CHAPTER 10

Hospice services

RECOMMENDATION

10 For fiscal year 2024, the Congress should update the 2023 Medicare base payment rates for hospice by the amount specified in current law and wage adjust and reduce the hospice aggregate cap by 20 percent.

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

CHAPTER 10

Hospice services

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries who are terminally ill with a life expectancy of six months or less if the illness runs its normal course. When beneficiaries elect to enroll in the Medicare hospice benefit, they agree to forgo Medicare coverage for conventional treatment of their terminal illness and related conditions. In 2021, more than 1.7 million Medicare beneficiaries (including almost half of decedents) received hospice services from 5,358 providers, and Medicare hospice expenditures totaled $23.1 billion.

Assessment of payment adequacy

The indicators of payment adequacy for hospices—beneficiary access to care, quality of care, provider access to capital, and Medicare payments relative to providers' costs—are generally positive.

Beneficiaries' access to care—In 2021, indicators of beneficiary access to care were mostly positive. Some measures of volume were stable while others declined. The declining measures appear to stem from the effects of changing death rates and patterns of care due to the coronavirus pandemic and are not a reflection of Medicare payment adequacy.

In this chapter

- Are Medicare payments adequate in 2023?
- How should Medicare payments change in 2024?

- ***Capacity and supply of providers***—In 2021, the number of hospice providers increased by about 6 percent as more for-profit hospices entered the market, a trend that has extended for more than a decade.
- ***Volume of services***—Total deaths among Medicare beneficiaries increased sharply in 2020 and declined by just 0.1 percent in 2021, while the number of Medicare decedents using hospice services dropped slightly between 2020 and 2021, from 47.8 percent to 47.3 percent. Although the overall rate of hospice use among decedents fell, the pattern varied by beneficiary characteristics, with hospice use growing among some groups. Among all beneficiaries (not limited to decedents), the number of beneficiaries who received hospice services and the number of hospice days furnished was stable. For decedents, average lifetime length of stay fell by almost 5 days in 2021 to 92.1 days, similar to the prepandemic level. Between 2020 and 2021, median length of stay declined slightly, from 18 days to 17 days.
- ***Medicare marginal profit***—In 2020, Medicare payments to hospice providers exceeded marginal costs by 18 percent. This rate of marginal profit suggests that providers have a strong incentive to treat Medicare patients and is a positive indicator of patient access.

Quality of care—Quality of care in 2021 is difficult to assess. While we report the most recent data from hospice patient experience and process measures, we have not used those results to inform our conclusions about trends in the quality of care provided to Medicare hospice beneficiaries and its relationship to Medicare payment adequacy. Scores on the Hospice Consumer Assessment of Healthcare Providers and Systems® were stable in the most recent period. Scores on a composite of seven processes of care at admission were generally topped out (meaning scores are so high and unvarying that meaningful distinctions and improvement in performance can no longer be made). The provision of in-person visits at the end of life was stable in 2021, after declining modestly in 2020 due to the coronavirus pandemic. CMS also launched a new claims-based quality measure, based on 10 indicators, that identifies outlier patterns of care among hospice providers.

Providers' access to capital—Hospices are not as capital intensive as other provider types because they do not require extensive physical infrastructure. Continued growth in the number of for-profit providers (an increase of over 8 percent in 2021) and reports of strong investor interest in the sector suggest that capital is available to these providers. Less is known about access to capital for nonprofit freestanding providers, for which capital may be more

limited. Hospital-based and home health–based hospices have access to capital through their parent providers.

Medicare payments and providers' costs—Hospice margins are presented through 2020 because of the data lag required to calculate cap overpayment amounts. Between 2019 and 2020, average cost per day increased just 1.1 percent, which helped boost the 2020 Medicare aggregate margin to 14.2 percent, up from 13.4 percent in 2019. If Medicare's share of pandemic-related relief funds are included, the estimated 2020 aggregate Medicare margin rises to about 16 percent. Growth in hospice cost per day increased 4.2 percent in 2021. We project an aggregate Medicare margin for hospices of about 8 percent in 2023.

In addition to indicators of hospice payment adequacy, this chapter also assesses the hospice aggregate cap. The cap limits the aggregate payments a hospice provider can receive in a year. This cap functions as a mechanism that reduces payments to hospices with long stays and high margins. We estimate that 18.6 percent of hospices exceeded the cap in 2020; the aggregate Medicare margin for these hospices was about 23 percent before and 8 percent after application of the cap. Each year since 2020, the Commission has recommended that the hospice aggregate cap be wage adjusted and reduced by 20 percent to reduce overpayments to providers with disproportionately long stays and high margins.

How should Medicare payments change in 2024?

Based on the generally positive indicators of payment adequacy and strong margins, the Commission concludes that a reduction to aggregate payments is warranted. However, in this sector, with the range of financial performance across providers and the existence of the hospice aggregate cap, there is the potential to focus payment reductions on providers with disproportionately long stays and high margins. Therefore, the Commission recommends that the Congress wage adjust and reduce the hospice aggregate cap by 20 percent while maintaining the current-law update for fiscal year 2024. Under this recommendation, payments would increase for many hospice providers by an estimated 2.9 percent, while payments would be reduced for providers with very long lengths of stay and low costs relative to payments. ■

Background

The hospice benefit covers palliative and support services for Medicare beneficiaries who are terminally ill with a medical prognosis indicating that the individual's life expectancy is six months or less if the illness runs its normal course. In 2021, more than 1.7 million Medicare beneficiaries received hospice services, and Medicare hospice expenditures totaled about $23.1 billion.

The hospice benefit covers a broad set of services for palliation of the terminal condition and related conditions (e.g., visits by nurses, aides, social workers, physicians, and therapists; drugs, durable medical equipment, and supplies; short-term inpatient care and respite care; bereavement services for the family; and other services for palliation of the terminal condition and related conditions). To receive hospice services, a beneficiary must elect the hospice benefit and agree to forgo Medicare coverage for conventional treatment of the terminal illness and related conditions. Medicare continues to cover items and services unrelated to the terminal illness and its related conditions outside of hospice. Most commonly, hospice care is provided in patients' homes, but hospice services may also be provided in nursing facilities, assisted living facilities, hospice facilities, and other inpatient settings.

Beneficiaries elect hospice for defined benefit periods. When a beneficiary first elects hospice, two physicians—a hospice physician and the beneficiary's attending physician—are required to certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course.[1] The first hospice benefit period spans up to 90 days. After the first benefit period, the hospice physician can recertify the patient for a second 90-day period and for an unlimited number of 60-day periods after that, as long as the patient's terminal condition continues to engender a life expectancy of 6 months or less. Beneficiaries can disenroll from hospice at any time (referred to as "revoking hospice") and can reelect hospice for a subsequent period as long as they meet the eligibility criteria.

Between 2010 and 2021, hospice spending grew substantially, increasing 5.4 percent per year on average, from $12.9 billion to $23.1 billion. Between 2020 and 2021, Medicare hospice spending increased 2.8 percent, largely driven by a 2.4 percent update in the 2021 hospice base payment rates and the suspension of the 2 percent sequester for the entirety of 2021 (compared with only a portion of 2020). Not included in the payment totals for 2020 are the coronavirus pandemic–related federal relief funds some providers received in 2020 and 2021. According to the Medicare cost reports, in cost report years 2020 and 2021, these relief payments for freestanding hospice providers totaled about $590 million and $330 million, respectively. Although the intent of these funds was to provide relief broadly to support care for all patients regardless of payer, the vast majority of hospice patients are Medicare beneficiaries (accounting for more 90 percent of all hospice patient days in 2021).

Medicare payment for hospice services

The Medicare program pays a daily rate to hospice providers. The hospice provider assumes all financial risk for costs and services associated with care for the patient's terminal illness and related conditions. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice staff visits the patient or otherwise provides a service each day. This payment design is intended to encompass not only the cost of visits but also costs that a hospice incurs for palliation and management of the terminal condition and related conditions (e.g., on-call services, care planning, and nonvisit services like drugs and medical equipment).

Payments are made according to a fee schedule that has four levels of care (Table 10-1, p. 290). Routine home care (RHC) accounted for 98.7 percent of Medicare-covered hospice days in 2021. Three other specialized levels of care are available to address patient needs in certain circumstances, including continuous home care (CHC), general inpatient care (GIP), and inpatient respite care (IRC). The level of care can vary throughout a patient's hospice stay as the patient's needs change.

Beginning in January 2016, Medicare pays two per diem rates for RHC—a higher rate for the first 60 days of a hospice episode and a lower rate for days 61 and beyond. (Previously, RHC was paid a single, uniform daily rate.) Medicare also makes additional payments for registered nurse and social worker visits that occur during the last seven days of life for patients

TABLE 10–1

Medicare hospice payment categories and rates

Category	Description	Base payment rate, FY 2023
Routine home care*	Home care provided on a typical day: Days 1–60	$211 per day
	Home care provided on a typical day: Days 61+	$167 per day
Continuous home care	Home care provided during periods of patient crisis	$63 per hour
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	$1,111 per day
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	$492 per day

Note: FY (fiscal year). Payment rates are rounded in the table to the nearest dollar. Payment for continuous home care (CHC) is an hourly rate ($63.42 per hour, with a maximum payment per day equal to about $1,522) for care delivered during periods of crisis if care is provided in the home for 8 or more hours within a 24-hour period beginning at midnight. In addition, a nurse must deliver more than half of the hours of this care to qualify for CHC-level payment. The above rates apply to providers that met the requirements for the hospice quality reporting program and received a full annual update. Providers that do not meet the quality reporting requirements receive slightly lower rates based on a 2 percentage point reduction to the annual update. The percentages may not sum to 100 percent due to rounding.
*In addition to the daily rate, Medicare pays about $63 per hour for registered nurse and social worker visits (up to four hours per day) that occur during the last seven days of life for beneficiaries receiving routine home care.

Source: CMS Manual System Pub 100–04 Medicare Claims Processing, Transmittal 11542, "Update to Hospice Payment Rates, Hospice Cap, Hospice Wage Index, and Hospice Pricer for FY 2023," August 4, 2022.

receiving RHC. In fiscal year 2020, CMS rebased the payment rates for the three higher-intensity, less frequently provided levels of hospice care (CHC, IRC, GIP), increasing those payment rates significantly and reducing the RHC payment rate by 2.7 percent.

Beneficiary cost sharing for hospice services is minimal. Hospices can, but are not required to, charge coinsurance of 5 percent for each prescription provided outside the inpatient setting (not to exceed $5) and for inpatient respite care (not to exceed the inpatient hospital deductible).[2]

Medicare fee-for-service (FFS) pays for hospice care for beneficiaries enrolled in both traditional FFS Medicare and Medicare Advantage (MA).[3] Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a provider paid by FFS Medicare (while Medicare continues paying the MA plan for Part D services and extra benefits, but not Part A and Part B services). In March 2014, the Commission urged that this policy be changed, recommending that hospice be included in the MA benefit package (Medicare Payment Advisory Commission 2014). In January 2021, as part of its value-based insurance design (VBID) models in MA, CMS's Center for Medicare & Medicaid Innovation (CMMI) launched a demonstration permitting MA organizations to provide hospice and palliative care services for their enrollees to test the effects of adding the hospice benefit to MA (Centers for Medicare & Medicaid Services 2020b). According to a CMS contractor evaluation report, 9,630 MA beneficiaries received hospice paid for by MA plans in 2021. The number of MA plans offering hospice will increase in the remaining three years of the demonstration. (For example, in 2023, 15 MA organizations, comprising 119 plan benefit packages, will furnish hospice benefits under the VBID model (Centers for Medicare & Medicaid Services 2022a).

Medicare hospice payment limits ("caps")

The Medicare hospice benefit was designed to provide beneficiaries with a choice in their end-of-life care to forgo conventional treatment and die at home. The

Congress expanded the Medicare benefit to include hospice care in 1983 in part because it was thought that the new benefit would be a less costly alternative to conventional end-of-life care (Government Accountability Office 2004, Hoyer 2007). Studies show that beneficiaries who elect hospice incur less Medicare spending in the last one or two months of life than comparable beneficiaries who do not, but also that Medicare spending for beneficiaries is higher for hospice enrollees than for nonenrollees in the earlier months before death. In essence, a hospice's net reduction in Medicare spending decreases the longer the patient is enrolled, and beneficiaries with long hospice stays tend to incur higher Medicare spending than those who do not elect hospice (Medicare Payment Advisory Commission 2008). Studies have been mixed on whether hospice has saved the Medicare program money in the aggregate compared with conventional care.[4] Research by a Commission contractor examined the literature and conducted a market-level analysis of hospices' effect on Medicare expenditures. That study found that while hospice produces savings for some beneficiaries, such as those with cancer, overall, hospice has not reduced net Medicare program spending and may have even increased net spending because of very long stays among some hospice enrollees (Direct Research 2015).

When the Congress established the hospice benefit, it included two limitations, or "caps," on payments to hospices in an effort to make cost savings more likely. The first cap limits the share of inpatient care days that a hospice can provide to 20 percent of its total Medicare patient care days. This cap is rarely exceeded; any inpatient days provided in excess of the cap are paid at the RHC payment rate.

The second cap limits the aggregate Medicare payments that an individual hospice can receive. Under the aggregate cap, if a hospice's total Medicare payments exceed the total number of Medicare beneficiaries it served multiplied by the cap amount ($32,486.92 in 2023), it must repay the excess to the program.[5] Beneficiaries who receive hospice care in multiple cap years or from multiple hospice providers are reflected in the beneficiary count of the cap calculation for a particular cap year and hospice provider in a prorated manner.[6] The cap is not applied individually to the payments received for each beneficiary, but rather to the total payments across all Medicare patients served by the hospice in the cap year. In other words, the cap is not a limit on Medicare's coverage of hospice services for patients. Rather, it limits how much Medicare will pay a hospice provider in the aggregate for its patient population. After the year ends, Medicare totals all its payments to the provider, and if that amount exceeds the number of beneficiaries multiplied by the aggregate cap amount, Medicare requires the hospice to repay the excess to the Medicare program. In 2020, we estimate 18.6 percent of hospices exceeded the cap.

Are Medicare payments adequate in 2023?

To address whether payments in 2023 are adequate to cover the costs of the efficient delivery of care and how much providers' payments should change in the coming year (2024), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of hospice providers, changes over time in the volume of services provided, quality of care, providers' access to capital, and the relationship between Medicare's payments and providers' costs.

Beneficiaries' access to care: Indicators were generally favorable

Our analysis of access indicators—including trends in the supply of providers, utilization of hospice services, and Medicare marginal profit—shows that beneficiaries' access to care in 2021 was generally favorable.

Capacity and supply of providers: In 2021, supply of hospices continued to grow, driven by an increase in for-profit providers

In 2021, 5,358 hospices provided care to Medicare beneficiaries, a 6 percent increase from the prior year (Table 10-2, p. 292). Market entry of for-profit, freestanding providers drove the growth in supply. For-profit hospices accounted for all of the net increase—an over 8 percent increase—while the number of nonprofit and government hospices declined by about 2 percent. In 2021, about three-quarters of hospices were for profit; however, they furnished care to just over half of Medicare hospice patients because, on average, for-

TABLE 10–2

Increase in total number of hospices driven by growth in for-profit providers

Category	2017	2018	2019	2020	2021	Average annual percent change 2017–2020	Percent change 2020–2021
All hospices	4,488	4,639	4,840	5,058	5,358	4.1%	5.9%
For profit	3,101	3,234	3,436	3,691	4,008	6.0	8.6
Nonprofit	1,226	1,245	1,255	1,220	1,195	–0.2	–2.0
Government	161	159	148	146	143	–3.2	–2.1
Freestanding	3,525	3,701	3,936	4,189	4,511	5.9	7.7
Hospital based	470	453	429	413	396	–4.2	–4.1
Home health based	471	463	456	437	434	–2.5	–0.7
SNF based	22	22	19	19	17	–4.8	–10.5
Urban	3,605	3,762	3,974	4,196	4,505	5.2	7.4
Rural	878	871	859	853	845	–1.0	–0.9

Note: SNF (skilled nursing facility). Some categories do not sum to total because of missing data for some providers. The rural and urban definitions used in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census). Type of hospice reflects the type of cost report filed (a hospice files a freestanding hospice cost report or the hospice is included in the cost report of a hospital, home health agency, or skilled nursing facility).

Source: MedPAC analysis of Medicare cost reports, Provider of Services file, and Medicare hospice claims data from CMS.

profit providers were smaller than nonprofit providers (latter data not shown). Freestanding providers also accounted for all the net growth in hospice providers, while the number of home health–based, hospital-based, and SNF-based providers declined.[7] In 2021, about 84 percent of hospices were freestanding, and these hospices furnished care to 86 percent of Medicare hospice patients (latter data not shown).

The number of hospice providers is not necessarily an indicator of beneficiary access to hospice because the number does not capture the size of providers, their capacity to serve patients, or the size of their service areas. In the past, we have concluded that no relationship exists between the supply of hospice providers and the rate of hospice use across states (Medicare Payment Advisory Commission 2010). A more recent analysis of 2019 data yields similar findings: Variation in hospice use rates across states appears unrelated to a state's number of hospice providers per 10,000 beneficiaries (Medicare Payment Advisory Commission 2021).

The number of rural hospices has declined in recent years, falling about 0.9 percent between 2020 and 2021 (Table 10-2). As of 2021, 84 percent of hospices were in urban areas and 16 percent were in rural areas (which is roughly similar to the share of Medicare beneficiaries living in rural areas, 17 percent). As noted above, the number of hospices in rural areas is not reflective of hospice access for rural beneficiaries because it does not capture the size of those hospice providers, their capacity to serve patients, or the size of their service area. Further, some urban hospices provide services in rural areas. Indeed, despite the decline in the number of rural hospices, the share of rural decedents using hospice has grown overall since 2010 (Table 10-3).

In 2021, most of the growth in the number of hospice providers was concentrated in California and Texas (data not shown). Between 2020 and 2021, California gained

TABLE 10–3

Share of decedents using hospice declined overall in 2021 but increased for some beneficiary groups

	Share of Medicare decedents who used hospice					
	2010	**2019**	**2020**	**2021**	**Average annual percentage point change 2010–2020**	**Percentage point change 2020–2021**
All decedent beneficiaries	43.8%	51.6%	47.8%	47.3%	0.4	–0.5
FFS beneficiaries	42.8	50.7	47.2	47.2	0.4	0.0
MA beneficiaries	47.2	53.2	48.7	47.4	0.2	–1.3
Dually eligible for Medicaid	41.5	49.3	42.3	42.1	0.1	–0.2
Not Medicaid eligible	44.5	52.4	49.8	49.2	0.5	–0.6
Age						
<65	25.7	29.5	26.5	25.0	0.1	–1.5
65–74	38.0	41.0	37.3	35.8	–0.1	–1.5
75–84	44.8	52.2	48.3	47.8	0.4	–0.5
85+	50.2	62.7	59.0	60.8	0.9	1.8
Race/ethnicity						
White	45.5	53.8	50.8	50.0	0.5	–0.8
Black	34.2	40.8	35.5	35.6	0.1	0.1
Hispanic	36.7	42.7	33.2	34.3	–0.4	1.1
Asian American	30.0	39.8	36.0	36.3	0.6	0.3
North American Native	31.0	38.5	33.5	33.8	0.3	0.3
Sex						
Male	40.1	46.7	42.9	42.1	0.3	–0.8
Female	47.0	56.3	52.7	52.5	0.6	–0.2
Beneficiary location						
Urban	45.6	52.8	48.8	48.5	0.3	–0.3
Micropolitan	39.2	49.7	46.8	45.1	0.8	–1.7
Rural, adjacent to urban	39.0	49.5	46.1	44.9	0.7	–1.2
Rural, nonadjacent to urban	33.8	43.8	40.7	39.8	0.7	–0.9
Frontier	29.2	36.2	33.4	33.0	0.4	–0.4

Note: FFS (fee-for-service), MA (Medicare Advantage). For each demographic group, the share of decedents who used hospice is calculated as follows: The number of beneficiaries in the group who both died and received hospice in a given year is divided by the total number of beneficiaries in the group who died in that year. "MA beneficiaries" refers to hospice enrollees who were enrolled in MA as of the last month of life. Prior to 2021, all individuals in the "MA beneficiaries" group received hospice paid for by the FFS program; beginning in 2021, most individuals in the "MA beneficiaries" group received hospice paid for by FFS, and a small number received hospice paid for by their MA plan under the MA value-based insurance design model. Beneficiary location reflects the beneficiary's county of residence in one of four categories (urban, micropolitan, rural adjacent to urban, or rural nonadjacent to urban) based on an aggregation of the Urban Influence Codes (UIC). This chart uses the 2013 UIC definition. The frontier category is defined as population density equal to or less than six people per square mile and overlaps with the beneficiary county of residence categories. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

167 hospices and Texas gained 56 hospices, continuing the trend in recent years of substantial market entry by hospice providers in these two states.[8] In addition, several other states experienced sizable gains in the number of hospices: 21 in Arizona, 9 in Nevada, and 7 in Georgia, Michigan, and Virginia (each). Some states saw the number of hospice providers decline, although these changes were generally modest. Connecticut and Nebraska experienced the largest net decrease (three hospices each).

Patterns of care among new hospices in California and Texas suggest additional oversight is warranted, particularly given the rapid entry of new providers in these states. In our March 2021 report to the Congress, an analysis of new hospices in California and Texas found that these providers tended to be small and had long average lengths of stay, high live-discharge rates, and high rates of exceeding the aggregate cap. Nearly all were for profit (Medicare Payment Advisory Commission 2021). Recently, the state of California passed two laws to address concerns about rapid growth in the number of hospices and questionable business practices among some providers in the state. California placed a moratorium on new hospice licenses beginning January 2022 and bolstered its state laws governing hospice referral and patient enrollment practices (California Legislature 2021). In addition, the California state auditor issued a report on hospice care in Los Angeles County, stating that "growth in the number of hospice agencies in Los Angeles County has vastly outpaced the need for hospice services" and identifying "numerous indicators of fraud and abuse" (Tilden 2022).[9]

Nationally, hospice use among Medicare decedents declined slightly in 2021, though use increased among some beneficiary groups

In 2021, about 47.3 percent of Medicare decedents received hospice services that year, a slight decrease from 47.8 percent in 2020 (Table 10-3, p. 293). Prior to 2020, hospice use among Medicare decedents rose substantially: Between 2010 and 2019, use grew from 43.8 percent to 51.6 percent. With the onset of the coronavirus pandemic, growth in beneficiary deaths in 2020 outpaced growth in the number of hospice users; the share of decedents using hospice in 2020 declined to 47.8 percent (Table 10-3). In 2021, total deaths among Medicare beneficiaries fell 0.1 percent, and the number of Medicare decedents who used hospice fell 1.3 percent, which explains the slight decline in the share of decedents using hospice (Table 10-4).

The share of decedents using hospice in 2021 continues to be affected by the coronavirus pandemic. Corresponding to waves of the pandemic, months with the highest numbers of deaths had the lowest hospice use rates (Figure 10-1, p. 296). Deaths among Medicare beneficiaries exceeded 300,000 in January, declined to a low of just under 200,000 in June, and increased again to just over 250,000 in December. The share of decedents using hospice moved in the opposite direction, with the lowest use rate (42 percent) in January when the number of deaths was highest, and the highest use rate in summer (51 percent) when the monthly number of deaths declined to a level more typical of prepandemic levels (Figure 10-1). This pattern largely reflects that elderly people who die of COVID-19, similar to those who die of pneumonia and influenza, are much more likely to die in the hospital and less likely to die at home or in a nursing facility than elderly people who die of other illnesses. For example, analysis of 2021 data from the CDC indicates that about 69 percent of decedents ages 65 and older who died of COVID-19 died in an inpatient setting, which is roughly similar to the share of decedents who died of pneumonia in an inpatient setting (76 percent) and influenza (69 percent). In contrast, only 26 percent of elderly individuals who died of other causes in 2021 died in inpatient settings (Centers for Disease Control and Prevention 2022b).[10] Thus, the slight drop in share of decedents using hospice during the coronavirus pandemic is not a reflection of Medicare payment adequacy.

Despite the decline nationally in the share of decedents using hospice, the pattern was not uniform, and hospice use increased among some decedent populations. For example, between 2020 and 2021, the share of decedents ages 85 and older who used hospice rose while hospice use rates fell for younger age groups (Table 10-3, p. 293). Hospice use remained more common among older decedents: 25 percent of decedents under age 65 used hospice compared with more than 60 percent of decedents ages 85 and older.

Between 2020 and 2021, hospice use rates increased or were stable among Black, Hispanic, Asian American, and North American Native beneficiaries, while the use rate declined for White beneficiaries. Nevertheless, hospice use rates continued to be

TABLE 10–4

Hospice use rates were stable or declined in 2021, following the 2020 increase

	2010	2019	2020	2021	Average annual percent change 2010–2019	Change 2019–2020	Change 2020–2021
Hospice utilization among Medicare decedents							
Number of Medicare decedents (in millions)	1.99	2.32	2.73	2.73	1.7%	17.6%	–0.1%
Number of Medicare decedents who used hospice (in millions)	0.87	1.20	1.31	1.29	3.6	9.0%	–1.3%
Average lifetime length of stay among decedents (in days)	87.0	92.5	97.0	92.1	0.7	4.8%	–5.1%
Median lifetime length of stay among decedents (in days)	18	18	18	17	0 days	0 days	–1 day
Medicare utilization and spending for all hospice users (not limited to decedents)*							
Total spending (in billions)	$12.9	$20.9	$22.4	$23.1*	5.5	7.4	2.8*
Number of Medicare hospice users (in millions)	1.15	1.61	1.72	1.71*	3.8	6.6	0.0*
Number of hospice days for all hospice beneficiaries (in millions)	81.6	121.8	127.8	127.6*	4.6	4.9	–0.1*

Note: Lifetime length of stay is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime. The percent change displayed in the table may not equal the percent change calculated using the yearly data displayed in the table due to rounding.
*These estimates are based on Medicare paid hospice claims, which excludes hospice care paid for by a small number of MA plans participating in the CMMI hospice MA VBID hospice model beginning in 2021. A CMS contractor report stated that 9,630 MA beneficiaries received hospice services in 2021 under the MA VBID program (Khodyakov et al. 2022).

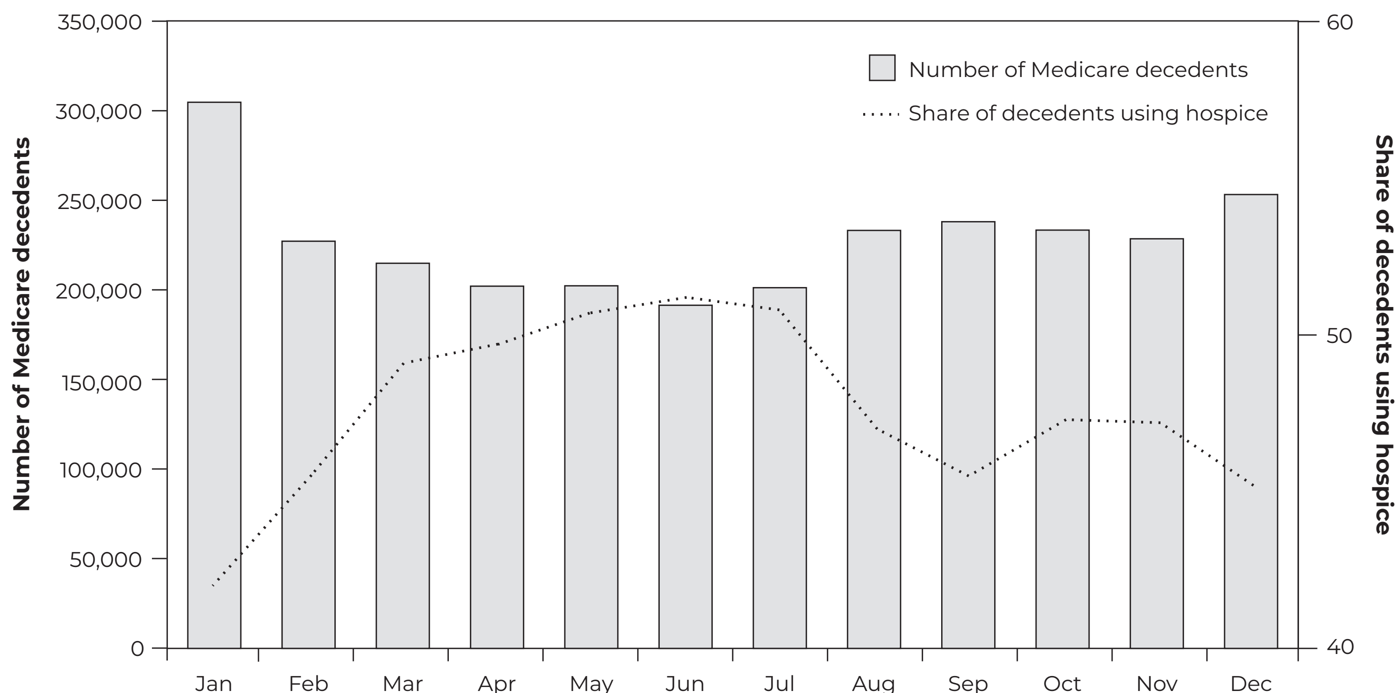
Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

lower for non-White decedents (Table 10-3, p. 293). The reasons for these differences are not fully understood. Researchers have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, disparities in access to care or information about hospice, socioeconomic factors, and mistrust of the medical system (Barnato et al. 2009, Cohen 2008, Crawley et al. 2000, LoPresti et al. 2016, Martin et al. 2011).

In 2021, hospice use rates declined in both rural and urban areas. Between 2020 and 2021, urban areas and frontier areas experienced a slight decline (0.3 and 0.4 percentage point, respectively), while the decline was largest in micropolitan areas (1.7 percentage points). Although a greater share of urban decedents than rural decedents have used hospice, hospice use grew across all rural categories between 2010 and 2019 (before the pandemic) (Table 10-3, p. 293).

FIGURE 10–1

Monthly trends in Medicare decedents and hospice use, 2021



Note: The share of Medicare decedents who used hospice reflects decedents who used hospice in the last calendar year of life. Analysis excludes beneficiaries without Medicare Part A because hospice is a Part A benefit.

Source: MedPAC analysis of data from the Common Medicare Enrollment file and hospice claims data from CMS.

In 2021, the hospice use rate was unchanged for FFS decedents and declined for MA decedents. Historically, more decedents in MA than in FFS have used hospice, although the difference has been shrinking in recent years. Growth in the share of newly eligible, younger beneficiaries choosing to enroll in MA plans rather than in traditional FFS Medicare has contributed to a declining aggregate hospice use rate among MA decedents (because younger decedents are less likely to enroll in hospice than older decedents) (Table 10-3, p. 293).

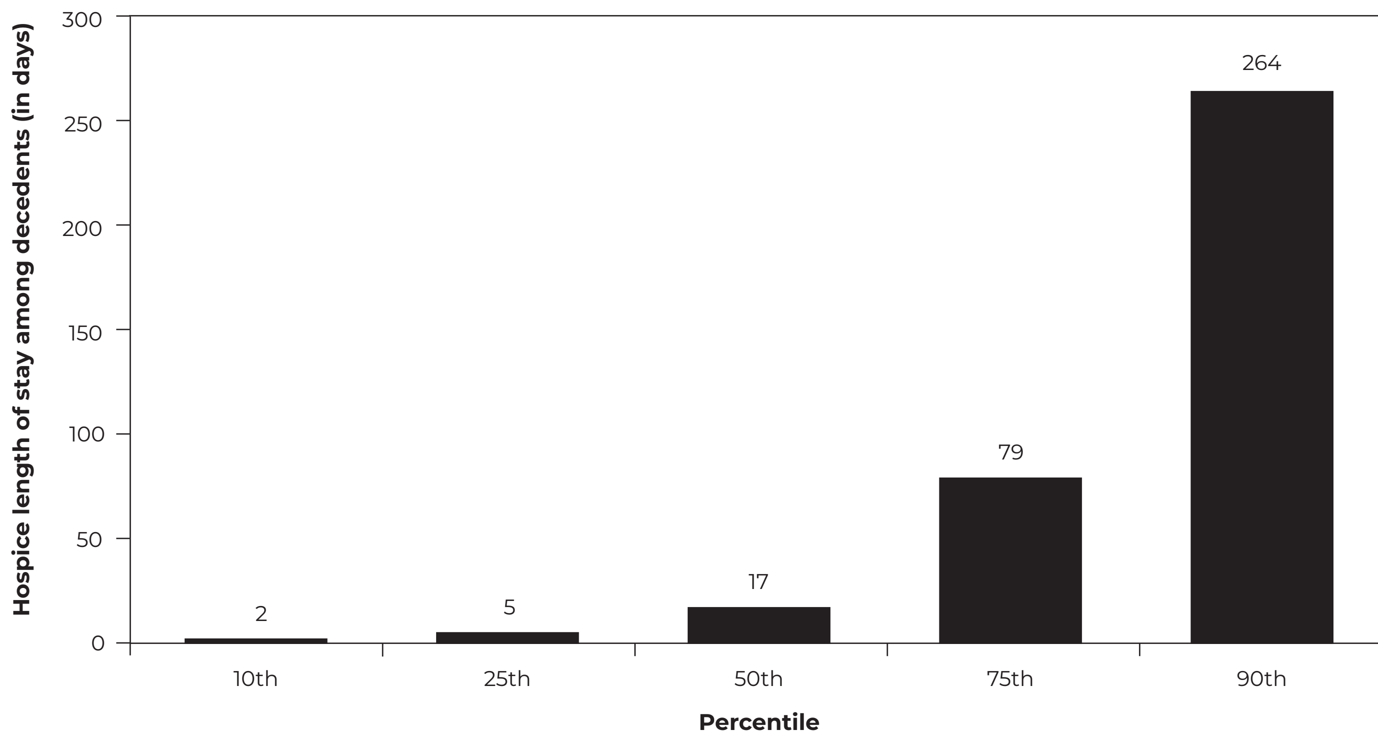
Also in 2021, location of care continued to shift because more decedents received hospice care at home. Fewer received hospice care in nursing facilities for reasons related to the coronavirus pandemic, not payment adequacy. The share of decedents receiving hospice in nursing homes declined to 15 percent (down from 18 percent in 2020 and 21 percent in 2019), while the share of decedents receiving hospice at home increased to 56 percent (up from 53 percent in 2020 and 49 percent in 2019). The decline of hospice care in nursing facilities has been driven by several pandemic-related factors, including (1) fewer patients residing in nursing facilities compared with prepandemic levels; (2) temporarily (in 2020) limited access to patients in nursing facilities (by outside staff, including hospice providers); and (3) beneficiaries with COVID-19 being more likely to die in the hospital or die suddenly than patients who die from chronic illnesses.[11]

Volume of services: Trends in hospice use and length of stay were mixed in 2021

In 2021, measures of hospice utilization for all hospice enrollees (not just decedents) were stable. That year,

FIGURE 10–2

Most Medicare hospice decedents in 2021 had relatively short stays, but some had very long stays



Note: Lifetime length of stay is calculated for decedents who were using hospice at the time of death or before death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime.

Source: MedPAC analysis of the Common Medicare Enrollment file and the Medicare Beneficiary Database from CMS.

1.71 million Medicare beneficiaries received hospice services, similar to 1.72 million beneficiaries in 2020 and up from 1.61 million beneficiaries in 2019 (Table 10-4, p. 295). The number of hospice days furnished was also stable at about 128 million days (Table 10-4).[12]

Hospice length of stay declined among decedents in 2021 (Table 10-4). Average lifetime length of stay among decedents was 92.1 days, down from 97.0 days in 2020 but similar to the 2019 average of 92.5 days. Median length of stay declined slightly to 17 days from 18 days in 2020. Most hospice decedents have short stays, but some have very long stays (Figure 10-2). Between 2020 and 2021, length of stay among decedents with the shortest stays remained the same (2 days at the 10th percentile and 5 days at the 25th percentile), but it fell for those with longer stays (from 87 days in 2020 to 79 days at the 75th percentile in 2021 and from 287 days to 264 days at the 90th percentile, respectively) (Figure 10-2).

Length of stay has implications for our broader assessment of payment adequacy because patient length of stay affects provider profitability. Hospices furnish more services at the beginning and end of a hospice episode and fewer services in the middle, making long stays more profitable for providers than short stays. Hospice lengths of stay vary by observable patient characteristics—such as patient diagnosis and location—so hospice providers can identify and enroll patients likely to have long (more profitable) stays if they choose to do so. For example, in 2021, average

TABLE 10–5

Nearly 60 percent of Medicare hospice spending in 2021 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2021 (in billions)
All hospice users in 2021	$23.1
Beneficiaries with LOS > 180 days	13.6
Days 1–180	4.4
Days 181–365	4.2
Days 366+	5.0
Beneficiaries with LOS ≤ 180 days	9.4

Note: LOS (length of stay). "LOS" reflects the beneficiary's lifetime LOS as of the end of 2021 (or at the time of discharge in 2021 if the beneficiary was not enrolled in hospice at the end of 2021). All spending reflected in the chart occurred only in 2021. Breakout groups do not sum to totals because of rounding.

Source: MedPAC analysis of Medicare hospice claims data and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

lifetime length of stay was longer among decedents with neurological conditions and chronic obstructive pulmonary disease (155 days and 140 days, respectively) than among decedents with cancer (51 days). Length of stay was also longer among patients in assisted living facilities (165 days) or nursing facilities (109 days) compared with patients at home (95 days).[13]

For-profit hospices have substantially longer average lengths of stay than nonprofit hospices (110 days compared with 71 days in 2021). For-profit hospices have more patients with diagnoses that tend to have longer stays, but they also have longer stays than nonprofit hospices for all types of diagnoses. These differences in patient mix and length of stay contribute to the variation in profitability observed among providers' profit margins.

Although most patients have short hospice stays, long stays account for the majority of Medicare spending on hospice. In 2021, Medicare spent about $13.6 billion, nearly 60 percent of hospice spending that year, on patients with stays exceeding 180 days (Table 10-5). About $5 billion of that spending was on additional hospice care for patients who had already received at least one year of hospice services (which is already twice the presumptive eligibility period for the hospice benefit).

Among the hospices with very long stays are those that exceed the hospice aggregate cap. In 2020, we estimate that about 18.6 percent of hospices exceeded the aggregate payment cap, similar to the prior year (19.0 percent in 2019) (Table 10-6).[14] On average, above-cap hospices exceeded the cap by about $422,000 in 2020, up from $384,000 in 2019. Above-cap hospices have fewer patients per year, on average, than below-cap hospices and are more likely to be for-profit, freestanding, recent entrants to the Medicare program and located in urban areas (Medicare Payment Advisory Commission 2022). Above-cap hospices have substantially longer stays than below-cap hospices, even for patients with similar diagnoses. Above-cap hospices also have substantially higher rates than other hospices of discharging patients alive. As the Commission has noted in past reports, these length-of-stay and live-discharge patterns suggest that above-cap hospices are admitting patients who do not meet the hospice eligibility criteria, which merits further investigation by the Office of Inspector General (OIG) and CMS.

In-person hospice staff visits increased slightly in 2021 after declining in 2020

In 2021, following a decline in in-person visits in 2020 related to the coronavirus pandemic, in-person hospice visits increased slightly. Medicare hospice patients received an average of 3.8 in-person visits per week, up from 3.6 visits in 2020 (Table 10-7). This increase resulted from a slight uptick in the average number of nurse visits and aide visits per week.

However, the average number of in-person visits per week remained below prepandemic levels. Some of these visits may have been replaced by telehealth visits. To facilitate access to care during the coronavirus public health emergency, CMS gave hospice providers the flexibility to provide visits using telecommunication systems in certain circumstances.[15] We lack data on telehealth visits provided by hospices except for

TABLE 10–6

Hospices that exceeded Medicare's annual payment cap, 2016–2020

	2016	2017	2018	2019	2020
Estimated share of hospices exceeding the cap	12.7%	14.0%	16.3%	19.0%	18.6%
Average payments over the cap per hospice exceeding it (in thousands)	$295	$273	$334	$384	$422
Payments over the cap as share of overall Medicare hospice spending	1.0%	1.0%	1.3%	1.7%	1.8%

Note: The aggregate cap statistics reflect the Commission's estimates and may differ from the CMS claims processing contractors' calculations. Our estimates assume all hospices use the proportional methodology and rely on claims data through 15 months after the end of each cap year (except for 2016, which used 14 months). The claims processing contractors may reopen the hospice cap calculation for up to three years; the reopening process and timing may vary across contractors. To illustrate the potential effect of reopening, we reestimated cap overpayments for 2017 using an additional 36 months of claims data (i.e., a 51 month run-out). With the additional 36 months of data, the estimated share of hospices exceeding the cap increased by just under 2 percentage points, the average payments over the cap per hospice exceeding the cap increased by roughly $25,000, and payments over the cap as a share of overall Medicare hospice spending increased by 0.3 percentage point. Spending in cap year 2017 reflects an 11-month period from November 1, 2016, to September 30, 2017. For years before 2017, the cap year was defined as the period beginning November 1 and ending October 31 of the following year. Beginning in 2018, the cap year is aligned with the federal fiscal year (October 1 to September 30 of the following year).

Source: MedPAC analysis of Medicare hospice claims data, Medicare hospice cost reports, and Medicare Provider of Services file from CMS.

social worker phone calls, which limits our ability to determine the extent to which telehealth visits have been used to supplement in-person visits. In our March 2022 report, the Commission recommended that CMS require hospice providers to report telehealth visits on hospice claims to enhance the agency's ability to monitor access to care.[16]

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are

TABLE 10–7

Average number of hospice visits and calls per patient per week increased slightly in 2021

	Average number of visits or calls per patient per week			
	2018	2019	2020	2021
Total visits	4.4	4.3	3.6	3.8
Nurse visits	1.8	1.8	1.6	1.7
Aide visits	2.2	2.2	1.7	1.8
Social worker visits	0.3	0.3	0.2	0.3
Social worker calls and visits	0.4	0.4	0.3	0.3

Note: "Visits" refers to in-person visits only. Nurse visits include both registered nurse and licensed practical nurse visits. "Social worker visits and calls" includes in-person social worker visits and social worker phone calls to patients or family. Number of visits by category may not sum to total number of visits due to rounding.

Source: MedPAC analysis of Medicare hospice claims data from CMS.

larger than the marginal costs of treating an additional beneficiary, a provider 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.[17] We found that the 2020 Medicare marginal profit for hospice providers was roughly 18 percent, suggesting that providers with the capacity to do so had a strong incentive to treat Medicare patients.

Quality of care is difficult to assess but appears stable

Quality of care in 2021 is difficult to assess due to effects of the coronavirus pandemic on beneficiaries and providers. While we report the most recent data from hospice patient experience and process measures, we have not used those results to inform our conclusions about trends in the quality of care provided to Medicare hospice beneficiaries and those trends' relationship to Medicare payment adequacy. Due to the pandemic, hospice quality data submitted by providers—the Hospice Item Set and the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) Hospice Survey—were suspended for the first and second quarters of 2020. CMS now reports quality data for periods after the second quarter of 2020, although the most recent data reporting period for CAHPS combines data from parts of 2019, 2020, and 2021.

We found, based on the most recent available data, that scores on available quality metrics were stable overall. Scores on the CAHPS survey were stable in the most recent period. Scores on a composite of seven processes of care at admission increased slightly in 2021 but are generally topped out. The provision of in-person visits at the end of life was stable, after modestly declining in 2020 due to the coronavirus pandemic.

Recently enacted legislation will increase the penalty for hospices that do not report quality data. Nonreporters currently face a 2 percent payment penalty, which will increase to 4 percent in 2024, per the Consolidated Appropriations Act, 2021.[18]

Consumer Assessment of Healthcare Providers and Systems®

The Hospice Quality Reporting Program requires hospice providers to participate in a CAHPS hospice survey. The survey gathers information from the patient's informal caregiver (typically a family member) after the patient's death.[19] The survey addresses aspects of hospice care that are thought to be important to patients and for which informal caregivers are positioned to provide information. Areas of focus include how the hospice performed on the following measures: communicating, providing timely care, treating patients with respect, providing emotional support, providing help for symptom management, providing information on medication side effects, and training family or other informal caregivers in the home setting. Respondents are also asked to rate the hospice on a scale of 1 to 10 and whether they would recommend the hospice. In August 2022, CMS began reporting star ratings for hospices based on the CAHPS scores.

CAHPS scores were stable in the most recent period (April 2019 to September 2021, excluding the first half of 2020) compared with the prior period (January 2018 to December 2019). CAHPS scores were highest on measures related to providing emotional support and treating patients with respect (90 percent of caregivers chose the most positive response in those areas), while scores were lowest in the areas of providing help for pain and symptoms, providing timely care, and training caregivers (with scores ranging from 75 percent to 78 percent in those areas) (Table 10-8). In terms of star ratings, most providers scored 3 stars or 4 stars (36 percent and 39 percent, respectively), while some providers scored higher (10 percent received 5 stars) or lower (14 percent received 2 stars and 1 percent received 1 star).

Process measures

Hospices are required to report data on seven processes of care that are important for patients newly admitted to hospice. These processes include pain screening, pain assessment, dyspnea screening, dyspnea treatment, documentation of treatment preferences, addressing beliefs and values if desired by the patient, and provision of a bowel regimen for patients treated with an opioid. CMS has a composite measure that reflects the share of admitted patients for whom the hospice performed all seven activities appropriately (or appropriately performed all the activities relevant to the patient). Hospice providers' scores on the composite measure are very high and increased slightly in the most recent period. The

TABLE 10–8

Scores on hospice CAHPS quality measures and hospice star ratings

	Prior period (January 2018 – December 2019)	Most recent period (April 2019 – December 2019; July 2020 – September 2021)
Share of respondents giving a top rating on:		
Providing emotional support	90%	90%
Caregiver rates hospice 9 or 10	81	81
Caregiver recommends hospice	84	84
Treating patients with respect	91	90
Help for pain and symptoms	75	75
Hospice team communication	81	81
Providing timely help	78	78
Caregiver training	76	76
Percent of providers by star rating score		
1 star	N/A	1%
2 star	N/A	14
3 star	N/A	36
4 star	N/A	39
5 star	N/A	10

Note: CAHPS (Consumer Assessment of Healthcare Providers and Systems®), N/A (not available). The CAHPS scores in the eight listed domains reflect the share of respondents who reported the "top-box"—meaning the most positive survey response across all providers.

Source: CAHPS data from CMS.

provider-level median score was 95.3 percent, up from 93.8 percent in the previous period. The high scores on the composite measure suggest that it has become topped out.

In August 2022, CMS added two new claims-based process measures to public reporting.[20] One is the Hospice Care Index, which identifies providers with outlier patterns of care based on hospice providers' performance across 10 indicators. These indicators include four related to the provision of visits to hospice patients, four related to aspects of live discharge, one that reflects Medicare hospice spending per beneficiary, and one that gauges whether the provider furnished any high-intensity care (continuous home care or general inpatient care). The first public reporting of this measure for the period April 2019 to September 2021 (excluding the first half of 2020) indicated that 14 percent of providers were an outlier on at least 3 of 10 measures, and 2 percent were an outlier on at least half of the measures.

The second new claims-based process measure in the public reporting program focuses on visits by hospice nurses and social workers at the end of life. Measures of these visits are thought to be indicators of quality because patients' and caregivers' need for symptom management and support tends to increase in the last week of life. The new measures calculate the share of hospice decedents who received in-person nurse or social worker visits on at least two of the last three days of life. The first public reporting period covered April 2019 through September 2021 (excluding the first half of 2020), and provider performance varied substantially, with scores ranging from 34 percent at the 25th percentile to 69 at the 75th percentile. In a

TABLE 10–9

Hospice in-person nurse and social worker visits during the last seven days of life, 2018–2021

	2018	2019	2020	2021
Nurse visits in last 7 days of life				
Share of days with visit	64%	66%	62%	63%
Average length of each visit (in 15-minute increments)	4.56	4.44	4.37	4.23
Average visit time per day (in 15-minute increments)	2.94	2.94	2.70	2.68
Social worker visits in last 7 days of life				
Share of days with visit	10%	10%	7%	9%
Average length of visits (in 15-minute increments)`	4.02	4.01	3.79	3.78
Average visit time per day (in 15-minute increments)	0.41	0.42	0.28	0.32

Note: Nurse visits include both registered nurse and licensed practical nurse visits.

Source: MedPAC analysis of Medicare hospice claims data from CMS.

separate claims analysis, the Commission examined the aggregate trend from 2018 to 2021 in nurse and social worker in-person visits in the last seven days of life. After a modest decline in 2020 in the frequency and length of these visits in the last seven days of life, provision of these visits was generally stable in 2021 compared to the prior year (Table 10-9).

Future quality measures

The Commission consistently maintains that, with quality measurement in general, outcome measures are preferable to process measures. Although outcome measures for hospice are particularly challenging, the Commission believes that outcome measures such as patient-reported pain and other symptom management measures warrant further exploration. In the hospice final rule for fiscal year 2022, CMS indicated that as part of the hospice patient assessment instrument currently under development (referred to as the Hospice Outcomes & Patient Evaluation (HOPE)), CMS has been working with a technical expert panel to explore three candidate outcome measures related to symptom management: timely reduction of pain impact, reduction in pain severity, and timely reduction of symptoms. In addition, CMS has been exploring development of additional process measures related to timely reassessment of pain and other symptoms (Abt Associates 2022). The agency has also been exploring development of measures in several other areas. Recently, CMS began work with a technical expert panel to develop health equity structural composite measures for hospice and home health (Centers for Medicare & Medicaid Services 2022c). CMS has also indicated interest in exploring additional quality measures that combine multiple types of data such as patient assessment data and claims data (e.g., hospitalizations during a hospice election and patterns of live discharges) (Centers for Medicare & Medicaid Services 2022b).

High rates of live discharge from hospice could signal problems

As the Commission has noted over the years, high rates of live discharge may signal poor quality or program integrity issues. Hospice providers are expected to have some live discharges because patients may

change their mind about using the hospice benefit and disenroll from hospice or their condition may improve and they no longer meet the hospice eligibility criteria. However, providers with substantially higher rates of live discharge than their peers signals a problem, such as a hospice provider not meeting the needs of patients and families or admitting patients who do not meet the eligibility criteria.

In 2021, the aggregate rate of live discharge (that is, live discharges as a share of all discharges) was 17.2 percent, an increase from 15.4 percent in 2020 but similar to the rate of 17.4 percent in 2019. As in prior years, hospice claims data show "beneficiary revocation" and "beneficiary not terminally ill" as the most common reasons for live discharge (each accounting for 6.3 percent of hospice discharges in 2021).[21] Among providers with more than 30 discharges, the median live-discharge rate was about 19 percent, but 10 percent of providers had live-discharge rates of 50 percent or more. Hospices with very high live-discharge rates were disproportionately for profit and recent entrants to the Medicare program (entered in 2010 or after) and had an above-average rate of exceeding the aggregate payment cap.

Very short hospice stays signal opportunities for quality improvement

For many years, a significant share of hospice stays have been very short. More than one-quarter of hospice decedents enroll in hospice only in the last week of life, a length of stay that is commonly thought to benefit patients less than enrolling somewhat earlier. Very short hospice stays occur across a wide range of diagnoses, often stemming from broader issues in the health care delivery system that precede the hospice referral (Medicare Payment Advisory Commission 2022). These short stays are generally unrelated to the adequacy of Medicare's hospice payment rates. For example, some physicians are reluctant to have conversations about hospice or tend to delay such discussions until death is imminent; some patients and families have difficulty accepting a terminal prognosis; and financial incentives in the FFS system encourage increased volume of clinical services (compared with palliative care furnished by hospice providers) (Medicare Payment Advisory Commission 2009). In addition, some analysts point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to deferring hospice care, resulting in short hospice stays.

Initiatives are under way that seek to address concerns about potentially late hospice enrollment and to improve the quality of end-of-life care more generally. Since 2016, under the physician fee schedule, Medicare has paid for advance care planning conversations between beneficiaries and their physicians, advanced practice registered nurses, or physician assistants. In 2016, CMS also launched a demonstration program (called the Medicare Care Choices Model (MCCM)) that permitted certain FFS beneficiaries who were eligible for hospice (but not enrolled in the Medicare hospice benefit) to enroll in the demonstration and receive palliative and supportive care from a hospice provider while continuing to receive "curative" care from other providers.[22] An evaluation of the first four years of the MCCM reported that participants were more likely to enroll in hospice before death and to do so earlier than the comparison group of decedents. The fourth evaluation found, based on the experience of 4,574 MCCM enrollees who enrolled between January 2016 and September 2020 and died by March 2021, that the MCCM was associated with a 14 percent net reduction in Medicare expenditures for these beneficiaries due to greater hospice use and lower acute care costs at the end of life (Kranker et al. 2022). The report cautioned against broadly extrapolating from these findings because the model involved a small number of beneficiaries and hospice providers, and the report noted uncertainty over the magnitude of the effect on spending.[23]

In March 2014, the Commission recommended that hospice be included in the MA benefit package, which would give plans greater incentive to develop and test new models aimed at improving end-of-life care and care for beneficiaries with advanced illnesses (Medicare Payment Advisory Commission 2014). As noted earlier, CMMI launched a VBID demonstration in January 2021 that tests, for MA plans participating in the demonstration, the inclusion of hospice services in the MA benefit. Participating plans may also offer enrollees palliative care outside the hospice benefit, transitional concurrent hospice and curative care, and hospice supplemental benefits (e.g., waiver of hospice cost sharing for drugs and respite care or additional in-home caregiver support).

In 2021, the first year of the hospice VBID, 9 MA parent organizations offered hospice in 52 plan benefit packages. The first-year evaluation report stated that about 9,630 beneficiaries received hospice care from an MA plan through the VBID in 2021 (Khodyakov et al. 2022). In VBID participating plans, hospice use was similar in 2021 and 2020, the year before VBID began (Khodyakov et al. 2022). In addition, the report indicated that some beneficiaries received transitional concurrent care (146 beneficiaries), hospice supplemental benefits (525 beneficiaries), and nonhospice palliative care (2,596 beneficiaries), although the report stated that there was less use of these additional benefits than expected. According to the report, MA plans and hospice providers reported implementation challenges, but they reported that these challenges lessened over time. Experience with VBID hospice continues to evolve as the number of plans participating increases in future years of the model. In 2023, 15 MA parent organizations will offer hospice in 119 plan benefit packages.

In addition to MA plans, accountable care organizations (ACOs)—which are accountable for a defined Medicare population's total spending, including end-of-life care and hospice—are entities that could provide hospice care and potentially reduce costs by implementing policies that would facilitate beneficiaries' use of end-of-life care in a way that is consistent with their preferences. Research examining the effect of ACOs on patterns of end-of-life care and hospice use are nascent, but findings to date suggest that the effects are modest (Gilstrap et al. 2018).

Providers' access to capital: Hospices have good access to capital

Hospices in general require less capital than many other provider types because they do not need extensive physical infrastructure (although some hospices have built their own inpatient units, requiring significant capital). Overall, access to capital for hospices appears adequate, given the continued entry of for-profit providers in the Medicare program.

In 2021, the number of for-profit providers grew by more than 8 percent, indicating that these providers have been able to access capital. Although the coronavirus pandemic has affected hospice providers' operations in a number of ways, financial reports indicate that publicly traded companies continued to have strong financial performance through the third quarter of 2022 (Amedisys 2022, Chemed 2022, Enhabit 2022). Several companies reported that admissions and average daily censuses had not yet returned to prepandemic levels. Some pointed to constraints on their capacity to accept new patients in some locations because of a shortage of staff and hiring challenges. The reports suggest that staffing shortages were particularly pronounced in the first half of 2022; while not fully resolved, these staffing issues have eased somewhat in the third quarter. Several companies reported using hiring bonuses, retention bonuses, or both as part of their hiring strategy and that they faced increased labor costs. Some companies continued to report lower average daily censuses because nursing facilities' and assisted living facilities' referrals had not rebounded to prepandemic levels. Despite these issues, publicly traded companies' margins continue to be strong. Furthermore, the hospice sector continues to garner substantial investment interest from private equity firms and investors, and market valuations of hospice companies are high (Parker 2022, Vossel 2022a, Vossel 2022b). Among nonprofit freestanding providers, less is known about access to capital, which may be limited. Hospital-based and home health–based nonprofit hospices have access to capital through their parent providers, and both sectors currently appear to have adequate access to capital.

A provider's all-payer total margin—which reflects how its total revenues compare with its total costs for all lines of business and all payers—can influence a provider's ability to obtain capital. Irregularities in the way some hospices report their total revenue and total expense data on cost reports prevent us from calculating a reliable estimate of all-payer total margins for hospices. Among hospice payers, however, Medicare accounts for about 90 percent of hospice days, and hospices' Medicare margins are strong.

Medicare payments and costs: Aggregate payments exceed costs

Hospice costs per day increased 4.2 percent between 2020 and 2021, up considerably relative to historical cost growth. Hospice costs per day vary substantially by providers' average length of stay, with hospices with longer stays having lower costs per day on average. Hospice margins are presented through 2020 because of the data lag required to calculate cap overpayment

amounts. Average cost per day increased just 1.1 percent between 2019 and 2020, which helped boost the 2020 Medicare aggregate margin to 14.2 percent (16 percent including pandemic relief funds), up from 13.4 percent in 2019. Given the acceleration in cost growth in 2021 and the reinstatement of the 2 percent sequester beginning July 2022, we project a Medicare aggregate margin for hospices of about 8 percent in 2023.

Hospice costs

In 2021, hospice costs per day across all levels of care and hospice providers averaged about $156, rising 4.2 percent from 2020. Between 2019 and 2020 (the year of our margin estimate), hospice costs per day grew 1.1 percent.

Hospice costs per day vary substantially by type of provider (Table 10-10), which is one reason for differences in hospice margins across provider types. In 2021, freestanding hospices had lower average costs per day than provider-based hospices (i.e., home health–based and hospital-based hospices). For-profit and rural hospices also had lower average costs per day than their respective counterparts. Many factors contribute to variation in hospice costs across providers. One factor is length of stay. Hospices with longer stays have lower costs per day on average. Freestanding and for-profit hospices have substantially longer stays than other hospices and thus have lower costs per day (Medicare Payment Advisory Commission 2022). Another factor is overhead costs. Included in the costs of provider-based hospices are overhead costs allocated from the parent provider, which contributes to provider-based hospices' higher costs compared with freestanding providers. The Commission maintains that payment policy should focus on the efficient delivery of services and that if freestanding hospices are able to provide high-quality care at a lower cost than provider-based hospices, payment rates should be set accordingly; the higher costs of provider-based hospices should not be a reason for increasing Medicare payment rates.

Hospice margins

In 2020, the Medicare aggregate margin for hospice providers was 14.2 percent, up from 13.4 percent in 2019 (Table 10-11, p. 306).[24] Medicare aggregate margins varied widely across individual hospice providers: –4.5 percent at the 25th percentile, 14.1 percent at the 50th percentile, and 27.6 percent at the 75th percentile (data not shown). Our estimates of Medicare aggregate margins exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs, consistent with our approach used in other Medicare sectors.[25] In addition, these aggregate Medicare margin estimates do not include federal relief funds related to the coronavirus pandemic that were received by hospice providers in 2020. However, if a portion of these relief funds received by freestanding hospice providers in 2020 were included in our margin estimates, the aggregate Medicare margin would have been about 16 percent (compared with our estimated 14.2 percent).[26]

Hospice margins vary by provider characteristics, such as type of hospice (freestanding or provider based), type of ownership (for profit or nonprofit), patient volume, and urban or rural location (Table 10-11, p. 306). In 2020, freestanding hospices had higher Medicare aggregate margins (16.7 percent) than home health–based (11.2 percent) or hospital–based hospices (–18.2 percent) (Table 10-11). Provider-based hospices

TABLE 10–10

Total hospice costs per day varied by type of provider, 2021

	Average total cost per day
All hospices	$156
Freestanding	150
Home health based	167
Hospital based	231
For profit	138
Nonprofit	184
Urban	158
Rural	142

Note: Data reflect aggregate costs per day for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care) for all payers. "Days" reflects the total number of days for which the hospice is responsible for care of its patients, regardless of whether the patient received a visit on a particular day. Data are not adjusted for differences in case mix or wages across hospices.

Source: MedPAC analysis of Medicare hospice cost reports and Medicare Provider of Services file from CMS.

TABLE 10–11

Hospice Medicare aggregate margins by selected characteristics, 2016 to 2020

Category	Share of hospices 2020	2016	2017	2018	2019	2020
All	100%	10.9%	12.5%	12.4%	13.4%	14.2%
Freestanding	83	14.0	15.3	15.1	16.2	16.7
Home health based	9	6.2	8.1	8.4	9.6	11.2
Hospital based	8	–16.7	–13.8	–16.5	–18.4	–18.2
For profit	73	17.9	20.0	19.0	19.2	20.5
Nonprofit	24	2.2	2.5	3.8	6.0	5.8
Urban	83	11.4	12.9	12.6	13.6	14.3
Rural	17	6.3	8.9	10.3	11.5	13.5
Patient volume (quintile)						
Lowest	20	–3.1	–1.1	–3.1	–4.5	–2.1
Second	20	6.2	6.7	5.6	6.2	4.9
Third	20	11.2	13.8	13.8	13.5	14.2
Fourth	20	13.1	15.2	14.0	15.8	17.9
Highest	20	11.1	12.5	12.7	13.9	14.4
Below cap	81	10.7	12.6	12.5	13.8	14.8
Above cap (excluding cap overpayments)	19	12.6	12.1	10.1	10.0	7.7
Above cap (including cap overpayments)	19	20.2	21.9	21.8	22.5	22.8
Share of stays > 180 days						
Lowest quintile	20	–5.4	–4.5	–3.0	–2.5	–0.4
Second quintile	20	5.8	7.0	8.5	10.3	11.8
Third quintile	20	14.8	17.1	16.8	19.9	20.0
Fourth quintile	20	20.0	22.1	20.8	22.8	24.1
Highest quintile	20	15.0	17.8	17.6	13.4	13.4
Share of patients in nursing facilities and assisted living facilities						
Lowest half	50	4.8	6.3	6.1	6.6	7.5
Highest half	50	16.2	18.1	17.3	18.7	18.9

Note: Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs. Margin by hospice ownership status is based on hospices' ownership designation from the Medicare cost report. The rural and urban definitions used in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

Source: MedPAC analysis of Medicare hospice cost reports, Medicare hospice claims data, and Medicare Provider of Services file from CMS.

typically have lower Medicare aggregate margins than freestanding hospices for several reasons, including their shorter stays and the allocation of overhead costs from the parent provider to the provider-based hospice. In 2020, the Medicare aggregate margin was considerably higher for for-profit hospices (20.5 percent) than for nonprofit hospices (5.8 percent). The Medicare aggregate margin for freestanding

nonprofit hospices was higher (9.5 percent) than the margin for nonprofit hospices overall (data not shown). Generally, hospices' Medicare aggregate margins vary by the provider's volume—hospices with more patients have higher margins on average. Hospices in urban areas had a slightly higher overall Medicare aggregate margin (14.3 percent) than those in rural areas (13.5 percent). Between 2016 and 2020, the gap in margins between urban and rural hospices shrank, from over 5 percentage points in 2016 to less than 1 percentage point in 2020.

In 2020, above-cap hospices had favorable margins even after the return of overpayments. Above-cap hospices had a Medicare aggregate margin of about 22.8 percent before the return of overpayments but had a margin of 7.7 percent after the return of overpayments. The Medicare aggregate margin for below-cap hospices was 14.8 percent.

Hospice profitability is closely related to length of stay. Hospices with longer stays have higher margins. For example, in an analysis of hospice providers based on the share of their patients' stays exceeding 180 days, the Medicare aggregate margin ranged from –0.4 percent for hospices in the lowest quintile to 24.1 percent for hospices in the second-highest quintile (Table 10-11). Hospices in the quintile with the greatest share of their patients exceeding 180 days had a 13.4 percent Medicare aggregate margin after the return of cap overpayments, but without the hospice aggregate cap, these providers' margins would have averaged 22.7 percent (latter figure not shown in table).

Hospices with a large share of patients in nursing facilities and assisted living facilities have higher Medicare aggregate margins than other hospices (Table 10-11). For example, in 2020, the 50 percent of hospices with the highest share of patients residing in nursing facilities and assisted living facilities had an aggregate Medicare margin that was more than double the margin for providers with fewer patients residing in facilities. The higher margin among hospices treating more facility patients is driven in part by the diagnosis profile and length of stay of patients residing in facilities. In addition, treating hospice patients in a centralized location may create efficiencies in terms of mileage costs and staff travel time, as well as facilities serving as referral sources for new patients. Nursing facilities can also be a more efficient setting for hospices to provide care because of the overlap in responsibilities between the hospice and the nursing facility.

Projected 2023 Medicare aggregate margin

To project the 2023 Medicare aggregate margin, we model the policy changes that went into effect between 2020 (the year of our most recent margin estimates) and 2023. The policies include annual payment updates in 2021, 2022, and 2023 of 2.4 percent, 2.0 percent, and 3.8 percent, respectively. The updates for these years reflect the market basket update and a productivity adjustment. In addition, our margin projection reflects reinstatement of the 2 percent sequester beginning in July 2022. (The sequester was suspended from May 2020 to March 2022 and was reinstated at 1 percent from April to June 2022.) We assume a rate of cost growth equal to 4.2 percent in 2021 (the observed rate for that year) and the projected growth in the market basket in 2022 and 2023, which reflects the most current data available on wage growth. Taking these factors into account, for 2023, we project a Medicare aggregate hospice margin of about 8 percent.

Policy to modify the hospice aggregate cap

In its March 2022 report to the Congress, the Commission determined that the aggregate level of hospice payments exceeded the amount necessary to provide high-quality care and that payments could be reduced in 2022. Rather than recommend an across-the-board reduction, the Commission recommended that payments in fiscal year 2023 be frozen at fiscal year 2022 levels and that the aggregate level of payments be reduced through a policy to modify the cap.

The Commission recommended that the aggregate cap be wage adjusted and reduced by 20 percent. Because the hospice payments are wage adjusted but the aggregate cap is not, the cap is more generous in some areas of the country than in others. Wage adjusting the cap would make it equitable across all providers.[27] The Commission also recommended that the aggregate cap be reduced by 20 percent. This reduction would focus payment reductions on providers with disproportionately long stays and high margins while leaving the majority of providers unaffected by the cap reduction. The Congress did not

TABLE 10–12

Simulated share of hospice providers exceeding the aggregate cap in 2020 under a policy to modify the aggregate cap

	2020 share of providers exceeding the cap	
	Actual	Simulation of modified cap policy
All	18.6%	33.5%
Freestanding	21.7	38.6
Home health based	4.4	13.3
Hospital based	0.7	3.2
For profit	24.6	43.0
Nonprofit	2.1	8.4
Urban	21.3	36.7
Rural	4.2	17.3

Note: This analysis simulates the effect of a policy to wage adjust and reduce the cap by 20 percent using 2020 data. The simulation assumes no changes in utilization in response to the policy. Although we are not able to incorporate potential behavioral changes in our simulation, it is possible that some providers might respond to cap changes by adjusting their admissions practices to remain under the cap.

Source: MedPAC analysis of Medicare claims data for hospice providers.

act on the Commission's recommendation to modify the aggregate cap.

Last year, we simulated the effect of the cap recommendation using historical data (from 2019). We have repeated that simulation with the most recently available data (from 2020) to provide an updated sense of its impact. An important caveat to our cap-policy simulations is that the simulations are based on historical data and make no projections or behavioral assumptions. Although we are not able to incorporate potential behavioral changes in our simulation, we note the possibility that some providers might respond to cap changes by adjusting their admissions practices to remain under the cap.

Under the Commission's cap recommendation—that the aggregate cap be wage adjusted and lowered—we estimate that the share of hospices exceeding the cap would increase, while the majority of providers would remain under the cap. In our simulation, the estimated share of hospices exceeding the cap in 2020 would increase from 18.6 percent (the estimated actual rate) to 33.5 percent (Table 10-12). The additional providers estimated to exceed the cap would be predominantly for profit (89 percent) and freestanding (93 percent), with a long average length of stay (244 days as of the end of 2020 for all patients, not limited to decedents) and a high 2020 Medicare aggregate margin (25 percent) (data not shown).[28] Our simulation estimates that about two-thirds of providers would remain under the cap, with many of these providers being substantially below the cap. Across all providers, our simulation finds that about 40 percent of hospices would be 25 percent or more below the cap under this policy. In addition, a greater share of rural hospices (nearly two-thirds), nonprofit hospices (over three-quarters), and provider-based hospices (over three-quarters) would remain 25 percent or more below the cap.

We estimate that our proposed cap policy would have reduced aggregate Medicare program payments in 2020 by about 3.3 percent (assuming no changes in utilization) (Table 10-13). The reductions in payments

TABLE 10–13

Simulated effect on hospice payments of policy to modify the aggregate cap

	Percent change in Medicare payments based on simulation of recommended policy to wage adjust and reduce the cap by 20%
All	–3.3%
Freestanding	–3.8
Home health based	–1.2
Hospital based	–0.1
For profit	–5.2
Nonprofit	–0.7
Urban	–3.2
Rural	–4.3
Share of stays > 180 days	
Lowest quintile	0.0
Second quintile	0.0
Third quintile	–0.2
Fourth quintile	–6.7
Highest quintile	–17.2

Note: This analysis simulates the effect of a policy to wage adjust and reduce the cap by 20 percent using 2020 data. The simulation assumes no changes in utilization in response to the policy. Although we are not able to incorporate potential behavioral changes in our simulation, it is possible that some providers might respond to cap changes by adjusting their admissions practices to remain under the cap.

Source: MedPAC analysis of Medicare claims data for hospice providers.

would occur among a subset of providers with disproportionately long stays and high margins. For example, our simulation finds that the cap policy change would reduce payments for hospices in the top two length-of-stay quintiles (by about 7 percent in the fourth quintile and about 17 percent in the fifth (highest) quintile), while payments for other hospices would remain largely unchanged (Table 10-13). The effects of the cap policy by category of hospice provider depend on the prevalence of providers in each category with disproportionately long stays. Per category, for-profit and freestanding hospices are estimated to receive reduced payments under the policy to modify the cap, while payments to nonprofit and hospital-based providers (the two groups with the lowest margins) would be largely unaffected.

Under the modified cap policy, we expect that beneficiaries will continue to have good access to hospice care. As discussed in our March 2020 report, the current aggregate cap is equivalent to the amount that Medicare pays for a routine home care stay of about 179 days (assuming a wage index of 1.0). Because the cap is applied in the aggregate across the provider's entire patient population (including both short and long stays) and not at the individual level, a hospice provider can provide a substantial number of long stays and remain under the cap. For example, we can consider a hypothetical hospice with a wage index of 1.0 whose patients received only RHC. Under the current cap, if half of the hospice's patients each had a length of stay of 30 days, the other half could have an average length of stay of up to 335 days before that provider would

TABLE 10–14

Simulated effect of policy to modify the aggregate cap on 2020 payment-to-cost ratios for urban and rural hospices

	2020 payment-to-cost ratios					
	All providers		Urban		Rural	
	Actual	Simulation of recommended policy to wage adjust and reduce cap	Actual	Simulation of recommended policy to wage adjust and reduce cap	Actual	Simulation of recommended policy to wage adjust and reduce cap
Lowest quintile	1.00	1.00	1.00	1.00	0.94	0.94
Second quintile	1.13	1.13	1.14	1.14	1.11	1.11
Third quintile	1.25	1.25	1.25	1.25	1.21	1.21
Fourth quintile	1.32	1.23	1.32	1.23	1.35	1.27
Highest quintile	1.15	0.96	1.13	0.95	1.36	1.04

Note: This analysis, using 2020 data, simulates the effect of a policy to wage adjust and reduce the cap by 20 percent. The simulation assumes no changes in utilization in response to the policy.

Source: MedPAC analysis of Medicare claims and cost report data for hospice providers.

exceed the cap.[29] The length-of-stay patterns in this hypothetical example are much longer than typical for the hospice population (for patients with both short and long stays), demonstrating the extent to which hospices that exceed the current cap have outlier utilization patterns. In the hypothetical example, if the hospice cap were reduced by 20 percent, the hospice provider could have half of its patients with 30-day stays and the other half with an average stay of 257 days before the provider would exceed the reduced aggregate cap amount.

There is evidence suggesting that some hospices are inappropriately using live discharges as a way to limit their cap liabilities. CMS and OIG should monitor this type of behavior under current policy and any changes under a policy to reduce the cap. In addition, there could be merit in considering a payment penalty for hospices with unusually high rates of live discharges. For example, live-discharge rates could be included in a compliance threshold policy, as discussed in our March 2021 report.

In aggregate, both urban and rural providers are estimated to experience reduced payments under the cap policy modification; however, these payment reductions would occur among the subset of urban and rural providers with disproportionately long stays and high margins. For example, both urban and rural providers in the two highest length-of-stay quintiles had substantial Medicare aggregate margins in 2020, with payment-to-cost ratios ranging from 1.13 to 1.36; these providers' payments would decline under the cap policy modification, as seen in Table 10-14.[30] Table 10-14 also shows that rural providers with fewer long-stay patients and lower margins (e.g., providers in the two lowest length-of-stay quintiles) would see no change in their payments.

How should Medicare payments change in 2024?

Under current law, Medicare's base payment rates for hospice care are increased annually based on the

projected increase in the hospice market basket, less an amount for productivity improvement. The final update for 2024 will not be set until summer 2023, but to get a sense of the update level, we note that CMS's third-quarter 2022 projections of the market basket (3 percent) and productivity adjustment (0.1 percent) would result in an increase in hospice payment rates of 2.9 percent.

Our indicators of payment adequacy for hospices—beneficiary access to care, quality of care, provider access to capital, and Medicare payments relative to providers' costs—are generally positive. The Commission has concluded that a reduction in aggregate payments is warranted. However, in this sector, with the range of financial performance across providers and the existence of the hospice aggregate cap, there is the potential to focus payment reductions on providers with disproportionately long stays and high margins. Therefore, the Commission recommends that the hospice aggregate cap be wage adjusted and reduced by 20 percent while maintaining the current-law update for fiscal year 2024. Under this recommendation, payments would increase for many hospice providers by an estimated 2.9 percent, while payments would be reduced for providers with very long lengths of stay and low costs relative to payments.

RECOMMENDATION 10

For fiscal year 2024, the Congress should update the 2023 Medicare base payment rates for hospice by the amount specified in current law and wage adjust and reduce the hospice aggregate cap by 20 percent.

RATIONALE 10

Our indicators of access to care are generally positive, and there are signs that the aggregate level of payment for hospice care exceeds the level needed to furnish high-quality care to beneficiaries. In 2021, the number of providers increased by 6 percent. The number of beneficiaries receiving hospice care and total days of hospice care were stable. Nationally, the share of Medicare decedents using hospice declined slightly, while use rates increased among some decedent populations. Average length of stay, which increased in 2020, declined in 2021 to its 2019 level. The 2020 Medicare marginal profit was about 18 percent. Access to capital appears good, as the number of for-profit providers increased by more than 8 percent and financial reports suggest the sector is viewed favorably by investors. The 2020 Medicare aggregate margin was 14.2 percent (16 percent if relief funds related to the coronavirus pandemic are included). The projected 2023 Medicare aggregate margin is about 8 percent.

IMPLICATIONS 10

Spending

- This recommendation would decrease federal program spending relative to the statutory update by $250 million to $750 million in one year and between $5 billion and $10 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have an adverse effect on beneficiaries' access to care or on providers' willingness or ability to care for Medicare beneficiaries. ■

Endnotes

1 If a beneficiary does not have an attending physician, they can initially elect hospice based on the certification of the hospice physician alone.

2 For a more complete description of the hospice payment system, see https://www.medpac.gov/wp-content/uploads/2021/11/MedPAC_Payment_Basics_22_hospice_FINAL_SEC.pdf.

3 Throughout this chapter, we use the term "FFS Medicare" or "traditional Medicare" as equivalents for 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.

4 Some studies have found large cost savings due to hospice, while others have found little or no savings overall. A contractor report sponsored by the Commission examined the difference in methodologies used in the literature (Direct Research 2015). The report found that large hospice cost savings found by some studies are likely an artifact of the methodology used rather than a reflection of the effect of hospice on Medicare spending. In particular, the report reviewed the methodology used by six studies. Four studies that looked at a fixed time period prior to death (e.g., the last year or half year) showed small costs or small savings for hospice users, depending on time period and population studied. By contrast, two studies that looked only at the period of hospice enrollment (and compared it with a "pseudo"-enrollment period created for nonhospice decedents) showed very large (e.g., 24 percent) cost savings for hospice decedents. The report suggested that, because the date of enrollment or pseudo-enrollment influences the calculated savings or costs, issues with assigning a pseudo-enrollment date to nonhospice enrollees make this methodology biased to find savings.

5 The cap is increased each year by a measure of inflation. Through 2016, it was increased annually by the rate of growth in the consumer price index for all urban consumers for medical care. In accord with the statute, the aggregate cap from 2017 through 2032 is updated annually by the same factor as the hospice payment rates (market basket net of productivity and other adjustments). After 2032, the aggregate cap will revert to being updated based on the consumer price index.

6 The beneficiary count starts with the number of beneficiaries treated by the hospice in the cap year. If a beneficiary receives care from more than one hospice, in more than one cap year, or both, that beneficiary is generally represented as a fraction in the beneficiary count of the cap calculation. In general, the fraction is calculated based on a proportional methodology and reflects the number of days of hospice care in a cap year the beneficiary received from that hospice as a percent of all days of hospice care received by that beneficiary from all hospices in all years. Because the fraction a beneficiary represents in a prior year's cap calculation can change going forward as that beneficiary continues to receive hospice care in subsequent cap years, CMS claims processing contractors can revisit the cap calculation for up to three years to update the beneficiary count and collect additional overpayments. Some hospices have elected an alternative methodology for handling the beneficiary count when a patient receives care in more than one cap year, called the streamlined methodology. For a detailed description of the two methodologies for the beneficiary count and when they are applicable, see our March 2012 report (Medicare Payment Advisory Commission 2012).

7 Type of hospice reflects the type of cost report filed (a hospice files a freestanding hospice cost report or the hospice is included in the cost report of a hospital, home health agency, or skilled nursing facility). The type of cost report does not necessarily reflect where patients receive care. For example, all hospice types may serve some nursing facility patients.

8 From 2017 to 2021, California averaged gains of about 123 hospices each year, and Texas averaged gains of 48 hospices each year.

9 The California auditor's report stated: "The fraud indicators we found particularly in Los Angeles County include the following: A rapid increase in the number of hospice agencies with no clear correlation to increased need. Excessive geographic clustering of hospices with sometimes dozens of separately licensed agencies located in the same building. Unusually long durations of hospice services provided to individual patients. Abnormally high rates of still-living patients discharged from hospice care. Hospice agencies using possibly stolen identities of medical personnel" (Tilden 2022).

10 In 2021, about 22 percent of elderly individuals who died of COVID-19, pneumonia, or influenza died at home or in a nursing facility compared with 59 percent of elderly individuals who died of other causes (Centers for Disease Control and Prevention 2022a).

11 In March 2020, to limit coronavirus exposure and spread among nursing facility residents, CMS issued guidance restricting nursing facility visitations by all visitors and nonessential health care personnel, except in certain compassionate-care situations, such as end-of-life situations (Centers for Medicare & Medicaid Services 2020a). Although CMS's guidance permitted visits by outside hospice staff, hospice industry groups reported that some facilities limited access to these staff. Over time, CMS provided additional guidance to states and facilities about phased reopening and expanded visitation (Centers for Medicare & Medicaid Services 2020c). In November 2021, CMS issued guidance that visits would again be allowed for all residents at all times (Centers for Medicare & Medicaid Services 2021).

12 This comparison of hospice use in 2020 and 2021 is based on paid Medicare claims. It slightly understates hospice use in 2021 because it excludes the roughly 9,630 beneficiaries who received hospice care that was paid for by MA plans participating in the hospice VBID demonstration.

13 In 2021, hospice patients in assisted living had markedly longer stays compared with those in other settings, even for the same diagnosis, which warrants further monitoring and investigation in CMS's medical review efforts.

14 The Commission bases these estimates of the share of hospices that exceed the cap in our analysis. While they are intended to approximate CMS claims processing contractors' calculations, differences in available data, methodology, and the timing of the calculations can lead to different estimates. Our estimates assume all hospices use the proportional methodology and rely on claims data through 15 months after the end of each cap year (except for cap year 2016, which uses data through 14 months after the close of the cap year). The claims processing contractors may reopen the hospice cap calculation for up to three years; the reopening process and timing may vary across contractors. To illustrate the potential effect of reopening, we re-estimated cap overpayments for 2017 using an additional 36 months of claims data (i.e., a 51-month period). With the additional 36 months of data, the estimated share of hospices exceeding the cap would increase by just under 2 percentage points, the average payments over the cap per hospice exceeding the cap would increase by roughly $25,000, and payments over the cap as a share of overall Medicare hospice spending would increase by 0.3 percentage point.

15 For beneficiaries receiving the RHC level of care, hospices can provide services using telehealth during the public health emergency, if feasible and appropriate, to ensure that beneficiaries continue to receive reasonable and necessary services for palliation of the terminal illness and related conditions. Provision of telehealth visits must be included in the patient's plan of care and tied to patient-specific needs.

16 We made a similar recommendation for home health agencies. CMS is implementing mandatory telehealth reporting by home health agencies in 2023.

17 If we approximate marginal cost as total Medicare costs minus fixed building and equipment costs, then marginal profit can be calculated as follows:

Marginal profit = (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.

18 In 2021, about 20 percent of hospices did not report the required quality measures or did not meet the timely reporting requirement and face a 2 percentage point reduction in Medicare payment rates for fiscal year 2023. On average, these hospices tend to be small, as they accounted for only about 7 percent of total payments in 2021.

19 The response rate for the hospice CAHPS in the most recent period was 29 percent (https://www.hospicecahpssurvey.org/en/scoring-and-analysis).

20 For both of the new claims-based quality measures, the public reporting program uses an 8-quarter reference period, with the aim of increasing the sample size at the provider level to enable CMS to report data on as many providers as possible.

21 Our analysis focuses on the broadest measure of live discharges, including live discharges initiated by the hospice (because the beneficiary is no longer terminally ill or because the beneficiary is discharged for cause) and live discharges initiated by the beneficiary (because the beneficiary revokes hospice enrollment, transfers hospice providers, or moves out of the area). Some stakeholders argue that live discharges initiated by the beneficiary are outside the hospice's control and should not be included in a live-discharge measure. Because beneficiaries choose to revoke hospice for a variety of reasons, which in some cases are related to the hospice provider's business practices or quality of care, we include revocations in our analysis. A CMS contractor, Abt Associates, found that rates of live discharge—due to beneficiary revocations and discharges because beneficiaries are no longer terminally ill—increase as hospice providers approach or surpass the aggregate cap (Plotzke et al. 2015). The contractor's report suggested that this pattern could reflect hospice-encouraged revocations or inappropriate live discharges and merit further investigation.

22 The term "curative care" is often used interchangeably with "conventional care" to describe treatments intended to be disease modifying.

23 Eligibility for the MCCM model was limited to beneficiaries with a life expectancy of 6 months or less who had certain diagnoses, utilization history, and location of care (diagnoses of cancer, congestive heart failure, chronic obstructive pulmonary disease, or HIV/AIDS; at least 1 hospital encounter and at least 3 office visits in the last 12 months; no election of hospice in the last 30 days; lived in a traditional home continuously for the last 30 days). While 89 hospices participated in the model, 5 hospices provided care to nearly half of the model's beneficiaries. The report stated that "these results might not generalize from the relatively small number of MCCM hospices and enrollees to other hospice providers or beneficiaries. And, although the evaluation has many strengths, some of the estimated differences in outcomes between MCCM enrollees and matched comparison beneficiaries could be due to unobserved differences between the two groups, such as having clinicians more likely to recommend hospice to their patients. Sensitivity analyses suggest these unobserved differences would have to be very large to fully negate the findings, but perhaps true impacts were not quite as large as we estimated" (Kranker et al. 2022).

24 The aggregate Medicare margin is calculated as follows:

((sum of total Medicare payments to all providers) – (sum of total Medicare costs of all providers) / (sum of total Medicare payments to all providers)).

Estimates of total Medicare costs come from providers' cost reports. Estimates of Medicare payments and cap overpayments are based on Medicare claims data.

25 Hospices that exceed the Medicare aggregate cap are required to repay the excess to Medicare. We do not consider the overpayments as part of hospice revenues in our margin calculation. We also exclude from our margin calculation nonreimbursable bereavement and volunteer costs, which are reported in nonreimbursable cost centers on the Medicare cost report. Statute requires that hospices offer bereavement services to family members of their deceased Medicare patients (Section 1861(dd)(2)(A)(i) of the Social Security Act); however, the statute prohibits Medicare payment for these services (Section 1814(i)(1)(A)). Including nonreimbursable bereavement and volunteer costs in our margin calculation would reduce the aggregate Medicare margin for 2020 by at most 1.2 percentage points and 0.3 percentage point, respectively.

26 Because federal relief funds were intended to help cover lost revenue and payroll costs—including lost revenue from Medicare patients and the cost of staff who help treat these patients—this alternate margin estimate includes a portion of these relief funds (based on the amount of relief funds received by each provider in cost report year 2020 multiplied by the provider's 2019 ratio of hospice days for Medicare patients to hospice days for all patients). Using this method, the alternate margin calculation allocates about 91 percent of federal relief funds that freestanding hospices reported on their 2020 cost reports toward hospices' care of Medicare beneficiaries in 2020.

27 As discussed in our March 2020 report, the hospice cap could be wage adjusted in the following manner: For each provider, Medicare could calculate the provider's wage index ratio and adjust the aggregate cap accordingly. Wage index ratio = provider's actual payments in cap year / amount that provider's payments would have been without wage adjustment. Wage-adjusted cap for a particular provider = national cap × wage index ratio for the provider. The cap calculation would otherwise work the same as it does today. If the provider's payments in the cap year exceeded the wage-adjusted cap multiplied by the number of beneficiaries served, the provider would repay the excess to the government.

28 Average length of stay is calculated for all patients who received hospice in 2020 and reflects lifetime length of stay as of the end of 2020 (or as of the date of death if it occurred in 2020). Across all hospices, this average was 155 days in 2020. In contrast, we estimate that average length of stay was 244 days among those providers that our simulation model estimates would switch from being below the cap to above the cap under a policy to wage adjust and reduce the cap by 20 percent.

29 This hypothetical example involves a hospice that provided only RHC to its patients. The aggregate cap equates to a smaller number of days for the other, more intense, higher-paid levels of care. However, the three other levels of care are typically furnished for only a short period, so the general principle that providers have room within the cap to furnish very long stays to some patients without exceeding the cap applies to providers that furnish the three higher-intensity levels of care as well. In addition, this example involves beneficiaries who receive hospice care entirely within a cap year. When beneficiaries receive hospice care across multiple cap years, methodologies exist to apportion the hospice cap amount for the beneficiary across cap years. In that situation, the average length of stay that results in a hospice exceeding the cap varies and depends on several factors, such as how many beneficiaries receive care entirely within the cap year versus multiple cap years and what share of a beneficiary's hospice days occur in only the cap year versus within other cap years. The example also assumes that beneficiaries

receive all their hospice care from a single hospice provider. When a beneficiary switches hospice providers and receives care from multiple different hospice providers, that beneficiary is represented in the beneficiary count for each hospice that furnished services to the beneficiary in a prorated manner (based on the share of total days of care provided by each hospice).

30 Rural providers are less likely to be in the top two length-of-stay quintiles than urban providers. About 44 percent of urban providers and 22 percent of rural providers were in the top two length-of-stay quintiles. In terms of revenues, a similar share of Medicare payments (33 percent of urban and 31 percent of rural) were made to providers in the top two length-of-stay quintiles.

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