SECTION 8

# Post-acute care

## Skilled nursing facilities
## Home health services
## Inpatient rehabilitation facilities
## Long-term care hospitals

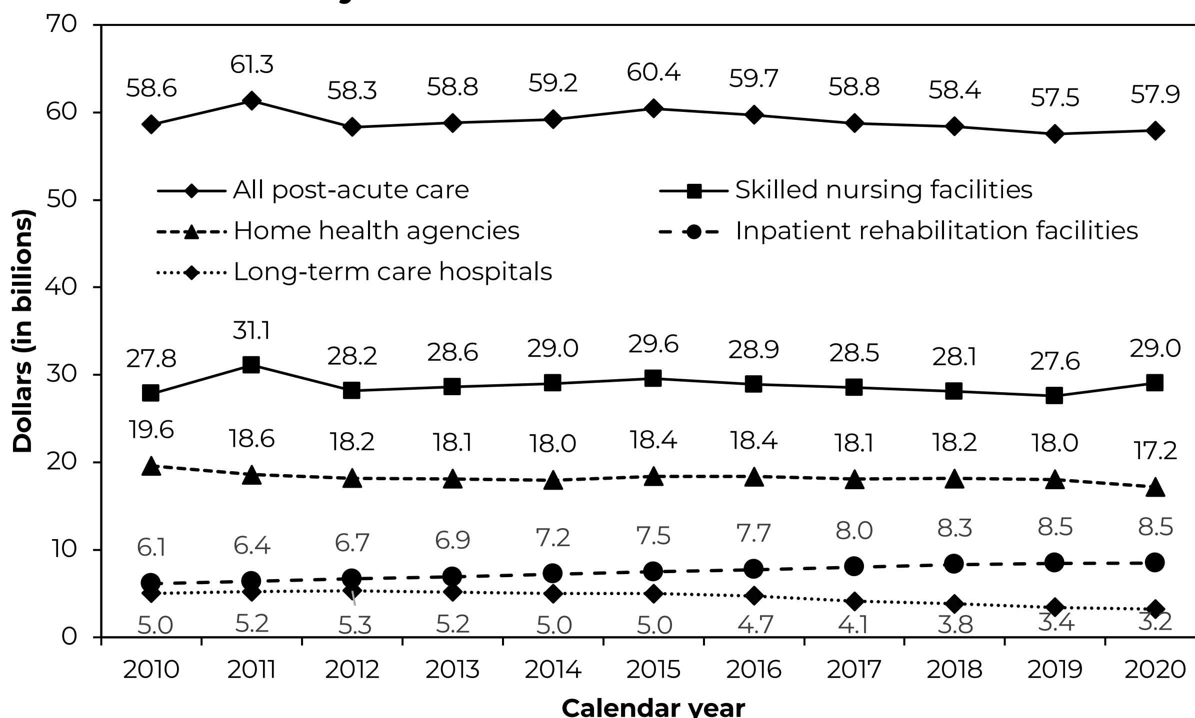
## Chart 8-1. The number of post-acute care providers decreased slightly in 2021

| | 2017 | 2018 | 2019 | 2020 | 2021 | Average annual percent change 2017–2021 | Percent change 2020–2021 |
|---|---|---|---|---|---|---|---|
| Home health agencies | 11,963 | 11,699 | 11,569 | 11,565 | 11,474 | –1.0 | –0.8 |
| Inpatient rehabilitation facilities | 1,178 | 1,170 | 1,152 | 1,159 | 1,181 | 0.1 | 1.9 |
| Long-term care hospitals | 411 | 386 | 371 | 351 | 345 | –4.3 | –1.7 |
| Skilled nursing facilities | 15,377 | 15,350 | 15,297 | 15,159 | 15,086 | –0.5 | –0.5 |

**Source:** MedPAC analysis of active provider counts from CMS Survey and Certification's Quality, Certification, and Oversight reports (skilled nursing facilities and home health agencies) and CMS Provider of Services files (inpatient rehabilitation facilities and long-term care hospitals).

- The number of home health agencies has been declining since 2013 after several years of substantial growth (data not shown). The decline in agencies was concentrated in Texas and Florida, two states that saw considerable growth after the implementation of the home health prospective payment system in October 2000.
- After declining for several years, the total number of inpatient rehabilitation facilities (IRFs) increased from 1,152 IRFs in 2019 to 1,159 IRFs in 2020. In 2021, the number of IRFs increased again to 1,181 IRFs. Most IRFs are distinct units in acute care hospitals; about one-quarter are freestanding facilities. However, because freestanding IRFs tend to have more beds, they account for about half of Medicare discharges from IRFs.
- After peaking in 2012 (data not shown), the number of long-term care hospitals (LTCHs) has decreased. The decline became more rapid after the implementation of a dual payment-rate system that reduced payments for certain Medicare discharges from LTCHs beginning in fiscal year 2016.
- The total number of skilled nursing facilities rose between 2016 and 2017, then decreased less than 1 percent per year between 2017 and 2021.

## Chart 8-2. Medicare fee-for-service spending for post-acute care was relatively stable from 2010 to 2020




**Note:** These calendar year–incurred data represent program spending only; they do not include beneficiary cost sharing.

**Source:** CMS Office of the Actuary 2022.

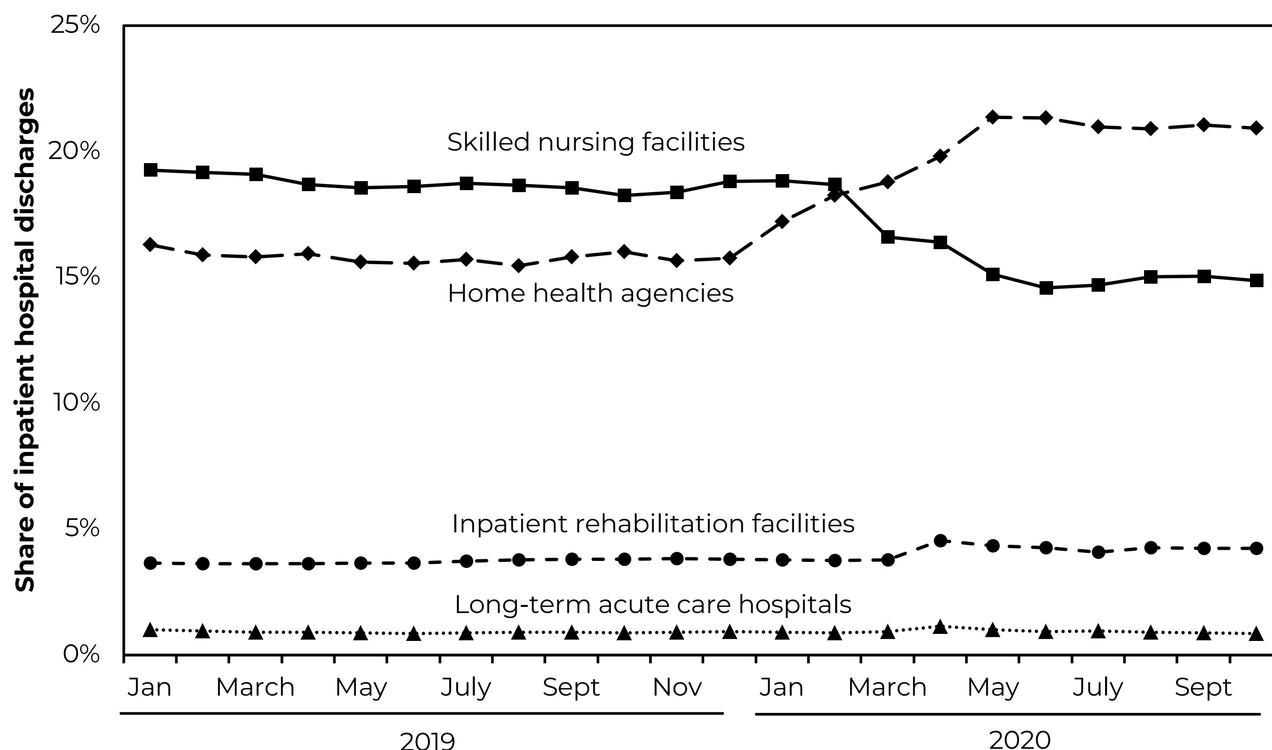
- Aggregate fee-for-service (FFS) spending on post-acute care (PAC) has remained stable since 2010, in part because of expanded enrollment in managed care under Medicare Advantage (Medicare Advantage spending is not included in this chart). However, spending growth has varied by PAC sector. In 2020, the COVID-19 public health emergency had varying effects on each sector. Spending for skilled nursing facility (SNF) care increased, declined for home health care and long-term care hospitals, and was steady for inpatient rehabilitation facility (IRF) care.

- FFS spending on SNFs increased in 2020 due to the implementation of the new case-mix system, the pandemic-related policy that waived the prior hospital stay requirement (thus enabling SNFs to “skill in place” nursing home residents who required higher-skilled services), higher case-mix indexes, longer stays, and the temporary suspension of the sequester that otherwise would have lowered payment rates.

- FFS spending on IRFs has increased steadily over the past decade. In all, spending on IRFs increased 38 percent between 2010 and 2019.

- FFS spending on long-term care hospitals (LTCHs) decreased by about 32 percent from 2015 and 2019, largely due to the implementation of the dual payment-rate system that reduced payments for certain LTCH cases.

## Chart 8-3. Use of skilled nursing facilities and home health agencies after an inpatient hospital stay shifted in 2020




**Note:** This chart shows where beneficiaries received post-acute care (PAC) after a hospitalization. PAC use for beneficiaries admitted from the community is not included.

**Source:** MedPAC analysis of Medicare Provider Analysis and Review files and the home health standard analytic file.

- About 39 percent of inpatient hospital discharges in both 2019 and 2020 were followed by services at a skilled nursing facility (SNF), home health agency, inpatient rehabilitation facility, or long-term acute care hospital (data not shown). Use of PAC after hospital discharge varied depending on the condition or treatment a patient received while hospitalized. For example, in 2019 the share of hospital discharges using PAC was 47 percent for postsurgical patients compared with 36 percent for patients who received mostly medical services during their inpatient stay (data not shown).

- In 2019, SNF care was the most common type of PAC, used after 18.7 percent of inpatient discharges. Home health care was the second most frequent type of PAC, used after 15.8 percent of inpatient discharges.

- In March 2020, at the onset of the COVID-19 public health emergency, the share of inpatient hospital discharges referred to SNFs declined to 16.6 percent and by October 2020 had reached 14.9 percent. By contrast, the share receiving home health care services increased to 20.9 percent. The shift to home health care reflected the pandemic-related effects experienced by nursing homes and the reluctance of beneficiaries to use them. The share of inpatient hospital discharges referred to inpatient rehabilitation facilities also increased slightly in April 2020.

## Chart 8-4. Freestanding SNFs and for-profit SNFs accounted for the majority of facilities, Medicare stays, and Medicare spending in 2020

| Type of SNF | Facilities | Medicare-covered stays | Medicare FFS payments (billions) |
|---|---|---|---|
| Totals | 13,884 | 1,722,219 | $24.7 |
| Freestanding | 96% | 97% | 97% |
| Hospital based | 4 | 3 | 3 |
| Urban | 73 | 83 | 84 |
| Rural | 27 | 17 | 16 |
| For profit | 71 | 74 | 78 |
| Nonprofit | 24 | 23 | 20 |
| Government | 5 | 3 | 3 |

**Note:** SNF (skilled nursing facility), FFS (fee-for-service). The spending amount included here is lower than that reported by the Office of the Actuary, and the count of SNFs is slightly lower than what is reported in CMS Survey and Certification's Quality, Certification, and Oversight reports. Components may not sum to 100 percent due to rounding.

**Source:** MedPAC analysis of the Provider of Services and Medicare Provider Analysis and Review files from CMS.

- In 2020, freestanding facilities accounted for 97 percent of Medicare-covered SNF stays and 97 percent of Medicare's payments to SNFs.
- Urban facilities accounted for 73 percent of facilities, 83 percent of stays, and 84 percent of Medicare payments in 2020.
- In 2020, for-profit facilities accounted for 71 percent of facilities but higher shares of stays (74 percent) and Medicare payments (78 percent). The shares of stays and payments increased from 2019, when for-profit facilities accounted for 71 percent of all stays and 75 percent of Medicare FFS payments (data not shown).

## Chart 8-5. SNF admissions continued to decline in 2020

| Volume measure | 2014 | 2016 | 2018 | 2019 | 2020 | Percent change 2019–2020 |
|---|---|---|---|---|---|---|
| Covered admissions per 1,000 FFS beneficiaries | 68.3 | 65.9 | 62.5 | 59.5 | 54.8 | –7.9% |
| Covered days per 1,000 FFS beneficiaries | 1,843 | 1,693 | 1,559 | 1,475 | 1,453 | –1.5 |
| Covered days per admission | 27.0 | 25.7 | 25.0 | 24.8 | 26.5 | 6.9 |

**Note:** SNF (skilled nursing facility), FFS (fee-for-service). Data include 50 states and the District of Columbia.

**Source:** Calendar year data from CMS, Office of Information Products and Data Analytics, 2021.

- SNF use for all beneficiaries has been declining for years, reflecting expanded enrollment in Medicare Advantage (MA) and more entities participating in alternative payment models (APMs) such as accountable care organizations and bundled payment demonstrations. MA plans and participants in APMs have financial incentives to shift post-acute care to home health services when possible and to shorten lengths of stays in SNFs.

- Reflecting the continued expansion of beneficiaries enrolling in MA, in 2020, 3.3 percent of beneficiaries enrolled in FFS Medicare used SNF services, down from 4 percent in 2019 (data not shown).

- Between 2019 and 2020, covered SNF admissions per 1,000 FFS beneficiaries decreased 7.9 percent. The decline is consistent with a decline in FFS per capita inpatient hospital stays that were three days or longer and therefore qualified for Medicare coverage of SNF care (data not shown). It also reflects a decline in SNF use during the coronavirus public health emergency.

- During the same period, covered days per admission declined at a slower 1.5 percent because stays were longer.

## Chart 8-6. Freestanding SNF Medicare margins remained high in 2020

| | 2012 | 2014 | 2016 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| All | 14.1% | 12.8% | 11.6% | 10.9% | 11.9% | 16.5% |
| Rural | 13.3 | 10.8 | 9.7 | 8.6 | 10.2 | 18.4 |
| Urban | 14.2 | 13.1 | 11.9 | 11.2 | 12.2 | 16.1 |
| Nonprofit | 5.7 | 4.3 | 2.6 | 0.8 | 1.4 | 0.6 |
| For profit | 16.3 | 15.1 | 14.1 | 13.7 | 15.0 | 20.0 |

**Note:** SNF (skilled nursing facility).

**Source:** MedPAC analysis of freestanding SNF cost reports 2012–2020.

- The aggregate Medicare margin for freestanding SNFs in 2020 exceeded 10 percent for the 21st consecutive year (not all years are shown). The aggregate Medicare margin was 16.5 percent in 2020, a sizable increase from 2019. Had we considered an allocated share of the additional federal relief funds providers received due to the coronavirus pandemic, we estimate the aggregate margin would be even higher, at 19.2 percent.

- The aggregate Medicare margin increased in 2020 because SNFs kept their cost growth below the payment rate increase and, on the payment side, providers received augmented payments from the new case-mix system and the suspension of the sequester that otherwise would have lowered payment rates.

- Aggregate Medicare margins (excluding the federal relief funds) varied widely across freestanding SNFs. One-quarter of SNFs had Medicare margins that were 28.7 percent or higher; one-quarter had margins that were 4 percent or lower (data not shown). On average, rural facilities had higher Medicare margins than urban facilities, and for-profit SNFs had considerably higher Medicare margins than nonprofit SNFs, reflecting their larger size and lower cost growth.

- High-margin SNFs had lower costs per day (43 percent lower costs than low-margin SNFs), after adjusting for wage and case-mix differences, and higher payments per day (10 percent) (data not shown).

- In 2020, the average total margin (the margin across all payers and all lines of business) for freestanding facilities was 3.0 percent, up from 0.6 percent in 2019 (data not shown).

## Chart 8-7. SNF quality measures were stable or improving between 2015 and 2019; 2020 rates reflect conditions unique to the coronavirus PHE

| Measure | 2015 | 2017 | 2019 | Average annual change 2015–2019 | 2020 | Average annual change 2019–2020 |
|---|---|---|---|---|---|---|
| **Successful discharge to the community** | | | | | | |
| All SNFs | 43.9% | 44.4% | 44.8% | 0.5% | 38.6% | –13.8% |
| For profit | 43.0 | 43.6 | 43.7 | 0.4 | 42.5 | –2.7 |
| Nonprofit | 47.2 | 47.6 | 48.0 | 0.4 | 37.6 | –21.7 |
| Freestanding | 43.4 | 44.0 | 44.4 | 0.6 | 38.2 | –14.0 |
| Hospital based | 52.9 | 53.8 | 53.6 | 0.3 | 48.2 | –10.1 |
| **Hospitalizations** | | | | | | |
| All SNFs | 15.1 | 14.4 | 13.7 | –2.4 | 14.2 | 3.6 |
| For profit | 15.7 | 14.9 | 14.2 | –2.5 | 14.7 | 3.5 |
| Nonprofit | 13.3 | 12.9 | 12.3 | –1.9 | 12.6 | 2.4 |
| Freestanding | 15.3 | 14.6 | 13.8 | –2.5 | 14.3 | 3.6 |
| Hospital based | 10.6 | 10.2 | 10.0 | –1.4 | 10.4 | 4.0 |

**Note:** SNF (skilled nursing facility), PHE (public health emergency). "Successful discharge to the community" includes beneficiaries discharged to the community (including those discharged to the same nursing home they were in before) who did not have an unplanned hospitalization or die in the 30 days after discharge. The hospitalization measure captures all unplanned hospital admissions, readmissions, and outpatient observation stays that occurred during the SNF stay. Both measures are uniformly defined and risk adjusted across SNFs, home health agencies, inpatient rehabilitation facilities, and long-term care hospitals. Providers with at least 60 stays in the year were included in calculating the average facility rate. The "All SNFs" category includes the performance of government-owned SNFs, which are not displayed separately in the table. The average annual changes were calculated using unrounded annual rates.

**Source:** MedPAC analysis of SNF claims and linked inpatient hospital stays, 2015 through 2020, for fee-for-service beneficiaries.

- While we report 2020 results for quality measures we track, these data reflect conditions unique to the PHE that confound our measurement and assessment of trends in 2020. For example, increased mortality due to COVID-19 infection and capacity constraints of acute care hospitals likely affected outcomes. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk; COVID-19, a new diagnosis, is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

## Chart 8-8. Trends in home health care use and spending

| | 2011 | 2017 | 2018 | 2019 | Average annual change 2011–2019 | 2020 | Average annual change 2019–2020 |
|---|---|---|---|---|---|---|---|
| Home health users (millions) | 3.4 | 3.4 | 3.4 | 3.3 | –0.6% | 3.1 | –7.3% |
| Share of beneficiaries using home health | 9.4% | 8.8% | 8.7% | 8.5% | –1.2% | 8.1% | –4.7% |
| Total payments (in billions) | $18.4 | $17.9 | $18.0 | $17.9 | –0.3% | $17.1 | –4.7% |
| Average payment per home health user | $5,348 | $5,255 | $5,333 | $5,437 | 0.2% | $5,591 | 2.8% |
| Average payment per FFS beneficiary | $505 | $461 | $466 | $465 | –1.0% | $455 | –2.0% |

**Note:** FFS (fee-for-service). Yearly figures presented in the table are rounded, but the percent change columns were calculated using unrounded data.

**Source:** MedPAC analysis of the home health standard analytic file from CMS.

- On an average annual basis between 2011 and 2019, total spending declined by 0.3 percent and the number of users dropped by 0.6 percent.
- In 2020, the use of home health care was disrupted by the COVID-19 public health emergency, and the decline in volume was greater than previous years. Total spending declined by 4.7 percent, and the number of beneficiaries using home health care decreased 7.3 percent. However, the decline in volume in 2020 was concentrated in March and April of that year (data not shown).
- As the number of beneficiaries receiving home health care declined by more than the drop in total spending, the average payment per home health user increased by about 2.8 percent a year in 2020, reaching $5,591. Through most of the 2011 to 2020 period, Medicare implemented a number of policies to reduce or slow the growth of home health payments. However, despite these reductions, the margins of freestanding home health agencies averaged in excess of 15 percent in this period, indicating that payments remain well in excess of costs despite these policies (data not shown; see Chart 8-10 for home health care Medicare margins in 2019 and 2020).

## Chart 8-9. Most home health periods are not preceded by hospitalization or PAC stay

| | 2019 | 2020 |
|---|---|---|
| **Periods by source of referral** | | |
| Preceded by hospital or institutional PAC | 25.3% | 25.7% |
| Community admitted | 74.7% | 74.3% |
| **Periods by timing of 30-day period** | | |
| Early | 35.0% | 31.1% |
| Late | 65.0% | 68.9% |

**Note:** PAC (post-acute care). Periods "preceded by hospitalization or institutional PAC" refers to periods that occurred less than 15 days after a stay in a hospital (including a long-term care hospital), skilled nursing facility, or inpatient rehabilitation facility. "Community admitted" refers to periods for which there was no hospitalization or PAC stay in the previous 15 days. "Early" periods are periods for beneficiaries who have not received any home health care in the prior 60 days; "late" periods are the second or later in a series of consecutive periods. In 2020, CMS implemented a new unit of payment, replacing the 60-day episode in effect in 2019 and prior years with a 30-day period. In this table, 60-day episodes from 2019 have been converted to 30-day periods to facilitate comparison of volume with 2020.

**Source:** MedPAC analysis of 2020 home health standard analytic file, 2019 home health limited data set.

- Most home health periods are not preceded by a hospitalization or institutional PAC stay, and these periods accounted for about three-quarters of PAC stays in 2019 and 2020.
- Home health periods for beneficiaries who have not received any home health care in the prior 60 days are classified as "early" under the home health payment system. Periods that are the second or later in a series of consecutive periods are classified as "late." The share of late periods increased slightly from 65.0 percent in 2019 to 68.9 percent in 2020.
- The share of periods by timing or source of referral did not change substantially in 2020 compared to the prior year. The mix of cases by clinical payment group (data not shown) also did not change significantly. These relatively unchanged indicators for patient acuity suggest that the types of patients served by home health agencies did not change significantly in 2020, despite Medicare's implementation of significant payment policy changes and the disruptions of the COVID-19 public health emergency that year.

## Chart 8-10. Medicare margins for freestanding home health agencies, 2019 and 2020

| | 2019 | 2020 | Share of agencies 2020 |
|---|---|---|---|
| All | 15.4% | 20.2% | 100% |
| Geography | | | |
| Mostly urban | 16.1 | 20.0 | 87 |
| Mostly rural | 14.2 | 21.6 | 13 |
| Type of control | | | |
| For profit | 17.4 | 22.7 | 87 |
| Nonprofit | 11.4 | 12.4 | 13 |
| Volume quintile (lowest to highest) | | | |
| First | 9.7 | 11.6 | 20 |
| Second | 11.4 | 14.0 | 20 |
| Third | 13.3 | 17.0 | 20 |
| Fourth | 14.1 | 18.8 | 20 |
| Fifth | 17.5 | 22.4 | 20 |

**Note:** Agencies are characterized as urban or rural based on the residence of the majority of their patients.

**Source:** MedPAC analysis of Medicare Cost Report files from CMS.

- In 2020, freestanding home health agencies (HHAs) (87 percent of all HHAs) had an aggregate margin of 20.2 percent. The 2020 margin is consistent with the historically high margins the home health industry has experienced since the prospective payment system (PPS) was implemented in 2000. The margins from 2001 to 2019 averaged 16.2 percent (data not shown), indicating that most agencies have been paid well in excess of their costs under the PPS.

- HHAs that served mostly urban patients in 2020 had an aggregate margin of 20.0 percent; HHAs that served mostly rural patients had an aggregate margin of 21.6 percent. For-profit agencies in 2020 had an average margin of 22.7 percent, while nonprofit agencies had an average margin of 12.4 percent.

- Agencies with higher episode volumes had higher margins. The agencies in the lowest-volume quintile in 2019 had an aggregate margin of 11.6 percent, while those in the highest quintile had an aggregate margin of 22.4 percent.

## Chart 8-11. Changes in home health care quality in 2020 likely reflect disruption of COVID-19 public health emergency

| Measure | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Successful discharge to community | 68.3% | 69.2% | 69.6% | 70.4% | 72.2% | 60.9% |
| Hospitalization during home health stay | 20.6% | 20.8% | 21.4% | 21.5% | 21.4% | 18.3% |

**Note:** "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 threshold of 0.7) were included in calculating the average facility rate.

**Source:** MedPAC analysis of Medicare Provider Analysis and Review and home health standard analytic files from CMS.

- Over the five years from 2015 to 2019, the share of patients successfully discharged from home health care to the community rose from 68.3 percent to 72.2 percent (higher rates indicate better performance). Over this period, the share of patients hospitalized while receiving home health care increased slightly from 20.6 percent to 21.4 percent (higher rates indicate worse performance).

- In 2020, the rate of hospitalizations declined slightly, but the share of beneficiaries successfully discharged to the community also declined. While we report 2020 results for these measures, these data reflect conditions unique to the public health emergency that confound our measurement and assessment of trends in 2020. For example, increased mortality due to COVID-19 infection and other changes to the health care delivery system could affect these measures. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk; COVID-19, a new diagnosis, is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

## Chart 8-12. Number of IRF cases decreased in 2020

| | 2015 | 2017 | 2019 | Average annual percent change 2015–2019 | 2020 | Percent change 2019–2020 |
|---|---|---|---|---|---|---|
| Number of IRF cases | 393,475 | 396,294 | 409,059 | 0.8% | 378,756 | –7.4% |
| Cases per 10,000 FFS beneficiaries | 103.3 | 102.0 | 106.0 | 0.5 | 100.9 | –5.0 |
| Payment per case | $18,527 | $19,481 | $20,417 | 2.0 | $21,765 | 6.6 |
| Average length of stay (in days) | 12.7 | 12.7 | 12.6 | –0.2 | 12.9 | 2.0 |

**Note:** IRF (inpatient rehabilitation facility), FFS (fee-for-service). Numbers of cases reflect Medicare FFS utilization only. Yearly figures presented in the table are rounded, but the percent-change columns were calculated using unrounded data.

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

- From 2015 to 2017, the number of FFS IRF cases steadily rose, then jumped to about 409,000 cases in 2019. In 2020, however, the total number of cases fell by 7.4 percent to about 379,000 cases. Controlling for the number of FFS beneficiaries, FFS cases declined by 5 percent in 2020.

- Consistent with the impact of the public health emergency (PHE), the number of IRF cases fell around April 2020 but then began to rise, reaching over 95 percent of prepandemic levels by the end of the fiscal year (data not shown). A large portion of IRF volume comes from patients who are transferred from the acute-care hospital (ACH) setting after surgery. Although the share of ACH cases discharged to IRFs was unaffected in 2020, the drop in volume in April 2020 is consistent with a temporary suspension of elective surgeries in ACHs from March through May 2020. The rebound in volume in summer 2020 may have been the result of the pent-up demand for surgical services after many FFS beneficiaries' surgeries had been canceled or delayed.

- Due to a combination of PHE-related factors, IRFs' overall case-mix index (CMI) increased 11 percent between 2019 and 2020, compared with a 3 percent average decrease in CMI between 2018 and 2019 (data not shown). The increase in the acuity level of IRF patients is one of several factors that contributed to the rise in payments per case and average length of stay. In 2020, payments per case rose by 6.6 percent to almost $22,000 per case, and the average length of stay grew by 2 percent to 12.9 days.

## Chart 8-13. Most common types of IRF cases, 2020

| Type of case | Share of cases |
|---|---|
| Stroke | 19.1% |
| Other neurological conditions | 14.0 |
| Debility | 13.5 |
| Fracture of the lower extremity | 11.3 |
| Brain injury | 11.2 |
| Other orthopedic conditions | 7.4 |
| Cardiac conditions | 5.8 |
| Spinal cord injury | 4.7 |
| Major joint replacement of lower extremity | 2.9 |
| All other | 10.2 |

**Note:** IRF (inpatient rehabilitation facility). "Other neurological conditions" includes multiple sclerosis, Parkinson's disease, polyneuropathy, and neuromuscular disorders. Patients with debility have generalized deconditioning not attributable to other conditions. "Fracture of the lower extremity" includes hip, pelvis, and femur fractures. "Other orthopedic conditions" excludes fractures of the hip, pelvis, and femur and hip and knee replacements. "All other" includes conditions such as amputations, arthritis, and pain syndrome. All Medicare fee-for-service IRF cases with valid patient assessment information were included in this analysis.

**Source:** MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

- In 2020, the most frequently occurring case type among fee-for-service (FFS) beneficiaries admitted to IRFs was stroke, which accounted for 19.1 percent of Medicare FFS cases.
- Due to the public health emergency, in addition to waiving the 3-hour rule in 2020, CMS waived the "60 percent rule," which requires that at least 60 percent of patients admitted to an IRF have as a primary diagnosis or comorbidity at least 1 of 13 qualifying conditions. The waiver of these rules allowed IRFs to treat a broader mix of patients, including those without a qualifying condition or who were unable to tolerate intensive therapy. Nevertheless, the mix of case types in IRFs remained relatively stable. Between 2019 and 2020, the share of IRF cases with a diagnosis of debility increased from 12.3 percent to 13.5 percent of IRF discharges. The share of cases with lower extremity fracture increased from 10.0 percent to 11.3 percent, while the share of patients with stroke declined from 19.8 percent to 19.1 percent (2019 data not shown).
- The distribution of case types differs by type of IRF (data not shown). For example, in 2020, only 16 percent of cases in freestanding for-profit IRFs were admitted for rehabilitation following a stroke, compared with 24 percent of cases in hospital-based nonprofit IRFs. Likewise, 19 percent of cases in freestanding for-profit IRFs were admitted with other neurological conditions, more than twice the share admitted to hospital-based nonprofit IRFs. Cases with other orthopedic conditions also made up a higher share of cases in freestanding for-profit facilities than in all other IRFs.

## Chart 8-14. IRF Medicare margins by type of facility, 2015–2020

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| All IRFs | 13.9% | 13.3% | 13.9% | 14.7% | 14.3% | 13.5% |
| Hospital based | 2.1 | 0.9 | 1.4 | 2.5 | 2.1 | 1.6 |
| Freestanding | 26.6 | 25.9 | 25.6 | 25.4 | 24.7 | 23.5 |
| Urban | 14.3 | 13.7 | 14.2 | 15.0 | 14.7 | 13.8 |
| Rural | 8.4 | 9.1 | 8.3 | 9.9 | 8.6 | 8.9 |
| Nonprofit | 3.5 | 1.8 | 2.0 | 2.5 | 1.5 | –0.7 |
| For profit | 25.0 | 24.5 | 24.3 | 24.6 | 24.2 | 23.7 |
| Number of beds | | | | | | |
| 1–10 | –7.7 | –10.1 | –10.5 | –5.7 | –4.2 | –6.5 |
| 11–24 | –0.4 | –0.3 | 0.6 | 2.1 | 2.0 | 2.5 |
| 25–64 | 16.0 | 15.0 | 15.7 | 16.9 | 16.0 | 15.0 |
| 65+ | 22.9 | 22.5 | 22.0 | 21.2 | 20.9 | 19.3 |

**Note:** IRF (inpatient rehabilitation facility).

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

- In 2020, the aggregate margin fell slightly from 2019 levels but remained high at 13.5 percent. Had we considered an allocated share of the additional federal relief funds providers received due to the coronavirus pandemic, the aggregate margin would have been 14.9 percent.
- Margins varied by ownership, with for-profit IRFs having substantially higher margins. Medicare margins in freestanding IRFs far exceeded those of hospital-based facilities.
- There was a wide range in Medicare margins for hospital-based IRFs. One-quarter of hospital-based IRFs had Medicare margins greater than 14 percent (data not shown), indicating that many hospitals can manage their IRF units profitably. Further, despite comparatively low average margins in hospital-based IRFs, evidence suggests that these units make a positive financial contribution to their parent hospitals. For example, in 2020, hospitals' aggregate total margins across all lines of service were slightly higher in hospitals with IRF units compared with those without such units (6.5 percent vs. 6.2 percent; data not shown).
- There are also large differences in Medicare margins when comparing the size of IRFs. In 2020, the aggregate Medicare margin for IRFs with 10 or fewer beds was –6.5 percent. In comparison, the Medicare margin for IRFs with 65 or more beds was 19.3 percent. These differences are in large measure due to economies of scale: That is, smaller facilities have higher unit costs.

## Chart 8-15. Risk-adjusted quality indicators for IRFs, 2016–2020

| Measure | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| All-condition hospitalizations within an IRF stay | 7.7% | 7.9% | 7.7% | 7.8% | 7.8% |
| Successful discharge to community | 64.6 | 64.8 | 65.1 | 65.5 | 67.3 |

**Note:** IRF (inpatient rehabilitation facility). The "all-condition hospitalization" measure captures all unplanned hospital admissions and readmissions and outpatient observation stays that occur during the stay. "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. 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. High rates of hospitalizations within a stay indicate worse quality. High rates of successful discharge to the community indicate better quality.

**Source:** Analysis of Medicare claims data and Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

- While we report 2020 results for quality measures we track, these data reflect conditions unique to the public health emergency that confound our measurement and assessment of trends in 2020. For example, increased mortality due to COVID-19 infection and capacity constraints of acute care hospitals likely affected outcomes. In addition, the Commission's quality metrics rely on risk-adjustment models that use performance from previous years to predict beneficiary risk; COVID-19, a new diagnosis, is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care in 2020. Therefore, we report the changes we have observed in the quality measures but do not draw conclusions about whether quality improved, worsened, or stayed the same in 2020.

- Between 2016 and 2019, the two quality measures we examined held steady or improved.

- In 2020, the national average rate of risk-adjusted all-condition hospitalizations within an IRF stay was 7.8 percent. The national average rate of risk-adjusted successful discharge to community was 67.3 percent in 2020.

## Chart 8-16. Ten MS–LTC–DRGs accounted for over half of LTCH discharges in 2020

| MS–LTC –DRG | Description | Discharges | Share of cases |
|---|---|---|---|
| 189 | Pulmonary edema and respiratory failure | 15,076 | 19.4% |
| 207 | Respiratory system diagnosis with ventilator support 96+ hours | 11,254 | 14.5 |
| 871 | Septicemia without ventilator support 96+ hours with MCC | 3,965 | 5.1 |
| 177 | Respiratory infections and inflammations with MCC | 2,869 | 3.7 |
| 208 | Respiratory system diagnosis with ventilator support <96 hours | 2,393 | 3.1 |
| 166 | Other respiratory system OR procedures with MCC | 1,903 | 2.5 |
| 949 | Aftercare with CC/MCC | 1,572 | 2.0 |
| 981 | Extensive OR procedure unrelated to principal diagnosis with MCC | 1,535 | 2.0 |
| 682 | Renal failure with MCC | 1,349 | 1.7 |
| 4 | Tracheostomy with ventilator support 96+ hours or primary diagnosis except face, mouth, and neck without major OR | 1,281 | 1.7 |
| | Top 10 MS–LTC–DRGs | 43,197 | 55.7 |
| | Total | 77,603 | 100.0 |

**Note:** MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS–LTC–DRGs are the case-mix system for LTCHs. Shares for each MS–LTC–DRG presented in the table are rounded, but the sum of the top 10 was calculated using unrounded values.

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

- Cases in LTCHs are concentrated in a relatively small number of MS–LTC–DRGs. In 2020, the top 10 MS–LTC–DRGs accounted for over 55 percent of LTCH Medicare cases.

## Chart 8-17. LTCH volume fell during the dual payment-rate system transition period (2016–2019), largely due to declining volume of nonqualifying cases

| | | 2019 | Average annual percent change 2016–2019 | 2020 | Percent change 2019–2020 |
|---|---|---|---|---|---|
| **Cases** | All | 91,147 | –10.1% | 77,603 | –14.9% |
| | Nonqualifying cases | 23,160 | –24.2 | 18,702 | –19.2 |
| | Qualifying cases | 67,987 | –2.0 | 58,901 | –13.4 |
| | Share of qualifying cases | 75% | 8.6 | 76% | 1.8 |
| **Cases per 10,000 FFS beneficiaries** | All | 23.8 | –10.1 | 20.9 | –12.4 |
| | Nonqualifying cases | 6.1 | –24.2 | 5.0 | –16.9 |
| | Qualifying cases | 17.8 | –2.0 | 15.8 | –10.9 |
| **Payment per case** | All | $41,448 | 0.6 | $45,634 | 10.1 |
| | Nonqualifying cases | $25,738 | –8.0 | $32,401 | 25.9 |
| | Qualifying cases | $46,800 | 0.4 | $49,835 | 6.5 |
| **Length of stay (in days)** | All | 26.8 | –0.1 | 27.6 | 3.0 |
| | Nonqualifying cases | 23.3 | –2.9 | 23.8 | 2.4 |
| | Qualifying cases | 28.0 | 0.1 | 28.8 | 2.8 |

**Note:** LTCH (long-term care hospital), FFS (fee-for-service). "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. 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 report of the Boards of Trustees of the Medicare trust funds.

- Beginning in fiscal year 2016, only certain LTCH cases qualify for the higher standard LTCH prospective payment system (PPS) rate. Cases that do not meet LTCH-qualifying criteria are paid a lower site-neutral rate—the lower of (1) an amount based on Medicare's inpatient hospital PPS rate or (2) 100 percent of the cost of the case.

- The number of LTCH cases per 10,000 FFS beneficiaries declined, on average, by about 10 percent per year between 2016 and 2019. In contrast, the number of cases meeting the LTCH-qualifying criteria decreased by just 2 percent per year during the same period.

- In 2020, the volume of all LTCH cases fell nearly 15 percent, while the volume of qualifying cases fell 13.4 percent, due, in part, to the overall reduction in upstream acute care volume during the pandemic.

- During the public health emergency (PHE), all cases were paid the higher standard LTCH PPS. As a result of this temporary PHE-related payment change, the average payment per nonqualifying case between 2019 and 2020 increased 26 percent.

## Chart 8-18. LTCHs' Medicare aggregate margin had been negative during the phase-in of site-neutral rates for nonqualifying cases but increased in 2020 due to higher Medicare payments

| Type of LTCH | Share of discharges in 2020 | Medicare margin | | | | |
|---|---|---|---|---|---|---|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| All | 100% | 3.9% | –2.2% | –0.5% | –1.6% | 3.6 |
| Nonprofit | 16 | –5.7 | –13.0 | –11.7 | –12.2 | –12.7 |
| For profit | 76 | 5.5 | –0.3 | 1.3 | 0.4 | 6.3 |

**Note:** LTCH (long-term care hospital). Nonprofit and for-profit shares sum to 92 percent of discharges because margins for government-owned facilities are not shown.

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

- In fiscal year 2016, CMS began implementing a dual payment-rate system under which LTCH cases not meeting criteria specified in law are paid a lower site-neutral rate—the lower of an amount based on (1) Medicare's inpatient hospital prospective payment system rate or (2) 100 percent of the cost of the case. As a result, the aggregate Medicare margin fell to –2.2 percent in 2017 and remained negative through 2019.
- In 2020, when all cases were paid the higher standard LTCH prospective payment system rates due to the public health emergency, Medicare aggregate margins (excluding relief funds) for all LTCHs increased to 3.6 percent. With reported Provider Relief Fund revenue allocated to Medicare payments, margins were 5 percent (data not shown).
- LTCHs with a high share (greater than 85 percent) of qualifying cases have had consistently higher aggregate margins than those that do not, each year since CMS began implementing a dual payment-rate system. In 2020, LTCHs with a high share of qualifying cases had Medicare aggregate margins, excluding relief funds, of 6.9 percent (data not shown).