CHAPTER 11

Hospice services

RECOMMENDATIONS

11-1 For fiscal year 2023, the Congress should eliminate the update to the 2022 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

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

11-2 The Secretary should require that hospices report telehealth services on Medicare claims.

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

CHAPTER 11

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 2020, more than 1.7 million Medicare beneficiaries (including almost half of decedents) received hospice services from 5,058 providers, and Medicare hospice expenditures totaled $22.4 billion.

In this chapter, we make a recommendation concerning the payment rate update for 2023. Because of standard data lags, the most recent complete hospice data we have for utilization and costs is from 2020 and for margins, from 2019. We have considered the effects of the coronavirus public health emergency (PHE) and associated relief policies on our indicators and whether those effects are likely to be temporary or permanent. To the extent that the effects of the PHE are temporary changes or vary significantly across individual hospice providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospices' payment rates in 2023 and future years. Based on information available at the time of publication, we do not generally anticipate long-term PHE-related effects on the

In this chapter

hospice sector, except for increased wage rates, which we account for in our margin projection. Instead, to the extent that the PHE continues, any needed additional financial support should be targeted to affected hospice providers that are necessary for access.

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 positive.

Beneficiaries' access to care—In 2020, hospice use among Medicare beneficiaries, which has been growing for more than a decade, increased overall. Tragically, with the pandemic leading to an 18 percent increase in deaths among Medicare beneficiaries in 2020, hospice use also increased, with the number of Medicare decedents using hospice growing by 9 percent.

- ***Capacity and supply of providers—***In 2020, the number of hospice providers increased by 4.5 percent, due to growth in the number of for-profit hospices, continuing a more than decade-long trend of substantial market entry by for-profit providers.
- ***Volume of services—***The number of beneficiaries using hospice services at the end of life continued to grow. However, the share of Medicare decedents using hospice declined between 2019 and 2020, from 51.6 percent to 47.8 percent, as deaths increased more rapidly than hospice enrollments. Between 2019 and 2020, average lifetime length of stay among decedents grew from 92.5 days to 97.0 days, and the median length of stay was stable at 18 days.
- ***Medicare marginal profit—***In 2019, Medicare payments to hospice providers exceeded marginal costs by roughly 17 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 is difficult to assess for 2020. Due to the pandemic, CMS suspended collection of hospice quality data submitted by providers (the Hospice Item Set and the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) Hospice Survey) for the first half of 2020; data that include performance in the second half of 2020 will become available in 2022. Based on the most recent data reflecting performance through 2019, hospice quality, as measured by scores on the hospice CAHPS, was stable. Performance on a measure of visits in the last three days of life improved slightly in 2019. Separate Commission analysis of nurse and social worker

visits in the last days of life suggests some decline in in-person visits between 2019 and 2020, which is likely tied to the pandemic and is not necessarily a reflection of quality of care.

***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 (about a 7 percent increase in 2020) 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*—**Measures of Medicare payments and costs suggest that Medicare payments are more than sufficient to cover providers' costs.

- ***Cost growth*—**Between 2018 and 2020, hospice cost growth was generally modest. Average cost per day for routine home care, the level of care that accounts for more than 98 percent of hospice days, increased 0.5 percent between 2018 and 2019 and 1.2 percent between 2019 and 2020. In contrast, average cost per day for general inpatient care, inpatient respite care, and continuous home care, which are provided relatively infrequently, rose substantially in 2020.
- ***Medicare aggregate margin*—**The 2019 Medicare aggregate margin, which is an indicator of the adequacy of Medicare payments relative to providers' costs, was 13.4 percent, up from 12.4 percent in 2018. (Hospice margins are presented through 2019 because of the data lag required to calculate cap overpayment amounts.) For 2022, the Commission projects a Medicare aggregate margin of about 13 percent.

In addition to indicators of hospice payment adequacy, this chapter also discusses the hospice aggregate cap. The cap limits the total payments a hospice provider can receive in a year in aggregate. The aggregate cap functions as a mechanism that reduces payments to hospices with long stays and high margins. In 2019, about 19 percent of hospices exceeded the cap; their Medicare aggregate margin was about 22 percent before and 10 percent after application of the cap. In March 2020 and 2021, the Commission recommended that the hospice aggregate cap be wage adjusted and reduced by 20 percent,

which would reduce aggregate payments by focusing payment reductions on providers with disproportionately long stays and high margins.

How should Medicare payments change in 2023?

Based on generally positive indicators of payment adequacy and strong margins, the Commission has concluded that, in aggregate, payments are more than sufficient to cover providers' costs. The Commission's recommendation is that the hospice payment rates in 2023 be held at their 2022 levels. In addition, the Commission recommends that the hospice aggregate cap be wage adjusted and reduced by 20 percent, which would focus payment reductions on providers with disproportionately long stays and high margins.

Another issue discussed in this chapter is the lack of reporting of telehealth visits on hospice claims. In response to the PHE, CMS modified the hospice conditions of participation to permit hospice providers to furnish services using telecommunication systems during the PHE, under certain circumstances. However, hospices are unable to report on the use of telehealth services on Medicare claims (with the exception of social worker phone calls, which have historically been reported on claims). The lack of this information has impaired our ability to understand the frequency and the role that telehealth has played during the PHE. For this reason, the Commission's recommendation is that CMS should require hospice providers to report telehealth visits on Medicare claims. ■

Background

Medicare began offering the hospice benefit in 1983, pursuant to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The benefit covers palliative and support services for 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. A broad set of services is included, such as nursing care; physician services; counseling and social worker services; hospice aide (also referred to as home health aide) and homemaker services; short-term hospice inpatient care (including respite care); drugs and biologics for symptom control; supplies; home medical equipment; physical, occupational, and speech therapy; bereavement services for the patient's family; and other services for palliation of the terminal illness and related conditions. Most commonly, hospice care is provided in patients' homes, but hospice services are also provided in nursing facilities, assisted living facilities, hospice facilities, and hospitals. In 2020, more than 1.7 million Medicare beneficiaries received hospice services, and Medicare hospice expenditures totaled about $22.4 billion.

Beneficiaries receive the Medicare hospice benefit only if they choose to; if they do, they 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. For each person admitted to a hospice program, a written plan of care must be established and maintained by an interdisciplinary group (which must include a hospice physician, registered nurse, social worker, and pastoral or other counselor) in consultation with the patient's attending physician, if there is one. The plan of care must identify the services to be provided (including management of discomfort and symptom relief) and describe the scope and frequency of services needed to meet the patient's and family's needs.

Beneficiaries elect hospice for defined benefit periods. The first hospice benefit period is 90 days. For a beneficiary to elect hospice initially, two physicians—a hospice physician and the beneficiary's attending physician—are generally required to certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course.[1] If the patient's terminal illness continues to engender the likelihood of death within 6 months, the hospice physician can recertify the patient for another 90 days and for an unlimited number of 60-day periods after that, as long as the patient remains eligible.[2] Beneficiaries can disenroll from hospice at any time (referred to as "revoking hospice") and can reelect hospice for a subsequent period as long as the beneficiary meets the eligibility criteria. 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.

Over the last decade, hospice spending grew substantially. Between 2010 and 2020, Medicare spending on hospice care grew at an average annual rate of 5.7 percent, increasing from $12.9 billion to $22.4 billion. Specifically, between 2010 and 2012, Medicare hospice spending rose rapidly from $12.9 billion to $15.1 billion, remained flat between 2012 and 2014 (reflecting in part the implementation of the sequester), and has increased since 2014. Between 2019 and 2020, Medicare hospice spending increased 7.4 percent, reflecting an increase in the number of beneficiaries using hospice care, a 2.6 percent update in the 2020 hospice base payment rates, and the suspension of the 2 percent payment sequester beginning May 2020. Not included in the payment totals for 2020 are the federal relief funds received by some providers in 2020. According to the Medicare cost reports, these payments for freestanding hospice providers totaled roughly $500 million in cost report year 2020. Although the intent of these funds was to provide relief broadly to support care for patients regardless of payer, it is notable that Medicare is the largest payer of hospice services, covering roughly 90 percent of all hospice patient days in 2020.

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 other costs that a hospice incurs for palliation and management of the terminal condition and related conditions, such as on-call services, care planning, drugs, medical equipment, supplies, patient transportation between sites of care that are specified in the plan of care, and short-term hospice inpatient care.

Payments are made according to a fee schedule that has four levels of care: routine home care (RHC), continuous home care (CHC), inpatient respite care (IRC), and general inpatient care (GIP). The four levels are distinguished by the location and intensity of the services provided. RHC is the most common level of hospice care, accounting for 98.7 percent of Medicare-covered hospice days in 2020. The other levels of care are available to manage needs in certain situations. GIP is provided in a facility on a short-term basis to manage symptoms that cannot be managed in another setting. CHC is intended to manage a short-term symptom crisis in the home and involves eight or more hours of care per day, mostly nursing. IRC is care in a facility for up to five days to provide a break for an informal caregiver. Unless a hospice provides CHC, IRC, or GIP on any given day, it is paid at the RHC rate. 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 (about $203 and $161 per day, respectively, in 2022). (Previously, RHC was paid a single, uniform daily rate.) Medicare also makes additional payments (about $61 per hour in 2022 for up to four hours per day) for registered nurse and social worker visits that occur during the last seven days of life for patients receiving RHC. The 2016 RHC payment structure was intended to better align payments with the costs of providing hospice care, which tend to be higher at the beginning and end of an episode and lower in the middle. Because of this U-shaped pattern of hospice visits, long stays in hospice have historically been profitable. The changes CMS made to the RHC payment structure in 2016 have only modestly reduced the variability in profitability by length of stay.

Beginning fiscal year 2020, CMS rebased the payment rates for the three higher-intensity, less frequently provided levels of hospice care (CHC, IRC, GIP). To better align payments with the costs for these three levels of care, CMS increased the CHC payment rate by 40 percent, the IRC rate by 156 percent, and the GIP rate by 35 percent. To offset the projected increase in spending, the payment rates for RHC in fiscal year 2020 were reduced slightly (by 2.7 percent, which, when offset by the annual payment update, resulted in a net reduction of less than 1 percent). Although CMS estimated that the payment rates for RHC in 2019 exceeded costs by 18 percent to 19 percent, the statute required that any rebalancing of the payment rates be budget neutral. Because RHC accounts for over 98 percent of hospice days, only a small decline in the RHC rates was needed to offset the increases for the three less frequent levels of care. In fiscal year 2022, CMS pays $1,068 per day for GIP, $474 per day for IRC, and $61 per hour for CHC.

Hospice payment rates are updated annually by the hospital market basket. The market basket index is reduced by a productivity adjustment. Hospices that do not report quality data receive a 2 percentage point reduction in their annual payment update, and beginning fiscal year 2024 this penalty will increase to 4 percentage points (in accord with the Consolidated Appropriations Act, 2021).

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). (For a more complete description of the hospice payment system, see https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_hospice_final_sec.pdf.)

Medicare hospice payment limits ("caps")

The Medicare hospice benefit was designed to give beneficiaries a choice in their end-of-life care, allowing them to forgo conventional treatment (often in inpatient settings) and die at home, with family, according to their personal preferences.

The inclusion of the Medicare hospice benefit in TEFRA was based in large part on the premise 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.[3] Research by a Commission contractor examined the literature and conducted a new 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, more visible cap limits the aggregate Medicare payments that an individual hospice can receive. This aggregate cap was established in statute when the hospice benefit was created and was intended to ensure that the benefit would generate savings compared with conventional care. The cap was initially pegged at 40 percent of the estimated cost of conventional care for cancer patients in the last six months of life. In the first year, the cap was set at $6,500, and it has been increased annually by a measure of inflation.[4] The hospice cap is the only significant fiscal constraint on the growth of program expenditures for hospice care (Hoyer 2007).

Under the cap, if a hospice's total Medicare payments exceed its total number of Medicare beneficiaries served multiplied by the cap amount ($31,297.61 in 2022), 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] This 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. It is important to note that 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.[7] In 2019, we estimate that the share of hospices that exceeded the cap was about 19 percent.

Are Medicare payments adequate in 2022?

To address whether payments in 2022 are adequate to cover the costs of the efficient delivery of care and how much providers' payments should change in the coming year (2023), 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. However, it is difficult to assess the quality of care in 2020 due to the temporary suspension of quality reporting data.

While it is impossible to predict the future with any certainty, given the evolving coronavirus pandemic, we anticipate that hospice payment adequacy indicators will remain positive in 2022. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see the text box on pp. 368–369.)

The coronavirus public health emergency and the Commission's payment adequacy framework

On January 31, 2020, the Secretary of Health and Human Services first declared the coronavirus public health emergency (PHE). In late March 2020, the nation's health care system began to experience major changes in service utilization, as elective procedures were postponed to preserve clinical staff's availability and equipment for COVID-19 patients. The PHE has had tragic effects on beneficiaries' health, including a disproportionate effect on Medicare beneficiaries. Since the onset of the PHE, deaths among Medicare beneficiaries have increased substantially. (For details on the effects of the pandemic on beneficiaries' health and access to care, see Chapter 1.) The pandemic has also had damaging effects on the nation's health care workforce, with frontline health care workers facing burnout and risks to their health and safety from treating COVID-19 cases.

From the perspective of assessing the adequacy of Medicare payments, the PHE has also had material effects on the Commission's payment adequacy indicators. Because of standard data lags, the most recent complete data we have are from 2019 or 2020 for most payment adequacy indicators; however, we also include preliminary information from 2021 where possible. As described in more detail later in this chapter, the effects of the PHE on indicators of Medicare's payment adequacy to hospices include:

- an increase in the number of beneficiaries receiving hospice services in 2020 due to increased mortality rates (however, the share of decedents who used hospice declined in 2020, reflecting a more rapid increase in deaths than in hospice enrollments);
- a shift in the location of hospice care, with more patients receiving care at home, in assisted living

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Beneficiaries' access to care: Indicators continue to be 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 2020 was generally favorable.

Capacity and supply of providers: Supply of hospices continued to grow, driven by growth in for-profit providers

In 2020, 5,058 hospices provided care to Medicare beneficiaries, a 4.5 percent increase from the prior year (Table 11-1, p. 370). For-profit hospices accounted for all of the net increase in the number of hospices. Between 2019 and 2020, the number of for-profit hospices increased by 7.1 percent, while the number of nonprofit hospices declined by 2.8 percent, and government-owned hospices declined by 0.7 percent. As of 2020, about 73 percent of hospices were for profit, 24 percent were nonprofit, and 3 percent were government owned. Because for-profit providers tend to be smaller on average than nonprofits, for-profit providers account for about 49 percent of hospice patients, while nonprofit and government providers account for 47 percent and 4 percent, respectively (data not shown).

Growth in the number of freestanding hospices accounted for all of the net growth in the number of hospice providers in 2020 and throughout the preceding decade (Table 11-1, p. 370). Between 2019 and 2020, the number of freestanding providers increased by 6.1 percent, while the number of hospital-based and home health–based hospices declined by 3.3 percent and 2.6 percent, respectively.[8] The number of skilled nursing facility (SNF)–based hospices is very small and was unchanged in 2020. As of 2020, about 83 percent of hospices were freestanding, 9 percent were home health based, 8 percent were hospital based, and less than 1 percent were SNF based.

The coronavirus public health emergency and the Commission's payment adequacy framework (cont.)

facilities, and in hospitals and fewer patients receiving hospice in nursing facilities and hospice facilities;

- suspension of collection of certain quality data for part of 2020;
- a Medicare payment policy change that increased payments to hospices through the suspension of the 2 percent sequestration beginning May 2020; and
- substantial federal relief funding that hospices received during their 2020 fiscal year.

In this chapter, we use available data and changes in payment policy to project hospice margins for 2022 and recommend payment rate updates for 2023; however, significant uncertainty remains about the duration of the pandemic as well as the extent to which certain changes to hospice volume and financial performance will persist past the end of the PHE. Therefore, while analysis of 2020 data is important in understanding what happened to beneficiaries' access to care, quality of care, providers' access to capital, and Medicare's payments and providers' costs, it will be more difficult to interpret these indicators than is typically the case.

As the Commission stated last year, to the extent that the effects of the coronavirus pandemic are temporary—even if over multiple years—or vary significantly across individual hospices, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospices' payment rates in 2023 and future years. Only permanent effects of the pandemic will be factored into our recommended changes in Medicare base payment rates. ■

The number of rural hospices has declined since 2010, falling about 1.0 percent between 2019 and 2020 (Table 11-1). As of 2020, 83 percent of hospices were in urban areas and 17 percent were in rural areas (which is roughly similar to the share of Medicare beneficiaries living in rural areas). The number of hospices in rural areas is not necessarily reflective of hospice access for rural beneficiaries for several reasons. A count of the number of rural hospices does not capture the size of those hospice providers, their capacity to serve patients, or the size of their service area. Furthermore, a count of rural hospices does not take into account hospices with offices in urban areas that also provide services in rural areas. While the number of rural hospices has declined in the last several years, the share of rural decedents using hospice grew through 2019 (see Table 11-3, p. 372). In addition, the number of rural beneficiaries receiving hospice services increased in 2020 (data not shown).

The majority of the growth in the number of hospice providers in 2020 was concentrated in two states—California and Texas. Between 2019 and 2020, California gained 112 hospices and Texas gained 45 hospices, continuing the trend in recent years of substantial market entry by hospice providers in these two states. From 2015 to 2020, California gained 110 hospices per year and Texas gained 42 hospices per year on average. In addition, several other states experienced substantial gains in the number of hospices in 2020, including Arizona, Georgia, Nevada, and Michigan (a net increase of 18, 15, 11, and 7 providers, respectively). In 2020, some states saw the number of hospice providers decline, although these changes were generally modest. The two states (Ohio and Mississippi) with the largest decline in the number of providers in 2020 nevertheless experienced an increase in the number of Medicare decedents receiving hospice services that year.

TABLE 11–1

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

Category	2010	2017	2018	2019	2020	Average annual percent change 2010–2019	Percent change 2019–2020
All hospices	3,498	4,488	4,639	4,840	5,058	3.7%	4.5%
For profit	1,958	3,101	3,234	3,436	3,680	6.4	7.1
Nonprofit	1,316	1,226	1,245	1,255	1,220	–0.5	–2.8
Government	224	161	159	148	147	–4.5	–0.7
Freestanding	2,401	3,525	3,701	3,936	4,178	5.6	6.1
Hospital based	609	470	453	429	415	–3.8	–3.3
Home health based	465	471	463	456	444	–0.2	–2.6
SNF based	23	22	22	19	19	–2.1	0.0
Urban	2,485	3,603	3,760	3,976	4,196	5.4	5.5
Rural	950	879	872	859	850	–1.1	–1.0

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 table are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

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

Patterns of care among new hospices in California and Texas suggest that 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, with long average lengths of stay, high live-discharge rates, and high rates of exceeding the aggregate cap. Nearly

TABLE 11–2

Number of Medicare decedents and number of decedents using hospice grew substantially in 2020

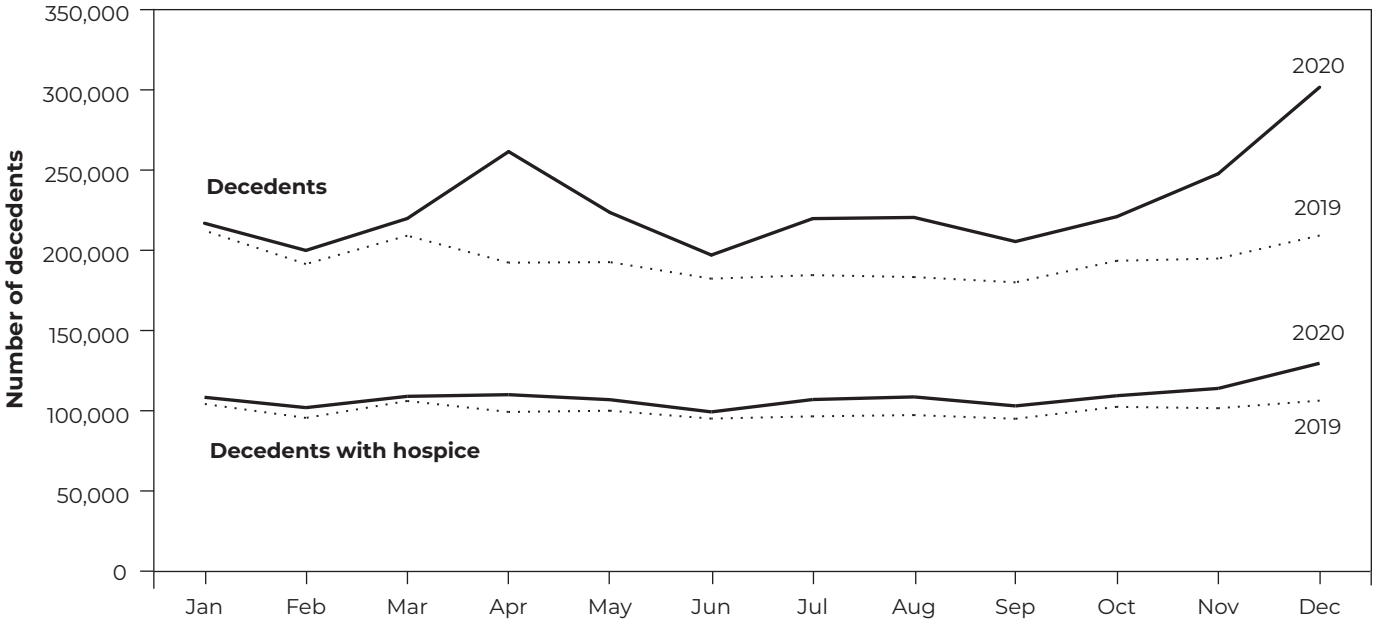
	2010	2017	2018	2019	2020	Average annual percent change 2010–2019	Percent change 2019–2020
Number of Medicare decedents (millions)	1.99	2.28	2.31	2.32	2.73	1.7%	17.6%
Number of Medicare decedents who used hospice (millions)	0.87	1.14	1.17	1.20	1.31	3.6	9.0
Share of decedents who used hospice	43.8%	49.8%	50.6%	51.6%	47.8%		

Note: The number of 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. Yearly figures presented in the table are rounded, but figures in the percent change columns were calculated using unrounded data.

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

FIGURE 11–1

Monthly trends in Medicare decedents and hospice use, 2019–2020



Note: The number of 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.

all were for profit. 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. California has 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).

The number of hospice providers is not necessarily an indicator of beneficiary access to hospice. The supply of providers—as measured by the number of hospices per 10,000 Medicare decedents—varies substantially across states. 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 2021, Medicare Payment Advisory Commission 2010).

Hospice use overall continues to increase

In 2020, with the onset of the pandemic, deaths among Medicare beneficiaries and hospice use among Medicare decedents increased. Between 2019 and 2020, deaths among Medicare beneficiaries increased by nearly 18 percent and the number of Medicare decedents who used hospice in their year of death increased by 9 percent (Table 11-2). Because growth in deaths outpaced growth in the number of hospice users in 2020, the share of Medicare decedents using hospice declined between 2019 and 2020, from 51.6 percent to 47.8 percent (Table 11-2).

The effects of the pandemic on beneficiary deaths and hospice use are shown in finer detail using monthly data (Figure 11-1). A sharp increase in deaths occurred in April 2020, corresponding to the first wave of the pandemic; deaths rose again in the summer of, and end of, 2020. The number of decedents using hospice was higher in

TABLE 11–3

Share of decedents using hospice increased from 2010 to 2019 but declined in 2020 as growth in deaths outpaced growth in hospice use

	Share of Medicare decedents who used hospice					
	2010	2018	2019	2020	Average annual percentage point change 2010–2019	Percentage point change 2019–2020
All decedent beneficiaries	43.8%	50.6%	51.6%	47.8%	0.9	–3.8
FFS beneficiaries	42.8	49.7	50.7	47.2	0.9	–3.5
MA beneficiaries	47.2	52.3	53.2	48.7	0.7	–4.5
Dually eligible for Medicaid	41.5	47.5	49.3	42.3	0.9	–7.0
Not Medicaid eligible	44.5	51.5	52.4	49.8	0.9	–2.6
Age						
< 65	25.7	28.8	29.5	26.5	0.4	–3.0
65–74	38.0	40.6	41.0	37.2	0.3	–3.8
75–84	44.8	51.2	52.2	48.3	0.8	–3.9
85+	50.2	61.1	62.7	59.0	1.4	–3.7
Race/ethnicity						
White	45.5	52.7	53.8	50.8	0.9	–3.0
Black	34.2	39.7	40.8	35.5	0.7	–5.3
Hispanic	36.7	42.5	42.7	33.3	0.7	–9.4
Asian American	30.0	38.8	39.8	36.1	1.1	–3.7
North American Native	31.0	37.8	38.5	33.5	0.8	–5.0
Sex						
Male	40.1	45.9	46.7	42.9	0.7	–3.8
Female	47.0	55.0	56.3	52.7	1.0	–3.6
Beneficiary county						
Urban	45.6	51.8	52.8	48.8	0.8	–4.0
Micropolitan	39.2	48.2	49.7	46.7	1.2	–3.0
Rural, adjacent to urban	39.0	47.9	49.5	46.1	1.2	–3.4
Rural, nonadjacent to urban	33.8	42.4	43.8	40.6	1.1	–3.2
Frontier	29.2	35.3	36.2	33.3	0.8	–2.9

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 2020 is divided by the total number of beneficiaries in the group who died in 2020. 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 (UICs). 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 the beneficiary county of residence categories. Yearly figures presented in the table are rounded, but figures in the percentage point change columns were calculated using unrounded data. 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.

each month of 2020 compared with the same month of 2019. In months when deaths rose, the number of decedents using hospice also rose, but somewhat more slowly. The share of decedents using hospice was higher in the first two months of 2020 than in those months of 2019, but beginning March 2020, as deaths rose, the share of decedents using hospice declined in 2020 compared with 2019.

It is not unexpected that growth in deaths would outpace growth in hospice use during a pandemic. Given the intensive hospital care that can be involved in treating severe COVID-19, patients for whom these treatments are not successful may be more likely to die in the hospital than patients with chronic illnesses. Analysis of data from the Centers for Disease Control and Prevention indicates that about 63 percent of decedents ages 65 and older who died of COVID-19 died in an inpatient setting (Centers for Disease Control and Prevention 2021). In addition, at the beginning of the pandemic, concerns about infection control and outbreaks led nursing facilities to restrict access to patients by outside visitors, including hospice staff, which may also have contributed to the decline in the share of decedents using hospice in 2020. Thus, the decrease in the share of decedents using hospice during the PHE is not a reflection of Medicare payment adequacy.

Overall, trends in hospice use among Medicare decedents generally suggest that access is favorable. In 2020, the number of Medicare decedents who received hospice increased 9 percent. Before 2020, the share of decedents using hospice had been increasing over the span of two decades. From 2000 to 2019, hospice use rates among decedents more than doubled, increasing from less than 25 percent to more than 50 percent of decedents (data for 2000 not shown).[9] We also observe growth in hospice use over time among different beneficiary groups. By beneficiary group—beneficiaries enrolled in fee-for-service (FFS) Medicare or Medicare Advantage (MA); Medicare-only beneficiaries and beneficiaries dually eligible for Medicare and Medicaid; age, race, and sex; and urban or rural residence—the share of decedents using hospice increased between 2010 and 2019 for each group (Table 11-3). In 2020, across each of these groups, the number of decedents using hospice increased, but the share of decedents using hospice declined, as growth in deaths exceeded growth in hospice enrollment. Across groups, larger declines in the share of decedents using hospice in 2020 generally reflect larger increases in deaths during the PHE.

Hospice use is slightly higher among decedents in MA than in FFS (Table 11-3).[10] Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a provider paid by Medicare FFS. In March 2014, the Commission urged that this policy be changed, recommending that hospice be included in the MA benefits 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). For 2022, 13 MA organizations (which comprise 115 plan benefit packages spanning 461 counties) will furnish hospice benefits under the VBID model (Centers for Medicare & Medicaid Services 2021a).

Hospice use continues to vary by beneficiary characteristics (Table 11-3). These differences in hospice use rates have persisted over time, even though rates grew for all groups between 2010 and 2019. In 2020, hospice use was less prevalent among Medicare decedents under age 65 (who are also likely to be dually eligible for Medicare and Medicaid) and most prevalent among those ages 85 and older. Female beneficiaries were also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span for women and greater hospice use among older beneficiaries. Medicare decedents who are dually eligible for Medicaid are less likely to use hospice than other Medicare decedents.

Hospice use also varies by racial and ethnic group, with higher use rates among White decedents than other racial and ethnic groups (Table 11-3). The reasons for these differences are not fully understood. Studies 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 provider communications about end-of-life care, socioeconomic factors, and mistrust of the medical system (Barnato et al. 2009, Brown et al. 2018, Cohen 2008, Crawley et al. 2000, LoPresti et al. 2016, Martin et al. 2011).

TABLE 11–4

Actual hospice use by beneficiary location and simulated use under scenario in which all decedents used hospice at urban rate, 2020

	Number of Medicare decedents			
Beneficiary location	All	Using hospice (actual)	Using hospice if same use rate as urban areas (simulated counterfactual)	Difference between actual and simulated number of hospice users
Urban	2,205,700	1,075,400	1,075,400	N/A
Micropolitan	285,800	133,600	139,300	5,800
Rural adjacent	138,800	63,900	67,700	3,800
Rural nonadjacent	81,400	33,100	39,700	6,600
Frontier	23,200	7,700	11,300	3,600

Note: "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 (UICs). This chart uses the 2013 UIC definitions. The frontier category is defined as population density equal to or less than six people per square mile and overlaps the beneficiary county of residence categories. Numbers in table are rounded. The difference in number of users displayed in the table may not equal the difference calculated using the components displayed in the table due to rounding. 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.

Over the years, a greater share of urban decedents than rural decedents have used hospice (Table 11-3, p. 372). However, hospice use rates increased for all categories of rural areas between 2010 and 2019, with the difference in hospice use rates between urban and rural areas narrowing between 2010 and 2019 for all categories of rural areas except frontier areas. In frontier areas, hospice use grew at a similar rate as in urban areas between 2010 and 2019, such that the difference in hospice use between urban and frontier areas was stable over the period.

The number of Medicare decedents residing in frontier areas is relatively small (Table 11-4). In 2020, just over 23,000 Medicare beneficiaries in frontier areas died. Of those decedents, 7,700 received hospice that year. If decedents in frontier areas had hospice use rates similar to decedents in urban areas, about 3,600 more frontier beneficiaries would have used hospice in 2020 (11,300 instead of 7,700).

It is uncertain what factors account for lower hospice use rates in frontier areas. Given the small numbers of beneficiaries and low population density in these areas, long travel times to some patients could contribute to lower hospice use rates. However, hospice use rates vary across a range of other beneficiary characteristics, and differences can be driven by a complex set of factors such as patient and family preferences, type of illness, and whether physicians and hospitals discuss hospice with patients. Consequently, lower use rates do not necessarily indicate lack of access to a hospice provider. In the future, we plan to continue to monitor access to care in frontier and rural areas.

In 2020, the main location where hospice patients receive care shifted. The number of Medicare decedents receiving hospice at home, in an assisted living facility, and in a hospital increased while the number of decedents receiving hospice in a nursing facility or hospice facility decreased that year (Table 11-5). The decline in the number of Medicare decedents who received hospice care in nursing facilities in 2020 is notable because of the substantial increase in the death rate among nursing facility residents that year. According to a study by the Office of Inspector General

TABLE 11–5

The location of hospice care shifted in 2020

Main location of hospice care	Number of Medicare decedents who received hospice (in thousands) 2019	2020	Percent change 2019–2020
Home	588	696	18%
Nursing facility	248	233	–6%
Assisted living facility	136	150	11%
Hospice facility	135	126	–7%
Hospital	87	96	10%

Note: "Main location of hospice care" reflects the setting in which the hospice patient received the most days of care.

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

(OIG), about 42 percent of nursing home residents (including those in SNF Part A stays and long-term nursing facility stays) were diagnosed with COVID-19 or likely COVID-19 in 2020, and mortality rates among nursing facility residents (from any cause) increased by 32 percent that year (Office of Inspector General 2021a). The decline in hospice care in the nursing facility setting is likely driven by the pandemic and unrelated to Medicare payment adequacy. Due in part to concerns about COVID-19 exposure in facilities among some patients and families, nursing facility occupancy rates fell in 2020 and fewer patients received care in that setting than in 2019. In addition, at the beginning of the pandemic, concerns about infection control and outbreaks led nursing facilities to restrict outside visitors, including hospice staff, which likely contributed to the decline in hospice use among nursing home residents in 2020.[11] Also, to the extent that nursing facilities transferred patients with severe COVID-19 to hospitals for treatment, patients for whom treatment was not successful may have been more likely to die in the hospital setting than receive hospice care in the nursing facility, as might more typically occur for patients with chronic illnesses.

Volume of services: Hospice use and length of stay increased in 2020

In 2020, the number of Medicare beneficiaries receiving hospice services continued to increase. About 1.72 million beneficiaries used hospice services, up 6.6 percent from about 1.61 million in 2019 (Table 11-6, p. 376). Between 2019 and 2020, the number of hospice days furnished to Medicare beneficiaries also increased 4.9 percent, from about 122 million days to about 128 million days.[12] During that period, the mix of hospice days by level of care shifted. Between 2019 and 2020, the share of days accounted for by RHC increased from 98.4 percent to 98.7 percent, owing to the 5 percent increase in the number of RHC days, while the number of GIP, CHC, and IRC days declined (by 9 percent, 18 percent, and 38 percent, respectively) (data not shown). The decline in days of the three infrequent levels of care may be related in part to the pandemic (e.g., anecdotal reports suggest that more limited access to facilities, less patient or family interest in facility care, and nurse staffing shortages among some hospices may have played a role), although GIP and CHC days had been on a modest downward trend before 2020.

Most hospice decedents have short stays, but some have very long stays (Figure 11-2, p. 377). In 2020, one-quarter of hospice decedents had stays of 5 days or less, half had stays of 18 days or less, and three-quarters had stays of 87 days or less. At the same time, 10 percent of hospice decedents had stays of more than 287 days. Between 2019 and 2020, hospice average lifetime length of stay among decedents increased from 92.5 days to 97.0 days.[13] Median length of stay was stable at 18 days (Table 11-6, p. 376). Length of stay

TABLE 11–6

Hospice expenditures and use increased in 2020

Category	2010	2018	2019	2020	Average annual change, 2000–2018	Change, 2018–2019	Change, 2019–2020
Total spending (in billions)	$12.9	$19.2	$20.9	$22.4	5.1%	8.5%	7.4%
Number of hospice users (in millions)	1.15	1.55	1.61	1.72	3.8%	3.7%	6.6%
Number of hospice days for all hospice beneficiaries (in millions)	81.6	113.5	121.8	127.8	4.2%	7.3%	4.9%
Average lifetime length of stay among decedents (in days)	87.0	90.3	92.5	97.0	0.5%	2.5%	4.8%
Median lifetime length of stay among decedents (in days)	18	18	18	18	0 days	0 days	0 days

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. Total spending, number of hospice users, number of hospice days, and average length of stay displayed in the table are rounded; the percentage change for number of users and total spending is calculated using unrounded data.

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

among decedents with the shortest stays remained stable (2 days at the 10th percentile and 5 days at the 25th percentile), while it increased for those with longer stays (from 85 days to 87 days at the 75th percentile and from 266 days to 287 days at the 90th percentile) (Figure 11-2).

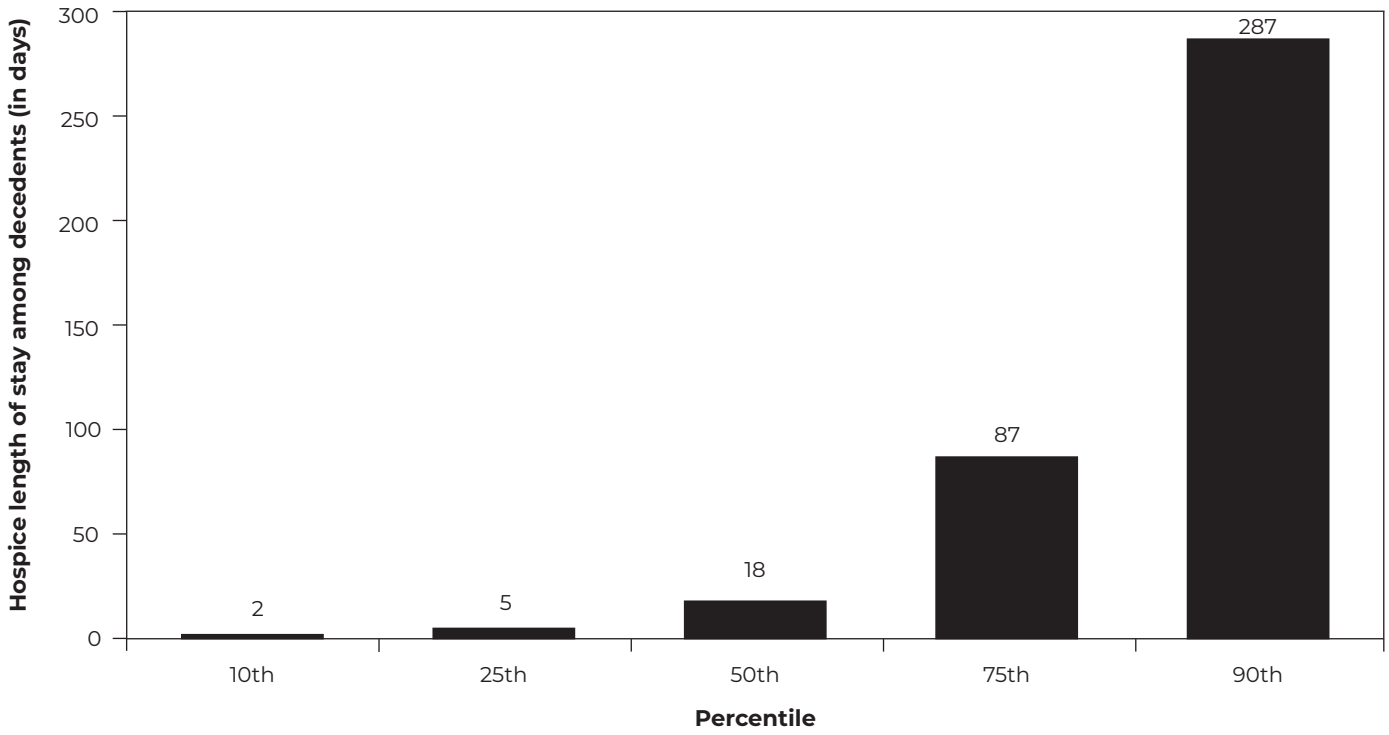
Hospice lifetime length of stay is generally similar for hospice decedents in FFS Medicare and MA. Average length of stay for decedents in 2020 was 98.2 days for FFS beneficiaries and 95.2 days for MA beneficiaries (data not shown). Long stays in hospice tend to be slightly shorter for MA decedents than for FFS decedents (281 days for MA beneficiaries compared with 292 days for FFS beneficiaries at the 90th percentile of stays in 2020), while short stays in hospice tend be slightly longer for MA decedents than for FFS decedents (median length of stay of 18 days and 17 days, respectively).

Hospice lengths of stay vary by observable patient characteristics, such as patient diagnosis and location, which permits providers to identify and enroll patients likely to have long (more profitable) stays if they believe it is financially advantageous to do so (Table 11-7, p. 378). For example, Medicare hospice decedents in 2020 with neurological conditions and chronic obstructive pulmonary disease had substantially higher average lengths of stay (161 days and 135 days, respectively) compared with decedents with cancer (53 days). Although this information is not broken out separately, about 27,000 hospice decedents had a hospice primary diagnosis of COVID-19 in 2020, their median length of stay was 3 days, and average length of stay was 26 days.[14]

In addition, length of stay varies by the setting in which care is provided. In 2020, average length of stay was higher among Medicare decedents whose main care setting was an assisted living facility (172 days) or a nursing facility (133 days) compared with home (90 days) (Table 11-7, p. 378). In particular, 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

FIGURE 11–2

Most hospice decedents in 2020 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.

investigation in CMS's medical review efforts. These patterns of differences in length of stay by diagnosis and location of care have persisted over many years.

Lengths of stay vary by type of provider ownership as well as by patient characteristics (Table 11-7, p. 378). In 2020, average length of stay was substantially longer among for-profit hospices than among nonprofit hospices (115 days compared with 73 days). The reason for longer length of stay among for-profit hospices has two components: (1) for-profit hospices have more patients with diagnoses that tend to have longer stays, and (2) for-profit hospice beneficiaries have longer stays for all diagnoses than beneficiaries who receive care from nonprofit hospices (data not shown). For example, among decedents with a neurological diagnosis, average length of stay was 184 days in for-profit hospices and 130 days in nonprofits. Underlying this difference is variation in length of stay for patients with the longest stays. For example, the 90th percentile length of stay for neurological decedents was substantially higher in for-profit hospices (543 days) compared with nonprofits (390 days).

The Commission has previously expressed concern about very short hospice stays. More than one-quarter of hospice decedents enroll in hospice only in the last week of life, a length of stay that is commonly

TABLE 11–7

Hospice length of stay among decedents by beneficiary and hospice characteristics, 2020

Characteristic	Average length of stay (in days)	Percentile of length of stay				
		10th	25th	50th	75th	90th
Beneficiary						
Diagnosis						
Cancer	53	3	6	16	50	129
Neurological conditions	161	4	9	40	191	483
Heart/circulatory	109	2	5	19	101	324
COPD	135	3	6	32	156	403
Other	54	2	3	7	31	149
Main location of care						
Home	90	3	7	23	82	244
Nursing facility	133	3	7	26	145	410
Assisted living facility	172	5	13	59	222	491
Hospice						
Hospice ownership						
For profit	115	2	4	22	59	349
Nonprofit	73	3	6	13	107	206
Type of hospice						
Freestanding	97	2	5	17	84	288
Home health based	73	2	5	15	63	202
Hospital based	59	2	4	11	48	163

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2020 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during their lifetime. The location categories reflect where the beneficiary spent the largest share of their days while enrolled in hospice. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

Source: MedPAC analysis of Medicare hospice claims data, the Common Medicare Enrollment file, the Medicare Beneficiary Database, Medicare hospice cost reports, and Provider of Services file from CMS.

thought to be of less benefit to patients than enrolling somewhat earlier. Very short hospice stays occur across a wide range of diagnoses (Table 11-7). These very short stays stem largely from factors unrelated to the Medicare hospice payment system: 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 provided 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.

A number of initiatives seek to address concerns about potentially late hospice enrollments and 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 physician or advanced practice registered nurse or physician assistant. In 2016, CMS also launched a demonstration program (called the Medicare Care Choices Model (MCCM)) that permits certain FFS beneficiaries who are 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.[15] An evaluation of the first three years of experience with the MCCM reported that demonstration participants were more likely to enroll in hospice before death and to do so about a week earlier than comparison group decedents. The evaluation report concluded, based on the experience of 2,766 MCCM enrollees who died within 365 days of enrollment and met MCCM eligibility criteria, that the MCCM resulted in estimated net savings of $21 million due to lower acute care costs at the end of life among participants (Harris et al. 2020).[16]

In March 2014, the Commission recommended that hospice be included in the MA benefits package, which would give plans greater incentives 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. MA plans participating in the demonstration may also offer palliative care outside the hospice benefit, transitional concurrent hospice and curative care, and hospice benefits (e.g., meals, transportation, or additional in-home caregiver support) to enrollees under certain circumstances.

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).

TABLE 11–8

Nearly 60 percent of Medicare hospice spending in 2020 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2020 (in billions)
All hospice users in 2020	$22.4
Beneficiaries with LOS > 180 days	13.3
Days 1–180	4.2
Days 181–365	4.1
Days 366+	4.9
Beneficiaries with LOS ≤ 180 days	9.2

Note: LOS (length of stay). "LOS" reflects the beneficiary's lifetime LOS as of the end of 2020 (or at the time of discharge in 2020 if the beneficiary was not enrolled in hospice at the end of 2020). All spending reflected in the table occurred only in 2020. Breakout groups do not sum to totals because of rounding.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

The Commission has also expressed concern about very long hospice stays. In 2020, Medicare spent about $13.3 billion, nearly 60 percent of hospice spending that year, on patients with stays exceeding 180 days (Table 11-8). About $4.9 billion of that spending was on additional hospice care for patients who had already received at least one year of hospice services (i.e., already twice the presumptive eligibility period for the hospice benefit). Although the 2016 changes to the payment structure for RHC reduced payments for long stays and increased payments for short stays to some extent, patients with long stays continue to account for a large share of hospice spending.

Several factors contribute to some providers treating more patients with very long stays than other

TABLE 11–9 **Hospices that exceeded Medicare's annual payment cap, 2015–2019**

	2015	2016	2017	2018	2019
Estimated share of hospices exceeding the cap	12.3%	12.7%	14.0%	16.3%	19.0%
Average payments over the cap per hospice exceeding it (in thousands)	$316	$295	$273	$334	$384
Payments over the cap as share of overall Medicare hospice spending	1.0%	1.0%	1.0%	1.3%	1.7%

Note: The aggregate cap statistics reflect the Commission's estimates and may differ from the CMS claims processing contractors' calculations. *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.

providers. Given the uncertainty associated with predicting life expectancy, some differences across providers in length of stay are expected due to random variation; however, persistent differences in length of stay over time for individual providers suggest that additional factors are at work. Since long stays in hospice are more profitable than short stays, financial incentives likely play a role in why some providers treat more patients with very long stays than do other providers. The sources from which providers seek referral may also contribute to length-of-stay differences. For example, beneficiaries who reside in assisted living facilities tend to have longer stays than beneficiaries residing in other settings, even for the same diagnosis. The potential for patients from the assisted living facility and nursing facility settings to increase a provider's census of long-stay patients was pointed out in a recent investor call by a publicly traded hospice company (Chemed 2021a). It is also possible that some providers' interpretations of the hospice eligibility criteria differ from others' interpretations, resulting in some providers admitting patients for hospice care before other providers would consider them eligible.

Among the hospices with very long stays are those that exceed the hospice aggregate cap. In 2019, we estimate that about 19.0 percent of hospices exceeded the aggregate payment cap, an increase from the prior year (16.3 percent in 2018) (Table 11-9).[17] On average, above-cap hospices exceeded the cap by about $384,000 in 2019, up from $334,000 in 2018.

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 (Table 11-10). 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 of discharging patients alive than other hospices. 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 OIG and CMS.

With the variation in practice patterns across hospices and concerns about the potential for some hospices to focus on patients likely to have long stays and high profitability, the Commission has advocated over the years for a targeted approach to auditing hospice providers, focusing the most resources on providers

TABLE 11-10

Characteristics of above-cap and below-cap hospices, 2019

	Above-cap hospices	Below-cap hospices
Average number of patients per year	130	400
Share of hospices by:		
Date of entry into Medicare program		
Pre-2000	5%	38%
2000–2009	15%	26%
2010 onward	79%	36%
Provider characteristics		
Urban	96%	79%
For profit	97%	65%
Freestanding	97%	76%
Share of patients by diagnosis		
Cancer	15%	26%
Neurological	32%	23%
Heart/circulatory	36%	29%
COPD	6%	5%
Other	10%	17%
Average lifetime length of stay for patients through 2019 (in days; all patients—not limited to decedents)		
Cancer	128	74
Neurological	360	232
Heart/circulatory	278	160
COPD	295	190
Other	197	95
Share of patients discharged alive	39%	16%

Note: COPD (chronic obstructive pulmonary disease). Data on average length of stay reflect lifetime length of stay as of the end of cap year 2019 for all patients who received care during 2019, including patients who were discharged deceased, discharged alive, or remained a patient.

Source: MedPAC analysis of hospice claims file, Medicare hospice cost reports, Medicare Provider of Services file from CMS, and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

for which such scrutiny is warranted. In March 2009, the Commission recommended that CMS conduct medical reviews of all hospice stays exceeding 180 days among those hospice providers for which these long stays exceeded a specified share of the provider's caseload. Similarly, in this report and prior reports, the Commission has expressed concern about very long hospice stays in assisted living facilities among some hospice providers and long stays and high live-discharge rates among above-cap hospices. The Commission has suggested that more program integrity scrutiny is warranted in those areas.

TABLE 11–11

Average number of in-person visits per week declined in 2020

	Average number of visits or calls per patient per week		
	2018	2019	2020
Total visits	4.4	4.3	3.5
Nurse visits	1.8	1.8	1.6
Aide visits	2.2	2.2	1.7
Social worker visits	0.3	0.3	0.2
Social worker calls and visits	0.4	0.4	0.3

Note: "Visits" refer to in-person visits only. "Nurse visits" include both registered nurse and licensed practical nurse visits. Number of visits by category may not sum to total due to rounding.

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

A targeted auditing approach that shows promise focuses on providers that receive a high share of their payments for hospice patients before the last year of life. In our March 2017 report, we show that the share of payments hospice providers receive for a beneficiary's care before the last year of life varies across providers. A provider with an unusually high share of payments derived from care furnished to patients earlier in the disease trajectory—for example, before the last year of life—could signal questionable admitting practices and warrant further scrutiny of those providers (Medicare Payment Advisory Commission 2017).

In addition to targeted auditing, other measures could address providers' aberrant utilization patterns. For example, a compliance threshold policy—similar to the inpatient rehabilitation facility 60 percent rule and the long-term care hospital 50 percent rule—could be considered for hospice providers as a way to limit the potential for a subset of providers to profit by pursuing outlier admitting and discharge practices (Medicare Payment Advisory Commission 2021). Furthermore, there may be a role for educational efforts that give physicians information on how the timing of their hospice referrals compares with that of other physicians. Such efforts could educate physicians about both early and late referrals to hospice.

Hospice visits

To facilitate access to care during the PHE, CMS has given hospice providers the flexibility to provide visits using telecommunication systems in certain circumstances. For beneficiaries receiving the RHC level of care, hospices can provide services using "telehealth" during the PHE, if feasible and appropriate, to ensure that the beneficiary continues 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 need.

We generally lack data on telehealth visits provided by hospices during the PHE. Although hospices can report the total costs of telehealth services on Medicare cost reports, hospices are unable report information about the use of telehealth services for each hospice patient on Medicare claims. Social worker calls, which historically have been on claims (before the PHE), are the one exception. The lack of data on telehealth visits limits our ability to understand the scope and frequency of services received by beneficiaries during the PHE.

In 2020, in-person visits to hospice beneficiaries decreased (Table 11-11). For beneficiaries receiving RHC, hospices provided on average 4.3 in-person visits per week from nurses, social workers, and aides in 2019

TABLE 11–12

Average number and length of in-person visits during the last week of life declined in 2020

	2015	2018	2019	2020
Nurse visits in last 7 days of life				
Average number of visits per day	0.59	0.64	0.66	0.62
Average length of each visit (in 15-minute increments)	5.00	4.56	4.44	4.37
Average visit time per day (in 15-minute increments)	2.96	2.94	2.94	2.70
Social worker visits in last 7 days of life				
Average number of visits per day	0.09	0.10	0.10	0.07
Average length of visits (in 15-minute increments)	4.22	4.02	4.01	3.79
Average visit time per day (in 15-minute increments)	0.37	0.41	0.42	0.28

Note: Nurse visits include both registered nurse (RN) and licensed practical nurse (LPN) visits. Although the new payment system makes additional payments only for RN (not LPN) visits in the last days of life, we have included both types of visits in this chart because data specific to RNs are not available for 2015.

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

and 3.5 in-person visits per week in 2020. The largest decrease in visits occurred with aides (from 2.2 visits per week to 1.7 visits per week on average). Nurse in-person visits also declined somewhat, from an average of 1.8 visits per week to 1.6 visits per week. This decline in in-person nurse visits likely stems from effects of the pandemic and does not reflect Medicare payment adequacy. For example, reluctance among some beneficiaries and families to have health care personnel in their homes may have contributed to a reduction in in-person visits. Because we lack data on any telehealth visits furnished by nurses, we are unable to quantify the extent to which telehealth was used to supplement in-person nurse visits. However, from discussions with hospice providers, we know that telehealth nurse visits were utilized to some extent. In the case of social worker visits, the claims data do provide information on the role of in-person visits and telephone calls. Between 2019 and 2020, in-person social worker visits declined from an average of 0.3 visits per week to 0.2 visits per week. Social worker phone calls increased slightly, but this increase did not fully offset the decline in in-person social worker visits.

One feature of the 2016 hospice payment system modifications is additional payment for certain visits in the last days of life. The purpose of these additional payments is to compensate hospices for the higher patient need and visit intensity in the last days of life. The hospice provider is eligible for additional payments for registered nurse and social worker visits that occur during the last seven days of life for patients receiving RHC. These payments are in addition to the base payment that the hospice receives for each day of care. These visits are paid at an hourly rate (up to four hours per day) as a means of targeting the payments toward those hospices that provide more visits in the last days of life. Only in-person visits qualify for the additional payments.

We estimate that, in calendar year 2020, Medicare paid hospice providers roughly $216 million for registered nurse and social worker visits in the last seven days of life. In examining the frequency and length of visits that occurred in the last days of life between 2015 and 2019, we found that visit patterns in the last days of life were relatively stable. Over this period, the number of visits grew slightly while the length of each visit fell slightly (Table 11-12). In 2020, most likely related to the pandemic, both the number of in-person visits and the length of in-person visits by nurses and social workers

in the last days of life declined. It is notable, however, that the average number of in-person visits by nurses in the last days of life in 2020 remained higher than the 2015 level.

Medicare marginal profit as a measure of access

Another measure of access is whether providers have a financial incentive to expand the number of Medicare beneficiaries they serve. In considering whether to treat a patient, a provider with excess capacity compares the marginal revenue it will receive (i.e., the Medicare payment) with its marginal costs—that is, the costs that vary with volume. If Medicare payments are larger than the marginal costs of treating an additional beneficiary, a provider 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.[18] For hospice providers, we find that 2019 Medicare marginal profit was roughly 17 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

Quality of care is difficult to assess for 2020 due to the effects of the coronavirus pandemic on beneficiaries and providers. Each year we track changes in quality measures and determine whether they have gotten better, gotten worse, or stayed the same. Due to the pandemic, submission of hospice quality data by providers—the Hospice Item Set and the Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) Hospice Survey—was suspended for the first and second quarters of 2020. Quality data reflecting the second half of 2020 have not yet been publicly released and will become available in 2022. As discussed in our March 2021 report, based on hospice quality data reflecting performance through 2019, hospice quality has been stable. Scores on the CAHPS Hospice Survey were stable through 2019. Scores on a composite measure of seven processes of care at hospice admission were very high in 2019, and the composite measure was nearly "topped out," defined as scores so high and unvarying that meaningful distinctions and improvement in performance can no longer be made. Performance on a measure of visits in the last three days of life improved slightly in 2019.

As discussed, the Commission's analysis of in-person nurse and social worker visits in the last days of life suggests some decline in visits between 2019 and 2020. While we report these 2020 results, we have not used them to inform our conclusions about trends in the quality of care provided to Medicare beneficiaries because they reflect temporary changes in the delivery of care and data limitations unique to the PHE rather than trends in the quality of care provided to beneficiaries. Therefore, we report the changes observed in the quality measures but do not draw conclusions about whether quality has improved, worsened, or stayed the same in 2020.

Future quality measures

With quality measurement in general, the Commission consistently maintains that 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 merit further exploration. In the hospice final rule for fiscal year 2022, CMS indicated that as part of the new hospice patient assessment instrument currently under development (referred to as the Hospice Outcomes & Patient Evaluation (HOPE)), CMS is developing three candidate outcome measures related to symptom management: timely reduction of pain impact, reduction in pain severity, and timely reduction of symptoms. CMS stated that a technical expert panel reviewed these measures and thought they were viable measures of hospice quality, and the agency continues to develop all three measures.

In the fiscal year 2022 final rule, CMS finalized its proposal to publicly report hospice star ratings based on the CAHPS survey beginning in 2022 (Centers for Medicare & Medicaid Services 2021b). CMS also adopted a new claims-based quality measure, referred to as the Hospice Care Index, with public reporting beginning no earlier than May 2022. That measure will identify hospice providers with unusual patterns of care across 10 measures. The 10 measures include 4 related to the provision of visits to hospice patients, 4 related to aspects of live discharges, 1 that reflects Medicare hospice spending per beneficiary, and 1 that gauges whether the provider furnished any high-intensity care (continuous home care or general inpatient care). The agency also indicated interest in developing additional claims-based measures in the future—for example, measures of hospice quality

TABLE 11–13 **Rates of hospice live discharge and reported reason for discharge, 2018–2020**

Category	2018	2019	2020
Live discharges as a share of all discharges, by reason for live discharge			
All live discharges	17.0%	17.4%	15.4%
No longer terminally ill	6.3	6.5	5.6
Beneficiary revocation	6.6	6.5	5.7
Transferred hospice providers	2.2	2.3	2.2
Moved out of service area	1.6	1.7	1.6
Discharged for cause	0.3	0.3	0.3
Providers' overall rate of live discharge as a share of all discharges, by percentile (for providers with more than 30 discharges)			
10th percentile	8.5%	8.6%	7.5%
25th percentile	12.0	12.3	10.9
50th percentile	17.9	18.9	16.9
75th percentile	27.8	29.5	26.6
90th percentile	42.5	46.6	43.3

Note: Percentages may not sum to total due to rounding. "All discharges" includes patients discharged alive or deceased.

Source: MedPAC analysis of the 100 percent hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file from CMS.

related to hospice services on weekends, transitions after hospice live discharge, postmortem visits, and Medicare expenditures per beneficiary, including the share of spending for hospice care before the last year of life and the share of nonhospice spending during hospice election. (For further discussion of nonhospice spending during hospice elections, see the section on additional hospice policy issues, pp. 395–400.)

Live-discharge rates

The Commission has, over the years, raised concern about hospice providers with unusually high live-discharge rates compared with other hospice providers. Hospice providers are expected to have some live discharges because some patients change their mind about using the hospice benefit and disenroll from hospice or their condition improves and they no longer meet the hospice eligibility criteria. However, claims data showing providers with substantially higher rates of live discharge than their peers could signal a problem with quality of care or program integrity, such as a hospice provider not meeting the needs of patients and families or admitting patients who do not meet the eligibility criteria.

In 2020, the aggregate rate of live discharge (that is, live discharges as a share of all discharges) was 15.4 percent, a decline of 2 percentage points from 2019 (Table 11-13). In recent years before 2020, live-discharge rates were stable or modestly increasing. Thus, the decline in live-discharge rates in 2020 likely reflects the effects of the pandemic and the higher beneficiary mortality rates during 2020. As in prior years, hospice claims data show "beneficiary revocation" and "beneficiary no longer terminally ill" as the most common reasons for live discharge in 2020 (accounting for 5.7 percent and 5.6 percent of hospice discharges in 2020, respectively).[19]

Live-discharge rates vary by patient diagnosis. In 2020, the rate was higher for hospice beneficiaries with chronic obstructive pulmonary disease (26 percent), heart and circulatory conditions (19 percent), and neurological conditions (18 percent) than for those with cancer (10 percent) or other diagnoses (12 percent) (data not shown). The diagnoses that tend to have higher live-discharge rates are the same diagnoses that tend to have longer stays (lengths of stay by diagnosis are shown in Table 11-7, p. 378).

Some providers have unusually high live-discharge rates. In 2020, among providers with more than 30 discharges, the median live-discharge rate was about 17 percent, but 10 percent of providers had live-discharge rates in excess of 43 percent (Table 11-13, p. 385). 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 (data not shown). Small hospices as a group also had substantially higher live-discharge rates than larger hospices—42 percent for hospices with 30 or fewer discharges (data not shown).

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

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

In 2020, the number of for-profit providers grew by about 7 percent, indicating that capital has been accessible to these providers. Although the 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 2021 (Amedisys 2021a, Amedisys 2021b, Chemed 2021a, Chemed 2021b, Encompass Health 2021a, Encompass Health 2021b, LHC Group 2021a, LHC Group 2021b). After an initial decline in patient volume at the outset of the pandemic, publicly traded firms generally reported that hospice patient admissions, average daily census, or both had returned to similar or above prepandemic levels in the second half of 2020. Reports on 2021 admissions and average daily census were more mixed, with some companies reporting decreases in one or both of these metrics, while some companies reported stability or increases. Some companies noted that waves of the COVID-19 Delta variant in 2021 resulted in admission of more patients nearer to the end of life and shorter lengths of stay. Several companies also reported a lower average daily census due to fewer referrals from nursing facilities and assisted living facility settings, which are traditionally sources of long-stay patients, although these companies indicated that referral patterns had begun to or were expected to normalize. Some publicly traded companies also reported increasing wage rates and staff recruitment challenges. Nonetheless, publicly traded companies' margins continue to be strong. According to financial reports, the hospice sector continues to garner substantial investment interest from private equity firms and investors, and market valuations of hospice companies are high (Vossel 2021). It is also notable that CMS's changes to the hospice payment system in 2016 have generally been viewed as modest.

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, which currently appear to have adequate access to capital in both sectors.

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 how some hospices report data on their total revenues and total expenses on their 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 providers' costs

To make an assessment of payment adequacy, we examine the relationship between Medicare payments and providers' costs. Medicare margins illuminate this relationship. To understand the drivers of Medicare margins, we also examine trends in providers' costs and how costs vary across types of providers.

Specifically, we examine cost trends through 2020 and Medicare margins through 2019. Margins are presented only through 2019 because they incorporate an estimate of hospice aggregate cap overpayments, and a significant lag exists for these data.

Hospice costs

In 2020, hospice costs per day across all levels of care and hospice providers averaged about $149, an increase of about 0.9 percent from 2019 (2019 data not shown). Among the factors accounting for low growth were low growth in cost per day for the RHC level of care and a shift in the mix of hospice days, with the share of days accounted for by RHC (the lowest-cost level of care) between 2019 and 2020 rising from 98.4 percent to 98.7 percent.

Hospice costs per day vary substantially by type of provider (Table 11-14), which is one reason for differences in hospice margins across provider types. In 2020, freestanding hospices had lower average costs per day than provider-based hospices (i.e., home health–based hospices 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 as a result have lower costs per day. Another factor relates to 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.

Table 11-15 (p. 388) presents estimates of average hospice costs by level of care for hospice providers from 2018 through 2020. Hospice costs for RHC grew modestly between 2018 and 2020. Average cost per day for RHC, the level of care that accounts for more than 98 percent of hospice days, increased 0.5 percent between 2018 and 2019 and 1.2 percent between 2019 and 2020. In contrast, average cost per day for the three less frequent levels of care—general inpatient care, inpatient respite care, and continuous home care—that together account for 1.3 percent of hospice days rose substantially in 2020 (by 15 percent, 37 percent, and 6 percent, respectively). Anecdotal reports suggest that the substantial increase in cost for facility-related care may in part reflect the effects of the pandemic (e.g., more limited access to some facilities may have resulted in hospices seeking placements for patients in alternate facilities, possibly at higher cost).

Hospice payment rates were rebased by level of care in 2020. Payment rates were increased in 2020 for GIP, IRC, and CHC, generally bringing them closer to estimated cost than they had been in prior years (Table 11-15, p. 388). To offset those payment rate increases, the RHC rates were reduced slightly. In 2020, RHC payment rates remained substantially above cost. The

TABLE 11–14 **Total hospice costs per day varied by type of provider, 2020**

	Average total cost per day
All hospices	$149
Freestanding	144
Home health based	159
Hospital based	224
For profit	131
Nonprofit	176
Urban	151
Rural	133

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 was 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 11–15

Hospice costs and payment rates by level of care, 2018–2020

Category	Share of days 2020	Average cost per day*			FY 2020 payment rate per day*
		2018	2019	2020	
Routine home care	98.7%	$131.54	$132.20	$133.79	$165.95
General inpatient care	1.0	914.90	945.90	1,085.56	1,021.25
Inpatient respite care	0.2	529.93	538.23	736.11	450.10
Continuous home care* (dollars per hour)	0.2	48.48	52.39	55.45	58.15

Note: FY (fiscal year). For routine home care, the average payment rate per day reflects the average actual amount paid (incorporating days paid at the higher days 1–60 rate and the lower days 61+ rate). Percentages may not sum to 100 due to rounding.
*Cost estimates and payment rates reflect dollars per day except for continuous home care, which is dollars per hour.

Source: MedPAC analysis of Medicare hospice cost reports, 100 percent hospice claims data, and Provider of Services file from CMS.

average payment for RHC in 2020 (across days 1 to 60 and days 61+) was $166 compared with an average cost of about $134.

Hospice margins

In 2019, the Medicare aggregate margin for hospice providers was 13.4 percent, up from 12.4 percent in 2018 (Table 11-16).[20] Medicare aggregate margins varied widely across individual hospice providers: –5.1 percent at the 25th percentile, 12.4 percent at the 50th percentile, and 25.5 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 in other Medicare sectors.[21]

We excluded nonreimbursable bereavement and volunteer costs from our margin calculations. The 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)). Hospices report the costs associated with bereavement services on the Medicare cost report in a nonreimbursable cost center. We also exclude nonreimbursable volunteer costs from our margin calculations.[22] If we had included nonreimbursable bereavement and volunteer costs in our margin calculation, it would have reduced the aggregate Medicare margin by at most 1.2 percentage points and 0.4 percentage point, respectively.

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 11-16). In 2019, freestanding hospices had higher Medicare aggregate margins (16.2 percent) than home health–based or hospital-based hospices (9.6 percent and –18.4 percent, respectively). Provider-based hospices 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 2019, the Medicare aggregate margin was considerably higher for for-profit hospices (19.2 percent) than for nonprofit hospices (6.0 percent). The Medicare aggregate margin for freestanding nonprofit hospices was higher (10.5 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 have a slightly higher overall Medicare aggregate margin (13.6 percent) than those in rural areas (11.5 percent).

In 2019, above-cap hospices had favorable margins even after the return of overpayments (Table 11-16). Above-cap hospices had a Medicare aggregate margin of about 22.5 percent before the return of

TABLE 11–16 **Hospice Medicare aggregate margins by selected characteristics, 2015 to 2019**

Category	Share of hospices 2019	2015	2016	2017	2018	2019
All	100%	9.9%	10.9%	12.5%	12.4%	13.4%
Freestanding	81	13.8	14.0	15.3	15.1	16.2
Home health based	9	3.3	6.2	8.1	8.4	9.6
Hospital based	9	–23.8	–16.7	–13.8	–16.5	–18.4
For profit	71	17.7	17.9	20.0	19.0	19.2
Nonprofit	26	0.1	2.2	2.5	3.8	6.0
Urban	82	10.4	11.4	12.9	12.6	13.6
Rural	18	4.8	6.3	8.9	10.3	11.5
Patient volume (quintile)						
Lowest	20	–5.3	–3.1	–1.1	–3.1	–4.5
Second	20	4.3	6.2	6.7	5.6	6.2
Third	20	10.7	11.2	13.8	13.8	13.5
Fourth	20	13.0	13.1	15.2	14.0	15.8
Highest	20	9.9	11.1	12.5	12.7	13.9
Below cap	81	9.9	10.7	12.6	12.5	13.8
Above cap (excluding cap overpayments)	19	9.8	12.6	12.1	10.1	10.0
Above cap (including cap overpayments)	19	21.4	20.2	21.9	21.8	22.5

Note: Medicare aggregate 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.

overpayments but had a margin of 10.0 percent after the return of overpayments. The Medicare aggregate margin for below-cap hospices was 13.8 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 –2.5 percent for hospices in the lowest quintile to 22.8 percent for hospices in the second highest quintile (Table 11-17, p. 390). 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 22.5 percent (latter figure not shown in table).

Hospices with a large share of patients in nursing facilities and assisted living facilities also have higher Medicare aggregate margins than other hospices (Table 11-18, p. 391). For example, in 2019, the 50 percent of hospices with the highest share of patients residing in nursing facilities had a Medicare aggregate margin of about 16 percent compared with a roughly 10 percent margin for providers with fewer nursing facility

TABLE 11–17 **Hospice Medicare aggregate margins by length of stay, 2019**

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–2.1%
Second quintile	11.2
Third quintile	19.4
Fourth quintile	20.8
Highest quintile	17.7
Share of stays > 180 days	
Lowest quintile	–2.5
Second quintile	10.3
Third quintile	19.9
Fourth quintile	22.8
Highest quintile	13.4

Note: Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs.

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

patients. For the half of providers with the largest share of patients in assisted living, the Medicare aggregate margin was about 16 percent, compared with a margin of about 8 percent for other hospices. Some of the difference in margins among hospices with different concentrations of nursing facility and assisted living facility patients was driven by differences in their patients' diagnostic profile and length of stay. However, hospices may find caring for patients in facilities more profitable than caring for patients at home for reasons in addition to length of stay. As discussed in our June 2013 report, there may be efficiencies in treating hospice patients in a centralized location in terms of mileage costs and staff travel time, as well as having facilities serve 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. Analyses in our June 2013 report suggest that a reduction to the RHC payment rate for patients in nursing facilities is warranted because of this overlap (Medicare Payment Advisory Commission 2013).

Our 2019 Medicare aggregate margin estimates reflect hospices' financial performance in the fourth year of the new RHC payment structure, which began in January 2016. The move away from a single base rate for RHC to a two-tiered base rate, with additional payments for certain visits in the last seven days of life, was expected to modestly reduce the variation in profitability across hospices. In fact, the variation across providers by length of stay initially narrowed, but it has since widened to nearly the same degree of variation that existed before the payment change.[23]

Projected 2022 Medicare aggregate margin

To project the 2022 Medicare aggregate margin, we model the policy changes that went into effect between 2019 (the year of our most recent margin estimates) and 2022. The policies include annual payment updates in 2020, 2021, and 2022 of 2.6 percent, 2.4 percent, and 2.0 percent, respectively. The updates for these years reflect the market basket update and a productivity adjustment. In addition, our margin projection for 2022 reflects current law regarding the sequester: suspension of the 2 percent sequester from May 2020 through March 2022, reduction of the sequester to 1 percent from April to June 2022, and reinstatement of the 2 percent sequester beginning in July 2022.

An area of uncertainty stemming from the pandemic is providers' cost growth. While hospice providers are likely to face some additional costs related to the pandemic (e.g., costs of personal protective equipment, testing, and telehealth equipment), certain regulatory flexibilities granted during the PHE (e.g., greater use of telehealth and suspension of some training and supervision requirements) may yield some offsetting cost savings. As discussed previously, cost growth in 2020 was modest for routine home care—the level of care that accounts for more than 98 percent of days—at about 1.2 percent. Based on information available at the time of publication, we do not generally anticipate long-term PHE-related effects in the hospice sector, except for increased wage rates, which are accounted for via CMS's market basket index. For our 2022 Medicare aggregate margin projection, we assume

a rate of cost growth equal to the projected growth in the market basket (which is higher than hospice cost growth in recent years and reflects the most current data available on wage growth). Taking these factors into account, for 2022, we project a Medicare aggregate margin for hospices of about 13 percent. This projection excludes nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce the aggregate margin by at most 1.2 percentage points and 0.4 percentage point, respectively).

TABLE 11–18 **Hospice Medicare aggregate margins by providers' share of patients residing in facilities, 2019**

Hospice characteristic	Medicare margin
Share of patients in nursing facilities	
Lowest half	9.7%
Highest half	16.3
Share of patients in assisted living facilities	
Lowest half	8.4
Highest half	16.4

Note: Medicare aggregate margins for all provider categories exclude overpayments to above-cap hospices. Medicare aggregate margins are calculated based on Medicare-allowable, reimbursable costs.

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

Policy to modify the hospice aggregate cap

In its March 2021 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 2022 be frozen at the fiscal year 2021 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 stricter in some areas of the country than in others. Wage adjusting the cap would make it equitable across all providers.[24] 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 act on the Commission's recommendation to modify the aggregate cap.

Last year, we simulated the effect of the cap recommendation using historical data (2018). We have repeated that simulation with the most recently available data (2019) to provide an updated sense of its impact. An important caveat to our cap-policy simulations is that the simulation is based on historical data and makes 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 2019 would change from 19 percent (the estimated actual rate) to 33 percent (Table 11-19, p. 392).[25] The additional providers estimated to exceed the cap would be predominantly for profit (88 percent) and freestanding (92 percent), with a long average length of stay (243 days) and a high 2019 Medicare aggregate margin (22 percent) (data not shown). Our simulation estimates that about two-thirds of providers would be under the cap, with many of these providers being substantially below the cap (Figure 11-3, p. 393). Under the modified cap policy, if a provider's payments as a share of the modified cap are less than 100 percent, the provider remains 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

TABLE 11–19

Simulated share of providers exceeding the aggregate cap in 2019 under rebasing and a policy to modify the aggregate cap

	Share of providers exceeding the cap	
	2019 actual	2019 simulated with rebasing and modified cap
All	19%	33%
Freestanding	22	39
Home health based	5	15
Hospital based	1	3
For profit	26	44
Nonprofit	2	8
Urban	22	37
Rural	4	18

Note: This analysis simulates the effect of rebasing and policy to wage adjust and reduce the cap by 20 percent using 2018 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.

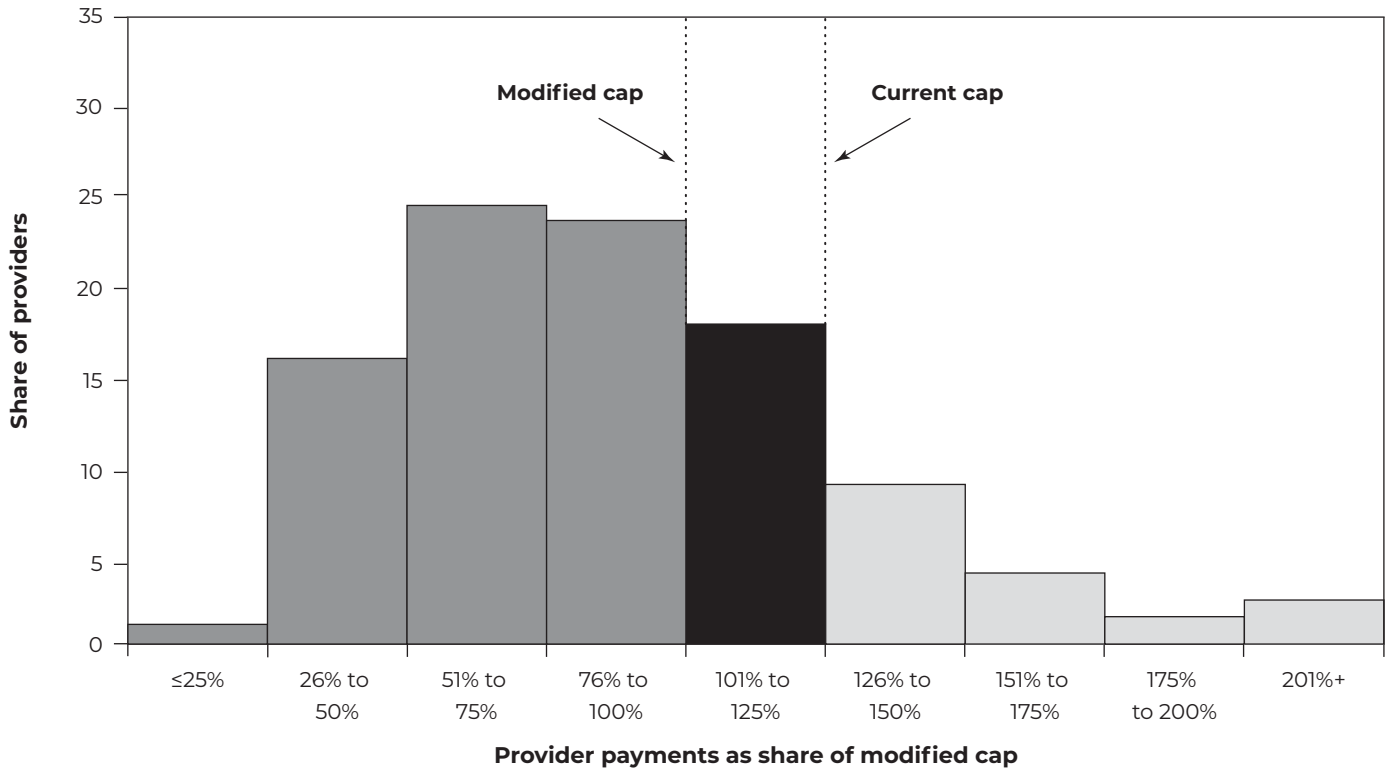
Source: MedPAC analysis of Medicare claims data for hospice providers.

this policy (i.e., payments as a share of the modified cap would be less than or equal to 75 percent). As described in our March 2020 report, a greater share of rural hospices, nonprofit hospices, and provider-based hospices would be substantially below the cap than the overall share of hospices nationally.

We estimate that the cap policy would have reduced aggregate Medicare program payments in 2019 by about 3.7 percent (assuming no changes in utilization). The reductions in payments 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 11-20, p. 394). 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 have 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 amount of long stays and remain under the cap. For example, 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

FIGURE 11–3 **Many hospices would remain substantially below the cap under a modified cap policy**



Note: The figure simulates the amount that providers would have been above or below the cap in 2019 under rebasing and the policy to wage adjust and reduce the aggregate cap by 20 percent. This simulation assumes no changes in utilization in response to the policy changes. New providers that enter Medicare after the start of the cap year do not have cap overpayments calculated and are not included in this figure.

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

of stay of up to 335 days before that provider would exceed the cap.[26] 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

TABLE 11–20

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

	Percent change in Medicare payments based on simulation of cap policy: Wage adjust and reduce the cap by 20%
All	–3.7%
Freestanding	–4.2
Home health based	–1.4
Hospital based	–0.1
For profit	–5.9
Nonprofit	–0.8
Urban	–3.6
Rural	–4.3
Share of stays > 180	
Lowest quintile	0.0
Second quintile	0.0
Third quintile	–0.1
Fourth quintile	–7.3
Highest quintile	–17.4

Note: This analysis, using 2019 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 from CMS and an Acumen LLC data file on hospice lifetime length of stay (which is based on an analysis of historical claims data).

providers in the two highest length-of-stay quintiles had substantial Medicare aggregate margins in 2019, with payment-to-cost ratios ranging from 1.13 to 1.32; these providers would experience payment declines under the cap policy modification, as seen in Table 11-21. Table 11-21 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 experience a slight increase in their payments (which reflects the effects of rebasing while their payments are generally unaffected by the cap policy).

How should Medicare payments change in 2023?

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. The Commission has concluded that aggregate payments are more than sufficient to cover providers' costs and that the payment rates in 2023 should be held at their 2022 levels. In addition, the Commission has concluded that aggregate payments should be reduced by wage adjusting and reducing the hospice aggregate cap, an approach that focuses payment reductions on providers with the longest stays and high margins.

RECOMMENDATION 11-1

For fiscal year 2023, the Congress should eliminate the update to the 2022 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

RATIONALE 11-1

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. The number of providers, number of beneficiaries enrolled in hospice, days of hospice care, and average length of stay increased in 2020. The 2019 Medicare marginal profit was about 17 percent. Given that the number of for-profit providers increased by 7 percent, access to capital appears strong. The 2019 Medicare aggregate margin was 13.4 percent, about 1 percentage point higher than in 2018. The projected 2022 Medicare aggregate margin is about 13 percent. Given the margin in the industry and our other positive payment adequacy indicators, we anticipate that the aggregate level of payments could be reduced and would still be sufficient to cover providers' costs. In light of the differential financial performance across providers, the Commission recommends keeping the payment rates unchanged in 2023 at the 2022 levels for all providers, and the Commission restates its March 2020 and March 2021 recommendations to modify the hospice aggregate cap to focus payment reductions on providers with disproportionately long stays and high margins. Our recommendation would bring aggregate

TABLE 11–21

Simulated effect of rebasing and policy to modify the aggregate cap on 2019 payment-to-cost ratios for urban and rural hospices

	2019 payment-to-cost ratios					
	All providers		Urban		Rural	
	Actual	Simulated with rebasing and policy to wage adjust and reduce cap	Actual	Simulated with rebasing and policy to wage adjust and reduce cap	Actual	Simulated with rebasing and policy to wage adjust and reduce cap
Lowest quintile	0.98	1.00	0.98	1.01	0.92	0.93
Second quintile	1.11	1.13	1.12	1.13	1.07	1.08
Third quintile	1.25	1.23	1.25	1.24	1.21	1.19
Fourth quintile	1.30	1.20	1.30	1.19	1.31	1.22
Highest quintile	1.16	0.95	1.13	0.94	1.32	1.02

Note: This analysis, using 2019 data, simulates the effect of rebasing and 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.

payments closer to costs, would lead to savings for beneficiaries and taxpayers, and would be consistent with the Commission's principle that it is incumbent on Medicare to maintain financial pressure on providers to constrain costs.

IMPLICATIONS 11-1

Spending

- Under current law, hospices are projected to receive an update in fiscal year 2022 equal to 2.0 percent (based on a projected market basket of 2.6 percent and a projected productivity adjustment of 0.6 percent). Our 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. This recommendation is not expected to affect providers' willingness or ability to care for Medicare beneficiaries.

Additional hospice policy issues

Require hospices to report telehealth services on claims if providers are permitted to provide services via telehealth

Hospice is often referred to as a "high-touch" service, and in-person visits play an important role in the care of patients and their families near the end of life. In response to the PHE, CMS modified the hospice conditions of participation to permit hospice providers to furnish services using telehealth during the PHE, under certain circumstances. Although hospices can report the costs of telehealth services on Medicare cost reports, they are unable to report telehealth use on Medicare claims (with the exception of social worker phone calls). As a result, we lack information on the extent to which beneficiaries received hospice services using telehealth during the PHE.

RECOMMENDATION 11-2

The Secretary should require that hospices report telehealth services on Medicare claims.

RATIONALE 11-2

The lack of information about hospice visits furnished via telecommunication systems makes it difficult to fully characterize the delivery of hospice services during the PHE. Although the flexibility to provide service via telecommunication systems is tied to the PHE, it is unclear how long the PHE will continue. For as long as CMS permits use of telehealth services in the hospice setting, CMS should require that hospices report data on those services via claims to permit an understanding of the role that such visits are playing in hospice care. Having such data will facilitate program oversight and monitoring. CMS could operationalize this data reporting through the use of a claims modifier (or through the use of different revenue codes, similar to how social worker phone calls have historically been reported on hospice claims). With this recommendation, the Commission is not taking a position on the merits of broader telehealth use in the hospice sector but rather opining on the need for claims reporting of telehealth visits if they are permitted.

IMPLICATIONS 11-2

Spending

- The recommendation would not change payments relative to current law.

Beneficiary and provider

- Beneficiaries' access to care would not be directly affected, but the recommendation would enhance CMS's ability to monitor access to care. Hospice providers may incur some additional administrative costs associated with including additional data on claims.

Nonhospice spending for hospice enrollees

Medicare's payments to hospices are intended to cover all services associated with the terminal condition and related conditions. For Medicare beneficiaries enrolled in the hospice benefit, Part A and Part B services unrelated to the terminal condition are covered through the regular fee-for-service (FFS) program, even for beneficiaries enrolled in Medicare Advantage (MA). Part D drugs unrelated to the terminal condition are covered through a prescription drug plan or MA prescription drug plan. CMS has stated in regulations over the years that the agency considers virtually all services at the end of life to be related to the terminal condition or related conditions, and therefore these services should be covered under the hospice benefit rather than separately paid through FFS or Part D (Centers for Medicare & Medicaid Services 2019).

To examine historical patterns of nonhospice services and spending for hospice enrollees, we contracted with Acumen LLC to quantify nonhospice service use and spending on Part A and Part B services and Part D drugs while beneficiaries were enrolled in hospice in 2018. We excluded nonhospice spending that occurred on days that the beneficiary was admitted to hospice or was discharged alive in order to avoid counting FFS spending that may have occurred before beneficiaries enrolled or after they disenrolled. We included only days that the beneficiary was enrolled in hospice. Spending estimates do not include physician visits provided by the hospice patient's attending physician (either those employed by the hospice or independent) that are billed as related to the terminal condition.

In 2018, the Medicare program spent $19.2 billion on the hospice benefit and $1.1 billion, or an additional 5.6 percent, on nonhospice services for beneficiaries enrolled in hospice. Beneficiaries spent an additional $177 million on cost sharing for nonhospice services while enrolled in hospice that year. The effect of nonhospice spending is also illustrated through average per day payment amounts. In 2018, Medicare spent an average of $169.56 per day on the hospice benefit and an average of $9.53 per day on nonhospice services for beneficiaries enrolled in hospice; beneficiaries spent an average of $1.56 per day on cost sharing for nonhospice services.

Of the total $1.3 billion in spending on nonhospice services for hospice enrollees in 2018, the largest category of spending was for Part D drugs ($508 million), representing 40 percent of total nonhospice spending (Table 11-22). The next largest shares of spending were for physician and supplier services ($301 million), outpatient hospital services ($177 million), and inpatient hospital services ($173 million). Of the roughly $480 million in total spending on physician, supplier, and outpatient hospital services, spending was highest on evaluation and management services ($180 million), ambulance services ($62 million), and emergency department visits ($49 million) (data not shown).

Among beneficiaries using hospice in 2018, almost half (47 percent) received at least one Part A or Part B service or Part D drug during their hospice stay that

TABLE 11–22

Nonhospice spending and service use among hospice beneficiaries, 2018

Medicare services	Program spending and beneficiary cost sharing (in millions)	Share of spending	Share of beneficiaries with overlapping service
All	$1,256	100%	47.4%
Any Part A or Part B	748	60	34.4
Inpatient	173	14	0.9
SNF	18	1	0.1
Home health	18	1	1.8
Outpatient	177	14	10.1
Physician and supplier	301	24	28.5
DME	61	5	6.2
Part D	508	40	31.6*

Note: SNF (skilled nursing facility), DME (durable medical equipment). Spending reflects Medicare program spending and beneficiary cost sharing for nonhospice services received while a beneficiary was enrolled in hospice. For Part D, spending includes the plan payment amount, low-income cost-sharing subsidy, and beneficiary cost sharing. Nonhospice services furnished on the first day of hospice election or the day of a live discharge are excluded. Data are not wage adjusted.
*The 31.6 percent of hospice beneficiaries with a Part D overlapping service is calculated using data for all hospice beneficiaries, including those without Part D. Among hospice beneficiaries with Part D, the percentage with an overlapping Part D prescription is about 40 percent.

Source: MedPAC analysis of Acumen LLC data.

was paid for outside the hospice benefit by Medicare FFS, a prescription drug plan, or an MA prescription drug plan. Over the course of an entire episode (which may have begun before 2018 or continued beyond 2018), about 52 percent of hospice beneficiaries received a service or drug paid for outside the hospice benefit (data not shown). While a higher proportion of FFS beneficiaries had a claim paid outside of hospice over the course of an episode compared with MA beneficiaries (54 percent vs. 49 percent, respectively), both had high shares.

Among hospice enrollees with Medicare Part D in 2018, about 40 percent of beneficiaries received a Part D–covered prescription while enrolled in hospice. The categories of drugs that accounted for the most 2018 Part D spending among hospice enrollees were antidiabetics ($74 million), psychotherapeutic and neurological agents ($47 million), antiasthmatic and bronchodilator agents ($44 million), and anticoagulants ($43 million).[27] Part D spending while in hospice was higher for hospice beneficiaries who were under age 65, dually eligible for Medicare and Medicaid, resided in long-term care facilities, and those who were discharged alive or revoked their hospice election than for other beneficiaries.

While hospice enrollees were likely using many of these Part D–covered drugs before their hospice admission, if the drugs were used to treat the terminal condition or related conditions before the hospice admission, the hospice provider has coverage responsibility for the drugs once the beneficiary elects hospice.[28] However, an OIG audit of a sample of hospice claims from 2016 suggested that a substantial portion of Part D spending for beneficiaries enrolled in hospice should have been paid by hospices or beneficiaries rather than by Part D. Based on review of a sample of 200 claims, OIG concluded that out of the $422.7 million of Part D spending for hospice enrollees in 2016, hospice

TABLE 11–23

Nonhospice spending varies across hospice providers

Provider percentile of nonhospice spending (for providers with more than 30 patients)	Average total spending per day on nonhospice services
10th	$4.04
25th	5.98
50th	8.81
75th	13.06
90th	19.50

Note: Analysis includes providers with more than 30 Medicare patients in 2018. Spending reflects Medicare program spending and beneficiary cost sharing for nonhospice services received while a beneficiary was enrolled in hospice, including Part A, Part B, and Part D services. For Part D, spending includes the plan payment amount, low-income cost-sharing subsidy, and beneficiary cost sharing. Nonhospice services furnished on the first day of hospice election or the day of a live discharge are excluded. Data are not wage adjusted.

Source: MedPAC analysis of data from Acumen LLC.

providers should have paid for at least $160.8 million of drugs reimbursed by Part D and likely should have paid for many of the drugs accounted for by the remaining $261.9 million of Part D spending on hospice enrollees that year (Office of Inspector General 2019).[29]

Although it is difficult to quantify without more detailed clinical data, it is likely that a sizable portion of Part A and Part B services paid for outside the hospice benefit are also related to the beneficiaries' terminal condition and related conditions. To get an initial sense, we compared the hospice primary diagnosis to the primary diagnosis on claims for nonhospice services. Since nonhospice services could be related to the terminal condition and related conditions, even if the primary diagnoses on the hospice and nonhospice claims are different, our approach likely substantially understates the share of nonhospice services that are related to the terminal condition.[30] Despite this significant limitation, we found evidence of overlap. For example, among beneficiaries with a hospice primary diagnosis of a heart or circulatory condition who had an inpatient hospital admission paid by Medicare FFS while on hospice, about 27 percent of those hospital stays had a primary diagnosis of a heart or circulatory condition. In addition, 21 percent of physician or hospital outpatient claims for those beneficiaries had a primary diagnosis of a heart or circulatory condition.

A recent OIG audit of FFS claims for durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) furnished to hospice enrollees between January 2015 and April 2019 found evidence of inappropriate payments for these services (Office of Inspector General 2021b). Based on a sample of claims, OIG estimated that $117 million out of $186 million in Medicare payments to DMEPOS providers were inappropriate because the services were for palliation or management of the hospice enrollee's terminal condition or related conditions. OIG identified several factors that contributed to inappropriate payments, including (1) the DMEPOS supplier was unaware of the beneficiary's hospice status, (2) the DMEPOS claims processing contractor's system edits that should have prevented the improper payments were not effective or did not exist, and (3) some DMEPOS suppliers inappropriately appended a modifier to the claim (the GW modifier) indicating the service was unrelated to the hospice enrollee's terminal condition or related conditions, when the service was actually related.[31]

Our analysis found that the amount of nonhospice spending for hospice enrollees varies across hospice providers. In 2018, among providers with more than 30 patients that year, median nonhospice spending per day was $8.81. For the top 25 percent of providers, nonhospice spending was $13.06 or more per day; for the top 10 percent of providers, nonhospice spending was $19.50 or more per day (Table 11-23). For-profit, freestanding, and urban hospices were more likely to be in the top 25 percent of providers (in terms of nonhospice spending) compared with their counterparts (Table 11-24). In addition, hospices that exceeded the aggregate cap, had a long average length of stay, or had a high live-discharge rate were also more likely to have high nonhospice spending (Table 11-24).

CMS has recently taken administrative action to address concerns about nonhospice spending for hospice enrollees. Beginning in October 2020, hospices are required to include in the beneficiary's hospice election statement specific information about the scope of the hospice benefit, the waiver of some

services when a beneficiary elects hospice, and the potential that, in rare circumstances, services may not be covered by the hospice provider because they are unrelated to the terminal condition and related conditions. Hospices are also required to notify beneficiaries that they have the right to request an addendum that includes a list of services the hospice considers unrelated and outside the scope of hospice for a particular patient. It is too soon to know what effect, if any, these administrative requirements will have on the amount of nonhospice spending that occurs for beneficiaries enrolled in hospice.

Payment by Medicare FFS or Medicare Part D for services that should be covered under the hospice benefit represents duplicate payment. Auditing is one tool the Medicare program can use to address potential duplicate payment. The new addendum about noncovered services that CMS is requiring hospices to supply to beneficiaries if requested could facilitate auditing type efforts. However, auditing is time consuming and may have limited scope. Other approaches could be considered to reduce the potential for duplicate payment.

For beneficiaries enrolled in MA, carving hospice into the MA benefit, as the Commission recommended in 2014, could help create greater accountability for nonhospice spending. Under an MA carve-in, plans would have financial responsibility for all care received by their members who elect hospice and would be better positioned to manage and coordinate the issue of related and unrelated services through their contractual arrangements with providers. Currently, as part of the CMS Innovation Center's value-based insurance design models, a small number of MA plans are providing hospice services for their enrollees.

For FFS beneficiaries, several approaches could be considered to improve provider incentives regarding nonhospice spending for hospice enrollees. For example, FFS Medicare could bundle into the hospice benefit all services a beneficiary would need, regardless of whether they are related to the terminal condition and related conditions. A fully bundled approach would have the benefit of simplicity in that there would be no need to distinguish between related and unrelated services. It would require hospices to take on more financial risk, and as a result, it might increase incentives for some providers to encourage patients to disenroll from hospice as a way to shift costs to FFS if a beneficiary incurs an expensive service. A live-discharge penalty could potentially be paired with a bundled policy as one way to address concerns about live discharges under a bundled approach.

Alternatively, hospice providers with nonhospice spending above a specified threshold could be subject to a penalty that would reduce their hospice payments by a certain amount. A penalty policy would place some financial risk on providers, but less risk than a bundled policy. Nonetheless, a penalty could give providers an incentive to ensure that they effectively educate families and beneficiaries about the scope of services available from hospice and who the family should call in an emergency. It could also give hospices an incentive to coordinate with providers that previously

TABLE 11–24 **Characteristics of hospice providers with high nonhospice spending, 2018**

Provider characteristics	Share of providers in the top 25 percent of nonhospice spending
All	25%
Freestanding	28
Home health based	14
Hospital based	10
For profit	30
Nonprofit	13
Urban	26
Rural	21
Above cap	39
Top 25% for mean episode length of stay	35
Top 25% for live-discharge rate	45

Note: Analysis includes providers with more than 30 Medicare patients in 2018.

Source: MedPAC analysis of data from Acumen LLC.

provided services to the beneficiary to ensure that they do not bill Medicare for additional services once the beneficiary has enrolled in hospice.

Hospice industry stakeholders point out that operational and systems issues may contribute to nonhospice spending for hospice enrollees. For example, industry groups have stated that hospice providers may not know that a beneficiary is receiving care from a nonhospice provider and contend that hospices need more information on nonhospice services that are billed by nonhospice providers for their hospice patients. Although under the hospice conditions of participation, hospice providers are responsible for communicating and coordinating with nonhospice providers, there may be opportunities to enhance the information hospice providers have on how nonhospice spending for their patients compares to that of other hospice providers.[32] For example, in 2021, as part of CMS's Program for Payment Patterns Electronic Reporting initiative, hospice providers began receiving an annual report of the number of Part D paid prescriptions per episode for their patients compared with that of other hospices. Data on Part A and Part B nonhospice spending are not included in this report, but such information could be informative. Industry groups also point to data lags that exist when a beneficiary elects hospice but that status is not yet reflected in data systems as another issue that could result in nonhospice claims being paid. Operational and systems issues like these could be taken into account when designing policies to address nonhospice spending for hospice enrollees. ■

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 When first established under TEFRA, the Medicare hospice benefit limited coverage to 210 days of hospice care. The Medicare Catastrophic Coverage Repeal Act of 1989 and the Balanced Budget Act of 1997 eased this limit. Benefit periods are now two 90-day periods, followed by 60-day periods.

3 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 the 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., 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 to a "pseudo"-enrollment period created for nonhospice decedents) showed very large (e.g., 24 percent) cost savings for hospice decedents. Because the date of enrollment/pseudo-enrollment will influence the calculated savings or costs, the report suggests that issues with the assignment of a pseudo-enrollment date to nonhospice enrollees make this methodology biased to find savings.

4 The aggregate cap increased annually by the rate of growth in the consumer price index for all urban consumers for medical care through 2016. In accord with the Improving Medicare Post-Acute Care Transformation Act of 2014 and the Consolidated Appropriations Act, 2021, the aggregate cap is updated annually by the same factor as the hospice payment rates (market basket net of productivity and other adjustments) from 2017 through 2030.

5 The 2022 cap year is aligned with the federal fiscal year (October 1, 2021, to September 30, 2022). Payments for the cap year reflect the sum of payments to a provider for services furnished in that year.

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 that the beneficiary received from that hospice as a share 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 When the CMS claims processing contractor calculates cap overpayments for the most recent cap year, the contractor can also reopen the cap calculation for a hospice provider for up to three prior years to adjust the prior years' beneficiary count to more accurately take into account beneficiaries who continued to receive hospice beyond the end of that cap year (as described in more detail in note 6).

8 Type of hospice reflects the type of cost report filed (a hospice files a freestanding hospice cost report or 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.

9 One driver of increased hospice use over the past decades has been growing use by patients with noncancer diagnoses, owing to increased recognition that hospice can care for such patients. Beneficiaries with any diagnosis where the life expectancy is six months or less are eligible to receive hospice services under Medicare. In 2020, 76 percent of Medicare beneficiaries who used hospice had a noncancer diagnosis, a slight increase from 75 percent in 2019 and up from 48 percent in 2000.

10 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.

11 In March 2020, to limit COVID-19 exposure and spread among nursing facility residents, CMS issued guidance restricting nursing facility visitations by all visitors and nonessential health care personnel, except for certain compassionate care situations, such as an end-of-life situation (Centers for Medicare & Medicaid Services 2020a). Although CMS's guidance permitted nursing facility visits by outside hospice staff, hospice industry groups reported that some facilities limited access to outside hospice 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 are allowed for all residents at all times (Centers for Medicare & Medicaid Services 2021c).

12 In 2020, growth in the number of beneficiaries receiving hospice care (6.6 percent) exceeded growth in the total number of hospice days furnished (4.9 percent). As a result, average hospice days furnished per patient in 2020 was slightly lower than in 2019. However, at the subgroup level, average days per patient increased between 2019 and 2020 for both (1) hospice patients who died during the year and (2) hospice patients who remained alive throughout the year. Despite increases in average days per patient among both of these subgroups in 2020, aggregate days per patient decreased because of a shift in the mix of patients. In 2020, decedents, who receive fewer days of hospice care than nondecedent hospice patients, made up a greater share of hospice patients in 2020 than 2019. The greater share of hospice patients dying in 2020 than in 2019 is likely related to the pandemic and increased mortality rates among beneficiaries in 2020.

13 Underlying the increase in average hospice lifetime length of stay for beneficiaries who died in 2020 are divergent trends for beneficiaries depending on when they first received hospice services. Among decedents who first received hospice services prior to the calendar year of their death, hospice lifetime length of stay increased substantially to about 335 days for decedents in 2020 compared to about 321 days for decedents in 2019. About one-third of the increase in hospice lifetime length of stay for this group of decedents occurred in the calendar year of death (an average increase of about 4 days) and two-thirds occurred prior to the calendar year of death (an average increase of about 10 days). In contrast, between 2019 and 2020, among decedents who first received hospice in the calendar year of death, hospice lifetime length of stay declined slightly from 30.3 days to 29.6 days. Roughly 77 percent of decedents in both 2019 and 2020 first received hospice services in the calendar year of death, while 23 percent first received hospice prior to the calendar year of death.

14 Overall, the distribution of diagnoses among Medicare hospice decedents shifted modestly in 2020. Beneficiaries with neurological conditions and "other" conditions (a category that includes COVID-19) made up a slightly greater share of hospice decedents in 2020 than 2019, while beneficiaries with terminal diagnoses of cancer, heart and circulatory conditions, and COPD accounted for a slightly smaller share of hospice decedents in 2020 than the prior year. This shift in the diagnosis mix of hospice decedents largely reflects the substantial increase in the number of hospice decedents with neurological conditions and "other" conditions between 2019 and 2020.

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

16 To be eligible for the MCCM, a beneficiary had to meet the following criteria: had Medicare FFS Part A and Part B as primary insurance for the prior 12 months; had prognosis of life expectancy of 6 months or less; had diagnosis of cancer, congestive heart failure, COPD, or HIV/AIDS; had at least 1 hospital encounter and at least 3 office visits in the last 12 months; had not elected hospice in the last 30 days; lived in a traditional home continuously for the last 30 days; and resided within the service area of the participating hospice. Enrollment in the MCCM was concentrated among hospice providers. Through September 2019, of the 89 participating hospices, 9 providers accounted for about 54 percent of enrollment (Harris et al. 2020).

17 The estimates of hospices over the cap are based on the Commission's analysis. While the estimates are intended to approximate those of the CMS claims processing contractors, differences in available data and methodology have the potential to lead to different estimates. An additional difference between our estimates and those of the CMS contractors relates to the alternative cap methodology that CMS established in the hospice final rule for 2012 (Centers for Medicare & Medicaid Services 2011). Based on that regulation, for cap years before 2012, hospices that challenged the cap methodology in court or made an administrative appeal had their cap payments calculated from the challenged year going forward using a new, alternative methodology. For cap years from 2012 onward, all hospices have their cap liability calculated using the alternative methodology unless they elect to remain with the original method. For estimation purposes, we assume that the CMS contractors used the alternative methodology for cap year 2012 onward. Estimates for cap years 2011 and earlier assumed that the original cap methodology was used.

18 To calculate marginal profit, we approximate marginal cost as total Medicare costs minus fixed building and equipment costs. With this approach, marginal profit is 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.

19 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 their 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 may 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 report suggested this pattern could reflect hospice-encouraged revocations or inappropriate live discharges and merit further investigation.

20 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.

21 Hospices that exceed the Medicare aggregate cap are required to repay the excess to Medicare. We do not consider the overpayments to be part of hospice revenues in our margin calculation.

22 The statute requires Medicare hospice providers to use some volunteers in the provision of hospice care. Costs associated with recruiting and training volunteers are generally included in our margin calculations because they are reported in reimbursable cost centers. The only volunteer costs that would be excluded from our margins are those associated with the nonreimbursable volunteer cost center.

23 When providers are grouped based on the share of their patients' stays exceeding 180 days, in 2015 (the year before the payment changes) the spread in margins between the lowest length-of-stay quintile (–8.9 percent) and the second highest length-of-stay quintile (20.4 percent) was over 29 percentage points. By 2017, the difference in margins across those length-of-stay quintiles had narrowed to 22 percentage points (as shown in our March 2020 report). However, by 2019, the difference in margins across those quintiles increased to about 26 percentage points.

24 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.

25 These estimates are based on constant 2019 utilization data. 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.

26 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 only for 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.

27 The majority of Part D spending for hospice enrollees occurs after the first month of hospice. Our analysis of Part D spending for hospice beneficiaries who enrolled in and were discharged from hospice in 2017 or 2018 found that 65 percent of Part D spending that occurred during these beneficiaries' hospice episodes occurred after the first 30 days of hospice.

28 In some situations, a hospice provider may determine that a medicine a beneficiary utilized prior to enrolling in hospice is no longer clinically appropriate for the patient (i.e., not reasonable and necessary for palliation of the terminal condition and related conditions). In that situation, if the beneficiary wished to remain on the medicine, the beneficiary would be liable for its cost rather than the hospice.

29 For the sample of claims that OIG reviewed, OIG asked each hospice if in retrospect they should have paid for the Part D claims. The $160.8 million estimate is based on the proportion of claims that hospice providers acknowledged they should have paid for, extrapolated to the total Part D spending for hospice enrollees.

30 For example, a beneficiary receiving treatment for a pressure ulcer or urinary tract infection would likely have a different diagnosis on the claim for treatment of those conditions than their hospice primary diagnosis.

31 One of the systems issues OIG identified was that the DMEPOS claims processing contractors were not automatically denying DMEPOS claims for hospice enrollees submitted without a GW modifier. For hospice enrollees, providers of Part B services are required to append the GW modifier to a claim when the service is unrelated to the terminal condition and related conditions and therefore eligible for FFS payment. If the service is related to the terminal condition or related conditions, the GW modifier should not be appended to the claim and the claim should be denied. In response to the OIG report, CMS issued manual guidance to the DMEPOS contractors to deny all DMEPOS claims for hospice enrollees without a GW modifier. In addition to this issue, OIG recommended other steps by the DMEPOS claims processing contractors to reduce inappropriate DMEPOS payments, including postpayment review to address claims that may have been paid very early in a hospice stay before the CMS data systems were updated to reflect the beneficiary's hospice status; pre- or postpayment review of claims submitted with the GW modifier to confirm the services were unrelated to the hospice beneficiary's terminal illness; and education of DMEPOS suppliers that use the GW modifier inappropriately (Office of Inspector General 2021b).

32 The hospice conditions of participation include requirements that hospice providers communicate and coordinate with nonhospice providers. The hospice conditions of participation Section 418.56(e) require that "the hospice must develop and maintain a system of communication and integration, in accordance with the hospice's own policies and procedures, to . . . provide for an ongoing sharing of information with other non-hospice healthcare providers furnishing services unrelated to the terminal illness and related conditions." CMS has stated that "given the comprehensive nature of the Medicare hospice benefit and the CoPs regarding the pivotal role hospices are required to play in care coordination, we believe hospices are primarily responsible for communication and care coordination with non-hospice providers while a beneficiary is under a hospice election" (Centers for Medicare & Medicaid Services 2019).

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