

CHAPTER 10

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**Long-term care  
hospital services**

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## R E C O M M E N D A T I O N

- 10** For fiscal year 2022, the Secretary should increase the 2021 Medicare base payment rate for long-term care hospitals by 2 percent.

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

## 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 for Medicare payment as an LTCH, a facility must meet Medicare’s conditions of participation for acute care hospitals and have an average length of stay of more than 25 days for certain Medicare patients. In 2019, Medicare spent \$3.7 billion on care provided in LTCHs. That year, about 82,000 fee-for-service Medicare beneficiaries had about 91,000 LTCH stays, which accounted for about 56 percent of LTCH stays among all users.

CMS began a four-year phase-in of a dual payment-rate system for LTCHs in fiscal year 2016. When fully phased in, LTCHs will be paid the standard LTCH prospective payment system (PPS) rate for cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 and will be paid a lower “site-neutral” rate for cases that do not. While policies effective during the coronavirus public health emergency (PHE) have temporarily affected the complete transition to site-neutral rates for all LTCHs in 2021, ultimately, the extent to which LTCHs shift toward cases that qualify for the standard LTCH PPS rate will determine the industry’s financial performance under Medicare’s LTCH PPS. Our payment adequacy analysis must be interpreted in the context of the transition to the dual payment-rate system and its anticipated effects on our payment adequacy metrics. To assess the adequacy of standard payments under the LTCH PPS for cases meeting the LTCH criteria, some analyses in

### In this chapter

- Are Medicare payments adequate in 2021?  
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- How should Medicare payments change in 2022?  
.....

this chapter focus on LTCHs treating a high share (more than 85 percent) of LTCH PPS-qualifying cases, consistent with the goals of the dual payment-rate system.

In this chapter, we recommend a payment-rate update for 2022. Because of standard data lags, the most recent complete data we have for most payment adequacy indicators is from 2019. Where relevant, we have considered the effects of the 2020 coronavirus PHE on our indicators and whether those effects are likely to be temporary or permanent. To the extent the effects of the PHE are temporary or vary significantly across LTCHs, they are best addressed through targeted temporary funding policies rather than a permanent change to all LTCHs' payment rates in 2022 and future years. Based on information available at the time of publication, we do not anticipate any long-term PHE-related effects that would warrant inclusion in the annual update to long-term care hospital payments in 2022.

### **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 and have seen reductions in these metrics since the implementation of the dual payment-rate system that began to be phased in with cost reporting periods starting in fiscal year 2016.

- ***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 system. From 2018 through 2019, the number of LTCH facilities decreased by 3.5 percent, while the number of LTCH beds decreased by 3 percent. However, the average LTCH occupancy rate was 63 percent in 2019, suggesting that LTCHs have capacity in the markets they serve.
- ***Volume of services***—From 2016 to 2019, the total number of Medicare cases in all LTCHs decreased by an average of about 10 percent annually. This downward trend in volume predates the implementation of the dual payment-rate system but has become more pronounced since the phase-in of site-neutral rates under that system. However, controlling for changes in the size of the traditional Medicare population, volume decline for LTCH PPS qualifying cases during this period was just 1.7 percent annually.
- ***Marginal profit***—Marginal profit, an indicator of whether LTCHs with excess capacity have an incentive to admit Medicare patients, averaged about 15 percent across LTCHs in 2019, a 1 percentage point decrease from 2018 but still a positive indicator of access. For LTCHs with a high share of cases meeting the LTCH PPS criteria specified in the Pathway for SGR Reform Act

of 2013, marginal profit totaled 17 percent, less than 1 percentage point lower than 2018.

**Quality of care**—Aggregate risk-adjusted rates of successful discharge to the community have declined, and all-condition hospitalizations within a stay have been unchanged during the dual payment-rate phase-in period. Consistent with prior years, non-risk-adjusted mean rates of death in the LTCH and death within 30 days of discharge for all cases were stable.

**Providers' access to capital**—LTCHs continued to alter their cost structures and referral patterns in response to the dual payment-rate system. Continued phase-in of site-neutral rates for nonqualifying cases, 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**—Aggregate LTCH margins have been variable and negative during the phase-in of the dual payment-rate system because costs grew more than payments in most years between 2016 and 2019. In 2017, the first full year that all LTCHs received the blended site-neutral rates under the transition to the dual payment-rate system, aggregate Medicare margins fell to –2.2 percent and then increased to –0.5 percent in 2018. In 2019, margins fell again to –1.6 percent. As they have since 2017, LTCHs with a high share of cases that met the criteria to be paid the standard LTCH rates in 2019 had positive margins, at 2.9 percent, a reduction of 1.8 percentage points from 2018. We expect continued changes in admission patterns and cost structures of LTCHs in response to the full implementation of the dual payment-rate system in 2020 and 2021, but the waiver of some site-neutral payment rules to create additional inpatient capacity during the PHE has delayed full implementation. We project that LTCHs' aggregate Medicare margin for facilities with more than 85 percent of Medicare discharges meeting the LTCH PPS criteria will be 2 percent in 2021.

## **How should payment rates change in 2022?**

Based on payment adequacy indicators and in the context of ongoing changes to payment policy, the Commission recommends for fiscal year 2022 that the 2021 LTCH payment rate be increased 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. ■



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## Background

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While most chronically critically ill (CCI) patients—those with profound debilitation of multiple systems, frequently with ongoing respiratory failure—are treated in acute care hospitals, some receive care in long-term care hospitals (LTCHs). LTCHs are primarily located in urban areas and are not distributed uniformly across the country, demonstrating that patients treated in LTCHs can be treated appropriately in other settings. To qualify as an LTCH for Medicare payment, a facility, which can be freestanding or colocated with other hospitals, must meet Medicare’s conditions of participation for short-term acute care hospitals (ACHs) and have an average length of stay of more than 25 days for certain Medicare patients.<sup>1</sup>

In 2019, LTCHs had an average Medicare length of stay of 26.8 days. About 82,000 fee-for-service (FFS) Medicare beneficiaries had approximately 91,000 LTCH stays and accounted for 56 percent of LTCHs’ discharges covered by any payer in 2019.<sup>2</sup> That year, Medicare program payments to LTCHs, exclusive of beneficiary cost sharing, were about \$3.7 billion (Office of the Actuary 2020).

Under Medicare’s prospective payment system (PPS) for LTCHs, payments are adjusted for differences in expected resource use using the Medicare severity long-term care diagnosis related group (MS–LTC–DRG) patient classification system.<sup>3</sup> MS–LTC–DRGs classify patients primarily according to diagnoses and procedures using the same groupings used in ACHs paid under the inpatient PPS (IPPS), but the MS–LTC–DRGs’ relative weights are specific to LTCH cases. The LTCH PPS makes high-cost outlier payments for cases that are extraordinarily costly and makes lower short-stay outlier payments for cases with shorter-than-average lengths of stay.<sup>4</sup>

Since 2016, Medicare has paid LTCHs according to a dual payment-rate system legislated in the Pathway for SGR Reform Act of 2013. (See text box, pp. 284–285, about the history of defining LTCH patient criteria, including previous Commission recommendations.) Under the law, the LTCH PPS standard payment rate applies only to qualifying LTCH stays 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 (ICU) or

- the case was assigned to an MS–LTC–DRG based on the receipt of mechanical ventilation services in the LTCH for at least 96 hours.

These LTCH PPS–qualifying cases are referred to as “cases meeting the LTCH PPS criteria” or “qualifying cases.” All other LTCH stays, referred to as “site-neutral cases” or “nonqualifying cases,” do not meet the criteria, including stays assigned to psychiatric or rehabilitation MS–LTC–DRGs, regardless of intensive care unit use.

Site-neutral cases are paid the lower of an amount based on Medicare’s IPPS payments or 100 percent of the costs of the case.<sup>5</sup> Starting in 2016 and continuing through 2019, nonqualifying cases received a blended payment of 50 percent of the standard LTCH PPS rate paid for qualifying cases and 50 percent of the site-neutral rate (Figure 10-1, p. 286).<sup>6</sup> In fiscal year 2020, the full site-neutral rate was to have been phased in for each facility starting with the month their cost reporting year began. Given this phase-in period, site-neutral payments would not have been fully in effect for all LTCH facilities until fiscal year 2021. However, in response to the coronavirus public health emergency (PHE), the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 waived some of the provisions of the dual payment-rate system, as explained in the text box on LTCHs and the pandemic (pp. 288–289). Under current law, site-neutral rates will resume after the end of the PHE.<sup>7</sup>

To assess the adequacy of Medicare’s payments under the LTCH PPS, we focus some analyses in this chapter on LTCHs with a high share of cases that meet the LTCH PPS criteria. We define this subgroup of LTCHs as those with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria.<sup>8</sup> As shown in Figure 10-2 (p. 286), the number and share of LTCHs in this group have been increasing each year since 2016. In 2019, in 47 percent of LTCHs, more than 85 percent of cases met the LTCH PPS criteria. At the same time, the number of cases in facilities with a high share of qualifying cases also increased, as shown in Figure 10-3 (p. 287).

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## Are Medicare payments adequate in 2021?

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To address whether LTCH PPS payments for 2021 are adequate to cover the costs that LTCHs incur in furnishing

## History of defining long-term care hospital patient criteria

Given the variation in long-term care hospital (LTCH) use across the country and the cost of providing care to Medicare beneficiaries in LTCHs, researchers and policymakers have attempted to define the type of patient most appropriate for the LTCH setting. Building on this research and its own analysis published 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 acute care hospital (ACH) settings. A few months earlier, in December 2013, the Pathway for SGR Reform Act mandated limiting the higher standard LTCH prospective payment system (PPS) rate to cases that spent at least three days in an intensive care unit (ICU) during an immediately preceding ACH stay or to cases that received an LTCH principal diagnosis indicating prolonged mechanical ventilation. While the policy in the Pathway for SGR Reform Act of 2013 uses a three-day ICU stay in a referring ACH as the threshold to qualify for the standard LTCH PPS rate, rather than the eight-day stay the Commission recommended, both policies had the intent of reducing incentives for LTCHs to admit beneficiaries with lower severity conditions. As the dual payment-rate system has been phased in, the number of site-neutral cases has been steadily declining (see Table 10-2, p. 291).

### Defining an LTCH patient: The research

A definition of the most medically complex patients appropriately treated in LTCHs has been elusive. Clinicians have described CCI patients requiring LTCH-level care as exhibiting metabolic, endocrine, physiologic, and immunologic abnormalities that result in profound debilitation and often ongoing respiratory failure (Nierman and Nelson 2002). While many of these conditions are not readily identifiable using administrative data, 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 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 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

*(continued next page)*

services to Medicare beneficiaries, we examine metrics of beneficiaries' access to care, including the capacity and supply of LTCH providers, changes over time in the volume of services furnished, and providers' willingness to admit Medicare beneficiaries; quality of care; providers' access to capital; and Medicare payments and providers' costs for LTCH PPS-qualifying cases. Our payment adequacy analysis for LTCHs must be interpreted in the context of the transition to the dual payment-rate system and its anticipated effects on our payment adequacy metrics. To focus our assessment of the adequacy of standard payments under the LTCH PPS, some analyses in

this chapter focus on LTCHs treating more than 85 percent of LTCH PPS qualifying cases in 2019. As shown earlier, the share of LTCHs in this group has grown, indicating that LTCHs are increasing their share of qualifying cases in response to the incentives of the LTCH PPS.

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

As Medicare phased in the dual payment-rate system, signaling the types of cases to be paid the LTCH PPS standard rate, reductions in the overall capacity and supply



## History of defining long-term care hospital patient criteria (cont.)

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 had also been commonly used for less acutely ill patients who may have required lengthy hospitalizations and subsequent PAC but did not have ongoing intensive nursing care needs (Centers for Medicare & Medicaid Services 2013). Research has shown that caring for lower acuity patients (defined as those with fewer than three days in an ICU and those without multiple system organ failure) in LTCHs increases Medicare expenditures without demonstrable improvements in quality of care or outcomes (Koenig et al. 2015).

### **Defining an LTCH patient: Commission recommendation**

The Commission has long maintained that (1) LTCHs should serve only the most medically complex patients; (2) payments to providers should be properly aligned with patients' service needs; and (3) subject to risk differentials, payment for the same services should be comparable, regardless of where the services are provided. In keeping with these tenets, the Commission recommended in its March 2014 report 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. These cases were concentrated in a small number of Medicare severity–diagnosis related groups that corresponded with critical care clinicians' descriptions of LTCH patients (Dalton et al. 2012).

Setting the ICU length-of-stay threshold for standard LTCH PPS payment at eight days captured 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 an immediately preceding ACH stay. The Commission therefore recommended that cases requiring prolonged ventilation care qualify for the standard LTCH PPS payment rate. For LTCH cases that did not qualify for the LTCH PPS rate, the Commission recommended payment rates equal to those of ACHs and that savings from this policy be used to create additional inpatient outlier payments for CCI cases in IPPS hospitals. ■

of LTCHs and in the volume of services they furnish were expected as facilities adapted to the new payment incentives to treat higher acuity cases.

### **Capacity and supply of providers: Decrease in number of LTCHs began in 2013 and continued through 2019**

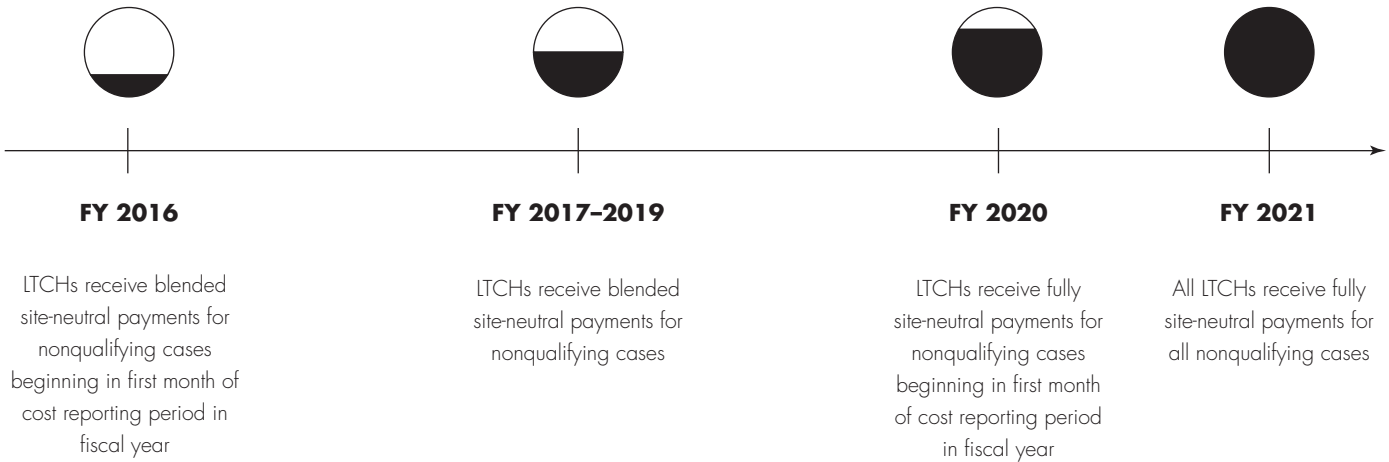
Because of concerns about appropriate use of LTCH-level care and spending on costly LTCH services, certain policies to constrain growth in the supply of LTCHs have been in place since the early 2000s. The Medicare, Medicaid, and SCHIP Extension Act of 2007 (MMSEA)

and subsequent legislation imposed a limited moratorium on new LTCHs and new beds in existing LTCHs from December 29, 2007, through December 28, 2012. During that time, new LTCHs were able to enter the Medicare program only if they met exceptions to the moratorium.<sup>9</sup> The Pathway for SGR Reform Act of 2013 and subsequent legislation implemented a new moratorium from April 1, 2014, through September 30, 2017.<sup>10</sup>

Since peaking in 2012, the number of LTCHs in 2019 decreased by more than 14 percent, from 421 (not shown) to 361 (Table 10-1, p. 290).<sup>11</sup> In 2019, 80 percent of

**FIGURE 10-1**

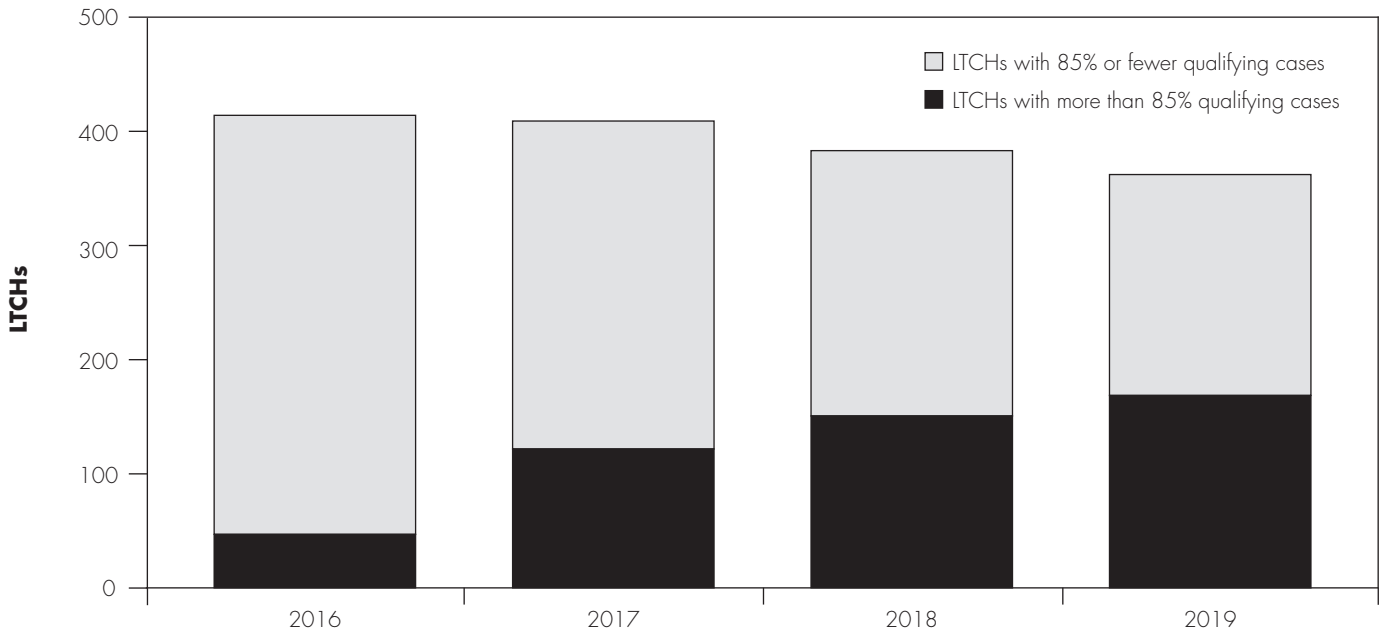
**Dual payment-rate system phase-in began in fiscal year 2016 and was to have been fully in effect in fiscal year 2021, absent PHE-related waivers**



Note: PHE (public health emergency, FY (fiscal year), LTCH (long-term care hospital). "Blended site-neutral payments" are 50 percent site-neutral rates and 50 percent standard LTCH prospective payment system (PPS) qualifying rates. "Nonqualifying cases" are Medicare cases that do not meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS.

**FIGURE 10-2**

**During the phase-in of the dual payment-rate system, the number and share of LTCHs with more than 85 percent of Medicare cases meeting the LTCH PPS criteria increased**

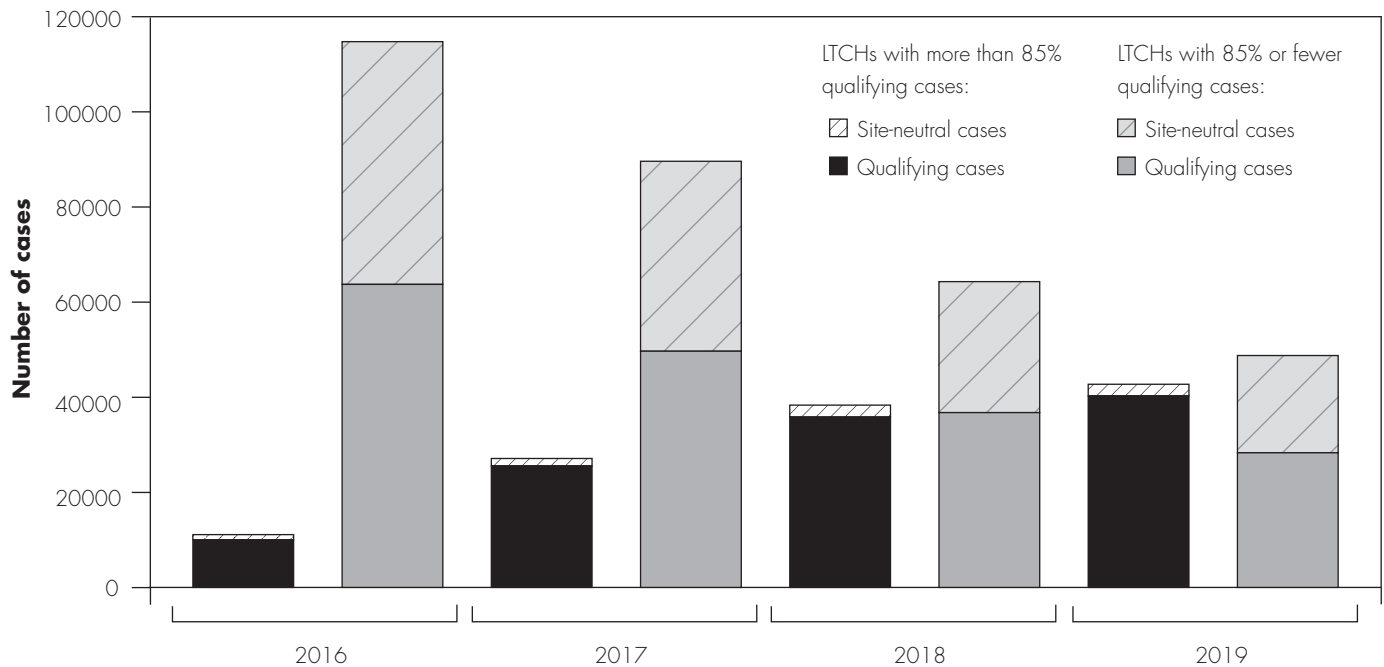


Note: LTCH (long-term care hospital), PPS (prospective payment system). "Meeting the LTCH PPS criteria" refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH PPS.

Source: MedPAC analysis of the LTCH Final Rule Impact files for fiscal years 2018, 2019, 2020, and 2021.

**FIGURE 10-3**

**During the phase-in of the dual payment-rate system, the number of qualifying cases cared for in LTCHs with a high share of qualifying cases increased**



Note: LTCH (long-term care hospital). “Qualifying cases” refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system.

Source: MedPAC analysis of the LTCH Final Rule Impact files for fiscal years 2018, 2019, 2020, and 2021.

LTCHs paid under the LTCH PPS were for profit (an increase from the historical trend), and 95 percent were in urban areas (consistent with historical trends). During the phase-in of the dual payment-rate system between 2016 and 2019, the number of LTCHs decreased by an average of 4.2 percent per year (Table 10-1, p. 290). From 2018 to 2019, the number of LTCHs decreased by 3.5 percent, and the number of beds decreased about 3 percent (data not shown).

Since the dual payment-rate system began through fiscal year 2020, 78 LTCHs have closed, representing over 15 percent of facilities and beds. The closures occurred primarily in market areas with multiple LTCHs: From October 2015 through September 2020, almost 80 percent of the MedPAC areas with an LTCH closure had at least one other LTCH in it.<sup>12</sup> In the remaining areas, the closest LTCH was within about two driving hours of the LTCH that closed.

Before the start of the dual payment-rate system, aggregate occupancy rates for LTCHs remained at about 66 percent for several years. In 2019, average occupancy was 63 percent for all LTCHs, the same as in 2018. LTCHs with more than 85 percent of Medicare cases meeting the LTCH PPS criteria had a higher aggregate occupancy rate (67 percent) than all LTCHs. These occupancy rates suggest that remaining LTCHs have capacity to treat additional patients.

We do not yet have a complete picture of the impact of the coronavirus PHE on occupancy or Medicare volume for all LTCHs in 2020. Information from the largest company providing LTCH services reported a 2 percentage point increase in year-over-year occupancy in its 100 facilities in 28 states from 2019 to 2020 through the end of the third quarter (Figure 10-5, p. 290) (Select Medical 2020). This company also reported increases in admissions and

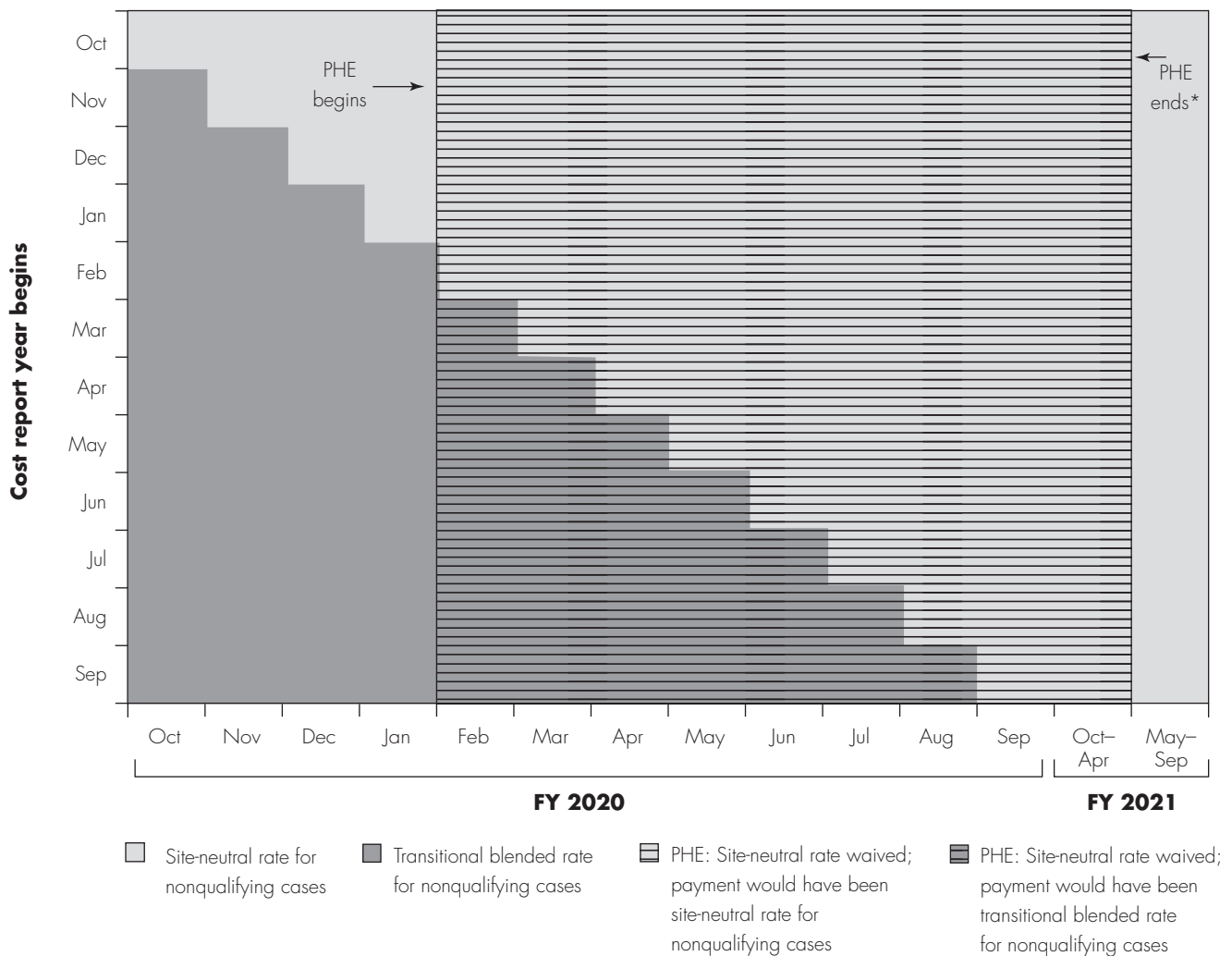
## Long-term care hospitals and the coronavirus pandemic

Since early 2020, the ongoing coronavirus pandemic and associated public health emergency (PHE) have had tragic effects on beneficiaries. They also have affected providers' patient volume, revenues, and costs, but those effects have varied considerably by provider type and geography.

Federal grants and loans, as well as setting-specific payment policy changes, have blunted some of the financial impacts. For long-term care hospitals (LTCHs), the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 temporarily waived certain provisions relating to site-neutral payments

**FIGURE 10-4**

**Waiver of site-neutral payments for LTCHs during the public health emergency interrupted full phase-in of dual payment-rate policy for LTCHs**



Note: LTCH (long-term care hospital), PHE (public health emergency). "Nonqualifying cases" refers to Medicare cases that do not meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system.  
\*As of this writing, the PHE is set to expire in April 2021.

(continued next page)

## Long-term care hospitals and the coronavirus pandemic (cont.)

during the coronavirus PHE to allow for expansion of inpatient capacity (Centers for Medicare & Medicaid Services 2020). Effective for claims with an admission date on or after January 27, 2020, and continuing through the duration of the PHE, all cases admitted are paid the LTCH PPS standard federal rate and are counted as discharges paid the LTCH PPS rate for purposes of calculating an LTCH's discharge payment percentage, temporarily interrupting the completion of the transition to the site-neutral payments for nonqualifying cases.<sup>13</sup>

As shown in Figure 10-4, the number of months of full site-neutral payments that were overridden by the PHE waiver depends on the start date of an LTCH's cost reporting year. (For example, LTCHs with a cost reporting year that began October 2019 would have received fully site-neutral payments for nonqualifying cases through January until the PHE waiver took effect.) CMS also waived the 25-day average-length-of-stay requirement to participate in the LTCH PPS when an LTCH admits or discharges patients to meet the demands of the PHE. This requirement will resume with a hospital's first cost reporting period that does

not include the PHE waiver period. We will be able to observe the effects of these policy changes in claims and cost report data for 2020 and 2021.

In this chapter, we are recommending payment rate updates for 2022. Because of standard data lags, the most recent complete data we have is from 2019 for most payment adequacy indicators. As we do each year, we use these data as well as changes in payment policy in current law to project margins for 2021 and make payment recommendations for 2022. To the extent the coronavirus pandemic's effects are temporary or vary significantly across individual providers, they are best addressed through targeted, temporary funding policies rather than a permanent change to all providers' payment rates in 2022 that also affect payments in future years. While the full effects of the pandemic on LTCH providers are not yet clear, available details about the impact of the coronavirus pandemic and associated policy changes on LTCHs can be found throughout this chapter. (For an overview of how our payment adequacy analysis takes account of the PHE, see Chapter 2 of this report.) ■

patient days through the third quarter of 2020 compared with 2019 but did not attribute the increase to patients with COVID-19. Though we do not yet have complete data on Medicare beneficiaries' LTCH utilization during the PHE, relaxing Medicare's site-neutral payment policies and eliminating the length-of-stay requirements to expand inpatient capacity during the PHE may increase Medicare volume for many facilities in 2020 and 2021.

### **Volume of services: Number of LTCH users continued to decline through 2019**

FFS Medicare beneficiaries' use of LTCHs decreased each year as the new dual payment-rate system was phased in. These decreases occurred, in part, because LTCHs changed their practices to admit fewer cases that did not

meet the LTCH PPS criteria (Medicare Payment Advisory Commission 2019). From 2016 to 2019, total LTCH cases per 10,000 beneficiaries dropped by about 10 percent annually, but for cases meeting the LTCH PPS criteria, that rate decreased just 1.7 percent per year over the same period (Table 10-2, p. 291). As volume declined, the share of cases meeting the criteria increased each year, reaching 75 percent in 2019, up from 58 percent in 2016, indicating success of the dual payment-rate system in reducing the number of site-neutral cases treated in LTCHs.

**LTCH stays are increasingly concentrated in a small number of diagnosis groups** In fiscal year 2019, the top 20 LTCH diagnoses made up 66 percent of LTCH stays. The most frequently occurring diagnosis was pulmonary

**TABLE  
10-1**

**The number of LTCHs continued to decrease in 2019**

Type of LTCH	2016	2017	2018	2019	Average annual change 2016-2019
LTCHs paid under the LTCH PPS	411	394	374	361	-4.2%
LTCHs with valid cost reports	407	398	368	351	-4.8
Nonprofit	71	71	60	61	-4.9
For profit	320	312	294	271	-5.4
Government	16	15	14	19	5.9

Note: LTCH (long-term care hospital), PPS (prospective payment system). 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.

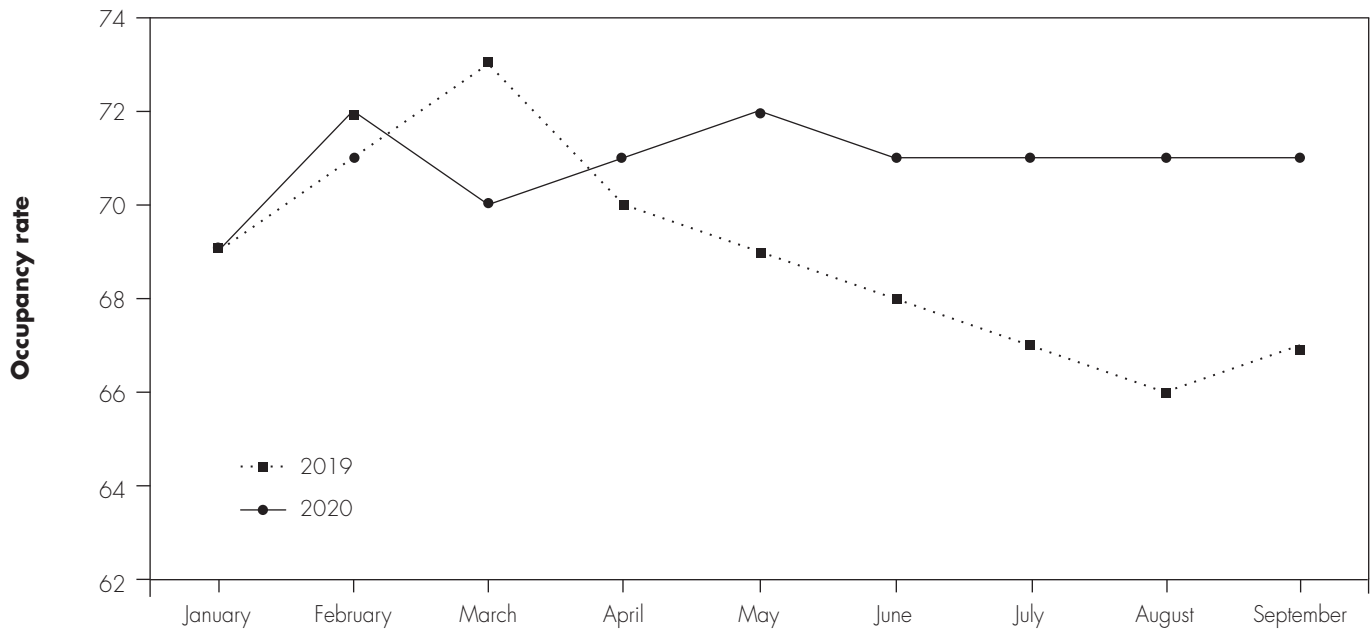
Source: Data for LTCHs paid under the LTCH PPS are from the Provider of Services file, based on the applicable fiscal year. Data for LTCHs with valid cost reports are from MedPAC analysis of cost report data (October 31, 2020 cut), based on the applicable fiscal year. The counts between the two sources differ due to the timing of the files and applicable data trims to the cost report files.

edema and respiratory failure (MS-LTC-DRG 189), accounting for 20 percent of stays. In 2019, 43 percent of LTCH cases were diagnoses that included respiratory conditions, an increase of 3 percentage points from 2018.<sup>14</sup>

Among the subset of LTCHs with a high share of cases (more than 85 percent) meeting the LTCH PPS criteria in 2019, LTCH stays are even more concentrated among a small number of diagnosis groups. For these LTCHs, the

**FIGURE  
10-5**

**Except for March, monthly occupancy rates for the largest company providing LTCH services were higher in 2020 than in 2019**



Note: LTCH (long-term care hospital).

Source: Select Medical Holdings Corp Form 10-Q for the 3rd quarter of 2020.

**TABLE  
10-2**

**The number of LTCHs and Medicare FFS LTCH cases continued to decrease, while the share of cases meeting the LTCH criteria increased in 2019**

	2016	2017	2018	2019	Average annual change 2016-2019
Cases					
All	125,586	116,424	102,288	91,147	-10.1%
Meeting criteria	72,318	74,666	71,916	67,987	-2.0
Share meeting criteria	58%	64%	70%	75%	8.6
Cases per 10,000 FFS beneficiaries					
All	32.5	30.1	26.5	23.8	-9.8
Meeting criteria	18.7	19.3	18.6	17.8	-1.7
Payment per case					
All	\$40,656	\$38,253	\$40,105	\$41,448	0.6
Meeting criteria	\$46,223	\$46,127	\$46,789	\$46,800	0.4
Average length of stay (in days)					
All	26.8	26.3	26.6	26.8	-0.1
Meeting criteria	27.9	27.9	28.0	28.0	0.1

Note: LTCH (long-term care hospital), FFS (fee-for-service). "Meeting criteria" refers to Medicare cases that meet the criteria specified in the Pathway for SGR Reform Act of 2013 for payment under the LTCH prospective payment system. All counts are for stays covered by FFS Medicare and do not include those in private plans.

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.

top 20 diagnoses made up more than three-quarters of stays (Table 10-3, p. 292). Despite overall volume declines, the absolute number of cases with the top two diagnoses—pulmonary edema and respiratory failure and respiratory system diagnosis with ventilator support—increased between 2018 and 2019 and accounted for nearly 43 percent of stays in 2019. That year, 54 percent of cases in LTCHs with a high share of cases meeting the LTCH PPS criteria involved diagnoses that were respiratory conditions or involved prolonged mechanical ventilation. These shifts toward complex respiratory cases indicate continued responsiveness to payment incentives and are consistent with the goals of the dual payment-rate system.

**Profile of Medicare LTCH users** FFS Medicare beneficiaries have been a declining share of all LTCH users since 2012. In 2019, they accounted for 56 percent of LTCH stays and 45 percent of patient days in aggregate. Dual-eligible beneficiaries (enrolled in both Medicare and Medicaid) continued to use LTCHs disproportionately: About 44

percent of Medicare stays were dual-eligible beneficiaries in 2019. FFS Medicare beneficiaries who use LTCHs are also disproportionately male, under age 65, diagnosed with end-stage renal disease, and/or Black, compared with the overall population of FFS Medicare beneficiaries. The higher rate of LTCH use by Black beneficiaries could be due to the concentration of LTCHs in areas of the country with larger Black populations (Dalton et al. 2012, Kahn et al. 2010). Another contributing factor could be a greater incidence of critical illness in this population (Mayr et al. 2010) and a greater likelihood to opt for LTCH care since these individuals are less likely than White beneficiaries to elect hospice care (Medicare Payment Advisory Commission 2017a).

**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

**TABLE  
10-3**

**The top 20 MS-LTC-DRGs made up more than three-quarters of FFS Medicare stays at LTCHs with a high share of stays meeting the LTCH PPS criteria in 2019**

MS-LTC-DRG	Description	Discharges	Share of cases
189	Pulmonary edema and respiratory failure	10,375	24.3%
207	Respiratory system diagnosis with ventilator support 96+ hours	7,873	18.4
871	Septicemia without ventilator support 96+ hours with MCC	2,440	5.7
208	Respiratory system diagnosis with ventilator support ≤96 hours	1,569	3.7
166	Other respiratory system OR procedures with MCC	1,038	2.4
949	Aftercare with CC/MCC	1,012	2.4
4	Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth and neck without major OR procedure	891	2.1
177	Respiratory infections and inflammations with MCC	836	2.0
981	Extensive OR procedure unrelated to principal diagnosis with MCC	829	1.9
682	Renal failure with MCC	782	1.8
314	Other circulatory system diagnoses with MCC	630	1.5
291	Heart failure and shock with MCC	629	1.5
862	Postoperative and post-traumatic infections with MCC	566	1.3
539	Osteomyelitis with MCC	563	1.3
919	Complications of treatment with MCC	547	1.3
870	Septicemia with ventilator support 96+ hours with MCC	504	1.2
559	Aftercare, musculoskeletal system and connective tissue with MCC	460	1.1
592	Skin ulcers with MCC	440	1.0
853	Infectious and parasitic disease with OR procedure with MCC	361	0.8
637	Diabetes with MCC	329	0.8
Top 20 MS-LTC-DRGs		32,674	76.4

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. Counts are for stays covered by FFS Medicare and do not include those in private plans. The sum of column components may not equal the stated total due to rounding. "Meeting the LTCH PPS criteria" refers to Medicare cases 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.

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 greater than the marginal costs of treating an additional beneficiary, a provider with 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.<sup>15</sup>

In 2019, the average LTCH marginal profit on Medicare cases was about 15 percent. Though down a percentage point from 2018, this value is a positive indicator of access because it suggests that LTCHs with available beds

continue to have a financial incentive to increase their occupancy with FFS Medicare beneficiaries who meet the LTCH PPS criteria. For LTCHs with a high share of Medicare cases meeting the LTCH PPS criteria, marginal profit in 2019 was even higher, 17 percent, less than 1 percentage point lower than in 2018.

**Quality of care: Risk-adjusted measures are mixed; unadjusted mortality rates are stable during the dual payment-rate system transition**

We evaluate the quality of LTCH care using two unadjusted mortality measures reported in previous years and two new measures: average risk-adjusted rates of



**TABLE  
10-4**

**Between 2015 and 2019, mean risk-adjusted rates of return to the community declined and hospital admissions and readmissions for LTCHs were stable**

	2015	2016	2017	2018	2019	Average annual change	
						2018–2019	2015–2019
Hospitalizations (all LTCHs)	5.5%	5.4%	5.3%	5.2%	5.3%	1.7%	-0.7%
Successful discharge to the community (all LTCHs)	26.9	25.4	24.4	22.9	22.1	-3.7	-4.9

Note: LTCH (long-term care hospital). “Successful discharge to the community” includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Both measures are uniformly defined and risk-adjusted across the four post-acute care settings. Providers with at least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate.

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

successful discharge to the community and all-condition hospitalizations within a stay.<sup>16</sup> Successful discharge to the community includes beneficiaries discharged to the community (including those discharged to the same nursing home) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. Both measures are uniformly defined and risk-adjusted across the four post-acute care (PAC) settings (skilled nursing facilities, home health agencies, inpatient rehabilitation facilities, and long-term care hospitals).<sup>17</sup> Providers with at least 60 stays in the year (the minimum count to meet a reliability of 0.7) were included in calculating the average facility rate.

**Aggregate risk-adjusted rates of successful discharge to the community have declined and all-condition hospitalizations within a stay have been unchanged during the dual payment-rate phase-in period**

In 2019, rates of acute care hospital admissions and readmissions during the LTCH stay were 5.3 percent (Table 10-4). This mean rate and the facility-level interquartile range of about 3 percent to 7 percent (not shown) were consistent with prior years of the dual payment-rate phase-in. Average rates of successful discharge to the community have gone down each year (higher rates are better) since 2015. In 2019, 22.1

percent of stays resulted in successful discharges to the community, a small decrease from 2018. During this period, patient acuity increased as a greater share of cases met the LTCH qualifying criteria and more facilities were treating a greater share of qualifying cases. While these cross-PAC measures are risk adjusted, to the extent that the risk adjustment does not account for certain patient characteristics, these changes could affect the rates of successful discharge.<sup>18</sup> Because the risk adjustment model for these measures pools cases in all four PAC settings, it may work relatively worse for LTCH cases, given their small contribution to the overall combined-PAC case count.

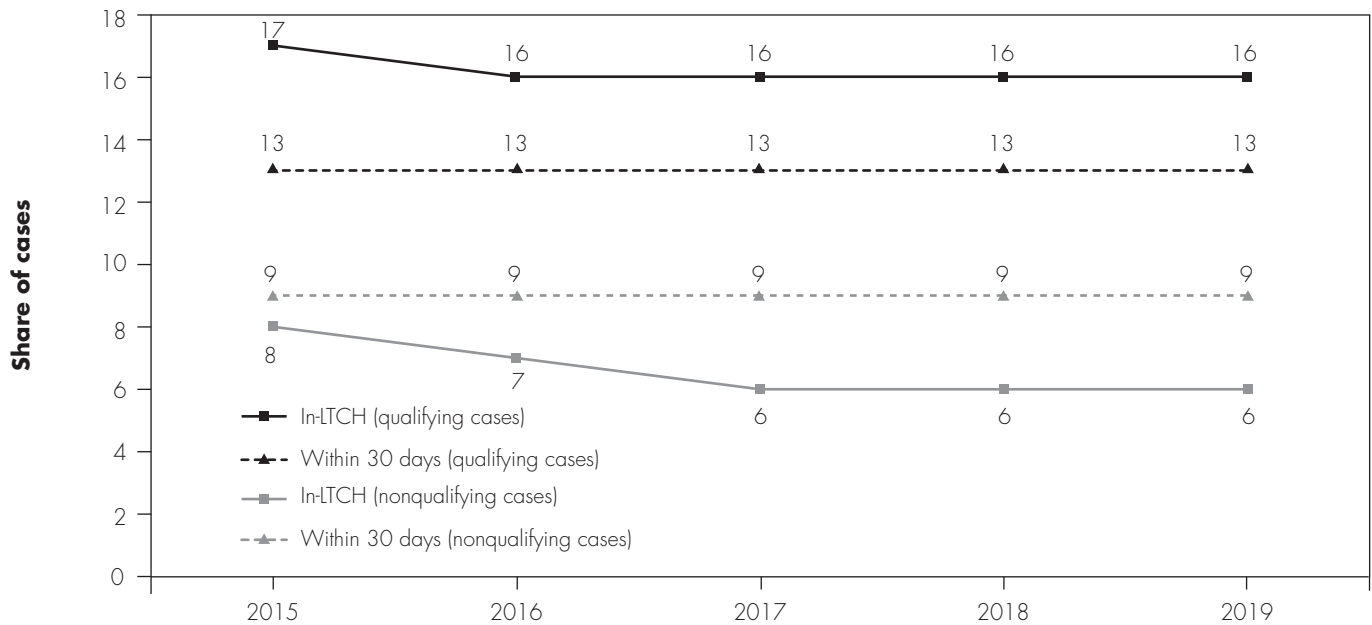
**Aggregate unadjusted quality measures have remained stable**

Unadjusted mortality rates in 2019 for FFS Medicare LTCH cases were generally unchanged from prior reported trends. However, because these measures are not risk adjusted, changes in patient severity may affect rates over time. Given differences in patient severity, unadjusted mortality rates (both in the facility and 30 days post discharge) varied depending on whether the case met the LTCH PPS criteria, but the rates were stable over time (Figure 10-6, p. 294).

For cases meeting the LTCH PPS criteria, unadjusted mortality rates varied based on which qualifying criteria the case met (Table 10-5, p 295). The approximately three-

**FIGURE  
10-6**

**Rates of unadjusted in-LTCH mortality and mortality within 30 days of discharge for FFS Medicare beneficiaries remain stable**



Note: LTCH (long-term care hospital), FFS (fee-for-service). "Qualifying cases" 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. "Nonqualifying cases" refers to Medicare stays that do not meet the criteria specified in the Pathway for SGR Reform Act of 2013. The share of qualifying cases is defined as having that share of cases in the reported year (e.g., 2018 rates are for providers with the designated share of cases in 2018), therefore the providers in those groups can vary each year.

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

quarters of cases that qualified for LTCH PPS payment solely based on the 3-day ACH intensive care unit (ICU) stay criteria had lower rates of readmission and death than did the approximately one-quarter of cases that received mechanical ventilation services in the LTCH for 96 hours.

Unadjusted readmission and mortality also varied by respiratory diagnosis groups (Table 10-6). For example, among patients with a principal diagnosis of septicemia with prolonged ventilator support with major complication or comorbidity (MCC) (MS-LTC-DRG 870), 37 percent died in the LTCH and another 13 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 11 percent died within 30 days of discharge. Overall, 34

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.

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

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

**TABLE  
10-5****Among FFS Medicare LTCH cases meeting the LTCH PPS criteria, rates of unadjusted mortality varied by qualifying criteria, 2019**

Reason for LTCH qualifying stay	Number	In-LTCH mortality rate	30-day post discharge mortality rate	Total mortality (in-LTCH plus 30 days post discharge)
ACH stay included at least 3 days in ICU	51,651	13%	13%	26%
Receipt of mechanical ventilation in the LTCH for at least 96 hours	16,336	24	14	39

Note: FFS (fee-for-service), LTCH (long-term care hospital), PPS (prospective payment system), ACH (acute care hospital), ICU (intensive care unit). "Cases meeting the LTCH PPS criteria" refers to Medicare stays that meet the criteria specified in the Pathway for SGR Reform of 2013 for payment under the LTCH PPS. Components may not sum to total due to rounding. The 51,651 cases grouped in the "ACH stay included at least 3 days in the ICU" qualified solely on that criterion and did not receive mechanical ventilation in the LTCH for at least 96 hours. Of the 16,336 cases in the "receipt of mechanical ventilation in the LTCH for at least 96 hours" group, 15,943 also had an ACH stay that included at least 3 days in the ICU.

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

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 during the transition period.

The LTCH industry has been positioning itself for the changing payment environment by 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

**TABLE  
10-6****Among FFS Medicare LTCH cases meeting the LTCH PPS criteria, rates of unadjusted mortality varied across diagnoses related to respiratory illness or using prolonged mechanical ventilation, 2019**

MS-LTC-DRG	Description	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+ hrs or primary diagnosis except face, mouth and neck without major OR procedure	30%	14%	45%
166	Other respiratory system OR procedures with MCC	21	16	38
177	Respiratory infections and inflammations with MCC	14	12	26
189	Pulmonary edema and respiratory failure	15	14	29
190	Chronic obstructive pulmonary disease with MCC	8	11	20
207	Respiratory system diagnosis with ventilator support 96+ hours	22	14	36
208	Respiratory system diagnosis with ventilator support ≤96 hours	33	15	48
870	Septicemia with ventilator support 96+ hours with MCC	37	13	50
	Total diagnoses related to respiratory illness or prolonged use of mechanical ventilation	20	14	34

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 totals due to rounding.

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

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 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, including KPC Health (a for-profit health care venture), Select Medical (another LTCH chain), and Lexmark Holdings LLC, purchased the hospitals (Ellison 2018b, Kindred Healthcare 2019, Mosbrucker 2019).

The CARES Act, passed in March 2020 in response to the coronavirus pandemic, gave providers, including LTCHs, access to funds through several mechanisms, including the provider relief fund, to be used for preventing, preparing for, and responding to COVID-19 and for reimbursing providers for lost revenues and health care–related expenses that are attributable to the disease. Also included were a Medicare accelerated and advance payments program, employer payroll tax deferral, paycheck protection program, and elimination of the sequester. (These funding sources were in addition to pandemic-related payment policy changes discussed in the text box, pp. 288–289.) The largest company providing LTCH services reported accessing all these sources of funding (Select Medical 2020).

LTCHs’ access to capital largely depends on their total (all-payer) profitability, which has been variable but positive in the dual payment-rate phase-in period. Before the phase-in, from 2012 through 2015, the LTCH all-payer margin remained at about 4 percent. However, in 2016, as the dual payment-rate system phase-in began, LTCHs’ all-payer margin declined to 3.1 percent. In 2017, the first full year of the phase-in, the all-payer margin dropped to 0.2 percent and then increased to 2.3 percent in 2018. In 2019, as LTCHs shifted their mix of cases toward qualifying cases, the aggregate all-payer LTCH margin was 2 percent. During the phase-in period, between 2015 and 2019, the share of Medicare revenue fell, from almost 50 percent to about 37 percent of total LTCH revenue, largely due to a reduction in the number of Medicare cases, particularly site-neutral cases.

The coronavirus pandemic and PHE-related waivers of site-neutral payments have disrupted the phase-in of the dual payment-rate system in 2020 and 2021, deferring its full impacts, for which the industry has been adjusting its admissions patterns and cost structures for several years.

Nevertheless, the Commission expects continued industry consolidation, limited need for capital, and limited growth opportunities until after the LTCH dual payment-rate system becomes fully implemented and LTCHs adjust their admission patterns and cost structures to align with the payment incentives of the dual payment-rate system in 2021. Because, absent PHE-related waivers of site-neutral payment policies, Medicare pays less for certain cases, LTCHs with a higher share of cases meeting the LTCH PPS criteria should have stronger financial performance when the dual payment-rate policy is fully implemented. In 2019, LTCHs with more than 85 percent of their Medicare cases meeting the LTCH PPS criteria had an aggregate all-payer margin of 3.2 percent, down 1.2 percentage points from 2018. In the short-term (2020 and 2021), however, LTCHs that have not transitioned to treating higher shares of qualifying cases could see improvements in their total margins due to higher standard LTCH PPS Medicare payments during the PHE for relatively lower cost site-neutral cases. (See text box, p. 301, for a discussion of the interaction of PHE-related payment policy changes and margin projections.)

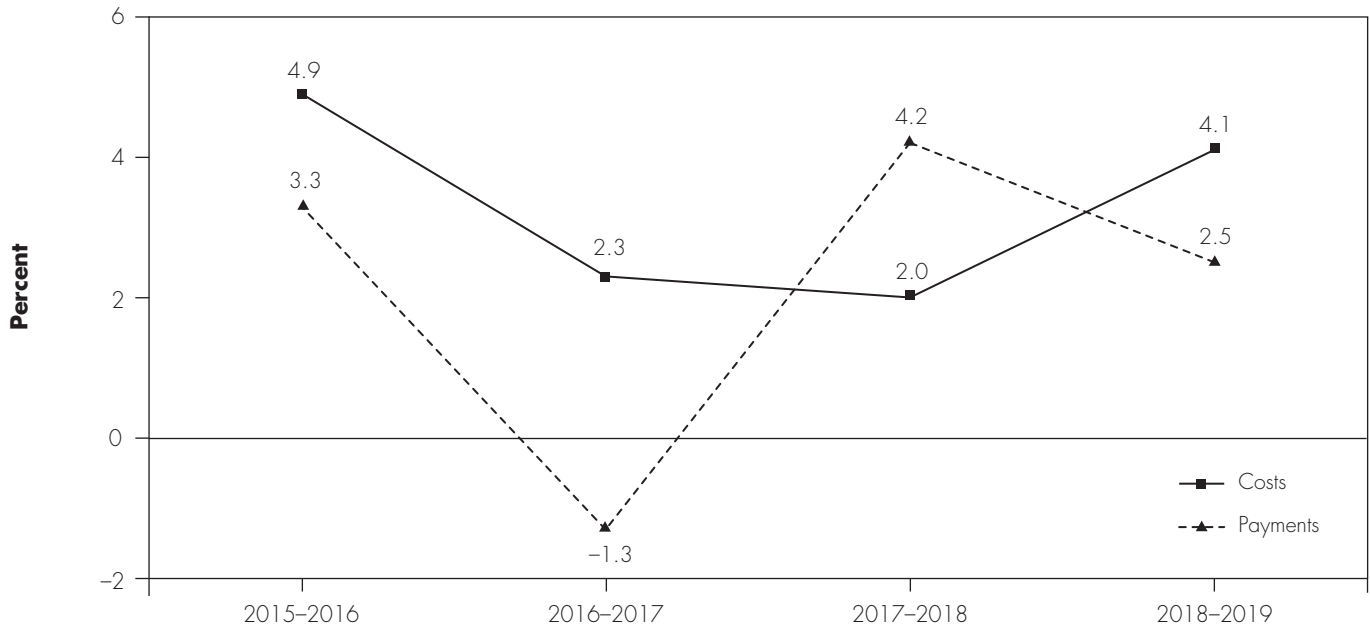
### **Medicare’s payments and providers’ costs: Cost growth exceeded payment growth in 2019**

Fiscal year 2019 was the last full year of the dual payment-rate system transition period during which LTCHs received a blended payment of 50 percent of the site-neutral rate and 50 percent of the LTCH standard rate for cases that did not meet the LTCH criteria. In 2019, the aggregate Medicare margin for all LTCHs was –1.6 percent, a 1 percentage point reduction from 2018. Among LTCHs with more than 85 percent of LTCH PPS–qualifying cases in 2019, aggregate Medicare margins were 2.9 percent.

### **During the phase-in of the dual payment-rate system, growth in cost per case has outpaced payment increases for all LTCH cases**

From 2016 to 2019, the share of all LTCH cases that met the LTCH PPS criteria increased from 58 percent to 75 percent. During this period of transition, aggregate cost growth was variable from year to year and generally outpaced payment growth as LTCHs adjusted their types of cases and received blended payments for cases that did not qualify for the standard LTCH PPS rate.

**Changes in payments per Medicare stay** CMS began to phase in the dual payment-rate system for cost-reporting periods beginning in 2016. As such, aggregate payment

**FIGURE  
10-7****Year-over-year changes in payments and cost per stay for LTCHs that had a high share of cases meeting the LTCH PPS criteria in 2019**

Note: LTCH (long-term care hospital), PPS (prospective payment system). "High share of 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 cost report data from CMS.

changes for all LTCHs in this period reflect payments for site-neutral cases and cases qualifying for the LTCH PPS standard rate. From 2015 to 2016, growth in payments per stay was nearly flat. Between 2016 and 2017, the first full year of the dual payment-rate system phase-in for all LTCHs, average Medicare payment per stay declined by 6.8 percent, consistent with lower payments for all site-neutral cases. As the share of cases meeting the LTCH criteria increased, Medicare payment per LTCH stay increased 3.8 percent from 2017 to 2018 and 2.9 percent from 2018 to 2019. For facilities with a high share of LTCH PPS-qualifying stays in 2019, payments per stay increased 2.5 percent from 2018.

**Changes in costs per Medicare stay** As providers adjusted to the incentives of the site-neutral payments, growth in cost per stay between 2015 and 2016 slowed to 1.3 percent in aggregate, the slowest growth since 2011. In 2017, LTCHs reduced costs per stay by 0.9 percent in aggregate.

This reduction likely resulted from changes in LTCH cost structures for site-neutral cases under the dual payment-rate system. As the share of LTCH PPS-qualifying cases increased, costs per stay increased 2.9 percent in 2018 and 4.4 percent in 2019, reflecting declining volume and an increase in acuity associated with treating the higher severity cases meeting the LTCH PPS criteria.

For the cohort of facilities with a high share of LTCH PPS-qualifying stays in 2019, costs per stay increased by about 4 percent from 2018 (Figure 10-7). This rate of growth in cost per stay between 2018 and 2019, which was the final full year of the blended payments for nonqualifying cases, reflects declining case volume as more providers transitioned to greater shares of higher acuity LTCH PPS-qualifying cases. For this cohort of LTCHs, their aggregate share of cases meeting the LTCH criteria grew steadily between 2016 and 2019, from 71 percent to 94 percent.

**TABLE  
10-7****The aggregate LTCH Medicare margin decreased between 2018 and 2019**

Type of LTCH	Share of stays, 2019	Medicare margin				
		2015	2016	2017	2018	2019
All	100%	4.7%	3.9%	-2.2%	-0.5%	-1.6%
Nonprofit	14	-5.9	-5.7	-13.0	-11.7	-12.2
For profit	84	6.5	5.5	-0.3	1.3	0.4

Note: LTCH (long-term care hospital). Nonprofit and for profit rows sum to 98 percent of stays because margins for government-owned facilities, which account for 2 percent of stays, are not shown.

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

### Aggregate LTCH Medicare margins decreased in 2019

In 2019, the aggregate Medicare margin for LTCHs fell to -1.6 percent as providers' costs grew more than Medicare payments. Consistent with prior years, financial performance of for-profit LTCHs (which accounted for 79 percent of all LTCHs (data not shown) in our cost report analysis and over 84 percent of LTCH stays) and nonprofit LTCHs varied in 2019 (Table 10-7). The aggregate margin for nonprofit LTCHs (which accounted for 17 percent of LTCHs (data not shown) in our cost report analysis and about 14 percent of LTCH stays) was -12.2 percent and the aggregate for-profit margin was 0.4 percent.

The aggregate Medicare margin for all LTCHs in Table 10-7 reflects the mix of site-neutral cases (paid the blended site-neutral rate in 2019) and LTCH PPS-qualifying cases paid the LTCH PPS standard rate each year. However, for purposes of determining the adequacy of the LTCH PPS, we are interested in cases that meet the LTCH criteria and are paid the standard LTCH PPS rate. (The payment rate for site-neutral cases is updated by means of the IPPS update.) In 2019, imputed case-level margins for cases meeting the LTCH PPS criteria were positive, over 3 percent, though down from about 6 percent in 2016 through 2018 (data not shown). To distinguish performance of providers under the LTCH PPS since 2017, we have examined margins for the subset of providers with a high share of qualifying cases in each year and found higher margins among these providers.

In 2019, this subset with a high share of qualifying cases (94 percent in aggregate) had an aggregate margin of 2.9 percent (Table 10-8). The 2019 margin for the subset of providers was lower than it had been in the previous two years, as membership in this group has grown over time to include more LTCHs. As we saw with the full sample of LTCHs, nonprofit providers have lower margins than for-profit providers among LTCHs with a high share of cases meeting the LTCH PPS criteria.

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

Higher costs per stay and lower payments per stay drove differences in financial performance between LTCHs with the lowest (bottom quartile) and highest (top quartile) Medicare margins.<sup>19</sup> High-margin LTCHs had a higher average case mix (1.22) than low-margin LTCHs (1.14) (Table 10-9, p. 300). This higher case mix index, in part, reflects the share of Medicare cases meeting the LTCH PPS criteria and has been increasing since the dual payment-rate system was implemented. In 2019, 80 percent of Medicare cases in high-margin LTCHs met the criteria, compared with 66 percent in low-margin LTCHs. Occupancy rates were also higher among high-margin LTCHs compared with low-margin LTCHs: 69 percent versus 55 percent.

After accounting for differences in case mix and local market input price levels, low-margin LTCHs had standardized costs per discharge that were over 40 percent higher than high-margin LTCHs (\$39,477 vs. \$27,819). Payments per discharge were substantially

lower for low-margin LTCHs. Outlier payments constituted a larger share of total payments to low-margin LTCHs compared with high-margin LTCHs. When these outlier payments were removed from total payments, standardized payment per discharge for low-margin LTCHs was \$33,599 compared with \$39,650 for high-margin LTCHs.

Given that low-margin LTCHs had relatively low occupancy, low share of stays meeting the LTCH PPS criteria, and relatively high costs in 2019, it may be difficult for many of these LTCHs to increase their occupancy rates and concurrently transition to a higher share of cases meeting the LTCH PPS criteria when the dual payment-rate system resumes after the end of the coronavirus PHE.

## How should Medicare payments change in 2022?

To estimate LTCH payments, costs, and margins for 2021, we consider the experience of the subset of LTCHs with a high share of cases qualifying for the standard LTCH PPS rates in 2019. Starting with payments and costs information for 2019, we consider (1) expected changes to costs of caring for FFS Medicare beneficiaries between 2019 and 2021 and (2) Medicare payment changes in current law in 2020 and 2021 at the time of this writing. The payment changes that affect our estimate of the 2021 margin include:

- 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;
- market basket increase of 2.3 percent for fiscal year 2021, with no productivity adjustment, for a net update of 2.3 percent;
- budget-neutrality adjustments for the elimination of the 25 percent rule;<sup>20</sup>
- budget-neutrality adjustments for changes to the area wage index;<sup>21</sup>
- CARES Act suspension of the 2 percent sequestration reduction to payments from May 1, 2020, through December 31, 2020, and subsequent extension of the suspension by the Consolidated Appropriations Act, 2021, through March 31, 2021.

**TABLE 10-8**

### Aggregate Medicare margins were positive for LTCHs with a high share of LTCH PPS-qualifying cases in 2019

	Medicare margin		
	2017	2018	2019
All high-share LTCHs	4.6%	4.7%	2.9%
Nonprofit	-6.9	-5.6	-6.9
For profit	6.5	6.2	4.2

Note: LTCH (long-term care hospital), PPS (prospective payment system). The numbers of LTCHs are 117 for 2017, 141 for 2018, and 168 for 2019. "LTCHs with a high share of LTCH PPS-qualifying cases" 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 each year.

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

The net result is that from 2019 to 2021, payment rates will increase by about 3.9 percent for cases that meet the LTCH PPS criteria.

As more LTCHs have transitioned to treating higher shares of LTCH PPS-qualifying cases during the phase-in of the dual payment-rate system through 2019, we expected and have seen growth in costs per case associated with increased acuity of cases meeting the criteria and declining volume. In our interviews about transitioning to the dual payment-rate system in 2018, LTCH staff discussed operational and administrative changes to handle higher acuity patients, including adding services or increasing staff capabilities (Medicare Payment Advisory Commission 2019). LTCHs described adding ICU beds, bariatric beds, and telemetry services to accommodate the higher acuity of patients discharged from an ACH to the LTCH. To accommodate higher acuity patients, facilities had increased staff skill levels through additional training, including critical care training for registered nurses to ensure that ICU-level care could be provided. Facility staff also discussed increased training at all staff levels to facilitate more vigilant monitoring and earlier patient ambulation. In addition to training, facility staff also reported hiring more nurses to increase nurse-to-patient ratios. We observe that, by 2019, cost growth had not yet leveled off among providers with a high share of LTCH

**TABLE  
10-9**

**LTCHs in the top quartile of Medicare margins in 2019 had lower costs, higher payments, and a higher share of cases meeting LTCH PPS criteria**

Characteristics	High-margin quartile	Low-margin quartile
Mean margin	15.5%	-29.2%
Mean total stays per facility (all payers)	459	405
Medicare patient share	63%	52%
Occupancy rate	69%	55%
Mean CMI	1.22	1.14
Mean per discharge:		
Standardized costs	\$27,819	\$39,477
Standard Medicare payment*	\$39,650	\$33,599
High-cost outlier payments	\$3,863	\$6,657
Share of:		
Cases meeting the LTCH PPS criteria	80%	66%
LTCHs that are for profit	85	70

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 2018 and 2019. 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.

PPS-qualifying cases in that year, as we had anticipated in previous years.

As the industry continues to adapt and fully transition to caring for patients who qualify for LTCH PPS standard payments, we expect this historical rate of transitional-phase cost growth through 2021, particularly given that the coronavirus pandemic-related payment policies have protracted this transition. Based on payment changes in

current law and average cost growth from 2016 through 2019 (about 2.8 percent) for facilities that achieved this high share of qualifying cases by 2019, we project the aggregate margin among these providers will decrease to 2 percent in 2021. (See text box for a discussion of the interaction of PHE-related payment policy changes and margin projections.) Our projection is driven by an assumption of growth in cost per case, based on the historical average, which is higher than payment increases in the period, even with the additional payments resulting from the suspension of the sequester.

The 2022 payment update for cases meeting the LTCH PPS criteria is expected to equal the projected LTCH market basket of 2.5 percent, less an adjustment for productivity of 0.3 percent, but that may change by the time CMS calculates the final 2022 update. Absent coronavirus PHE-related payment policy changes, the phase-in of the dual payment-rate system would have been complete, and all LTCHs would have been paid the site neutral rate for cases not meeting the LTCH PPS criteria by 2021.<sup>22</sup> However, as noted above, the CARES Act waiver of site-neutral policies disrupted this implementation to allow for expanded inpatient capacity.<sup>23</sup> As a result, the full site-neutral payments will not take effect until the PHE expires, absent any policy changes.

Based on 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 10**

**For fiscal year 2022, the Secretary should increase the 2021 Medicare base payment rate for long-term care hospitals by 2 percent.**

**RATIONALE 10**

Our payment adequacy measures for LTCHs are positive or reflect expected changes under the new dual payment-rate system. The aggregate Medicare margin for LTCHs with a high share of cases that meet the LTCH PPS criteria for 2019 was positive, indicating that LTCHs can operate under current payment rates. However, we estimate that the Medicare margin will decline from 2.9 percent to 2 percent for these facilities in 2021. While we continue to expect LTCHs to adapt to the new payment incentives, based on historical trends, we also expect to see cost



## Coronavirus public health emergency waiver–related impacts on all long-term care hospital payments and costs in 2020 and 2021

As discussed in the text box (pp. 288–289), the Coronavirus Aid, Relief, and Economic Security Act temporarily waived certain provisions relating to site-neutral payments during the coronavirus public health emergency (PHE) to allow for expansion of inpatient capacity. Because it changed payments for site-neutral cases, this waiver does not affect projected margins for long-term care hospital (LTCH) prospective payment system (PPS)–qualifying cases. Under the fully implemented site-neutral policy, we would expect margins for LTCHs with high shares of LTCH PPS–qualifying cases to be higher than our projections and lower for LTCHs with higher shares of site-neutral cases in 2020 and 2021. However, with the waiver of site-neutral payments, LTCHs with a high

share of site-neutral cases could have higher margins in 2020 and 2021 than they would have otherwise because they will receive the higher LTCH PPS payment for lower-cost site-neutral cases. It is possible those margins could exceed margins for LTCHs with high shares of qualifying cases. It is also possible that LTCHs that have transitioned to caring for a high share of qualifying cases during the phase-in of the dual payment-rate system will care for more site-neutral cases due to the coronavirus pandemic or in response to payment incentives. We will be able to observe the effects of PHE–related policies on LTCHs’ payment and costs in cost-report data for 2020 and 2021 when available. ■

growth in 2020 and 2021 consistent with growth during the phase-in of the dual payment-rate system. 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 10

#### Spending

- This recommendation would decrease federal program spending relative to the expected payment update by less than \$50 million in 2022 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

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- 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, daily physician on-site availability, and interdisciplinary treatment teams of health care professionals. The Pathway for SGR Reform Act of 2013 specifies that, beginning in fiscal year 2020, LTCHs are also required to maintain a certain share of beneficiaries who qualify to receive the standard LTCH prospective payment system rate.
- 2 Throughout this chapter, we use the term “FFS Medicare” or “traditional Medicare” as equivalents of the CMS term “Original Medicare.” Collectively, we distinguish the payment model represented by these terms from other models such as Medicare Advantage or advanced alternative payment models that may use FFS mechanisms but are designed to create different financial incentives.
- 3 More information on the prospective payment system for LTCHs is available at [http://medpac.gov/docs/default-source/payment-basics/medpac\\_payment\\_basics\\_20\\_ltch\\_final\\_sec.pdf?sfvrsn=0](http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_20_ltch_final_sec.pdf?sfvrsn=0).
- 4 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 (\$27,124 in 2019). Medicare pays 80 percent of the LTCH’s costs above the threshold. In fiscal year 2019, 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 14 percent of cases in for-profit LTCHs were high-cost outliers compared with 22 percent of cases in nonprofit LTCHs.
- 5 The Bipartisan Budget Act of 2018 specified that the IPPS-comparable amount would be reduced by 4.6 percent for fiscal years 2018 through 2026.
- 6 Not all LTCHs’ cost reporting start dates are the same; implementation of the dual payment-rate system began for LTCHs over the course of fiscal year 2016.
- 7 Under section 319 of the Public Health Services Act, the Secretary of Health and Human Services may determine that a disease or disorder presents a public health emergency (PHE) or that a PHE, including significant outbreaks of infectious disease or bioterrorist attacks, otherwise exists. The Secretary first determined the existence of a coronavirus PHE, based on confirmed cases of COVID-19 in the U.S., on January 31, 2020. At the time of publication, the coronavirus PHE had been renewed four times, most recently on January 7, 2021.
- 8 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, some time series analyses presented for this cohort are not necessarily comparable across reports.
- 9 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.
- 10 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.
- 11 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 count 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 immediately removed from the file.

- 12 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).
- 13 Section 3711(b)(2) of the CARES Act provides a waiver of the application of the site-neutral payment rate under Section 1886(m)(6)(A)(i) of the Act for those LTCH admissions that are in response to the PHE and occur during the coronavirus PHE period. Under this provision, all LTCH cases admitted during the PHE period will be paid the relatively higher LTCH PPS standard federal rate (Centers for Medicare & Medicaid Services 2020). For cost reporting periods beginning on or after October 1, 2019, an LTCH that has not maintained the required discharge payment percentage (DPP) is paid an amount comparable to the amount paid for a similar stay under the acute care hospital PPS until its DPP reaches 50 percent or higher; however, section 3711(b)(1) of the CARES Act waives the payment adjustment under section 1886(m)(6)(C)(ii) of the Act for LTCHs that do not have a DPP for the period that is at least 50 percent during the coronavirus public health emergency period. (An LTCH's DPP is its ratio of fee-for-service discharges that qualify for the LTCH PPS rate to the LTCHs' total number of Medicare discharges.)
- 14 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.
- 15 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.
- 16 This year we have dropped standardized infection ratios of hospital-onset infections—including rates of catheter-associated urinary tract infection, central line–associated blood stream infection, methicillin-resistant staphylococcus aureus (MRSA) infection, clostridium difficile infection—published by CMS on its LTCH Compare website. We previously reported that these rates continued to be lower than expected after adjusting for certain risk factors, but we cautioned against interpreting the ratios and changes over time because of variation in LTCHs' reporting of these infections. Data available for three of these measures (MRSA is no longer reported) shows continued decline (indicating improvement compared to fiscal year 2018) for fiscal year 2019.
- 17 The risk adjustment for the successful discharge to the community measure includes age and sex of the beneficiary, end-stage renal disease (ESRD) and disability status for entitlement, principal diagnosis, comorbidities, the length of stay of the preceding hospital stay (if there was one), and a count of the hospitalizations during the preceding year. Risk adjusters for the hospitalization measure include primary diagnosis, comorbidities and severity of illness, special conditions (severe wounds, difficulty swallowing, and bowel incontinence), age and sex, disability and ESRD status, hospitalization in the previous month, days in the intensive care unit during a preceding hospitalization (if there was one), a count of the hospitalizations during the preceding year, and the provision of ventilator care during the PAC stay.
- 18 The risk adjustment model for these measures pools cases across all four PAC settings.
- 19 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 2018 and 2019. We excluded government-owned LTCHs because they operate in a different financial context than other LTCHs, making their financial performance not comparable.
- 20 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. The 2020 standard federal rate included a temporary, one-time budget-neutrality adjustment of 0.999858 in connection with the elimination of the 25 percent rule. The 2021 standard federal rate included a permanent, one-time budget-neutrality adjustment of 1.000517 for the elimination of the 25 percent threshold rule.

- 21 The 2020 standard federal rate included an area wage budget-neutrality factor of 1.0020203. The 2021 standard federal rate included an area wage budget-neutrality factor of 1.0016837.
- 22 CMS estimated that LTCH PPS payments for cases that complete the statutory transition to the lower payment rates under the dual rate system would decrease by approximately 24 percent in 2021. This estimate accounts for the LTCH site-neutral payment rate cases that will no longer be paid a blended rate at the end of the statutory transition period, cases that represent approximately 25 percent of all LTCH cases and 10 percent of all LTCH PPS payments.
- 23 The CARES Act also temporarily waived the requirement that, on or after October 1, 2019, to be paid the LTCH PPS rate, a facility must have maintained a discharge payment percentage (DPP) of at least 50 percent.

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