not be included in the cost report data we analyzed but would be present in the POS data. At the same time, POS data may overstate the total number of LTCHs because facilities that close may not be immediately removed from the file. The cost report data, therefore, provide a more conservative estimate of capacity and supply. Further, Commission analysis revealed inaccuracies in ownership status in the POS data, so we opted to rely on cost report data to determine the distribution of facilities across the ownership and location categories shown in Table 3D-2.[6]

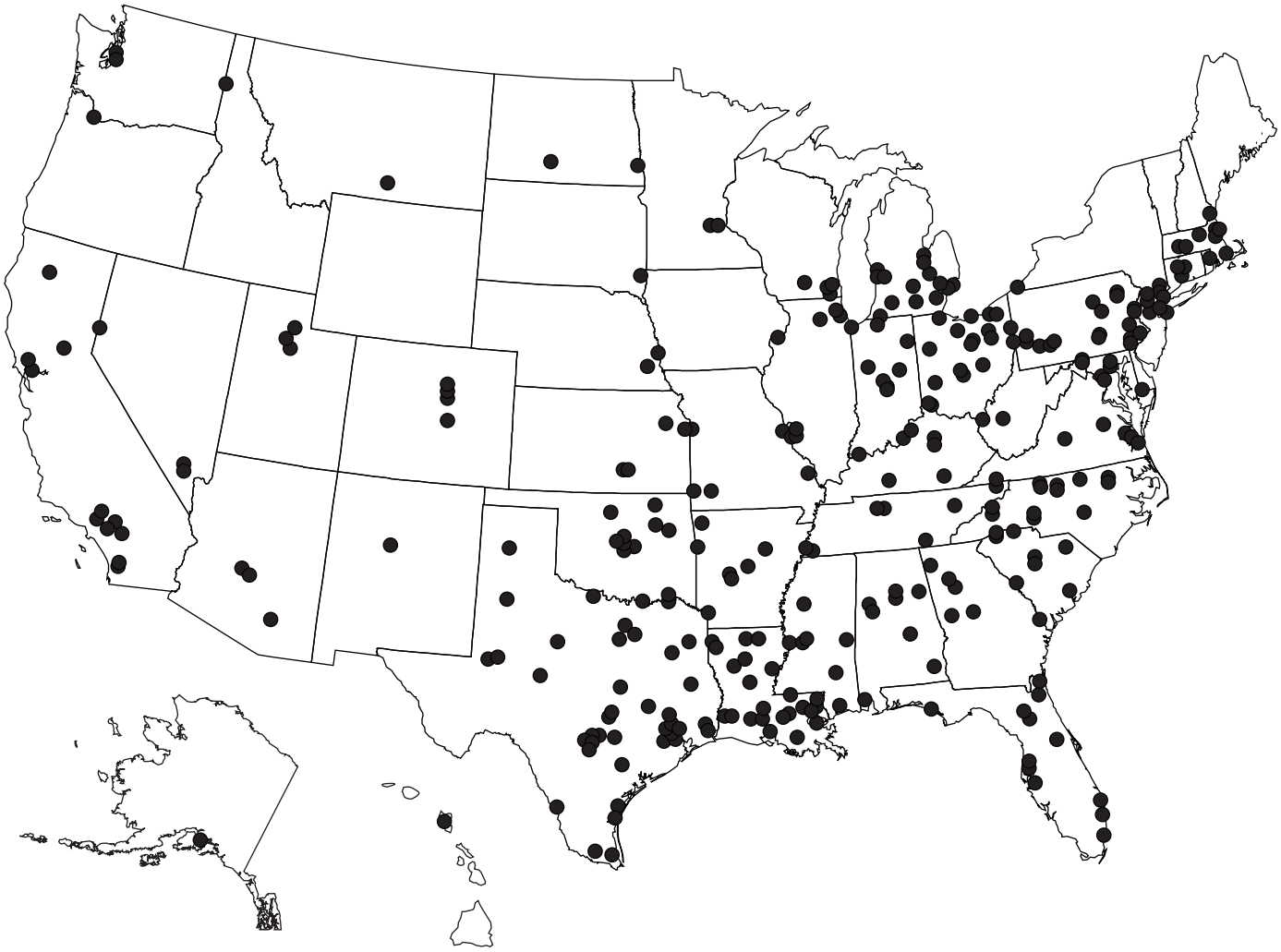
LTCHs are not distributed evenly across the nation. Some areas have many LTCHs; others have none (Figure 3D-1). In 2008, Massachusetts led the nation with the highest number of LTCH beds per 10,000 beneficiaries (30), followed by Rhode Island (29) and Louisiana (28). By contrast, Oregon, Iowa, and Washington have about 1 LTCH bed per 10,000 beneficiaries, while Hawaii has 0.5 LTCH bed per 10,000 beneficiaries, and 4 states have no LTCH beds at all.[7] Many LTCHs that have entered the Medicare program since implementation of the LTCH PPS have located in markets where LTCHs already existed instead of opening in new markets. This trend is somewhat surprising because these facilities are supposed to be serving unusually sick patients, and one would expect such patients to be relatively rare. The uneven distribution of LTCHs indicates that medically complex patients can be treated appropriately in other settings, making it difficult to assess the need for LTCH care and therefore the adequacy of supply.

Volume of services: Use of LTCHs by FFS beneficiaries continues to rise

Beneficiaries' use of services suggests that access has not been a problem. Controlling for the change in the number of fee-for-service (FFS) beneficiaries, we found that the number of LTCH cases rose 3.6 percent between 2007 and 2008, suggesting that access to care was maintained during this period (Table 3D-3, p. 248). A precise assessment of volume changes, however, is difficult because there are no criteria defining LTCH patients. Therefore, counting numbers of patients in LTCHs may not capture the extent of access beneficiaries have to that level of care; that is, not all patients treated in LTCHs may require that level of care, just as patients who do need that level of care often receive it in acute care hospitals. Demographic characteristics of Medicare beneficiaries admitted to LTCHs in 2008 are shown in Table 3D-4, p. 249.

FIGURE 3D–1

Long-term care hospitals are not distributed evenly across the nation



Source: MedPAC analysis of 2008 Provider of Service file and Medicare cost report data from CMS.

Quality of care: Meaningful measures not currently available while gross indicators show stability

Unlike most other health care facilities, LTCHs do not submit quality data to CMS. In the past, the Commission has used selected Agency for Healthcare Research and Quality (AHRQ) patient safety indicators (PSIs) to measure adverse events across all LTCHs using claims data. The Commission has always been cautious in interpreting the results of PSI measurements in LTCHs because the indicators were developed specifically for use in acute care hospitals. Further, the PSI rates can be affected by changes in coding practices unrelated to quality issues (Agency for Healthcare Research and Quality 2007). This year, in light of additional information about the validity of certain PSIs, the Commission has opted not to rely on them as indicators of quality of care in LTCHs. AHRQ recently completed an evaluation of its PSIs and made recommendations about their use in public reporting and pay-for-performance initiatives (Agency for Healthcare Research and Quality 2009). Many PSIs remain reliable indicators of potential quality problems, but two of the four PSIs historically used by the Commission to monitor trends in LTCH quality (decubitus ulcers and postoperative pulmonary embolism and

TABLE 3D–3

Medicare LTCH spending per FFS beneficiary continues to rise

	2003	2004	2005	2006	2007	2008	Average annual change 2003–2005	Average annual change 2005–2007	Average annual change 2007–2008
Cases	110,396	121,955	134,003	130,164	129,202	130,869	10.2%	–1.8%	1.3%
Cases per 10,000 FFS beneficiaries	30.8	33.4	36.4	36.0	36.4	37.7	8.8	0.0	3.6
Spending (in billions)	$2.7	$3.7	$4.5	$4.5	$4.5	$4.6	29.1	0.0	2.4
Spending per FFS beneficiary	$75.2	$101.3	$122.2	$124.3	$126.7	$132.6	27.5	1.8	4.7
Payment per case	$24,758	$30,059	$33,658	$34,859	$34,769	$35,200	16.6	1.6	1.2
Length of stay (in days)	28.8	28.5	28.2	27.9	26.9	26.7	–1.0	–2.3	–0.7

Note: LTCH (long-term care hospital), FFS (fee-for-service).

Source: MedPAC analysis of MedPAR data from CMS.

deep vein thrombosis) were frequently found to capture conditions that are present on admission, thus potentially contaminating the results of measurements covering the entire LTCH stay. AHRQ did not evaluate the other two PSIs used by the Commission (postoperative sepsis and infection due to medical care) because the implementation of new coding guidelines and new codes required major respecifications of the indicators.[8]

Currently, the Commission uses trends in in-facility mortality, mortality within 30 days of discharge, and readmission to acute care as unadjusted aggregated indicators of quality. We focus on examining trends, rather than levels, because levels can reflect both planned readmissions and unplanned incidents as well as coding practices. We consider these indicators for the top 15 LTCH diagnoses, which in 2008 accounted for 48 percent of all LTCH cases. We found that readmission rates have been stable or declining for most of these diagnoses. Trends in rates of death in LTCHs and death within 30 days of discharge from an LTCH are more difficult to interpret for individual diagnoses, but across all diagnoses these rates have remained stable.

Concerned about the lack of reliable quality measures for LTCHs, the Commission is planning to explore development of these measures with expert panels to help identify meaningful measures and the data needed for measurement. We also plan to assess the feasibility of risk-adjusted quality measurement at the provider level.

Providers' access to capital: Improving but still limited

Access to capital allows LTCHs to maintain and modernize their facilities. If LTCHs were unable to access capital, it might in part reflect problems with the adequacy of Medicare payments, since Medicare provides about 70 percent of LTCH revenues. In our March 2009 report, we noted that the economy wide credit crisis meant that LTCHs' difficulty accessing capital at that time told us little about Medicare payment adequacy. One year later, credit markets are operating in a more normal manner. But the three-year moratorium on new beds and facilities imposed by the MMSEA has reduced (but not eliminated) opportunities for expansion and need for capital. Overall it appears that relatively little equity has been raised by LTCH chains in recent months, with two notable exceptions.

In September 2009, Select Medical Corp., one of the two largest LTCH chains, raised $279.1 million in an initial public stock offering. In addition, publicly owned RehabCare Group announced in November 2009 that it had completed its merger with private-equity-funded Triumph. The merger makes RehabCare Group the third largest LTCH provider, behind Select and Kindred.

TABLE 3D–4

Characteristics of Medicare beneficiaries using LTCHs, 2008

Characteristic	Percent of beneficiaries
Sex	
Female	52%
Male	48
Race	
White, non-Hispanic	74
African American, non-Hispanic	19
Hispanic	4
Other	3
Age	
<65	22
65–74	30
75–84	31
85+	18

Note: LTCH (long-term care hospital). Columns may not sum due to rounding.

Source: MedPAC analysis of MedPAR data from CMS

Medicare payments and providers' costs

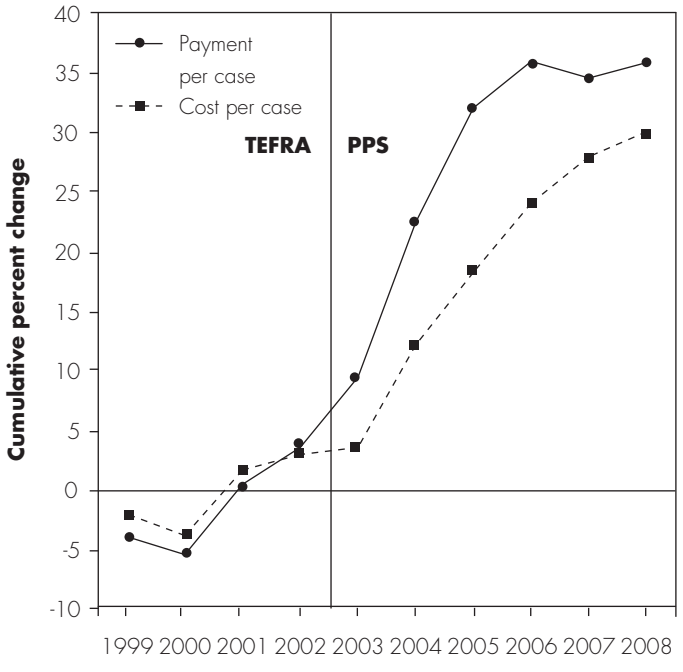
In the first three years of the LTCH PPS, Medicare spending for LTCH services grew rapidly, climbing an average of 29 percent per year (Table 3D-3). Between 2005 and 2007, however, payments held steady at $4.5 billion due to changes in payment policies and growth in the number of beneficiaries enrolling in Medicare Advantage plans, whose LTCH use is not included in these totals. Between 2007 and 2008, spending began to tick upward, rising 2.4 percent. Medicare spending per FFS beneficiary rose almost twice as much, climbing 4.7 percent. CMS estimates that total Medicare spending for LTCH services will be $4.8 billion in 2010 and will reach $5.2 billion in 2013 (Bean 2009).

Payment per case increased rapidly after the PPS was implemented, climbing 16.6 percent between 2003 and 2005. Cost per case also increased rapidly during this period, albeit at a slower pace (Figure 3D-2). More recently, growth in both payment per case and cost per case has slowed. LTCHs appear to be responsive to changes in payments, adjusting their costs per case when payments per case change. Although payments were significantly higher than costs, the rise in cost per case from 2000 to 2006 roughly paralleled growth in payments per case. The gap between payment and cost growth narrowed in 2007 but held steady between 2007 and 2008.

Much of the growth in payments since the PPS was implemented has been due to an increase in the reported patient case-mix index, which, in principle measures the expected costliness of a facility's patients. Between fiscal years 2003 and 2004, the reported case-mix index increased an estimated 6.75 percent. Estimated increases in 2005, 2006, and 2007 were 3.5 percent, 1.9 percent, and 3.1 percent, respectively (Centers for Medicare & Medicaid Services 2006, Centers for Medicare & Medicaid Services 2007, Centers for Medicare & Medicaid Services 2008, Centers for Medicare & Medicaid Services 2009). But not all the growth in reported case mix was due to changes in the intensity and complexity of patients admitted to LTCHs. Some of the reported case-mix growth was due to improvements in documentation and coding that were unrelated to changes in complexity and intensity. Experience suggests that the introduction of new case-mix

FIGURE 3D–2

The gap between LTCH payments and costs held steady in 2008



Note: LTCH (long-term care hospital), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system). Data are from consistent two-year cohorts of LTCHs.

Source: MedPAC analysis of Medicare cost report data from CMS.

TABLE 3D–5

Medicare margins, by type of LTCH

Type of LTCH	Share of discharges	2001	2002	2003	2004	2005	2006	2007	2008
All	100%	–1.6%	–0.1%	5.2%	9.0%	11.9%	9.8%	4.8%	3.4%
Urban	94	–1.6	–0.1	5.2	9.2	11.9	10.0	4.9	3.6
Rural	4	–2.7	–0.5	5.2	2.6	10.0	4.9	–0.5	–2.3
Freestanding	71	–1.3	0.1	5.4	8.1	11.2	9.0	5.2	3.7
Hospital within hospital	29	–2.1	–0.5	5.0	9.9	12.5	10.5	4.3	3.1
Nonprofit	17	–1.8	0.1	2.0	6.7	9.0	6.5	1.8	–2.0
For profit	81	–1.4	–0.1	6.3	10.0	13.0	11.0	5.7	4.9
Government*	2	–4.9	–2.6	–1.1	–0.7	0.3	–1.1	–4.4	–10.1

Note: LTCH (long-term care hospital). Columns may not sum to 100 percent due to rounding or missing data.
*Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of Medicare cost report data from CMS.

classification systems and subsequent refinements to those systems usually lead to more complete documentation and coding of the diagnoses, procedures, services, comorbidities, and complications that are associated with payment (Centers for Medicare & Medicaid Services 2009, Medicare Payment Advisory Commission 2007, RAND Corporation 1990). Those changes can raise the average case-mix index under the new or refined classification system, even though patients are no more resource intensive than they were previously. Changes to a classification system can therefore lead to unwarranted increases in payments to providers.

Increases in the case-mix index due to documentation and coding improvements can be expected to plateau over time, as LTCHs become familiar with the classification system. Facilities' experience with the system may have helped to dampen annual growth in payments per case. However, with the introduction in October 2007 of the MS–LTC–DRGs, Medicare's refined case-mix classification system, we expected that improvements in LTCHs' documentation and coding of diagnoses and procedures would lead to increases in reported case mix (Medicare Payment Advisory Commission 2007, Medicare Payment Advisory Commission 2009). CMS estimates that the case-mix increase attributable to documentation and coding improvements between 2007 and 2008 was 1.3 percent (Centers for Medicare & Medicaid Services 2009).

After the LTCH PPS was implemented in 2003, margins rose rapidly for all LTCH provider types, climbing from –0.1 percent in 2002 to 11.9 percent in 2005 (Table 3D-5). At that point, Medicare margins began to decline, as growth in payments per case leveled off. The Medicare margin in 2008 for LTCHs was 3.4 percent.

Financial performance in 2008 varied across LTCHs. The aggregate Medicare margin for for-profit LTCHs (which account for 81 percent of all Medicare discharges from LTCHs) was 4.9 percent, compared with –2.0 percent for nonprofit facilities (which account for 17 percent of all Medicare LTCH discharges). Rural LTCHs' aggregate margin was –2.3 percent, compared with 3.6 percent for their urban counterparts. Rural providers account for about 6 percent of all LTCHs. They tend to be smaller than urban LTCHs, caring for a lower volume of patients on average, which may result in poorer economies of scale.

A quarter of all LTCHs had margins in excess of 11.8 percent, while another quarter had margins below –8.2 percent. As with skilled nursing facilities and home health agencies, lower unit costs—rather than higher payments—drove the differences in financial performance between LTCHs with the lowest and highest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins). Low-margin LTCHs had standardized costs per discharge that were almost 50 percent higher than

high-margin LTCHs ($38,314 vs. $26,058) (Table 3D-6). Lengths of stay were two days longer in low-margin LTCHs. On average, low-margin LTCHs received 40 percent of their referrals from their primary referring acute care hospital, compared with 35 percent for high-margin LTCHs. Low-margin LTCHs were also far less likely to be for profit than were their high-margin counterparts.

High-cost outlier payments per discharge for low-margin LTCHs were more than double those of high-margin LTCHs ($4,984 vs. $2,176). At the same time, short-stay outliers made up a larger share of low-margin LTCHs' cases. Low-margin LTCHs thus cared for disproportionate shares of patients who are high-cost outliers and patients who have shorter stays. Both types of patients can have a negative effect on LTCHs' margins. LTCHs lose money on high-cost outlier cases since, by definition, they generate costs that exceed payments.[9] Further, as discussed in the text box (p. 253), cases that are short-stay outliers may receive reduced payments.

Low-margin LTCHs served fewer patients overall (an average of 419 in 2008 compared with 577 for high-margin LTCHs). Poorer economies of scale may therefore have affected low-margin LTCHs' costs. We observed this same correlation in rural facilities, as described above. A critical mass of patients might be needed to achieve economies of scale. The Commission has also pointed out previously that a critical mass of medically complex patients might be needed to maintain expertise and achieve a high quality of care (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009) . If that is the case, then the proliferation of LTCHs in some markets might be cause for concern. To ensure that providers have the necessary experience and adequate resources to care for medically complex patients, CMS might appropriately view LTCHs (and other providers of medically complex care) as regional referral centers, serving wider catchment areas. Such referral centers for medically complex patients may be able to provide more value for the Medicare program by achieving better outcomes with greater efficiency. The development of facility and patient criteria, which the Commission has long advocated, is an important step in implementing this type of care model. Such criteria would define the desired level of care—whether furnished in an LTCH, acute care hospital, specialized skilled nursing facility, or inpatient rehabilitation facility—and the staff credentials, service capabilities, and volume levels needed to furnish this level of care.

TABLE 3D–6

LTCHs in the top quartile of Medicare margins in 2008 had much lower costs

Characteristics	High-margin LTCHs	Low-margin LTCHs
Mean total discharges (all payers)	577	419
Medicare share	66%	61%
Average length of stay (in days)	27	29
Mean per discharge:		
Standardized costs	$26,058	$38,314
Medicare payment	$38,297	$37,896
High-cost outlier payments	$2,176	$4,984
Share of:		
Cases that are SSOs	28%	35%
Medicare cases from primary-referring ACH	35	40
LTCHs that are for profit	88	57

Note: LTCH (long-term care hospital), SSO (short-stay outlier), ACH (acute care hospital). High-margin LTCHs were in the top 25 percent of the distribution of Medicare margins. Low-margin LTCHs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs have been adjusted for differences in case mix and area wages. Cases from primary referring ACH indicates the mean share of patients who are referred to LTCHs from each LTCH's primary referring ACH.

Source: MedPAC analysis of LTCH cost reports and MedPAR data from CMS.

To estimate 2010 payments and costs with 2008 data, the Commission considered policy changes effective in 2009 and 2010. Those that affect our estimate of the 2010 Medicare margin include:

- A market basket increase of 3.6 percent for 2009, offset by an adjustment for past coding improvements and an adjustment to account for changes in law that reduced payments for rate year 2008, for a net update of 1.9 percent;[10]
- A market basket increase of 2.5 percent for 2010, offset by an adjustment for past coding improvements, for a net update of 2 percent;
- Implementation of the MS–LTC–DRGs in 2008 and the reweighting of them in 2009, which on net we expect will continue to result in improved coding and documentation and thus increase payments;
- An adjustment to the high-cost outlier fixed loss amount for 2010, which increases payments; and

- Changes to the wage index in 2009 and 2010, which decrease payments.

We estimate that LTCHs' aggregate Medicare margin will be 5.8 percent in 2010.

How should Medicare payments change in 2011?

The Secretary has discretion to update payments for LTCHs; there is no congressionally mandated update. In view of LTCHs' responsiveness to changes in payments, we expect growth in costs to continue at the current pace—roughly similar to the latest forecast of the market basket for 2011 of 2.4 percent—as long as Medicare continues to put fiscal pressure on LTCHs.

Update recommendation

On the basis of our review of payment adequacy for LTCHs, the Commission recommends that the Secretary eliminate the update to the LTCH payment rates.

RECOMMENDATION 3D

The Secretary should eliminate the update to the payment rate for long-term care hospitals for rate year 2011.

RATIONALE 3D

In sum, the number of cases per FFS beneficiary has increased, suggesting that access to care has been maintained. In addition, growth in payments per case has continued. The quality trends we measure appear stable. Under the current moratorium on LTCH growth, LTCHs' need for capital is limited. Margins are positive and are expected to increase. These trends suggest that LTCHs are able to operate within current payment rates. We will closely monitor our payment update indicators and will be able to reassess our recommendation for the LTCH payment update in the next fiscal year.

IMPLICATIONS 3D

Spending

- Because CMS typically uses the market basket as a starting point for establishing updates to LTCH payments, this recommendation decreases federal program spending by between $50 million and $250 million in one year and by less than $1 billion over five years.

Beneficiary and provider

- This recommendation is not expected to affect Medicare beneficiaries' access to care or providers' ability to furnish care. ■

Payments for short-stay outliers in long-term care hospitals

In the long-term care hospital (LTCH) payment system, a short-stay outlier (SSO) is a patient with a shorter-than-average length of stay. The SSO policy reflects CMS's contention that patients with lengths of stay similar to those in acute care hospitals should be paid at rates comparable to those under the acute care hospital prospective payment system. About 32 percent of LTCH discharges receive payment adjustments for having shorter-than-average lengths of stays, but this share varies across types of cases.[11]

The amount Medicare pays to LTCHs for an SSO case is the lowest of:

- 100 percent of the cost of the case,
- 120 percent of the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) specific per diem amount multiplied by the patient's length of stay,
- The full MS–LTC–DRG payment, or
- A blend of the inpatient prospective payment system (IPPS) amount for the DRG and 120 percent of the MS–LTC–DRG per diem payment amount.[12]

Generally, for the same DRG, the LTCH payment is greater than the payment under the IPPS. CMS estimates that in 2008 about 67 percent of SSO cases were paid on a cost basis (Centers for Medicare & Medicaid Services 2009).

Effective July 2007, Medicare applied a different standard for the very shortest SSO cases ("very SSOs"). These cases, which represented about 16 percent of LTCH admissions in 2007, are those in which length of stay is less than or equal to the average length of stay for the same DRG at acute care hospitals paid under the IPPS plus one standard deviation. For SSO cases that meet the IPPS comparable threshold, LTCHs were to be paid the lowest of:

- 100 percent of the cost of the case,
- 120 percent of the MS–LTC–DRG specific per diem amount multiplied by the patient's length of stay,
- The full MS–LTC–DRG payment, or
- The IPPS per diem amount multiplied by the length of stay for the case, not to exceed the full IPPS amount.

The Medicare, Medicaid, and SCHIP Extension Act of 2007 prohibited the Secretary from applying the very SSO standard for a three-year period beginning December 29, 2007. Very SSO cases are now paid at the same rate as other SSO cases. ■

Endnotes

1 More information on the prospective payment system for LTCHs is available at: http://medpac.gov/documents/MedPAC_Payment_Basics_09_LTCH.pdf.

2 About 80 percent of Medicare LTCH patients are admitted from an acute care hospital. The remainder do not have a preceding acute care hospital stay.

3 CMS implemented the 25 percent rule to discourage acute care hospitals from unbundling services covered under the inpatient PPS and to discourage inappropriate payments under the LTCH PPS (Centers for Medicare & Medicaid Services 2004).

4 HWHs and satellites are paid LTCH PPS rates for patients admitted from the host acute care hospital until the percentage of discharges from the host hospital exceeds the threshold for that year. After the threshold is reached, the LTCH is paid the lesser of the LTCH PPS rate or an amount equivalent to the acute care hospital PPS rate for patients discharged from the host acute care hospital. Patients from the host hospital who are outliers under the acute hospital PPS before their discharge to the HWH or satellite do not count toward the threshold and continue to be paid at the LTCH PPS rate even if the threshold has been reached.

5 This inequity is exacerbated by CMS's interpretation of Section 114 of the Medicare, Medicaid, and SCHIP Extension Act of 2007, under which different thresholds are applied to HWHs and satellite LTCHs depending on how long they have been operating.

6 Overall, 18 percent of the active LTCHs in the POS file in fiscal year 2008 had an ownership status (for profit, not-for-profit, or government) that conflicted with the status indicated on the LTCH's cost report for the corresponding year. Most of these LTCHs were proprietary LTCHs incorrectly listed as voluntary facilities in the POS file.

7 Maine, New Hampshire, Vermont, and Wyoming have no LTCH beds.

8 The PSI "infection due to medical care" was recently limited to central line-associated infections.

9 LTCHs are paid outlier payments for patients who are extraordinarily costly. High-cost outlier cases are identified by comparing their costs with a threshold that is the MS–LTC–DRG payment for the case plus a fixed loss amount. (In 2010 the fixed loss amount is $18,425.) Medicare pays 80 percent of the LTCHs' costs above the threshold.

10 The MMSEA specified that the base rate for LTCH discharges occurring in the fourth quarter of rate year (RY) 2008 would be the same as the base rate for discharges occurring during rate year 2007, thereby eliminating the 2008 0.71 percent increase for discharges in the fourth quarter of RY 2008. CMS therefore applied the market basket increase for RY 2009 to the base rate that was in effect during the fourth quarter of RY 2008.

11 Lower payments are triggered for LTCH patients with a length of stay less than or equal to five-sixths of the geometric mean length of stay for the patient's Medicare severity long-term care diagnosis related group. A geometric mean is derived by multiplying all numbers in a set and raising that product to the exponent of one divided by the number of cases in the set. This statistic is useful for analyzing data that are skewed. SSO cases that are very costly may qualify for high-cost outlier payments.

12 For the blended alternative, the LTCH per diem payment amount makes up more of the total payment amount as the patient's length of stay approaches the geometric mean length of stay for the LTC–DRG.

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