CHAPTER 11

Long-term care hospital services

RECOMMENDATION

11 For fiscal year 2021, the Secretary should increase the fiscal year 2020 Medicare base payment rates for long-term care hospitals by 2 percent.

COMMISSIONER VOTES: YES 17 • NO 0 • NOT VOTING 0 • ABSENT 0

CHAPTER 11

Long-term care hospital services

Chapter summary

Long-term care hospitals (LTCHs) provide care to beneficiaries who need hospital-level care for relatively extended periods of time. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for acute care hospitals, and certain Medicare patients in the facility must have an average length of stay of more than 25 days. In 2018, the 374 LTCHs that participated in the Medicare program provided about 102,000 LTCH stays to 92,000 Medicare fee-for-service (FFS) beneficiaries, and Medicare FFS spending on LTCH services was $4.2 billion. On average, FFS beneficiaries accounted for about 60 percent of LTCH stays.

In fiscal year 2016, CMS began implementing a dual payment-rate structure for LTCHs that decreased payment rates for certain cases that do not meet criteria specified in the Pathway for SGR Reform Act of 2013. The phase-in of the dual payment-rate structure will be completed after the 2020 LTCH cost reporting period. The extent to which LTCHs alter admission patterns for cases that meet the criteria and are thus paid the standard LTCH prospective payment system (PPS) rate will ultimately determine the industry's financial performance under Medicare. We focus some analyses on a cohort of LTCHs with a high share (85 percent or more) of cases meeting the LTCH PPS criteria in 2018, consistent with the goals of the dual payment-rate policy. This cohort consisted of about 39 percent of LTCHs in 2018.

In this chapter

Assessment of payment adequacy

Beneficiaries' access to care—We consider the capacity and supply of LTCH providers and changes over time in the volume of services they furnish. We expect reductions in these metrics because of the implementation of the new dual payment-rate structure that began in fiscal year 2016, as mandated by the Pathway for SGR Reform Act of 2013.

- ***Capacity and supply of providers—***The number of LTCHs began to decrease in 2013, but the decline has been more rapid since the implementation of the dual payment-rate structure. We estimate that from 2017 through 2018, the number of LTCH facilities decreased by 5.1 percent, while the number of LTCH beds decreased by 7.2 percent. However, the average LTCH occupancy rate was 63 percent in 2018, suggesting that LTCHs have adequate capacity in the markets they serve.
- ***Volume of services—***From 2016 to 2018, the number of LTCH cases decreased by about 10 percent each year, continuing a five-year trend downward that began in 2013.
- ***Marginal profit—***In 2018, marginal profit, an indicator of whether LTCHs with excess capacity have an incentive to admit Medicare patients, averaged about 16 percent across LTCHs, a 2 percentage point increase from 2017. For LTCHs with a high share (85 percent or more) of cases meeting the LTCH PPS criteria specified in the Pathway for SGR Reform Act of 2013, marginal profit totaled 18 percent, also about 2 percentage points higher than in 2017.

Quality of care—Consistent with prior years, non-risk-adjusted rates of readmissions to acute care hospitals directly from LTCHs, mortality in the LTCH, and mortality within 30 days of discharge were stable across all LTCH cases. These findings indicate that quality of LTCH services remained stable in 2018.

Providers' access to capital—LTCHs have been altering their referral patterns in response to the dual payment-rate structure, which reduces payment for cases that do not meet the criteria specified in law. This transition, coupled with payment reductions to annual updates required by statute, have limited opportunities for growth in the near term and reduced the industry's need for capital.

Medicare payments and providers' costs—From 2012 through 2015, Medicare payments increased, but more slowly than provider costs. Payments per case remained stable from 2015 through 2016, resulting in an aggregate 2016 Medicare margin of 3.9 percent across all cases. The first year that all LTCHs began transitioning to the dual payment-rate structure was 2017, prompting aggregate

Medicare margins to fall to –2.2 percent. In 2018, the aggregate Medicare margin increased by 1.7 percentage points to –0.5 percent. The extent to which each facility admits cases that meet the LTCH PPS criteria directly impacts the Medicare payments it receives and can affect the costs incurred in providing care. However, for a cohort of LTCHs with a high share of cases that met the criteria (and thus admission patterns consistent with the goals of the dual payment-rate structure), the Medicare margin remained positive. Indeed, in 2018, the cohort of LTCHs with 85 percent or more of Medicare cases that met the criteria had a Medicare margin of 4.7 percent. We expect continued changes in LTCHs in response to the implementation of the dual payment-rate structure. We project that LTCHs' aggregate Medicare margin for facilities with more than 85 percent of Medicare discharges that meet the LTCH PPS criteria will be 3.7 percent in 2020.

How should payment rates change in 2021?

On the basis of the payment adequacy indicators, and in the context of recent changes in payment policy, our recommendation for fiscal year 2021 would increase the 2020 LTCH payment rate by 2 percent. This update supports LTCHs in their provision of safe and effective care for Medicare beneficiaries meeting the LTCH PPS criteria for payment at the standard LTCH PPS rate. ■

Background

Patients with chronic critical illness—those who exhibit metabolic, endocrine, physiologic, and immunologic abnormalities that result in profound debilitation and often ongoing respiratory failure—frequently need hospital-level care for extended periods. Some of these patients are treated in long-term care hospitals (LTCHs). These facilities can be freestanding or colocated with other hospitals as hospitals within hospitals or satellites. To qualify as an LTCH for Medicare payment, a facility must meet Medicare's conditions of participation for short-term acute care hospitals (ACHs), and certain Medicare patients in the facility must have an average length of stay of more than 25 days.[1] In 2018, LTCHs had an average Medicare length of stay of 26.6 days; by comparison, the average Medicare length of stay in ACHs was less than 5 days. That year, Medicare spent $4.2 billion on care provided in LTCHs nationwide (Office of the Actuary 2019). About 92,000 Medicare fee-for-service (FFS) beneficiaries had roughly 102,000 LTCH stays. On average, these beneficiaries accounted for about 60 percent of LTCHs' stays.

Since October 2002, Medicare has paid LTCHs prospective per discharge rates based primarily on the patient's diagnosis and the facility's wage index. Under this prospective payment system (PPS), LTCH payment rates are based on the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) patient classification system, which groups patients primarily according to diagnoses and procedures. MS–LTC–DRGs include the same groupings used in ACHs paid under the inpatient PPS (IPPS) but have relative weights specific to certain LTCH patients that reflect the average relative costliness of cases in the group compared with that of the average LTCH case. The LTCH PPS has outlier payments for patients who are extraordinarily costly.[2] The LTCH PPS pays differently for short-stay outlier cases (patients with shorter-than-average lengths of stay), reflecting CMS's contention that Medicare should adjust payment rates for patients with relatively short stays to reflect the reduced costs of caring for them.[3]

LTCHs are not distributed uniformly across the country and are primarily located in urban areas. Due in part to state certificate-of-need programs that prevent or limit the opening of certain types of health care facilities in some states, there is wide variation in LTCH concentration across urban areas, underscoring the fact that some medically complex patients can be treated appropriately in other settings.

In fiscal year 2016, CMS began phasing in a payment change for LTCH cases that do not meet certain criteria specified in the Pathway for SGR Reform Act of 2013 (see text box on the implementation of the long-term care hospital dual payment-rate structure, pp. 304–306).[4] Under this new dual payment-rate structure, Medicare cases are paid the standard LTCH PPS rate if the patient had an immediately preceding ACH stay that included 3 or more days in an intensive care unit (ICU) or if the patient received mechanical ventilation services for at least 96 hours in the LTCH. These cases are referred to as "cases meeting the LTCH PPS criteria." LTCH cases not meeting the LTCH PPS criteria receive a "site-neutral" rate based on the lesser of an IPPS-comparable amount or 100 percent of the cost for the case. For the first four years of implementation, cases that do not meet the criteria receive payment of 50 percent of the standard LTCH PPS rate and 50 percent of the site-neutral rate. Given LTCHs' varying cost reporting periods, the Commission expects fiscal year 2021 to be the first full year in which this policy is completely phased in. However, since 2017, data include the partial phase-in of the dual payment-rate structure across all LTCHs.

Because the impact of the dual payment-rate structure is expected to be substantial, we focus some analyses on LTCHs that have a high share of cases that meet the LTCH PPS criteria, consistent with the goals of the dual payment-rate structure, which creates a financial incentive for LTCHs to predominantly admit Medicare cases that meet the criteria. We define this subgroup of LTCHs as a cohort of LTCHs with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria in 2018. This cohort represents 39 percent of all LTCHs.[5]

Are Medicare payments adequate in 2020?

To address whether payments for 2020 are adequate to cover the costs that LTCHs incur in furnishing services to Medicare beneficiaries, we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care (by examining the capacity and supply of LTCH providers, changes over time in the volume of services furnished, and providers' willingness to admit

Implementation of the long-term care hospital dual payment-rate structure

The Pathway for SGR Reform Act of 2013 mandated changes to the long-term care hospital (LTCH) prospective payment system (PPS), including limiting the standard LTCH PPS payment rate to cases that spent at least three days in an intensive care unit (ICU) during an immediately preceding acute care hospital (ACH) stay or to stays that received an LTCH principal diagnosis indicating prolonged mechanical ventilation. In March 2014, the Commission recommended that the LTCH payment system be reformed to better align payments for both chronically critically ill (CCI) cases and cases not meeting that definition across LTCH and ACH settings.

Defining an LTCH patient

For almost two decades, given the variation in LTCH use across the country and the relatively high cost of providing care to Medicare beneficiaries in LTCHs, policymakers and researchers alike have attempted to define the type of patient most appropriate for the LTCH setting. Recent research using data from 2012 showed that, after adjusting for case mix, about half of the variation in LTCH use is explained by patient factors, including the presence of a tracheostomy. This research found that the remaining variation in LTCH use is explained by regional and hospital factors, including the proximity of the ACH from which the beneficiary is being discharged to the nearest LTCH (Makam et al. 2018).

Definition of the most medically complex patients who might be the most appropriate for LTCH-level care has been elusive. Some clinicians have described CCI patients as exhibiting metabolic, endocrine, physiologic, and immunologic abnormalities that result in profound debilitation and often ongoing respiratory failure (Nierman and Nelson 2002). Many of these abnormalities and debilities in hospital patients are not readily identifiable using available administrative data. However, the research literature is consistent in describing such patients as having long ACH stays with heavy use of intensive care services. Another study defined LTCH-appropriate patients as ventilator-dependent with major comorbidities, patients who have multiple organ failures, and patients with septicemia and other complex infections (Dalton et al. 2012).

Analysis of findings from the Post-Acute Care Payment Reform Demonstration, which tested the use of a standardized patient assessment tool in various post-acute care settings, revealed meaningful differences in the intensity of nursing care and nutritional, rehabilitation, and physician services between LTCH users and other post-acute care (PAC) users. Length of

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Medicare beneficiaries), quality of care, providers' access to capital, and the relationship between Medicare payments and providers' costs.

Beneficiaries' access to care: Expected reductions in supply and volume continue, without affecting access to care

LTCHs historically have constituted about 1 percent of post-acute care (PAC) use; however, this share varies substantially across ACH diagnoses and by the need for invasive mechanical ventilation. In 2017, almost all PAC users requiring mechanical ventilation were treated in LTCHs (Medicare Payment Advisory Commission 2019). While changes in the overall capacity and supply of LTCHs and in the volume of services they furnish might typically suggest declining access to care, we fully expected reductions in these metrics following the implementation of the dual payment-rate structure that began in fiscal year 2016.

Capacity and supply of providers: Number of LTCHs began to decrease in 2013

The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA) and subsequent legislation imposed a limited moratorium on new LTCHs and new beds in existing LTCHs from December 29, 2007, through

Implementation of the long-term care hospital dual payment-rate structure (cont.)

time in an ICU during an immediately preceding ACH stay was a distinguishing characteristic of patients who used LTCHs as opposed to patients who used only skilled nursing facilities, inpatient rehabilitation facilities, or care provided by home health agencies. PAC episodes that had a preceding ACH ICU stay of seven days or more were found only among LTCH users (Gage et al. 2011).

Historically, LTCH care was commonly used also for other, less acutely ill, patients. These patients may require lengthy hospitalizations and subsequent PAC, but they do not have (or no longer have) intensive nursing care needs (Centers for Medicare & Medicaid Services 2013). Research has shown that caring for these lower acuity patients in LTCHs increases Medicare expenditures without demonstrable improvements in quality of care or outcomes (Koenig et al. 2015).

Commission recommendation for long-term care hospitals

The Commission has maintained that LTCHs should serve only the most medically complex patients and has determined that the best available proxy for intensive resource needs in LTCH patients is ICU length of stay during an immediately preceding ACH stay.

The Commission has also long held that payments to providers should be properly aligned with patients' service needs. Further, subject to risk differentials, payment for the same services should be comparable regardless of where the services are provided.

The Commission recommended that the Congress limit standard LTCH PPS payments to cases that spent eight or more days in an ICU during an immediately preceding ACH stay (Medicare Payment Advisory Commission 2014). The Commission's analysis of inpatient prospective payment system (IPPS) claims data found that cases with eight or more days in an ICU accounted for about 6 percent of Medicare's IPPS stays and had a geometric mean cost per discharge that was four times that of IPPS cases with seven or fewer ICU days. Further, these cases were concentrated in a small number of Medicare severity–diagnosis related groups that correspond with descriptions of LTCH patients provided by critical care clinicians (Dalton et al. 2012).

Setting the ICU length of stay threshold for CCI cases at eight days captures a large share of LTCH cases requiring prolonged mechanical ventilation—a service specialty of many LTCHs. However, the Commission was concerned that LTCH care could be appropriate for some patients requiring mechanical ventilation even if they did not spend eight or more days in an ICU during

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December 28, 2012. During that time, new LTCHs were able to enter the Medicare program only if they met specific exceptions to the moratorium.[6] The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.[7]

The number of LTCHs decreased considerably in the later years of the moratorium. Since peaking in 2012 (data not shown), the number of LTCHs decreased by more than 11 percent, from 421 to 374.[8] From 2017 to 2018, the number of LTCHs decreased by 5.1 percent, with a 15.5 percent reduction in the number of nonprofit LTCHs (Table 11-1, p. 307). Cost report data indicate that the number of LTCH beds nationwide decreased about 2.1 percent annually from 2012 through 2017 and by 7.2 percent from 2017 to 2018 (data not shown). In 2018, 80 percent of LTCHs were for profit (an increase from the historical trend), and 95 percent were located in urban areas (consistent with historical trends).

Since the implementation of the dual payment-rate structure began in fiscal year 2016 and through fiscal year 2019, 66 LTCHs have closed, representing over 15 percent of both LTCH facilities and beds. The closures occurred primarily in market areas with multiple LTCHs. From

Implementation of the long-term care hospital dual payment-rate structure (cont.)

an immediately preceding ACH stay. The Commission therefore recommended that patients requiring prolonged ventilation care qualify for CCI status. For LTCH cases that did not spend eight or more days in an ICU during an immediately preceding ACH stay, the Commission recommended that the Secretary of Health and Human Services set the payment rates equal to those of ACHs. The Commission recommended that savings from this policy be used to create additional inpatient outlier payments for CCI cases in IPPS hospitals.

Congressionally mandated patient-level criteria

The Pathway for SGR Reform Act of 2013 established "site-neutral" payments for certain cases in LTCHs, beginning in fiscal year 2016. Under the law, the LTCH PPS payment rate applies only to qualifying LTCH stays (cases that meet the criteria) that had an ACH stay immediately preceding LTCH admission and for which either:

- the ACH stay included at least 3 days in an intensive care unit or
- the discharge was assigned to the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) based on the receipt of mechanical ventilation services for at least 96 hours.

All other LTCH stays (cases that do not meet the criteria)—including stays assigned to psychiatric or rehabilitation MS–LTC–DRGs, regardless of intensive care unit use—are paid a site-neutral amount (an amount based on the lower of Medicare's IPPS payments or 100 percent of the costs of the case). These site-neutral payments are being phased in over a four-year period. In cost reporting periods starting fiscal year 2016, cases that do not meet the criteria receive a blended rate of one-half the standard LTCH PPS payment and one-half the site-neutral payment. In cost reporting periods starting on or after October 1, 2019, these cases receive 100 percent of the site-neutral payment rate. Given LTCHs' varying cost reporting periods, the Commission expects fiscal year 2021 to be the first full year in which this policy is completely phased in.

Congressionally mandated facility-level criteria

To qualify as an LTCH for Medicare payment, a facility must meet Medicare's hospital conditions of participation, and certain Medicare patients in the facility must have an average length of stay of more than 25 days. The Pathway for SGR Reform Act of 2013 loosens these criteria such that, beginning in fiscal year 2016, CMS calculates the LTCH average length of stay only for Medicare fee-for-service cases that are not paid the site-neutral rate. However, the Pathway for SGR Reform Act of 2013 requires that, for cost reporting periods starting on or after October 1, 2019, at least half of an LTCH's cases meet the criteria to continue to be paid the standard LTCH PPS rate. ■

October 2015 through September 2019, 70 percent of areas with an LTCH closure had at least one other LTCH in it.[9] In the remaining areas, the next closest LTCH was within about two driving hours of the LTCH that closed. In aggregate, during their last year of operation, LTCHs that closed had a lower share of Medicare stays that met the LTCH PPS criteria, lower occupancy rate, and higher standardized cost per case.

Before the start of the dual payment-rate structure, aggregate occupancy rates for LTCHs remained largely unchanged at 66 percent. Historically, occupancy rates at for-profit LTCHs had been 1 percentage point to 2 percentage points higher than those at nonprofit LTCHs. However, in 2018, occupancy rates for all LTCHs dropped to 63 percent, and the difference between occupancy rates at for-profit and nonprofit LTCHs widened. Similar to 2017, in 2018, for-profit LTCHs had an occupancy rate of 64 percent compared with 59 percent at nonprofit LTCHs. In 2018, LTCHs with a high share of Medicare cases meeting the LTCH PPS criteria had a higher aggregate occupancy rate than all LTCHs (69 percent), consistent with 2017.

TABLE 11–1

The number of LTCHs continued to decrease in 2018

	Congressionally imposed moratorium[a]				Average annual change	
Type of LTCH	**2015[b]**	**2016**	**2017**	**2018**	**2016–2018**	**2017–2018**
LTCHs paid under the LTCH PPS[c]	412	411	394	374	–4.5%	–5.1%
LTCHs with valid cost reports	392	407	398	368	–4.9	–7.5
Urban	373	389	378	349	–5.3	–7.7
Rural	19	18	20	19	–2.7	–5.0
Nonprofit	66	71	71	60	–8.1	–15.5
For profit	309	320	312	294	–4.1	–5.8
Government	17	16	15	14	–6.5	–6.7

Note: LTCH (long-term care hospital), PPS (prospective payment system).
[a]The Medicare, Medicaid, and SCHIP Extension Act of 2007 and subsequent legislation imposed a moratorium on new LTCHs and new LTCH beds in existing facilities from December 29, 2007, through December 29, 2012. The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.
[b]Data from 2015 should not be compared with subsequent years because of an anomalous number of facilities that underwent changes in the cost reporting period.
[c]Data for hospitals paid under the LTCH PPS are from the Provider of Services file, based on the applicable fiscal year. The count of hospitals with valid cost reports is based on the cost reporting period for each hospital that most aligns with the fiscal year; however, this timing contributes to differences between the two facility counts.

Source: MedPAC analysis of cost report data and the Medicare Provider of Services file from CMS.

Volume of services: Number of LTCH users decreased

Medicare FFS beneficiaries' use of LTCH services declined after the implementation of the new dual payment-rate structure that began in fiscal year 2016, similar to LTCHs' response to prior policy changes. For example, following a moratorium on new facilities and new beds in existing facilities, from 2012 through 2015, the number of LTCH cases per capita decreased by 3.0 percent annually. From 2015 to 2016, as the new dual payment-rate structure was implemented, LTCH cases per 10,000 FFS beneficiaries further dropped by 5.7 percent annually. From 2016 to 2018, LTCH cases per 10,000 beneficiaries dropped by 7.3 percent and 11.9 percent per year, respectively (Table 11-2, p. 308). These decreases occurred, in part, because LTCHs changed their admitting practices to admit fewer cases that do not meet the criteria in order to be eligible to be paid the standard LTCH PPS rate. Payment per case also decreased since the start of the dual payment-rate structure because of reductions in payment for cases not meeting the LTCH PPS criteria.

However, since 2015, the share of Medicare cases in LTCHs meeting the LTCH PPS criteria increased by 15 percentage points to 70 percent in 2018, driven primarily by a reduction in the volume of cases not meeting the LTCH PPS criteria (data not shown). Indeed, since the dual payment-rate structure began in 2016, the total number of LTCH cases meeting the LTCH PPS criteria has remained stable (Table 11-3, p. 309). Similarly, from 2016 through 2018, controlling for changes in the number of FFS beneficiaries, we found the number of LTCH cases meeting the LTCH PPS criteria also remained fairly stable.

In 2018, Medicare FFS beneficiaries accounted for 60 percent of LTCH stays and just under half of patient days in aggregate, representing a slight decline in the share of Medicare FFS stays and patient days following a period of relative stability since 2010. In 2018, dual-eligible beneficiaries (enrolled in both Medicare and Medicaid) accounted for about 45 percent of FFS Medicare days in LTCHs (data not shown).

TABLE 11–2

After peaking in 2012, the number of Medicare LTCH cases and users continued to decrease

						Average annual change			
	2012	2015	2016	2017	2018	2012–2015	2015–2016	2016–2017	2017–2018
Cases	140,463	131,129	125,586	116,424	102,288	–2.3%	–4.2%	–7.3%	–12.1%
Cases per 10,000 FFS beneficiaries	37.7	34.4	32.5	30.1	26.5	–3.0	–5.7	–7.3	–11.9
Payment per case	$39,493	$40,719	$40,656	$38,253	$40,105	1.0	–0.2	–5.9	4.8
Average length of stay (in days)	26.2	26.6	26.8	26.3	26.6	0.4	1.0	–2.2	1.2

Note: LTCH (long-term care hospital), FFS (fee-for-service). Percent change columns were calculated on unrounded data.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and the annual reports of the Boards of Trustees of the Medicare trust funds.

Compared with all Medicare beneficiaries, those admitted to LTCHs are disproportionately disabled (under age 65), over age 85, or diagnosed with end-stage renal disease. They are also more likely to be African American. The higher rate of LTCH use by African American beneficiaries may be due to the concentration of LTCHs in areas of the country with larger African American populations (Dalton et al. 2012, Kahn et al. 2010). Another contributing factor may be a greater incidence of critical illness in this population (Mayr et al. 2010). At the same time, African American Medicare beneficiaries may be more likely to opt for LTCH care since they are less likely than White beneficiaries to elect hospice care (Medicare Payment Advisory Commission 2017a).

LTCH patient stays are concentrated in a relatively small number of diagnosis groups. In fiscal year 2018, the top 20 LTCH diagnoses made up 65 percent of LTCH stays. The most frequently occurring diagnosis was pulmonary edema and respiratory failure (MS–LTC–DRG 189). Forty percent of LTCH cases were diagnoses that included respiratory conditions, an increase from before the implementation of the dual payment-rate structure.[10]

Patient MS–LTC–DRGs become even more concentrated when we consider cases from the cohort of LTCHs with the highest share of cases (85 percent or more) meeting the LTCH PPS criteria for the standard LTCH PPS rate in 2017. For these LTCHs, the top 20 MS–LTC–DRGs made up 76 percent of stays (Table 11-4, p. 310). In 2018, the top two MS–LTC–DRGs, pulmonary edema and respiratory failure and respiratory system diagnosis with ventilator support, accounted for 42 percent of stays at the cohort of LTCHs with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria. The same two MS–LTC–DRGs accounted for 31 percent of stays across all LTCHs (data not shown). Further, more than half of the cases for the cohort of LTCHs with a high share of cases meeting the LTCH PPS criteria involved MS–LTC–DRGs that were respiratory conditions or involved prolonged mechanical ventilation.

Financial incentives to serve Medicare beneficiaries across LTCHs

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider with sufficient capacity has a financial incentive to increase its volume of Medicare patients. In contrast, if payments do not cover the marginal costs, the provider could have a disincentive to care for Medicare beneficiaries.[11]

TABLE 11–3

The number of Medicare FFS LTCH cases meeting the LTCH PPS criteria remained stable, while the share of cases continued to increase, 2016–2018

				Percent change	
	2016	2017	2018	2016–2017	2017–2018
Cases meeting the LTCH PPS criteria	72,318	74,666	71,916	3.2%	–3.7%
Share of all LTCH cases	58%	64%	70%		
Cases per 10,000 FFS beneficiaries	18.7	19.3	18.6	3.2	–3.4
Payment per case	$46,223	$46,127	$46,789	–0.2	1.4
Length of stay (in days)	27.9	27.9	28.0	–0.1	0.4

Note: FFS (fee-for-service), LTCH (long-term care hospital), PPS (prospective payment system). "Cases meeting the LTCH PPS criteria" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS.

Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS and the annual reports of the Boards of Trustees of the Medicare trust funds.

In 2018, the average LTCH marginal profit on Medicare FFS cases was about 16 percent, a 2 percentage point increase from 2017. This increase followed an almost 5 percentage point decrease from 2016 because of industry-wide changes in response to the implementation of the dual payment-rate structure. For LTCHs with a high share of Medicare cases meeting the LTCH PPS criteria, marginal profit in 2018 was about 18 percent, also 2 percentage points higher than 2017. Both statistics suggest that LTCHs with available beds continue to have a financial incentive to increase their occupancy rates with Medicare FFS beneficiaries who meet the LTCH PPS criteria, representing a positive indicator of access.

Quality of care: Meaningful measures becoming available; trends for unadjusted indicators remain stable

Historically, the Commission has assessed aggregate quality of care trends by examining three claims-calculated measures: ACH readmissions directly from LTCHs, unadjusted in-facility mortality rates, and mortality within 30 days postdischarge. LTCHs began reporting a limited set of quality measures to CMS in fiscal year 2013, and CMS recently started publicly reporting some risk-adjusted quality measures for LTCHs that we use to examine quality.

Aggregate unadjusted quality measures

For this report, we continued to analyze unadjusted readmission and mortality rates for Medicare FFS LTCH cases from 2015 through 2018. Not unexpectedly, given differences in patient diagnoses and severity, the unadjusted rates of readmissions to ACHs and mortality rates (both in the facility and 30 days postdischarge) varied depending on whether the case met the LTCH PPS criteria, but the rates were stable over time (Figure 11-1, p. 311). However, because these measures were not risk adjusted—that is, patient characteristics were not taken into account when calculating rates—trends may be muted or exaggerated over time by changes in patient mix.

In 2018, for cases meeting the LTCH PPS criteria, 10 percent were readmitted to the ACH directly from the LTCH, 16 percent died in the LTCH, and 13 percent died within 30 days of discharge from the LTCH. Thus, combined, almost 30 percent of LTCH cases meeting the LTCH PPS criteria in 2018 died in the LTCH or within 30 days of discharge. By comparison, cases not meeting the LTCH PPS criteria had lower rates of readmission and mortality, largely due to a lack of risk adjustment in these measures.

For cases meeting the LTCH PPS criteria, the unadjusted readmission and mortality rates varied markedly by

TABLE 11–4

The top 20 MS–LTC–DRGs made up three-quarters of 2018 Medicare FFS stays at LTCHs with a high share of stays meeting the LTCH PPS criteria

MS–LTC–DRG	Description	Discharges	Share of stays
189	Pulmonary edema and respiratory failure	8,507	22.6%
207	Respiratory system diagnosis with ventilator support 96+ hours	7,211	19.2
871	Septicemia without ventilator support 96+ hours with MCC	2,133	5.7
208	Respiratory system diagnosis with ventilator support ≤ 96 hours	1,413	3.8
166	Other respiratory system OR procedures with MCC	1,057	2.8
949	Aftercare with CC/MCC	930	2.5
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth and neck without major OR procedure	838	2.2
682	Renal failure with MCC	746	2.0
177	Respiratory infections and inflammations with MCC	718	1.9
981	Extensive OR procedure unrelated to principal diagnosis with MCC	680	1.8
291	Heart failure and shock with MCC	572	1.5
592	Skin ulcers with MCC	535	1.4
862	Postoperative and post-traumatic infections with MCC	519	1.4
314	Other circulatory system diagnoses with MCC	494	1.3
870	Septicemia with ventilator support 96+ hours with MCC	490	1.3
559	Aftercare, musculoskeletal system and connective tissue with MCC	472	1.3
539	Osteomyelitis with MCC	450	1.2
919	Complications of treatment with MCC	450	1.2
853	Infectious and parasitic disease with OR procedure with MCC	301	0.8
570	Skin debridement with MCC	179	0.5
	Top 20 MS–LTC–DRGs	28,695	76.3

Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), FFS (fee-for-service), LTCH (long-term care hospital), PPS (prospective payment system), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS–LTC–DRGs are the case-mix system for LTCH facilities. The sum of column components may not equal the stated total due to rounding.

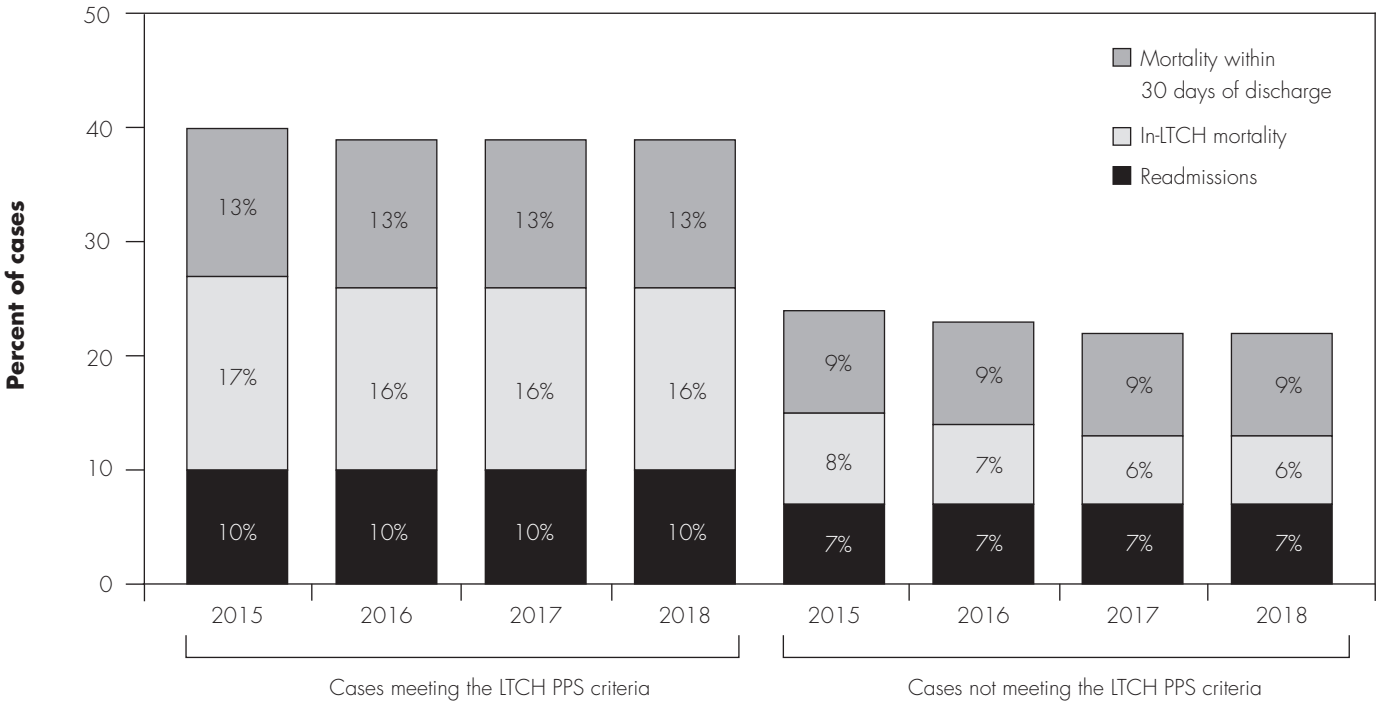
Source: MedPAC analysis of Medicare Provider Analysis and Review data from CMS.

respiratory diagnosis group (Table 11-5, p. 312). For example, among patients with a principal diagnosis of septicemia with prolonged ventilator support with major complication or comorbidity (MCC) (MS–LTC–DRG 870), 36 percent died in the LTCH and another 14 percent died within 30 days of discharge. By comparison, among patients with a primary diagnosis of chronic obstructive pulmonary disease with MCC (MS–LTC–DRG 190), 8 percent died in the LTCH and another 13 percent died within 30 days of discharge. Overall, 33 percent of patients meeting the LTCH PPS criteria with a diagnosis related to respiratory illness or prolonged use of mechanical ventilation died in the LTCH or within 30 days of discharge.

Adjusted measures for quality reporting

Medicare's LTCH Quality Reporting Program (QRP) for fiscal year 2019 includes 15 measures. CMS currently reports some of these measures on its LTCH Compare website, which is updated quarterly. The data elements needed to calculate the LTCH quality measures are collected from three sources: a patient assessment instrument called the Continuity Assessment Record and Evaluation (CARE) Data Set, the Centers for Disease

FIGURE 11–1 **Rates of unadjusted LTCH quality measures for Medicare FFS beneficiaries remain stable**



Note: LTCH (long-term care hospital), FFS (fee-for-service), PPS (prospective payment system). "Cases meeting the LTCH PPS criteria" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 to qualify for payment under the LTCH PPS. "Cases not meeting the LTCH PPS criteria" refers to Medicare stays that do not meet the criteria specified in the Pathway for SGR Reform Act of 2013.

Source: MedPAC analysis of Medicare Provider Analysis and Review and enrollment data from CMS.

Control and Prevention's internet-based surveillance system (National Healthcare Safety Network), and Medicare claims data. CMS has published two or more years of outcome data for several outcome measures, including rates of catheter-associated urinary tract infection (CAUTI), central line–associated blood stream infection (CLABSI), methicillin-resistant *Staphylococcus aureus* (MRSA) infection, *Clostridium difficile* infection (CDI), and 30-day all-cause unplanned readmissions. For several measures, CMS compares each facility's risk-adjusted rate with the national rate.

The standardized infection ratios of the hospital-onset infections including CAUTI, CLABSI, MRSA, and CDI continued to be lower than expected (less than 1.0, using a measure of the share of actual cases observed with the infection compared with the expected number of cases after adjusting for certain risk factors) (Table 11-6, p. 313). For example, in 2017 the rate of CAUTI was about 2 percent lower than expected (standardized rate of 0.98), and the 2018 rate was 13 percent lower than expected (standardized rate of 0.87). We urge caution in interpreting the precise ratios and changes since 2016 because some LTCHs are better than others at reliably reporting infections. We will continue to monitor trends in the rates of these measures as well as newly adopted measures as they become available for analysis.

Providers' access to capital: Implementation of LTCH dual payment-rate structure slows investment

Access to capital allows LTCHs to maintain, modernize, and expand their facilities. If LTCHs were unable to access capital, it might in part reflect problems with the adequacy of Medicare payments since Medicare accounts for about half of LTCH total revenues. However, in prior

TABLE 11–5

Among Medicare FFS LTCH cases meeting the LTCH PPS criteria, rates of unadjusted quality measures varied across diagnoses related to respiratory illness or using prolonged mechanical ventilation, 2018

MS–LTC–DRG	Description	Readmission rate	In-LTCH mortality rate	30-day post discharge mortality rate	Total mortality (in LTCH plus 30 days post discharge)
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth and neck without major OR procedure	6%	28%	14%	41%
166	Other respiratory system OR procedures with MCC	12	23	16	39
177	Respiratory infections and inflammations with MCC	6	11	16	28
189	Pulmonary edema and respiratory failure	8	16	14	29
190	Chronic obstructive pulmonary disease with MCC	4	8	13	21
207	Respiratory system diagnosis with ventilator support 96+ hours	11	22	13	35
208	Respiratory system diagnosis with ventilator support ≤96 hours	23	34	15	49
870	Septicemia with ventilator support 96+ hours with MCC	11	36	14	50
	Total diagnoses related to respiratory illness or prolonged use of mechanical ventilation	10	20	14	33

Note: FFS (fee-for-service), LTCH (long-term care hospital), PPS (prospective payment system), MS–LTC–DRG (Medicare severity long-term care diagnosis related group), OR (operating room), MCC (major complication or comorbidity). "Cases meeting the LTCH PPS criteria" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS. A higher rate of readmission and in-LTCH mortality is expected for cases grouped in MS–LTC–DRG 208 since it is defined in part by the length of time mechanical ventilation is received. Components may not sum to total due to rounding.

Source: MedPAC analysis of Medicare Provider Analysis and Review and enrollment data from CMS.

years, the level of capital investment likely reflected more about uncertainty regarding changes to regulations and legislation governing LTCHs than about Medicare payment rates. Although the Pathway for SGR Reform Act of 2013 provided more long-term regulatory certainty for the industry compared with prior years, concerns about the industry's ability to comply with the new patient criteria have resulted in low levels of capital investment.

The LTCH industry has been positioning itself for the changing payment environment. Strategies have included diversifying service lines and shifting portfolios over the last several years through closures and sales (Kindred Healthcare 2017, Kindred Healthcare 2015, Select Medical 2017, Select Medical 2015). Many of these sales and closures occurred in markets with substantial competition from other LTCHs. In 2018, one of the two largest publicly traded LTCH chains, Kindred Healthcare, was acquired by Humana and two private equity firms (Kindred Healthcare 2018). In late 2018, a smaller LTCH chain, Promise Healthcare, filed for bankruptcy and has since sold or closed most of its LTCHs (Ellison 2018a). Three companies have purchased the hospitals, including KPC Health, a for-profit health care venture, Select Medical (another LTCH chain), and Lexmark Holdings LLC (Ellison 2018b, Kindred Healthcare 2019, Mosbrucker 2019).

LTCHs' access to capital largely depends on their total (all-payer) profitability. From 2012 through 2015, the LTCH all-payer margin remained stable at about 4 percent. However, in 2016 and 2017, as the implementation of the dual payment-rate structure began, LTCHs' all-payer margin dropped to 3.1 percent and then to 0.2 percent, respectively. In 2018, the phase-in of the dual payment-rate structure continued. While, on average, facilities increased the share of patients meeting the LTCH PPS criteria, 30 percent of cases, on average, did not meet the criteria and thus received a reduced payment rate.

TABLE 11–6 **Aggregate rates of infection in LTCHs were lower than expected, 2016–2018**

Measure	Standardized infection ratio		
	2016	2017	2018
Catheter-associated urinary tract infection	0.94	0.98	0.87
Central line–associated bloodstream infection	0.94	0.87	0.90
Methicillin-resistant *Staphylococcus aureus* infection	N/A	0.90	0.83
Clostridium difficile infection	N/A	0.79	0.68

Note: LTCH (long-term care hospital), N/A (not available). "Standardized infection ratio" is a measure of the share of actual cases observed with the infection compared with the expected number of cases after adjusting for certain risk factors. A ratio of 1.0 indicates the rate is equal to what was expected, below 1.0 indicates the rate is lower than expected, and above 1.0 indicates the rate is higher than expected.

Source: CMS LTCH Compare website.

Between 2015 and 2018, the share of Medicare revenue also fell, from almost 50 percent to about 42 percent of total LTCH revenue, largely due to a reduction in the number of Medicare cases. Even in light of declining volume, in 2018, LTCHs focused on more profitable cases, and the aggregate all-payer LTCH margin increased by 2 percentage points to 2.2 percent.

The Commission expects continued industry contraction, limited need for capital, and limited growth opportunities until after the LTCH dual payment-rate structure becomes fully implemented and LTCHs adjust their admission patterns and cost structures to align with the new payment incentives. Because Medicare pays less for certain cases, LTCHs with a higher share of cases meeting the LTCH PPS criteria will have stronger financial performance. The cohort of LTCHs with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria in 2018 had an aggregate all-payer margin of 4.5 percent in 2018, up 1.0 percentage point from 2017.

Medicare's payments and providers' costs: Payment growth exceeded cost growth in 2018

From the start of Medicare's LTCH PPS until 2012, LTCHs, in aggregate, held cost growth below payment growth. After 2012, however, Medicare payments increased more slowly than provider costs, resulting in the aggregate Medicare margin decreasing to 3.9 percent in 2016 (Table 11-7, p. 314). Because of reductions in payment associated with the implementation of the dual payment-rate structure, Medicare margins across LTCHs fell to –2.2 percent in 2017. In 2018, the aggregate LTCH Medicare margin increased by 1.7 percentage points to –0.5 percent. However, LTCH profitability in 2018 relied on the extent to which LTCHs admitted Medicare cases that met the LTCH PPS criteria. The cohort of LTCHs with more than 85 percent of cases meeting the LTCH PPS criteria in 2018 had a Medicare margin of 4.7 percent (Table 11-8, p. 315).

Reductions in Medicare payments per LTCH stay result from the dual payment-rate structure

Medicare FFS payment per LTCH stay grew rapidly following the implementation of the LTCH PPS starting in fiscal year 2003, but growth in these payments slowed over time. From 2012 through 2015, payment per stay grew at 1.3 percent annually. However, from 2015 to 2016, payment growth per stay was flat, a function of CMS beginning to phase in the dual payment-rate structure. In 2017, the dual payment-rate structure was 50 percent phased in for all LTCHs, resulting in a 7.3 percent reduction in average Medicare FFS payment per LTCH stay. From 2017 through 2018, Medicare payment per LTCH stay increased by 3.6 percent.

Starting in 2016, trends in the payment per stay began to diverge between the cohort of LTCHs with more than 85 percent of stays meeting the LTCH PPS criteria and LTCHs with a lower share of stays meeting the criteria.

TABLE 11–7 **From 2017 to 2018, the aggregate LTCH Medicare margin increased**

Type of LTCH	Share of stays	Medicare margin				
		2012	2015	2016	2017	2018
All	100%	7.6%	4.7%	3.9%	–2.2%	–0.5%
Urban	95	7.7	4.7*	4.0	–1.9	–0.2
Rural**	5	3.4	3.5*	–0.2	–13.6	–9.5
Nonprofit	14	–0.2	–5.9	–5.7	–13.0	–11.7
For profit	84	9.3	6.5	5.5	–0.3	1.3

Note: LTCH (long-term care hospital). The type of ownership components does not sum to 100 percent of cases because government-owned facilities, accounting for 2 percent of stays, operate in a different financial context from other facilities; thus, their margins are not shown separately.
*CMS adopted new core-based statistical area codes for LTCHs beginning fiscal year 2015; this change reclassified several facilities as urban that had previously been classified as rural, and therefore the margins across categories of urban and rural of facilities before 2015 should not be compared.
**In 2018, the rural hospital margin is based on the performance of 19 LTCHs. Changes in any one rural facility could substantially affect the aggregate margin we reported.

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

From 2012 through 2015, before the implementation of the dual payment-rate structure, payment per stay grew by 1.3 percent annually, on average, for both cohorts of LTCHs. However, beginning in 2016, the trend in payments per stay diverged. From 2016 to 2018, payments per stay grew 2.3 percent per year for the cohort of LTCHs with more than 85 percent of stays meeting the LTCH PPS criteria compared with –1.2 percent for LTCHs with a lower share of stays meeting the criteria. This divergence is likely due to increases in case mix associated with the higher share of Medicare beneficiaries meeting the criteria in these facilities.

In aggregate, LTCHs' costs per stay increased from 2017 to 2018

From 2012 through 2015, LTCH cost per case increased by about 2 percent per year across all LTCHs. During this time, cost per case also increased by about 2 percent per year for the cohort of LTCHs with a high share of Medicare beneficiaries who met the LTCH PPS criteria in 2018. However, after the phase-in of the dual payment-rate structure began, growth in cost per discharge slowed to 1.3 percent in aggregate, between 2015 and 2016, the slowest growth since 2011. In 2017, on average, LTCHs actually reduced costs per discharge by 0.9 percent. This reduction in costs likely resulted from changes in LTCH cost structures, including reductions in length of stay for beneficiaries not meeting the LTCH PPS criteria under the dual payment-rate structure. In 2018, cost growth increased by 2.7 percent, reflecting an increase in case mix and patient acuity associated with treating the higher severity cases meeting the LTCH PPS criteria.

By comparison, cost growth remained robust for LTCHs with a high share of Medicare FFS cases meeting the LTCH PPS criteria. For these LTCHs, cost per case increased 5.3 percent from 2015 to 2016 and 3.4 percent from 2016 to 2017, a 10-year high across this cohort of LTCHs. These increases in costs were expected, given the increase in case mix and patient acuity associated with treating the higher severity cases meeting the LTCH PPS criteria. For this group of LTCHs, the share of aggregate cases meeting the criteria grew by 28 percentage points between 2015 and 2018 (from 66 percent of cases meeting the criteria in 2015 to nearly 87 percent of cases in 2017 and 94 percent in 2018). Given that the largest increase in cases meeting the criteria occurred before 2018, it is not surprising that cost growth for LTCHs with a high share of Medicare FFS cases meeting the LTCH PPS criteria slowed to about 1 percent in 2018.

Aggregate LTCH Medicare margins increased in 2018

LTCH Medicare margins peaked in 2012 at 7.6 percent. In 2013, 2014, and 2015, CMS began implementing a downward payment adjustment intended to bring LTCH payments more in line with what would have been spent

TABLE 11–8

Across a cohort of LTCHs with more than 85 percent of cases meeting the LTCH PPS criteria in 2018, Medicare margins increased in 2018

Type of LTCH	Share of all Medicare FFS stays	Medicare margin				
		2012	2015	2016	2017	2018
All	37%	10.4%	6.6%	5.6%	2.7%	4.7%
Nonprofit	12	1.0	0.9	–1.7	–8.4	–5.6
For profit	86	11.8	7.5	6.6	4.3	6.2

Note: LTCH (long-term care hospital), PPS (prospective payment system), FFS (fee-for-service). "Cohort of LTCHs with more than 85 percent of cases meeting the LTCH PPS criteria in 2018" refers to a cohort of LTCHs defined by their share of Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS in 2018. The hospitals in this cohort may or may not have had more than 85 percent of Medicare fee-for-service cases meeting the criteria in prior years. The type of ownership components does not sum to 100 percent of cases because government-owned facilities, accounting for 2 percent of stays, operate in a different financial context from other facilities; thus, their margins are not shown separately.

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

under the previous payment method (as mandated by the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999), decreasing the standard federal payment rate by about 3.75 percent in total. Because of these adjustments, by 2015, the aggregate LTCH margin fell to 4.7 percent (Table 11-7).

In 2016, as the phase-in of the dual payment-rate structure began, the aggregate LTCH margin fell further to 3.9 percent, primarily because of decreases in Medicare payment for stays not meeting the LTCH PPS criteria. From 2016 through 2018, although there was a 15 percentage point shift toward cases that met the criteria (from 55 percent to 70 percent), LTCHs in aggregate received lower payments for 30 percent of cases. In 2018, the increase in payments exceeded increases in costs, thus raising the aggregate Medicare margin by 1.7 percentage points to –0.5 percent.

Consistent with prior years, financial performance in 2018 varied across LTCHs. For-profit LTCHs (which accounted for more than three-quarters of all LTCHs and 84 percent of LTCH stays) had the highest aggregate Medicare margin at 1.3 percent (Table 11-7). The aggregate margin for nonprofit LTCHs (which accounted for less than 20 percent of LTCH facilities and 14 percent of LTCH stays) was –11.7 percent.

Since 2015, the Commission has calculated a case-level margin for Medicare cases meeting the LTCH PPS criteria using claims data combined with cost-to-charge ratios for each LTCH, as opposed to aggregate cost report data. Using this methodology, the Medicare margin for cases meeting the LTCH PPS criteria declined between 2015 and 2016 from 6.8 percent to 6.3 percent (data not shown). In 2017, the margin for cases meeting the LTCH PPS criteria declined by half a percentage point to 5.8 percent, where it remained in 2018 (data not shown). Because cases that meet the criteria are generally more profitable under the dual payment-rate structure than those that do not, we expect stronger financial performance under Medicare for LTCHs that treat higher shares of these cases. Indeed, the cohort of LTCHs with more than 85 percent of Medicare cases meeting the LTCH PPS criteria have historically had higher margins, in part due to the high case mix and relatively high profitability of Medicare cases admitted. In 2018, the aggregate Medicare margin for these LTCHs was 4.7 percent, a 2.0 percentage point increase from 2017 (Table 11-8).

Consistent with LTCHs' financial performance in aggregate, differences exist by facility ownership even across LTCHs with a high share of cases meeting the LTCH PPS criteria (Table 11-8). From 2017 to 2018, although cost per case increased four times more rapidly at nonprofit facilities with a high share of cases that met the criteria than at their for-profit counterparts (3.7 percent compared with 0.9 percent), payment per case also increased (data not shown), resulting in a 2.8 percentage point increase in the Medicare margin (from –8.4 percent to –5.6 percent). In 2018, margins at for-profit LTCHs

TABLE 11–9

LTCHs in the top quartile of Medicare margins in 2018 had lower costs, higher payments, and a higher share of cases meeting LTCH PPS criteria

Characteristics	High-margin quartile	Low-margin quartile
Mean margin	16.6%	–30.3%
Mean total stays per facility (all payers)	488	412
Medicare patient share	62%	56%
Occupancy rate	70%	53%
Mean CMI	1.25	1.14
Mean per discharge:		
Standardized costs	$26,837	$39,373
Standard Medicare payment*	38,033	32,245
High-cost outlier payments	2,147	5,655
Share of:		
Cases meeting the LTCH PPS criteria	73%	60%
LTCHs that are for profit	91	69

Note: LTCH (long-term care hospital), PPS (prospective payment system), CMI (case-mix index). Figures presented include only established LTCHs—those that filed valid cost reports in both 2017 and 2018. High-margin-quartile LTCHs were in the top 25 percent of the distribution of Medicare margins. Low-margin-quartile 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. Case-mix indexes have been adjusted for differences in short-stay outliers across facilities. "Cases meeting the LTCH PPS criteria" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS. Government providers were excluded.
*Excludes outlier payments.

Source: MedPAC analysis of LTCH cost reports and Medicare Provider Analysis and Review data from CMS.

with a high share of Medicare cases meeting the LTCH PPS criteria increased by about 2 percentage points to 6.2 percent.[12]

High-margin LTCHs focused on cases meeting the LTCH PPS criteria

In 2018, both higher costs per stay and lower payments per stay were the primary drivers of differences in financial performance between LTCHs with the lowest and highest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins).[13] More than half of the LTCHs with the highest Medicare margins in 2018 also had more than 85 percent of their Medicare FFS cases meeting the LTCH PPS criteria compared with only 19 percent of LTCHs with the lowest Medicare margins in 2018; therefore, many of the attributes of the highest margin facilities overlapped with those of LTCHs with a high share of cases meeting the LTCH PPS criteria. High-margin LTCHs had a higher average case mix (1.25) than low-margin LTCHs (1.14) (Table 11-9). This case mix, in part, reflects the share of Medicare cases meeting the LTCH PPS criteria and has been increasing since the dual payment-rate structure was implemented. In 2018, 73 percent of Medicare cases in high-margin LTCHs met the criteria compared with 60 percent in low-margin LTCHs. Occupancy rates also tracked closely with financial performance: High-margin LTCHs had an average occupancy rate of 70 percent compared with an average of 53 percent at low-margin LTCHs.

After accounting for differences in case mix and local market input price levels, low-margin LTCHs had standardized costs per discharge that were almost 50 percent higher than high-margin LTCHs ($39,373 vs. $26,837, respectively). Payments per discharge were substantially lower for low-margin LTCHs. Outlier payments comprised a larger share of total payments to low-margin LTCHs compared with high-margin LTCHs (15 percent compared with 5 percent) (data not shown). When these outlier payments were removed from total payments, we found that the standard payment per discharge for low-margin LTCHs was 15 percent lower than that for high-margin LTCHs ($32,245 vs. $38,033, respectively).

Given the relatively low occupancy and low share of stays meeting the LTCH PPS criteria and the relatively high costs, it will be difficult for many of these low-margin LTCHs to increase their occupancy rates and concurrently transition to a higher share of cases meeting the LTCH PPS criteria as the dual payment-rate structure is implemented.

How should Medicare's payments change in 2021?

To estimate LTCH payments, costs, and margins for 2020, we consider the cohort of LTCHs with a high

share of cases meeting the LTCH PPS criteria specified in the Pathway for SGR Reform Act of 2013—that is, those LTCHs with 85 percent or more of Medicare cases meeting the criteria in 2018. Considering only this cohort of LTCHs is consistent with the goals of the dual payment-rate policy. Additionally, the payment update applies to cases meeting the criteria for payment under the LTCH PPS. The LTCH payment update is not applied to cases not meeting the criteria (those paid the site-neutral rate). We base this projection on margins in 2018 and policy changes in 2019 and 2020. Those payment changes that affect our estimate of the 2020 margin include:

- a market basket increase of 2.9 percent for fiscal year 2019, offset by reductions required by the Affordable Care Act of 2010 (ACA), totaling 1.55 percentage points, for a net update of 1.35 percent;[14]
- a market basket increase of 2.9 percent for fiscal year 2020, less the required multifactor productivity adjustment of 0.4 percent, for a net update of 2.5 percent; and
- budget-neutrality adjustments for the elimination of the 25 percent rule.[15]

The net result is that from 2018 to 2020, payment rates will increase by about 3.4 percent for cases that meet the LTCH PPS criteria.

Given the implementation of the dual payment-rate structure, changes in cost will depend on the extent to which LTCHs focus on Medicare cases that meet the LTCH PPS criteria. These cases tend to have a higher severity of illness than other cases; thus, as the share of these cases increases in LTCHs, LTCH costs are also expected to increase. From 2016 to 2017, costs per case in LTCHs with a high share of Medicare cases that met the LTCH PPS criteria grew by 3.1 percent, in large part due to increases in the share of Medicare cases meeting the LTCH PPS criteria. For this group of LTCHs, the share of cases meeting the LTCH PPS criteria grew by 32 percentage points in aggregate, from 66 percent of cases meeting the LTCH PPS criteria in 2015 to nearly 87 percent of cases in 2017 and up to 94 percent in 2018. Given that the largest increase in cases meeting the LTCH PPS criteria occurred prior to 2018, it is not surprising that cost growth slowed to about 1 percent in 2018.

We continue to expect significant changes in LTCHs' costs as the dual payment-rate structure is fully implemented and LTCHs continue to increase their Medicare admissions of cases that meet the criteria. However, once an LTCH has reached a threshold of such cases, we expect changes in cost will stabilize and reflect levels consistent with those before the implementation of the dual payment-rate structure. From 2013 through 2015, annual cost growth in LTCHs with a high share of cases meeting the LTCH PPS criteria in 2018 was about 2 percent. This annual cost growth was also consistent across LTCHs in aggregate from 2013 through 2015, regardless of the share of Medicare cases that met the criteria in 2017. As such, and based on historical trends, we assume cost growth per discharge will equal about 2 percent per year.

Our projection of the LTCH Medicare margin for fiscal year 2020 focuses on the cohort of LTCHs with more than 85 percent of Medicare cases meeting the LTCH PPS criteria. Nearly 40 percent of LTCHs meet the 85 percent threshold, which aligns with the goals of the dual payment-rate structure—encouraging LTCHs to admit the most medically complex cases requiring specialized services. We calculated a 2018 margin of 4.7 percent for these LTCHs. Using a three-year historical average of cost growth from 2013 through 2015, prior to the implementation of the dual payment-rate structure (about 2 percent), we project that for facilities with more than 85 percent of Medicare cases that meet the criteria, the aggregate margin will decrease to 3.7 percent in 2020. The decrease in margin is driven by the 2019 payment update being reduced by an ACA-mandated additional factor of 0.75 percent. However, in 2020, based on the 2.5 percent payment update, we expect that the margin will begin to increase, albeit not to the 2018 level.

The extent to which LTCHs transition their admissions to cases that meet the LTCH PPS criteria will influence their financial performance under Medicare. We expect growth in payment to accompany growth in costs associated with the increased severity of illness in cases meeting the criteria. However, the extent to which this growth occurs depends on the degree of behavioral response from the industry. We project that LTCHs that admit a lower share of cases meeting the LTCH PPS criteria will have a negative Medicare margin in 2020, while those that admit a higher share of cases meeting the LTCH PPS criteria will have a margin higher than our projection.

The 2021 payment update for cases meeting the LTCH PPS criteria is expected to equal the projected LTCH market basket of 3.2 percent, less an adjustment for

productivity of 0.4 percent. Currently, the net expected update is 2.8 percent, but that amount may change by the time CMS calculates the final 2021 update. By 2021, the phase-in of the dual payment-rate structure will be complete and cases not meeting the LTCH PPS criteria will no longer receive a blended payment rate. In addition, LTCHs will be required to meet a 50 percent threshold of Medicare cases that meet the LTCH PPS criteria in order to be paid the standard LTCH PPS rate.

On the basis of these indicators, the Commission concludes that a positive payment update is necessary to support LTCHs focused on a high share of cases meeting the LTCH PPS criteria and to ensure that Medicare beneficiaries maintain access to safe and effective LTCH care.

RECOMMENDATION 11

For fiscal year 2021, the Secretary should increase the fiscal year 2020 Medicare base payment rates for long-term care hospitals by 2 percent.

RATIONALE 11

Most of our payment adequacy measures are positive or reflect expected changes under the new dual payment-rate structure, and the aggregate Medicare margin for LTCHs with a high share of cases that meet the LTCH PPS criteria for 2018 was positive, indicating that LTCHs are able to operate under current payment rates. However, we estimate that the Medicare margin will decline from 4.7 percent to 3.7 percent for these facilities in 2020. While we continue to expect LTCHs to quickly respond to the new payment incentives, based on historical trends, we also expect to see increases in cost growth in 2019 and 2020 as the new payment structure continues to be implemented. Because of these factors, an update of 2 percent is appropriate given the shift in the industry toward higher acuity patients and the Commission's desire to support LTCHs that have a high share of cases meeting the LTCH PPS criteria, while maintaining financial pressure on an industry that historically has been highly responsive to changes in payment policy.

IMPLICATIONS 11

Spending

- This recommendation would decrease federal program spending relative to the expected payment update by less than $50 million in 2021 and by less than $1 billion over five years.

Beneficiary and provider

- This recommendation is not expected to have adverse effects on Medicare beneficiaries' access to care. This recommendation is not expected to affect providers' willingness or ability to furnish care for cases that meet the LTCH PPS criteria. ■

Endnotes

1 The Medicare, Medicaid, and SCHIP Extension Act of 2007 also requires LTCHs to have a patient review process that screens patients to ensure appropriateness of admission and continued stay, physician on-site availability on a daily basis, and interdisciplinary treatment teams of health care professionals. The Pathway for SGR Reform Act of 2013 specifies that, beginning in fiscal year 2020, at least half of an LTCH's cases meet the criteria to continue to be paid the standard LTCH PPS rate.

2 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 ($27,381 in 2018). Medicare pays 80 percent of the LTCH's costs above the threshold. In fiscal year 2018, high-cost outlier payments were made for about 15 percent of LTCH cases. The prevalence of high-cost outlier cases varied by LTCH ownership. About 13 percent of cases in for-profit LTCHs were high-cost outliers compared with 20 percent of cases in nonprofit LTCHs. Historically, some case types have been far more likely to be high-cost outliers than others. For example, almost a quarter of cases assigned to MS–LTC–DRG 4 (tracheostomy with prolonged mechanical ventilation) qualify to receive high-cost outlier payments each year.

3 More information on the prospective payment system for LTCHs is available at http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_19_ltch_final_v2_sec.pdf?sfvrsn=0.

4 Not all LTCHs' cost reporting start dates are the same; implementation of the dual payment-rate structure began for LTCHs over the course of fiscal year 2016.

5 The 85 percent threshold originated from conversations with industry representatives and stakeholders as a reasonable goal for financial stability under Medicare. We update this cohort annually to reflect changes in the industry over time; therefore, time series analyses presented on this cohort are not necessarily comparable across reports.

6 MMSEA and subsequent legislation allowed exceptions to the moratorium 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 or 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 on or before December 29, 2007; (3) entities that had obtained a state certificate of need on or before December 29, 2007; (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; and (5) LTCHs that were in a state with only one other LTCH and that sought to increase beds after the closure or decrease in the number of beds of the state's other LTCH.

7 The Pathway for SGR Reform Act of 2013, as amended by the Protecting Access to Medicare Act of 2014, allowed exceptions to the moratorium for (1) LTCHs that began their qualifying period (demonstrating an average Medicare length of stay greater than 25 days) on or before April 1, 2014; (2) entities that had a binding or 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 on or before April 1, 2014; and (3) entities that had obtained a state certificate of need on or before April 1, 2014.

8 The Medicare Provider of Services (POS) file is one data source for determining LTCH supply. The POS file includes a larger number of facilities than is found in the cost report file. The cost report file provides a more conservative estimate of total capacity because some LTCHs may not yet have filed a cost report for the applicable year when we completed our analysis, while others may have been exempt from filing cost reports because of low Medicare volume or because they were paid under an all-inclusive rate. However, POS data can overstate the total number of LTCHs because some facilities that close are not be immediately removed from the file.

9 We define MedPAC areas as metropolitan statistical areas within a state or rest-of-state nonmetropolitan areas, depending on where beneficiaries reside (Medicare Payment Advisory Commission 2017b).

10 The following MS–LTC–DRGs are considered related to respiratory illness or prolonged use of mechanical ventilation: MS–LTC–DRG 4, tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth and neck without major operating room (OR) procedure; MS–LTC–DRG 166, other respiratory system OR procedures with major complication or comorbidity (MCC); MS–LTC–DRG 177, respiratory infections and inflammations with MCC; MS–LTC–DRG 189, pulmonary edema and respiratory failure; MS–LTC–DRG 207, respiratory system diagnosis with ventilator support 96+ hours; MS–LTC–DRG 208, respiratory system diagnosis with ventilator support ≤96 hours; MS–LTC–DRG 870, septicemia with prolonged ventilator support with MCC.

11 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows: (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments. This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.

12 Only one rural facility had more than 85 percent of its Medicare cases meeting the LTCH PPS criteria in 2018; therefore, we did not consider a breakdown of margins by urban–rural location to be meaningful.

13 Many new LTCHs operate at a loss for a period after opening. For this analysis of high-margin and low-margin LTCHs, we examined only LTCHs that submitted valid cost reports in both 2017 and 2018. We excluded government-owned LTCHs because they operate in a different financial context than other LTCHs, making their financial performance not comparable.

14 The 2019 payment update equaled the LTCH PPS market basket increase, projected to be 2.9 percent, less the required multifactor productivity adjustment of 0.8 percentage point and less the required 0.75 percentage point reduction.

15 CMS established the "25-percent threshold rule" to set a limit on the share of cases that can be admitted to an LTCH from certain referring ACHs and reduce payment for some LTCHs with cases that exceed the threshold. Although the policy was intended to create disincentives for LTCHs to admit a large share of their patients from a single ACH, it was never fully implemented. In its final 2019 payment rule, CMS eliminated the 25-percent threshold rule.

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