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 2022

	2017	2018	2019	2020	2021	2022	Average annual percent change 2017–2022	Percent change 2021–2022
Skilled nursing facilities	15,357	15,359	15,305	15,173	15,098	14,973	–0.5	–0.8
Home health agencies	11,963	11,699	11,569	11,565	11,474	11,353	–1.0%	–1.1%
Inpatient rehabilitation facilities	1,178	1,170	1,152	1,159	1,181	1,181	<0.1	0.0
Long-term care hospitals	411	386	371	351	345	341	–3.7	–1.2

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).

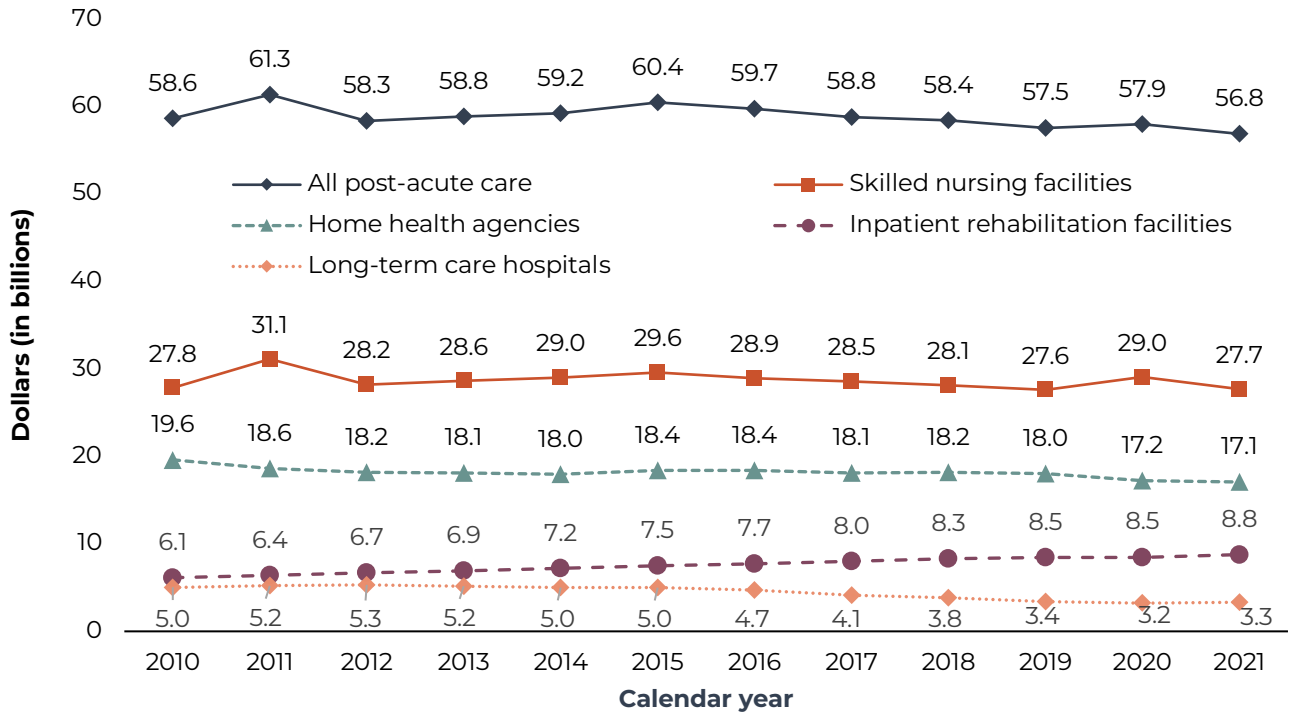
> The number of skilled nursing facilities decreased less than 1 percent per year between 2017 and 2022.

> The number of home health agencies (HHAs) began to decline after 2013 following 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. Between 2017 and 2022, the number of HHAs decreased by about 1 percent per year.

> After declining for several years, the total number of inpatient rehabilitation facilities increased slightly in 2020 and 2021.

> 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, but the decline slowed in 2021 and 2022.

Chart 8-2 Medicare fee-for-service spending for post-acute care declined between 2015 and 2021



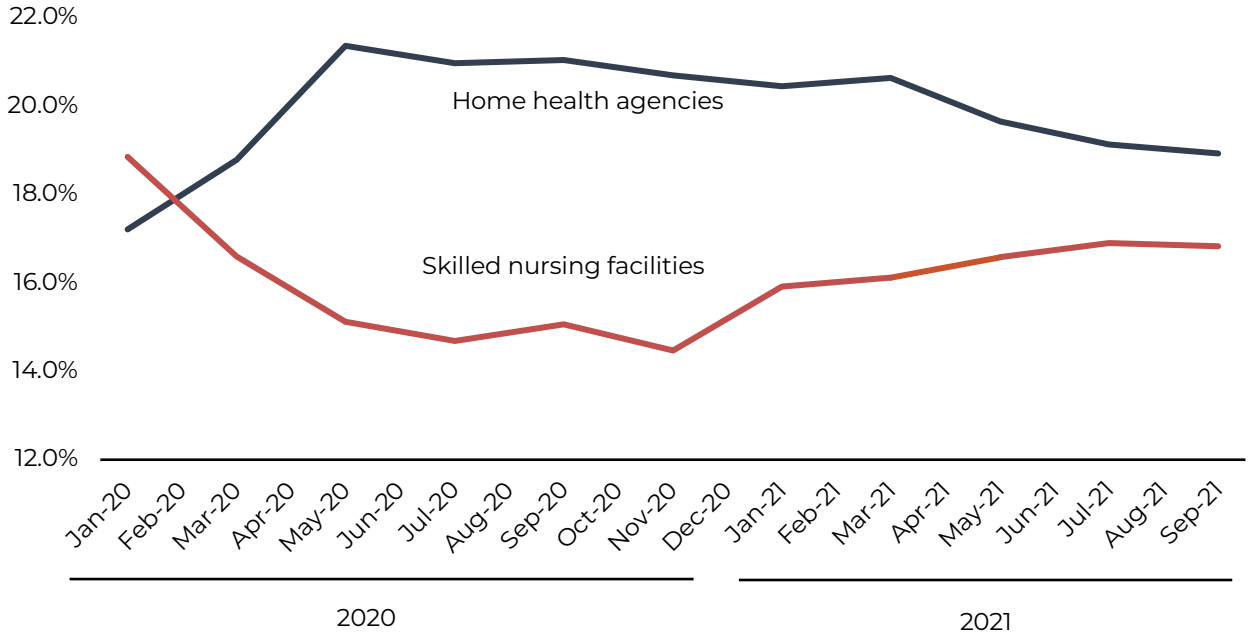
Note: These calendar year–incurred data represent program spending only; they do not include beneficiary cost sharing.

Source: CMS Office of the Actuary 2023.

> With the exception of a slight uptick in 2020, aggregate fee-for-service (FFS) spending on all post-acute care (PAC) sectors combined had been declining in recent years. In part, the decline is due to expanded enrollment in Medicare Advantage, which is not included in this chart. However, while spending declined in other PAC sectors, spending on inpatient rehabilitation facilities (IRFs) increased.

> Between 2020 and 2021, spending for skilled nursing facility care declined due to reduced volume. Spending remained relatively stable for home health care and long-term care hospitals, while spending on IRFs increased.

Chart 8-3 The COVID-19 pandemic altered the use of SNF and home health care after discharge from an acute care hospital



Note: This chart shows where beneficiaries enrolled in fee-for-service Medicare 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.

> In January 2020, the share of Medicare beneficiaries discharged from the acute inpatient hospital to a skilled nursing facility (SNF) was 18.9 percent, compared to 17.2 percent discharged to home health care services. Beginning in March 2020, the COVID-19 pandemic had a significant impact on services, and the share of inpatient hospital discharges referred to SNFs declined to 16.6 percent and by November 2020 had fallen to 14.5 percent. Conversely, the share of discharges that received home health care services increased relative to the pre-pandemic period and relative to the share that received SNF care. The shift to home health care reflected the pandemic-related effects experienced by nursing homes and the reluctance of beneficiaries to use them. As of September 2021, the share of discharges to SNFs had increased from the public health emergency nadir in November 2020 and the share to home health care had declined but remained higher than the share going to SNFs.

> Overall, about 41 percent of inpatient hospital discharges in both 2020 and 2021 were followed by services at a 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 2020 the share of hospital discharges using PAC was 47 percent for postsurgical patients compared with 38 percent for patients who received mostly medical services during their inpatient stay (data not shown).

Chart 8-4 Freestanding SNFs and for-profit SNFs accounted for the majority of facilities, Medicare stays, and Medicare spending in 2021

Type of SNF	Facilities	Medicare-covered FFS stays	Medicare FFS payments (billions)
Totals	14,720	1,689,000	$24.3
Freestanding	97%	97%	98%
Hospital based	3	3	2
Urban	73	84	85
Rural	27	16	14
For profit	72	74	77
Nonprofit	23	23	20
Government	5	3	3

Note: SNF (skilled nursing facility), FFS (fee-for-service). Totals may not sum to 100 percent due to rounding and missing values. The number of facilities and the Medicare FFS spending amounts shown here are lower than those displayed in Charts 8-1 and 8-2 due to the use of different data sources. Facilities, stays, and spending reported for 2020 in our 2022 Data Book were undercounts due to an error in the Provider of Services file. This error did not materially affect the proportions of facilities, stays, or spending by SNF type reported in the table.

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

> In 2021, freestanding facilities accounted for 97 percent of Medicare-covered SNF stays and 98 percent of Medicare's payments to SNFs.

> In 2021, urban facilities accounted for 73 percent of facilities, 84 percent of stays, and 85 percent of Medicare payments.

> In 2021, for-profit facilities accounted for 72 percent of facilities, 74 percent of stays and 77 percent of Medicare payments.

Chart 8-5 Fee-for-service SNF admissions continued to decline in 2021

	Prepandemic			Pandemic		Average annual change	
Volume measure	2017	2018	2019	2020	2021	2017–2019	2020–2021
Covered admissions per 1,000 FFS beneficiaries	64.6	62.5	59.5	54.8	53.5	–4.0%	–2.4%
Covered days per 1,000 FFS beneficiaries	1,623	1,559	1,475	1,453	1,399	–4.7	–3.7
Covered days per admission	25.1	25.0	24.8	26.5	26.2	–0.6	–1.3

Note: SNF (skilled nursing facility), FFS (fee-for-service). Data are for the calendar year and include 50 states and the District of Columbia. Average annual changes are calculated using unrounded values and then rounded to the nearest tenth.

Source: Calendar year data from CMS, Office of Information Products and Data Analytics, 2022.

> To control for changes in FFS enrollment, we examine service use per 1,000 FFS beneficiaries. Between 2020 and 2021, SNF admissions per 1,000 FFS beneficiaries dropped 2.4 percent. Because stays were slightly shorter in 2021 than 2020, covered days declined more (3.7 percent). However, the decline in admissions and days per 1,000 FFS beneficiaries between 2020 and 2021 was less than the annual decline between 2017 and 2019.

Chart 8-6 Freestanding SNF Medicare margins remained high in 2021

	2016	2018	2019	2020	2021
All	11.6%	10.9%	12.1%	17.8%	17.2%
Rural	9.7	8.6	10.2	19.1	16.8
Urban	11.9	11.2	12.5	17.5	17.3
Nonprofit	2.6	0.8	1.7	3.0	2.8
For profit	14.1	13.7	15.2	21.0	20.6

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports 2016–2021.

> The aggregate Medicare margin for freestanding SNFs in 2021 (17.2 percent) exceeded 10 percent for the 22nd consecutive year (not all years are shown). Had we considered an allocated share of the federal relief funds providers received due to the coronavirus pandemic, we estimate the aggregate margin would be even higher, at 19.6 percent (not shown).

> The aggregate Medicare margin decreased in 2021 because SNFs' cost growth exceeded the growth in payments. Between 2020 and 2021, the average payment per day increased 3 percent, while costs per day increased 4 percent (data not shown). The relatively high cost growth reflects fewer covered days over which to spread fixed costs, an increase in routine costs per day, and a small decline in ancillary costs per day compared with 2020, consistent with declining therapy minutes under the new SNF case-mix system, the Patient-Driven Payment Model, which eliminated incentives to provide more therapy in order to receive higher payments. Higher routine costs per day reflect an increase in labor costs that may be driven by signing bonuses, use of contract labor, and a greater decline in lower-paid nursing aide staff relative to higher-paid nursing staff.

> Aggregate Medicare margins for freestanding SNFs varied widely across SNFs: One-quarter of SNFs had Medicare margins that were 27.9 percent or higher, and one-quarter had margins that were 3.8 percent or lower (data not shown). Consistent with several years before the pandemic, urban SNFs had a higher aggregate Medicare margin than rural or frontier SNFs in 2021. For-profit SNFs had a considerably higher aggregate Medicare margin than nonprofit SNFs. Compared with for-profit SNFs, nonprofit facilities were smaller (fewer beds and lower volume) and had lower payments per day, higher costs per day, and higher growth in costs per day between 2020 and 2021.

> Compared with SNFs in the lowest Medicare margin quartile, high-margin SNFs have lower standardized daily total, routine, and ancillary costs and lower costs per discharge. Further, high-margin SNFs have, on average, fewer nursing hours per resident day, adjusted for facility case mix. Economies of scale also affect the difference in financial performance. In 2021, high-margin SNFs had higher daily censuses on average and higher occupancy rates. High-margin SNFs also had, on average, a higher share of Medicare-covered SNF days attributable to beneficiaries receiving the Part D low-income subsidy and higher shares of total Medicaid-covered facility days. Facilities with a higher Medicaid mix may keep their costs lower, in part through lower staffing, contributing to their higher Medicare margins.

> In 2021, the average total margin (the margin across all payers and all lines of business) for freestanding facilities was 3.4 percent, up from 3.1 percent in 2020 (data not shown).

Chart 8-7 SNF quality measures were stable or improving between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All SNFs	44.4%	44.3%	44.8%	38.6%	43.5%
For profit	43.6	43.5	43.7	37.6	42.7
Nonprofit	47.6	47.4	48.0	42.5	46.6
Freestanding	44.0	44.0	44.4	38.2	43.1
Hospital based	53.8	52.8	53.6	48.2	53.0
Hospitalization during SNF stay					
All SNFs	14.4%	14.1%	13.7%	14.2%	13.1%
For profit	14.9	14.6	14.2	14.7	13.5
Nonprofit	12.9	12.7	12.3	12.6	11.7
Freestanding	14.6	14.3	13.8	14.3	13.2
Hospital based	10.2	10.6	10.0	10.4	9.8

Note: SNF (skilled nursing facility). "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) 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 occur during the SNF stay. 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. The "All SNFs" category includes the performance of government-owned SNFs, which are not displayed separately in the table.

Source: MedPAC analysis of SNF claims and linked inpatient hospital stays, 2017 through 2021, for fee-for-service beneficiaries.

> We report the Commission's quality measure results for 2020 and 2021 with the caveat that the pandemic and public health emergency–related policies confound our measurement and assessment of trends in our quality measures for several reasons. First, capacity constraints of acute care hospitals or post-acute care providers, increased mortality due to COVID-19 infections, and increased or earlier discharges to avoid the setting could affect the measures during the pandemic. Second, the public health emergency–related waiver of the three-day hospital stay could result in long-stay patients making up a greater share of SNF cases, which could affect the rates of both measures. Third, risk adjustment for these measures does not include COVID-19, so our models may not adequately adjust for the acuity and mix of patients receiving care during the pandemic.

Chart 8-8 Fee-for-service home health care use and spending declined slightly in 2021

	Prepandemic			Pandemic		Average annual change	
	2017	2018	2019	2020	2021	2017–2019	2020–2021
Medicare FFS home health users (millions)	3.4	3.4	3.3	3.1	3.0	–1.7%	–1.1%
Share of Medicare FFS beneficiaries using home health care	8.8%	8.7%	8.5%	8.1%	8.3%	–1.3%	2.5%
Total payments (in billions)	$17.9	$18.0	$17.9	$17.1	$16.9	>–0.1%	–1.2%
Total visits (millions)	104.8	103.9	99.7	81.1	76.8	–2.5%	–5.3%
Visit per user	30.7	30.8	30.2	26.6	25.4	–0.8%	–4.2%
30-day periods (millions)	N/A	N/A	N/A	9.6	9.3	N/A	–2.9%
30-day periods per 100 FFS Medicare beneficiary	N/A	N/A	N/A	25	26	N/A	0.7%

Note: FFS (fee-for-service), N/A (Not available). Percentage changes were calculated on unrounded data. Payment amounts shown here are lower than those displayed in Chart 8-2 due to the use of different data sources.

Source: MedPAC analysis of home health standard analytic files from CMS and the 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> In 2021, the number of beneficiaries using FFS-covered home health care declined by 1.1 percent, and the volume of 30-day periods declined by 2.9 percent. FFS home health utilization and spending have been declining for several years, driven by growth in the number of beneficiaries enrolling in Medicare Advantage and a decline in aggregate and per capita FFS hospitalizations, which are a common source of referral to home health care. Controlling for the number of FFS beneficiaries, however, use of the benefit increased 0.7 percent in 2021. Nevertheless, the share of FFS beneficiaries using home health care (8.3 percent) remains below prepandemic levels.

> The number of visits per user fell 4.2 percent between 2020 and 2021. Fewer visits could, in part, reflect policy changes related to the coronavirus public health emergency, during which CMS expanded the use of telehealth in home health care, permitting agencies to provide virtual visits and other telehealth services under the benefit. (These changes were later made permanent.) No data are available on the number and type of telehealth services home health agencies provided in 2020 and 2021. It is not known, therefore, whether the decline in visits represents a real reduction in service provision or if some or all of those visits were replaced with telehealth services. Beginning July 1, 2023, home health agencies are required to report telehealth visits on Medicare claims, similar to what is required for in-person visits.

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

Type of 30-day period	2020	2021
Periods by source of referral		
Preceded by hospital or institutional PAC	25.7%	24.3%
Community admitted	74.3%	75.6%
Periods by timing of 30-day period		
Early	31.1%	29.3%
Late	68.9%	70.7%

Note: PAC (post-acute care). Periods "preceded by hospitalization or institutional PAC" refer 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.
Source: MedPAC analysis of 2021 home health standard analytic file.

> 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 2020 and 2021.

> 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 periods by timing or source of referral did not change substantially in 2021 compared to the prior year. The mix of cases by clinical payment group (data not shown) also did not change significantly.

Chart 8-10 Medicare margins for freestanding home health agencies, 2020 and 2021

	2020	2021	Share of agencies 2021
All	20.2%	24.9%	100%
Geography			
Mostly urban	20.0	24.8	85
Mostly rural	21.6	25.2	15
Type of control			
For profit	22.7	26.1	88
Nonprofit	12.4	20.2	12
Volume quintile (lowest to highest)			
First	11.6	14.0	20
Second	14.0	15.9	20
Third	17.0	19.3	20
Fourth	18.8	22.8	20
Fifth	22.4	28.3	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 2021, freestanding home health agencies (HHAs) (87 percent of all HHAs) had an aggregate margin of 24.9 percent. The 2021 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 16.4 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 2021 had an aggregate margin of 24.8 percent; HHAs that served mostly rural patients had an aggregate margin of 25.2 percent. For-profit agencies in 2021 had an average margin of 26.1 percent, while nonprofit agencies had an average margin of 20.2 percent.

> Agencies with higher volumes of 30-day periods had higher margins. The agencies in the lowest-volume quintile in 2021 had an aggregate margin of 14.0 percent, while those in the highest quintile had an aggregate margin of 28.3 percent.

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

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All HHAs	69.6%	70.4%	72.2%	61.8%	52.2%
For profit	68.2%	68.9%	70.7%	60.1%	50.7%
Nonprofit	76.6%	77.5%	78.9%	70.4%	59.7%
Freestanding	69.0%	69.8%	71.6%	61.1%	51.5%
Hospital based	75.3%	76.2%	77.5%	64.9%	58.2%
Hospitalization during home health care services					
All HHAs	21.4%	21.5%	21.4%	18.4%	18.2%
For profit	22.0%	22.1%	22.0%	18.8%	18.6%
Nonprofit	18.8%	18.9%	19.0%	17.0%	16.4%
Freestanding	21.7%	21.8%	21.6%	18.6%	18.4%
Hospital based	19.0%	19.1%	19.4%	16.9%	16.5%

Note: "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) 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 home health agency claims and linked inpatient hospital stays, 2017 through 2021, for fee-for-service beneficiaries.

> From 2016 to 2019, the share of patients successfully discharged from home health care to the community rose from 69.2 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 20.8 percent to 21.4 percent (higher rates indicate worse performance).

> While we report results for these measures in 2020 and 2021, these data reflect conditions unique to the public health emergency that confound our measurement and assessment of trends during the pandemic. 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. 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.

> The implementation of 30-day periods in 2020 shortened the length of time beneficiaries received home health care, and likely also affected the results we report. Under the new unit of payment, time periods between the 31st and 60th day of home health care that were previously (before 2020) included as part of a home health spell of care became part of a postdischarge period. As a result, data on some hospitalizations that previously would have occurred within a home health stay could have been captured as occurring after discharge, resulting in a decline in the community discharge rate. Correspondingly, the data for 2019 and prior years reflect the 60-day unit of payment and thus cannot be compared with the 2021 data.

Chart 8-12 Number of fee-for-service IRF cases was stable in 2021

	Prepandemic		Pandemic		Average annual change	
	2017	2019	2020	2021	2017–2019	2020–2021
Number of IRF cases	396,000	409,000	379,000	379,000	1.6%	0.0%
Cases per 10,000 FFS beneficiaries	102.0	106.0	100.9	104.6	2.0	3.6
ALOS (in days)	12.7	12.6	12.9	12.9	–0.6	–0.2
Number of users	355,000	363,000	335,000	335,000	1.2	–0.1

Note: IRF (inpatient rehabilitation facility), FFS (fee-for-service), ALOS (average length of stay). 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.

> Between 2017 and 2019, the number of FFS cases steadily rose, reaching over 409,000 cases by 2019.

> 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 that year (a decline of 7.4 percent) is consistent with a temporary suspension of elective surgeries in ACHs from March through May 2020.

> From 2020 to 2021, the number of FFS cases was stable at about 379,000 cases. However, when controlling for the number of FFS beneficiaries, the number of cases increased 3.6 percent in 2021. Average length of stay remained stable at 12.9 days.

Chart 8-13 The number of fee-for-service IRF cases with debility continued to rise in 2021

Type of case	Share of cases
Stroke	18.1%
Other neurological conditions	14.9
Debility	14.0
Brain injury	11.3
Fracture of the lower extremity	11.2
Other orthopedic conditions	7.3
Cardiac conditions	5.9
Spinal cord injury	4.6
Major joint replacement of lower extremity	3.0
All other	9.6

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. Components may not sum to 100 percent due to rounding.

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

> In 2021, the most frequently occurring case type among fee-for-service (FFS) beneficiaries admitted to IRFs was stroke, which accounted for 18.1 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 2020 and 2021, the share of IRF cases with a diagnosis of debility increased from 13.5 percent to 14.0 percent of IRF discharges. The share of cases with lower extremity fracture decreased from 11.3 percent to 11.2 percent, while the share of patients with stroke declined from 19.1 percent to 18.1 percent (2020 data not shown).

Chart 8-14 Freestanding and for-profit IRF Medicare margins remained high in 2021

	Prepandemic			Pandemic	
	2017	2018	2019	2020	2021
All IRFs	13.9%	14.7%	14.3%	13.4%	17.0%
Hospital based	1.4	2.6	2.2	1.7	5.8
Freestanding	25.7	25.4	24.7	23.4	25.8
Urban	14.2	15.0	14.7	13.7	17.4
Rural	8.7	9.9	8.6	9.5	11.5
Nonprofit	2.0	2.6	1.4	−0.1	5.3
For profit	24.3	24.6	24.3	23.5	25.3
Number of beds					
1–10	–10.6	−5.9	−4.3	−7.3	−2.4
11–24	0.7	2.3	2.1	2.3	5.7
25–64	15.7	16.9	16.0	15.1	18.9
65+	22.0	21.2	20.9	19.3	22.1

Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of cost report data from CMS.

> In 2021, the aggregate margin increased to 17.0 percent (17.5 percent when including Medicare's share of federal relief funds) from 13.4 percent in 2020 (14.9 percent when including Medicare's share of federal relief funds).

> Medicare margins vary by IRF type, with freestanding IRFs having a substantially higher aggregate margin compared to that of hospital-based facilities. Medicare margins also varied by ownership, with the aggregate margin of for-profit IRFs far exceeding that of non-profit IRFs.

> There are also large differences in Medicare margins by IRF size. In 2021, the aggregate Medicare margin for IRFs with 10 or fewer beds was –2.4 percent. By contrast, the Medicare margin for IRFs with 65 or more beds was 22.1 percent. These differences are in large measure due to economies of scale, as smaller facilities have higher unit costs.

Chart 8-15 IRF quality measures held steady or improved slightly between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to the community					
All IRFs	64.8%	65.1%	65.5%	67.3%	67.6%
For profit	64.7	65.1	65.3	66.8	67.0
Nonprofit	64.9	65.1	65.6	67.6	68.0
Freestanding	63.6	64.0	64.2	66.0	66.5
Hospital based	65.2	65.5	66.0	67.9	68.1
All-condition hospitalizations within an IRF stay					
All IRFs	7.9%	7.7%	7.8%	7.8%	7.2%
For profit	7.9	7.7	7.9	7.8	7.2
Nonprofit	7.8	7.7	7.7	7.8	7.3
Freestanding	8.0	7.8	7.8	8.0	7.2
Hospital based	7.8	7.7	7.7	7.8	7.2

Note: IRF (inpatient rehabilitation facility), PHE (public health emergency). "Successful discharge to the community" includes beneficiaries discharged to the community (home with or without home health care) who did not have an unplanned hospitalization or die in the 30 days after discharge. The "all-condition 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. High rates of hospitalizations within a stay indicate worse quality. High rates of successful discharge to the community indicate better quality.

Source: MedPAC analysis of IRF claims and linked inpatient hospital stays from 2017 through 2021 for fee-for-service beneficiaries.

> From 2017 to 2019, IRFs' rates of successful discharge to the community and all-condition hospitalizations within an IRF stay remained steady.

> While we report 2020 and 2021 results for our quality measures, we have not used those results to inform our conclusions about trends in IRFs' quality of care. The results reflect temporary changes in the delivery of care and data limitations unique to the coronavirus pandemic rather than trends in quality of care provided to beneficiaries. In addition, the Commission's IRF quality metrics rely on risk-adjustment models developed using data from previous years. COVID-19 is a relatively new diagnosis and therefore is not included in the current risk-adjustment models, though many associated conditions are. As a result, our models may not adequately represent the acuity and mix of patients receiving care from IRFs during the pandemic. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same.

Chart 8-16 In 2021, fee-for-service LTCH volume continued to decline, but the number and share of nonqualifying cases increased compared to 2020

		2020	Average annual percent change 2017–2020	2021	Percent change 2020–2021
Cases	All	77,603	–12.6%	70,021	–9.8%
	Nonqualifying cases	18,702	–23.5	20,072	7.3
	Qualifying cases	58,901	–7.6	49,949	–15.2
	Share of qualifying cases	76%	6.0	71%	–6.0
Cases per 10,000 FFS beneficiaries	All	20.7	–11.8	19.5	–5.7
	Nonqualifying cases	5.0	–22.8	5.6	12.2
	Qualifying cases	15.7	–6.7	13.9	–11.4
Payment per case	All	$45,634	6.1	$48,557	6.4
	Nonqualifying cases	$32,401	10.3	$39,063	20.6
	Qualifying cases	$49,835	2.6	$52,745	5.8
Length of stay (in days)	All	27.6	1.6	27.6	–0.1
	Nonqualifying cases	23.8	0.6	25.7	8.1
	Qualifying cases	28.8	1.1	28.3	–1.7

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 11.8 percent per year between 2017 and 2020. In contrast, the number of cases meeting the LTCH-qualifying criteria declined more slowly, falling 6.7 percent per year during the same period.

> In 2021, the volume of all LTCH cases fell nearly 10 percent. The volume of qualifying cases fell 15.2 percent that year, while the volume of nonqualifying cases increased, likely owing to the pandemic and the waiver of site neutral payments for nonqualifying cases.

> During the public health emergency (PHE), all cases were paid the higher, standard LTCH PPS rate. As a result of this temporary PHE-related payment change, the average payment per nonqualifying case between 2019 and 2020 increased 26 percent (not shown) and increased again by 20.6 percent between 2020 and 2021.

Chart 8-17 Ten MS–LTC–DRGs accounted for over half of LTCH fee-for-service discharges in 2021

MS–LTC–DRG	Description	Discharges	Share of cases
189	Pulmonary edema and respiratory failure	13,085	18.7%
207	Respiratory system diagnosis with ventilator support 96+ hours	10,936	15.6
177	Respiratory infections and inflammations with MCC	6,374	9.1
871	Septicemia without ventilator support 96+ hours with MCC	2,736	3.9
208	Respiratory system diagnosis with ventilator support <96 hours	2,476	3.5
166	Other respiratory system OR procedures with MCC	1,952	2.8
981	Extensive OR procedure unrelated to principal diagnosis with MCC	1,544	2.2
949	Aftercare with CC/MCC	1,326	1.9
539	Osteomyelitis with MCC	1,175	1.7
682	Renal failure with MCC	998	1.4
	Top 10 MS–LTC–DRGs	42,602	60.9
	Total	70,021	100.0

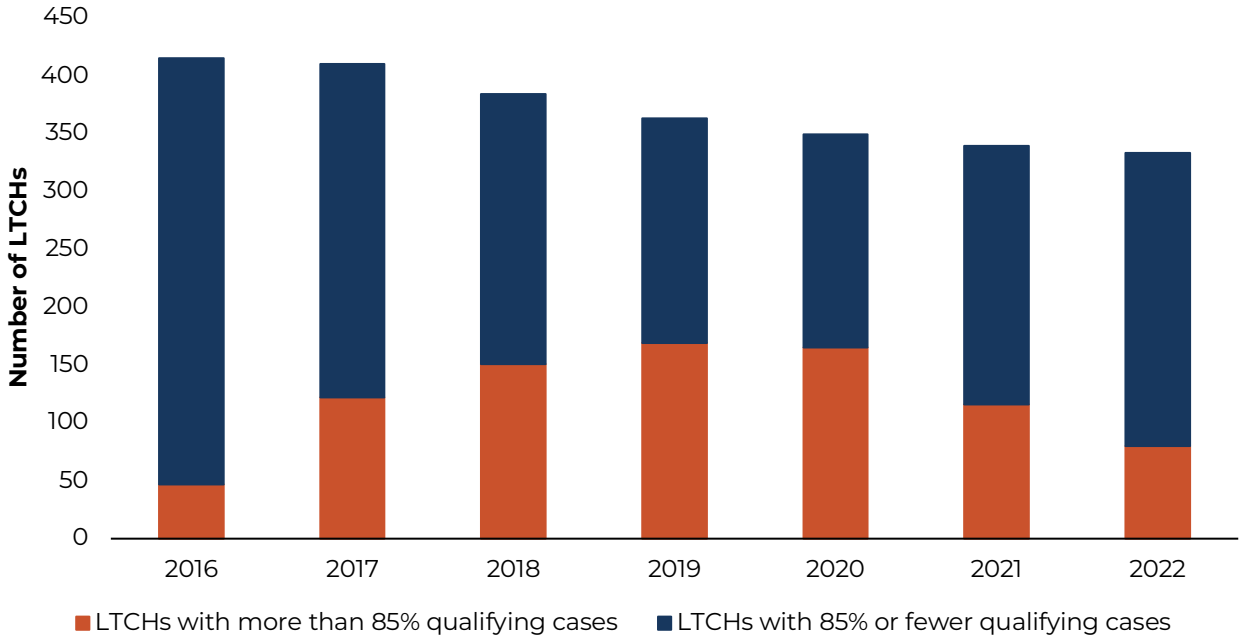
Note: MS–LTC–DRG (Medicare severity long-term care diagnosis related group), LTCH (long-term care hospital), MCC (major complication or comorbidity), OR (operating room), CC (complication or comorbidity). MS–LTC–DRGs are the case-mix system for LTCHs. Shares for each MS–LTC–DRG presented in the table 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 2021, the top 10 MS–LTC–DRGs accounted for over 60 percent of LTCHs' fee-for-service cases. Cases in LTCHs have grown more concentrated over time. In 2019, the top 10 MS–LTC–DRGs accounted for 53.7 percent of fee-for-service cases in LTCHs (data not shown).

> The share of fee-for-service LTCH cases in MS–LTC–DRG 177 (respiratory infections and inflammations with major complication or comorbidity) increased from 1.9 percent of cases in 2019 (not shown) to 9.1 percent of cases in 2021. The share of cases in MS–LTC–DRG 207 (respiratory system diagnosis with ventilator support 96+ hours) also increased, from 13.2 percent of cases in 2019 (not shown) to 15.6 percent of cases in 2021.

Chart 8-18 The number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria fell during the PHE, when site-neutral payments were suspended



Note: LTCH (long-term care hospital), FFS (fee-for-service), PPS (prospective payment system), PHE (public health emergency). "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 stays that are covered by private plans.

Source: MedPAC analysis of LTCH impact files.

> Beginning in fiscal year 2016, only certain LTCH cases qualify for the higher standard LTCH 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.

> As the site-neutral policy was being phased in (2016 through 2019), the number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria increased.

> Starting January 27, 2020, the site-neutral payment policy was waived due to the coronavirus public health emergency (PHE). Under the waiver, which was in effect through the end of the PHE, all LTCH cases were paid the higher standard LTCH PPS rates. In 2021 and 2022, when the waiver was in effect for the entire year, the number and share of LTCHs with more than 85 percent of Medicare FFS cases meeting the LTCH PPS criteria decreased.

Chart 8-19 LTCHs' Medicare margins increased in 2020 and 2021 due to higher Medicare payments

	Prepandemic			Pandemic	
LTCH	2017	2018	2019	2020	2021
All	–2.2%	–0.5%	–1.6%	3.6	6.7%
Type of control					
Nonprofit	–13.0	–11.7	–12.2	–12.7	–9.6
For profit	–0.3	1.3	0.4	6.3	9.3
Facility share of qualifying cases					
High share	0.8	3.3	2.5	5.7	4.7
Low share	–1.9	–1.0	–2.9	2.5	7.8

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. "High share" means more than 85 percent of a provider's cases are qualifying cases in the year. "Low share" means 85 percent or fewer of a provider's cases are qualifying cases in the year.

Source: MedPAC analysis of cost report and Medicare Provider Analysis and Review 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.

> Due to the public health emergency waiver of site-neutral payment rates, all cases were paid the higher standard LTCH prospective payment system rates starting January 27, 2020. That year, the Medicare aggregate margin (excluding relief funds) for all LTCHs increased to 3.6 percent. In 2021, when LTCHs were paid the higher LTCH rate for the entire year, the aggregate margin nearly doubled to 6.7 percent. With reported Provider Relief Fund revenue allocated to Medicare payments, the aggregate margin in 2021 was 9.8 percent (data not shown).

> In 2021, also due to the public health emergency waiver of site-neutral payment rates, LTCHs with a high share (greater than 85 percent) of qualifying cases had an aggregate Medicare margin of 4.7 percent, while LTCHs with a low share (85 percent or less) of qualifying cases had an aggregate margin of 7.8 percent, excluding relief funds (data not shown).

Chart 8-20 Pandemic-related payment increases drove growth in LTCH Medicare PPS payments per case in 2020 and 2021

	Percent change			
	2017–2018	2018–2019	2019–2020	2020–2021
Payments per case				
All LTCHs	3.8%	3.0%	9.4%	7.1%
LTCHs with >85% qualifying cases	6.6	1.9	9.3	8.0
Cost per case				
All LTCHs	3.0	4.5	4.4	3.9
LTCHs with >85% qualifying cases	3.9	2.9	5.6	9.5

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

> Between 2020 and 2021, aggregate Medicare payments per case for all LTCHs increased 7.1 percent to more than $48,000 per case (latter data not shown). For LTCHs with high shares (more than 85 percent) of qualifying cases, payments per case increased 8.0 percent to more than $56,000 per case (not shown) during the same period. This increase in payments is likely due to the suspension of the 2 percent sequestration and waiver of site-neutral payments.

> In 2021, reduced case volume and coronavirus pandemic–related costs likely contributed to aggregate growth in costs per case. Between 2020 and 2021, aggregate cost per case for all LTCHs rose 3.9 percent to nearly $45,000 per case. For LTCHs with high shares of qualifying cases, costs increased 9.5 percent to nearly $54,000 per case (not shown) during the same period.

Chart 8-21 LTCH quality measures were worsening or stable between 2017 and 2019; 2020 and 2021 rates reflect conditions unique to the coronavirus pandemic and related PHE

	Prepandemic			Pandemic	
Measure	2017	2018	2019	2020	2021
Successful discharge to community	24.4%	22.9%	22.1%	23.0%	22.4%
Hospitalization during LTCH stay	5.3	5.2	5.3	6.1	6.2

Note: LTCH (long-term care hospital), PHE (public health emergency). "Successful discharge to the community" includes beneficiaries discharged to the community 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 data from CMS.

> From 2017 to 2019, the share of fee-for-service beneficiaries successfully discharged from LTCHs to the community declined from 24.4 to 22.1 (lower rates indicate worse performance), although the share that were hospitalized during the LTCH stay was unchanged.

> While we report 2020 and 2021 results for quality measures we track, these data reflect conditions unique to the PHE that confound our measurement and assessment of trends during the pandemic. 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 is not included in the current models. As a result, our models may not adequately represent the acuity and mix of patients receiving care during the pandemic. 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 during the pandemic.