CHAPTER 11

Hospice services

RECOMMENDATION

11 For fiscal year 2022, the Congress should eliminate the update to the 2021 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

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 2019, more than 1.6 million Medicare beneficiaries (including more than half of decedents) received hospice services from 4,840 providers, and Medicare hospice expenditures totaled $20.9 billion.

In this chapter, we make a recommendation concerning the payment rate update for 2022. Because of standard data lags, the most recent complete data we have is from 2019 for hospice utilization and 2018 for provider costs and margins. Where relevant, we have considered the effects of the 2020 coronavirus public health emergency (PHE) on our indicators and whether those effects are likely to be temporary or permanent. To the extent the PHE effects are temporary or vary significantly across hospice providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all hospice payment rates in 2022 and future years. Based on information available at the time of publication, we do not

In this chapter

anticipate any long-term PHE-related effects that would warrant inclusion in the annual update to hospice payments in 2022.

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—Hospice use among Medicare beneficiaries has grown substantially in recent years, suggesting greater awareness of and access to hospice services. In 2019, hospice use increased across all demographic and beneficiary groups examined. However, rates of hospice use remained higher for White beneficiaries than for other beneficiaries.

- ***Capacity and supply of providers—***In 2019, the number of hospice providers increased by 4.3 percent, due largely 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—***In 2019, the proportion of beneficiaries using hospice services at the end of life continued to grow, and length of stay among decedents increased. Between 2018 and 2019, the share of Medicare decedents who used hospice rose from 50.6 percent to 51.6 percent, the average length of stay among decedents rose from 90.3 days to 92.6 days, and the median length of stay was stable at 18 days.
- ***Marginal profit—***In 2018, Medicare payments to hospice providers exceeded marginal costs by roughly 16 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—Limited quality data are available for hospice providers. Scores on a composite measure of seven processes of care at hospice admission are very high, and the composite measure is nearly "topped out"; that is, scores are 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. Scores on the Hospice Consumer Assessment of Healthcare Providers and Systems® were stable. However, an Office of Inspector General analysis of data from state survey agencies and accrediting organizations identified 313 hospice providers as poor performers in 2016 due to at least one occurrence of a serious deficiency or severe and substantiated complaint that year.

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 (6.3 percent increase in 2019) and reports of strong investor interest in the sector suggest 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—The aggregate 2018 Medicare margin, which is an indicator of the adequacy of Medicare payments relative to providers' costs, was 12.4 percent, similar to the 2017 margin of 12.5 percent. The projected 2021 margin is 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. If a provider's total payments exceed the number of patients treated multiplied by the cap amount, the provider must repay the excess to the Medicare program.

The aggregate cap functions as a mechanism that reduces payments to hospices with long stays and high margins. In 2018, about 16 percent of hospices exceeded the cap; their aggregate Medicare margin was about 22 percent before and 10 percent after application of the cap. These above-cap hospices had high average lengths of stay and high live-discharge rates and were disproportionately for profit, freestanding, urban, small, and new entrants to the Medicare program. Unlike wage-adjusted Medicare payments, the hospice aggregate cap is not wage adjusted, resulting in an aggregate cap that is stricter in some areas of the country than in others.

How should Medicare payments change in 2022?

Based on 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 recommends that the hospice payment rates in 2022 be held at their 2021 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. ■

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 2019, more than 1.6 million Medicare beneficiaries received hospice services, and Medicare expenditures totaled about $20.9 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 he or she 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.

Over the last decade, hospice spending has grown substantially. Between 2010 and 2019, Medicare spending on hospice care grew at an average annual rate of 5.5 percent, increasing from $12.9 billion to $20.9 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 increased after 2014. Between 2018 and 2019, Medicare hospice spending increased 8.5 percent, reflecting an increase in the number of beneficiaries using hospice care and in hospice length of stay, plus a 1.8 percent update in hospice base payment rates in 2019. Medicare is the largest payer of hospice services, covering nearly 92 percent of hospice patient days in 2018.

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 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), general inpatient care (GIP), continuous home care (CHC), and inpatient respite care (IRC). 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 more than 98 percent of Medicare-covered

hospice days in 2019. 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 ($199 and $157 per day, respectively, in 2021). (Previously, RHC was paid a single, uniform daily rate.) Medicare also makes additional payments ($60 per hour in 2021 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 change to the 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 change CMS made to the RHC payment structure in 2016 has modestly reduced the variability in profitability by length of stay. Additional policies could be explored to address the profitability of long stays and concerns about aberrant utilization patterns among some providers (see text box on potential directions for payment policy, pp. 341–344).

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 40 percent, the IRC rate 156 percent, and the GIP rate 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 requires that any rebalancing of the payment rates be budget neutral. Because RHC accounts for about 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. As of fiscal year 2021, CMS pays $1,046 per day for GIP, $461 per day for IRC, and $60 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 http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_20_hospice_final_sec.pdf?sfvrsn=0.)

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 ($30,684 in 2021), 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] We estimate the share of hospices that exceeded the cap in 2018 was about 16 percent.

Are Medicare payments adequate in 2021?

To address whether payments in 2021 are adequate to cover the costs of the efficient delivery of care and how much providers' payments should change in the coming year (2022), 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.

While impossible to predict the future with any certainty given the evolving coronavirus pandemic, we anticipate hospice payment adequacy indicators will remain positive in 2021. (For a description of how the coronavirus pandemic has been incorporated into our payment adequacy framework, see the text box, p. 316.)

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 marginal profit—shows that beneficiaries' access to care in 2019 was favorable.

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

In 2019, 4,840 hospices provided care to Medicare beneficiaries, a 4.3 percent increase from the prior year (Table 11-1, p. 317). For-profit hospices accounted for most of the net increase in the number of hospices. Between 2018 and 2019, the number of for-profit hospices increased by 6.3 percent, while the number of nonprofit hospices increased by 0.2 percent, and government-owned hospices declined by 5.7 percent. As of 2019, about 71 percent of hospices were for profit, 26 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 just over half (51 percent) of hospice patients while nonprofit and government providers account for 45 percent and 4 percent, respectively (data not shown).

Growth in the number of freestanding hospices accounted for almost all of the net growth in the number

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

The coronavirus pandemic and associated public health emergency (PHE) had tragic effects on beneficiaries' health in 2020.[8] Since the onset of the PHE, many beneficiaries have died from COVID-19 and many have died from causes unrelated to the pandemic. For beneficiaries facing the end of life and their families, the social isolation associated with the pandemic and its emotional effects has added to the human tragedy.

COVID-19 has also had material effects on providers' patient volume, revenues, and costs. The impact of COVID-19 has varied considerably both geographically and over time, and it is not clear when or whether the pandemic's full effects will end. With respect to hospice providers, information from publicly traded hospice companies indicates that patient volumes declined initially but generally rebounded within a few months to near and in some cases above prepandemic levels. Site of care appears to have shifted, as hospice providers reported fewer nursing facility and assisted living facility patients (as many facilities have restricted access) while referral from other sources such as community physicians has increased. Hospice providers have faced some additional costs associated with the pandemic (e.g., costs related to personal protective equipment, testing, and telehealth equipment), while federal grants and loans received by some hospice providers and temporary policy changes (e.g., flexibility to use telehealth visits and suspension of some training and supervision requirements) have helped ease the PHE's impact.

In this chapter we recommend payment rate updates for 2022. Because of standard data lags, the most recent complete data we have are from 2019 for hospice utilization and 2018 for provider costs and margins. As always, we use the best available data and changes in payment policy to project margins for 2021 and make payment recommendations for 2022. To the extent the COVID-19 effects are temporary or vary significantly across individual providers, they are best addressed through targeted temporary funding policies rather than a permanent change to all providers' payment rates in 2022 that will also affect payments in future years. For each payment adequacy indicator in this chapter, we discuss whether the effects of COVID-19 on those indicators will most likely be temporary or permanent. Only permanent effects of the pandemic will be factored into recommended permanent changes in Medicare payment rates. (For an overview of how our payment adequacy analysis takes account of the PHE, see Chapter 2.) ■

of hospice providers in 2019 and throughout this decade (Table 11-1). Between 2018 and 2019, the number of freestanding providers increased by 6.3 percent, while the number of hospital-based and home health–based hospices declined by 4.6 percent and 1.7 percent, respectively.[9] The number of skilled nursing facility (SNF)–based hospices is very small and declined in 2019. As of 2019, about 81 percent of hospices were freestanding, 9 percent were hospital based, 9 percent were home health based, and less than 1 percent were SNF based.

The number of rural hospices has declined since 2010, falling about 1.5 percent between 2018 and 2019 (Table 11-1). As of 2019, 82 percent of hospices were in urban areas and 18 percent were 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 has grown (Table 11-2, p. 318).

TABLE 11–1 **Increase in total number of hospices driven by growth in for-profit providers**

Category	2010	2016	2017	2018	2019	Average annual percent change 2010–2018	Percent change 2018–2019
All hospices	3,498	4,382	4,488	4,639	4,840	3.6%	4.3%
For profit	1,958	2,943	3,101	3,233	3,437	6.5	6.3
Nonprofit	1,316	1,272	1,226	1,246	1,248	–0.7	0.2
Government	224	167	161	159	150	–4.2	–5.7
Freestanding	2,401	3,376	3,525	3,699	3,932	5.6	6.3
Hospital based	609	499	470	454	433	–3.6	–4.6
Home health based	465	482	471	464	456	0.0	–1.7
SNF based	23	25	22	22	19	–0.6	–13.6
Urban	2,485	3,474	3,603	3,760	3,952	5.3	5.1
Rural	950	901	879	872	859	–1.0	–1.5

Note: SNF (skilled nursing facility). Some categories do not sum to total because of missing data for some providers. The rural and urban definitions used in this chart are based on updated definitions of the core-based statistical areas (which rely on data from the 2010 census).

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

Most of the growth in the number of hospices in 2019 was concentrated in two states—California and Texas. Between 2018 and 2019, California gained 118 hospices and Texas gained 53 hospices, continuing the trend in recent years of substantial market entry by hospice providers in these two states. From 2014 to 2019, California averaged gains of about 108 hospices each year, and Texas has gained 38 hospices each year. In addition to California and Texas, Arizona and Georgia gained a substantial number of hospice providers in 2019 (a net increase of 12 providers in each state). In 2019, some states saw the number of hospice providers decline, although these changes were generally modest. The three states (Maine, Missouri, and Oklahoma) with the largest decline in the number of providers in 2019 nevertheless experienced stable or increased hospice use rates among decedents.

Patterns of care among new hospices in California and Texas suggest additional oversight is warranted, particularly given the rapid entry of new providers in these states. To understand more about the characteristics of new hospices in California and Texas, we analyzed new hospices in those states that began treating Medicare patients in 2015 and followed them through 2018. Of the 104 hospices in California and 39 hospices in Texas that began treating Medicare patients in 2015, about 90 percent were still treating Medicare patients as of 2018. Nearly all of the new providers had for-profit ownership, and they tended to be small, treating about half the number of patients in 2018 treated by other hospices in the state, on average. Compared with providers that had been operating longer, a larger share of new providers in both states did not provide any IRC in 2018, and in Texas a larger share of new providers did not furnish any GIP. However, new providers in these two states were more likely to provide CHC to at least one patient in 2018 than other providers in the state, on average. A substantial share of new hospices (58 percent in California and 34 percent in Texas) exceeded the aggregate cap in 2018. These hospices had a high average length of stay (216 days in California and 259 days in Texas) and high live-discharge rates (37 percent in California and 32 percent in Texas) that year. In addition, a separate analysis of quality reporting data across states finds that California and Texas are the two

TABLE 11–2

Hospice use among decedents continues to increase

	Share of Medicare decedents who used hospice					
	2010	2017	2018	2019	Average annual percentage point change 2010–2018	Percentage point change 2018–2019
All decedent beneficiaries	43.8%	49.8%	50.6%	51.6%	0.9	1.0
FFS beneficiaries	42.8	48.9	49.7	50.7	0.9	1.0
MA beneficiaries	47.2	51.6	52.3	53.2	0.6	0.9
Dual eligibles	41.5	47.0	47.5	49.2	0.8	1.7
Medicare only	44.5	50.6	51.5	52.3	0.9	0.8
Age						
<65	25.7	28.3	28.8	29.4	0.4	0.6
65–74	38.0	40.3	40.6	41.0	0.3	0.4
75–84	44.8	50.5	51.2	52.2	0.8	1.0
85+	50.2	59.7	61.1	62.7	1.4	1.6
Race/ethnicity						
White	45.5	51.8	52.7	53.8	0.9	1.1
Black	34.2	39.5	39.7	40.8	0.7	1.1
Hispanic	36.7	41.5	42.5	42.7	0.7	0.2
Asian American	30.0	37.7	38.8	39.8	1.1	1.0
American Indian/Alaska Native	31.0	36.6	37.8	38.5	0.9	0.7
Sex						
Male	40.1	45.1	45.9	46.7	0.7	0.8
Female	47.0	54.1	55.0	56.2	1.0	1.2
Beneficiary county						
Urban	45.6	51.1	51.8	52.7	0.8	0.9
Micropolitan	39.2	47.1	48.2	49.7	1.1	1.5
Rural, adjacent to urban	39.0	46.9	47.9	49.5	1.1	1.5
Rural, nonadjacent to urban	33.8	41.2	42.4	43.8	1.2	1.4
Frontier	29.2	33.4	35.3	36.2	1.1	1.6

Note: FFS (fee-for-service), MA (Medicare Advantage). 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 with 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. The estimates in this table may differ from those published in prior reports because this analysis uses the data from the Common Medicare Enrollment file instead of the denominator file (which was used in past years) and because we have made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports).

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

states with the highest share of providers that are not meeting the requirement to report quality data to CMS (and that are not exempt from the reporting requirement).

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 there is no

relationship between the supply of hospice providers and the rate of hospice use across states (Medicare Payment Advisory Commission 2010). A new analysis of 2019 data yields similar findings: Variation in hospice use rates across states appears unrelated to the number of hospice providers per 10,000 beneficiaries in state.

Share of decedents using hospice continues to increase

In 2019, hospice use among Medicare beneficiaries increased, continuing the trend of a growing proportion of beneficiaries using hospice services at the end of life.[10] Of the Medicare beneficiaries who died that year, 51.6 percent used hospice, up from 50.6 percent in 2018 (Table 11-2). Over the last 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). Hospice use varied in 2019 by beneficiary characteristics—enrollment 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—but increased in all of these groups.[11]

Hospice use is slightly higher among decedents in MA than in FFS. In 2019, about 51 percent of Medicare FFS decedents and 53 percent of MA decedents used hospice. MA plans do not provide hospice services. 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 9 MA organizations (which comprise 53 plan benefit packages) 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).

Hospice use varies by other beneficiary characteristics. In 2019, a smaller proportion of Medicare decedents who were dually eligible for Medicare and Medicaid used hospice compared with the rest of Medicare decedents (49 percent vs. 52 percent). Hospice use was least prevalent among Medicare decedents under age 65 (who are also likely to be dually eligible) and most prevalent among those age 85 and older (about 29 percent vs. 63 percent). 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. Hospice use is higher for urban than for rural beneficiaries, although use has grown across all area categories (Table 11-2).

Hospice use also varies by racial and ethnic group (Table 11-2). As of 2019, Medicare hospice use was highest among White decedents, followed by Hispanic, Black, Asian American, and American Indian/Alaska Native decedents, in that order. Hospice use grew across all these groups between 2018 and 2019, but differences in use rates persisted. The reasons for these differences are not fully understood. Researchers have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, disparities in access to care or information about hospice, socioeconomic factors, and mistrust of the medical system (Barnato et al. 2009, Cohen 2008, Crawley et al. 2000, LoPresti et al. 2016, Martin et al. 2011).

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. At the same time, beneficiaries with these terminal conditions tend to have longer hospice stays, which have historically been more profitable than shorter stays under Medicare's hospice payment system. In 2019, 75 percent of Medicare beneficiaries who used hospice had a noncancer diagnosis, a slight increase from 74 percent in 2018 and up from 48 percent in 2000 (data not shown).

Volume of services: Hospice use and length of stay increased in 2019

In 2019, the number of Medicare beneficiaries receiving hospice services continued to increase. About 1.61 million beneficiaries used hospice services, up 3.7 percent from about 1.55 million in 2018 (Table 11-3, p. 320). Between 2018 and 2019, the number of hospice days furnished to Medicare beneficiaries also increased 7.3 percent, from about 114 million days to about 122 million days. During that period, the mix of hospice days by level of care shifted slightly, with the share of days accounted for by RHC edging upward (data not shown).[12]

TABLE 11–3

Hospice expenditures and use increased in 2019

Category	2010	2017	2018	2019	Average annual change, 2000–2017	Change, 2017–2018	Change, 2018–2019
Total spending (in billions)	$12.9	$17.9	$19.2	$20.9	4.8%	7.4%	8.5%
Number of hospice users (in millions)	1.15	1.49	1.55	1.61	3.8%	3.9%	3.7%
Number of hospice days for all hospice beneficiaries (in millions)	81.6	106.3	113.5	121.8	3.9%	6.8%	7.3%
Average length of stay among decedents (in days)	87.0	89.3	90.3	92.6	0.4%	1.1%	2.5%
Median 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 his or her 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. The length-of-stay estimates in this table may differ from those published in prior reports because this analysis uses the data from the Common Medicare Enrollment file instead of the denominator file (which was used in past years) and because we have made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports).

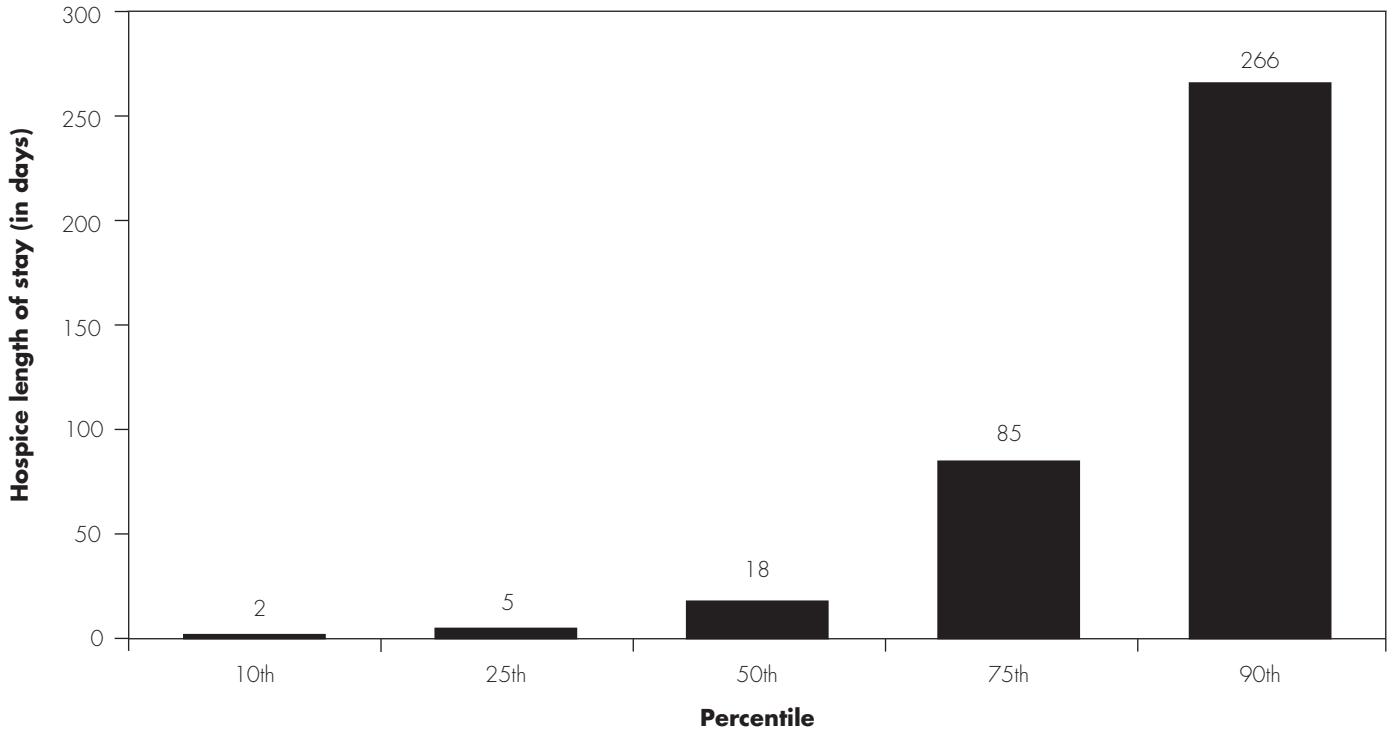
Source: MedPAC analysis of the Common Medicare Enrollment file and the Medicare Beneficiary Database from CMS.

Most hospice decedents have short stays, but some have very long stays (Figure 11-1). In 2019, 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 85 days or less. At the same time, 10 percent of hospice decedents had stays of more than 266 days. Between 2018 and 2019, hospice average length of stay among decedents increased from 90.3 days to 92.6 days and median length of stay was stable at 18 days (Table 11-3). Length of stay for the shortest stays remained stable (two days at the 10th percentile and five days at the 25th percentile), while it increased for longer stays (from 82 days to 85 days at the 75th percentile and from 255 days to 266 days at the 90th percentile) (Figure 11-1 shows 2019 data).

Hospice length of stay is generally similar for hospice decedents in FFS Medicare and MA. Average length of stay for decedents in 2019 was 93.1 days for FFS beneficiaries and 91.7 days for MA beneficiaries (data not shown). The most significant difference is that very long stays in hospice are slightly shorter for beneficiaries in MA than for those in FFS (263 days for MA beneficiaries compared with 268 days for FFS beneficiaries at the 90th percentile of stays in 2019). Among beneficiaries with short stays, MA beneficiaries had slightly longer stays than FFS beneficiaries (median length of stay of 19 days and 18 days, respectively) (data not shown).

With the growing use of hospice, rates of patients dying in the hospital have declined, but evidence is mixed on the extent to which the decline has been accompanied by a reduction in the overall intensity of care in the last months of life. Teno and colleagues (2018) found that between 2000 and 2015, the share of Medicare FFS decedents ages 65 and older dying in the hospital declined (from 32.6 percent to 19.8 percent). In addition, some indicators of intensity of care rose at the beginning of the 2000 to 2015 window but fell in later years, with a net overall decrease by 2015. For example, between 2000 and 2015, the share of beneficiaries with 3 or more hospitalizations in the last 90 days of life and the share with multiple hospitalizations for infections or dehydration in the last 120 days of life declined. At the same time, the study found that other indicators of intensity of care have increased. For

FIGURE 11–1 **Most hospice decedents in 2019 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 his or her lifetime.

Source: MedPAC analysis of the Common Medicare Enrollment file and the Medicare beneficiary database from CMS.

example, the share of beneficiaries receiving treatment in an intensive care unit during the last month of life increased between 2000 and 2009 (from 24.3 percent to 29.2 percent) and has changed little between 2009 and 2015. The share of beneficiaries with a hospitalization in the last 90 days of life increased between 2000 and 2005; it has declined since then but remained higher in 2015 than in 2000. This increase in the intensity of some aspects of end-of-life care may in part reflect referrals to hospice occurring in only the last few days of life for some beneficiaries.

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 thought to be of less benefit to patients than enrolling somewhat earlier. Very short hospice stays occur across a wide range of diagnoses (Table 11-4, p. 322). 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.

TABLE 11–4

Hospice length of stay among decedents by beneficiary and hospice characteristics, 2019

Characteristic	Average length of stay (in days)	Percentile of length of stay				
		10th	25th	50th	75th	90th
Beneficiary						
Diagnosis						
Cancer	52	3	6	17	51	129
Neurological conditions	155	4	9	40	182	459
Heart/circulatory	99	2	5	18	94	297
COPD	124	2	6	30	140	362
Other	57	2	3	8	38	158
Main location of care						
Home	95	4	9	27	91	257
Nursing facility	109	3	6	22	105	324
Assisted living facility	161	5	14	56	199	457
Hospice						
Hospice ownership						
For profit	112	3	6	24	107	332
Nonprofit	71	2	5	14	60	195
Type of hospice						
Freestanding	95	2	5	19	86	275
Home health based	72	2	5	15	64	199
Hospital based	59	2	4	12	51	163

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2019 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his or her lifetime. This year, we made some refinements to our methodology (e.g., beneficiaries residing in U.S. territories are included in this table, whereas they were not in prior reports), which makes the numbers not fully comparable with those in past reports. The location categories reflect where the beneficiary spent the largest share of his or her days while enrolled in hospice. "Diagnosis" reflects primary diagnosis on the beneficiary's last hospice claim.

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

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 a beneficiary and his or her physician or advanced practice registered nurse or physician assistant care. 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.[13] 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, and the estimated net savings from the demonstration were reported at about $21 million due to lower acute care costs at the end-of-life among participants (Harris et al. 2020).

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 supplemental 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 also 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 the effects are modest (Gilstrap et al. 2018).

The Commission has also expressed concern about very long hospice stays. In 2019, Medicare spent about $12.3 billion, nearly 60 percent of hospice spending that year, on patients with stays exceeding 180 days (Table 11-5). About $4.3 billion of that spending was on additional hospice care for patients who had already received at least one year of hospice services. 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.

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 11-4). For example, Medicare decedents in 2019 with neurological conditions and chronic obstructive pulmonary disease had substantially higher average lengths of stay (155 days and 124 days, respectively) compared with decedents with cancer (52 days). In addition, length of stay varies by the setting in which care is provided. In 2019, average length of stay was higher among Medicare decedents whose main care setting was an assisted living facility (ALF) (161 days) or a nursing facility (109 days) compared with home (95 days) (Table 11-4). In particular, hospice patients in ALFs had markedly longer stays compared with other settings, even for the same diagnosis, which warrants further monitoring and 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 11-4). In 2019, average length of stay was substantially longer among for-profit hospices than among nonprofit hospices (112 days compared with 71 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

TABLE 11–5

Nearly 60 percent of Medicare hospice spending in 2019 was for patients with stays exceeding 180 days

	Medicare hospice spending, 2019 (in billions)
All hospice users in 2019	$20.9
Beneficiaries with LOS >180 days	12.3
Days 1–180	4.1
Days 181–365	3.8
Days 366+	4.3
Beneficiaries with LOS ≤ 180 days	8.6

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2019 (or at the time of discharge in 2019 if the beneficiary was not enrolled in hospice at the end of 2019). All spending reflected in the chart occurred only in 2019. 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 historic claims data).

TABLE 11–6 **Hospices that exceeded Medicare's annual payment cap, 2014–2018**

	2014	2015	2016	2017	2018
Estimated share of hospices exceeding the cap	12.1%	12.3%	12.7%	14.0%	16.3%
Average payments over the cap per hospice exceeding it (in thousands)	$370	$316	$295	$273	$334
Payments over the cap as share of overall Medicare hospice spending	1.2%	1.0%	1.0%	1.0%	1.3%
Total Medicare hospice spending in the cap year* (in billions)	$15.0	$15.7	$16.7	$16.2	$18.9

Note: The aggregate cap statistics reflect the Commission's estimates and may differ from the CMS claims processing contractors.
*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 2018, the cap year is aligned with the federal fiscal year (October 1 to September 30 of the following year).

Source: MedPAC analysis of 100 percent hospice claims standard analytical file, Medicare hospice cost reports, and Medicare Provider of Services file from CMS. Data on total spending are from the CMS Office of the Actuary or MedPAC estimates.

(data not shown). For example, among decedents with a neurological diagnosis, average length of stay was 181 days in for-profit hospices and 121 days in nonprofits. Underlying this difference between for-profit and nonprofit hospices' average length of stay for neurological decedents 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 (530 days) compared with nonprofits (362 days).

Several factors contribute to some providers treating more patients with very long stays than other providers. Given the uncertainty associated with predicting life expectancy, some differences across providers in length of stay are expected due to random variation across providers; however, persistent differences in length of stay over time for individual providers suggest 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. 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 2018, we estimate about 16.3 percent of hospices exceeded the aggregate payment cap, an increase from the prior year (14.0 percent in 2017) (Table 11-6).[14] On average, above-cap hospices exceeded the cap by about $334,000 in 2018, reversing a downward trend in recent years.

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 11-7). 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 the Office of Inspector General and CMS.

With the variation in practice patterns across hospices and concerns about 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

TABLE 11–7 **Characteristics of above-cap and below-cap hospices, 2018**

	Above-cap hospices	Below-cap hospices
Average number of patients per year	120	396
Share of hospices by:		
Date of entry into Medicare program		
Pre-2000	5%	39%
2000–2009	17%	27%
2010 onward	78%	34%
Provider characteristics		
Urban	95%	78%
For profit	98%	64%
Freestanding	97%	76%
Share of patients by diagnosis		
Cancer	15%	26%
Neurological	33%	23%
Heart/circulatory	36%	29%
COPD	6%	5%
Other	10%	17%
Average lifetime length of stay for patients through 2018 (in days; all patients—not limited to decedents)		
Cancer	131	74
Neurological	360	228
Heart/circulatory	274	156
COPD	293	184
Other	197	92
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 2018 for all patients who received care during 2018, 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 (which is based on an analysis of historic claims data).

approach to auditing hospice providers, focusing the most resources on providers 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 ALFs 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.

A targeted auditing approach that shows promise is to focus on providers that receive a high share of their payments for hospice patients before the last year of life. As discussed in detail in our March 2017 report, 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

TABLE 11–8

Provision of nurse and social worker visits during the last seven days of life has been stable

	2015	2017	2018	2019
Nurse visits in last 7 days of life				
Average number of visits per day	0.59	0.63	0.64	0.66
Average length of each visit (in 15-minute increments)	5.00	4.66	4.56	4.44
Average visit time per day (in 15-minute increments)	2.96	2.92	2.94	2.94
Social worker visits in last 7 days of life				
Average number of visits per day	0.09	0.10	0.10	0.10
Average length of visits (in 15-minute increments)	4.22	4.00	4.02	4.01
Average visit time per day (in 15-minute increments)	0.37	0.40	0.41	0.42

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 100 percent hospice claims standard analytical file data from CMS.

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 program integrity scrutiny of those providers (Medicare Payment Advisory Commission 2017). The recently enacted Consolidated Appropriations Act, 2021, includes additional hospice program integrity provisions that will require additional scrutiny for some hospice providers.

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 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 (see text box, pp. 341–344). Furthermore, there may be a role for educational efforts that give physicians information on how the timing of their hospice referrals compares with other physicians. The benefits of such an educational effort could be two-fold, educating physicians about both early and late referrals to hospice.

Visits in the last days of life

One feature of the 2016 hospice payment system modifications is that it provides 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.

We estimate that, in calendar year 2019, Medicare paid hospice providers roughly $167 million for registered nurse and social worker visits in the last seven days of life. We examined the frequency and length of visits that occurred in the last days of life between 2015 and 2019 to see whether they changed over the first three years of the payment system changes. The prevalence and length of visits in the last days of life changed very modestly between 2015 and 2019 (Table 11-8). In that period, overall, a modest increase in nurse visit frequency offset a modest decrease in the length of these visits, with the average visit time per day remaining about 44 minutes (2.94 fifteen-minute increments). Social worker visits in the last days of life were less frequent and changed minimally during this period. Overall, these data continue to suggest that the additional payments for certain visits during the last seven days of life have led to little change in the overall amount of time spent furnishing visits to patients at the end of life.

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.[15] For hospice providers, we find that Medicare payments in 2018 exceeded marginal costs by roughly 16 percent, suggesting that providers with the capacity to do so had a strong incentive to treat Medicare patients. This profit margin is thus a positive indicator of patient access.

Our preceding analysis of access to care relies on data through 2018 and 2019. Only limited information is available on hospice access to care during the 2020 pandemic, mostly from reports of publicly traded hospice companies. These companies report that hospice patient volumes, which were initially down in 2020, have rebounded to near or in some cases above prepandemic levels. Hospice providers report that some nursing facilities and assisted living facilities are restricting access to their facility, which has led to lower patient volume in those settings, while hospice referrals from other sources have increased. Companies report modest, varied effects of the pandemic on hospice length of stay as of third quarter 2020. The effect of the pandemic on the amount of hospice visits received by patients is currently unknown. CMS has permitted hospice providers flexibility during the public health emergency (PHE) to do telehealth visits to supplement in-person visits or substitute for them when there are barriers to in-person visits; providers have generally reported that these flexibilities have been helpful in maintaining access. While there will continue to be effects of the pandemic in 2021, we anticipate that indicators of hospice access to care will remain positive in 2021.

Quality of care: Data on hospice quality are limited

CMS has had a hospice quality reporting program underway for several years, but data on hospice quality are limited. Scores on a composite measure of seven processes of care at hospice admission are very high and scores on the seven individual process measures are topped out. In the most recent period, providers' performance on a measure of visits in the last three days of life improved slightly, and scores on the Hospice Consumer Assessment of Healthcare Providers and Systems® (CAHPS®) were stable. It is notable, however, that an Office of Inspector General (OIG) analysis of data from state survey agencies and accrediting organizations identified 313 hospice providers as poor performers in 2016 due to at least one occurrence of a serious deficiency or severe and substantiated complaint that year.

Hospice performance on process measures

Hospices are required to report data on seven process measures that address important aspects of care for patients newly admitted to hospice. These measures focus on pain screening, pain assessment, dyspnea screening, dyspnea treatment, documentation of treatment preferences, addressing beliefs and values if desired by the patient, and provision of a bowel regimen for patients treated with an opioid. CMS also has a composite measure that reflects the share of admitted patients for whom the hospice performed all seven activities appropriately (or appropriately performed all the activities relevant to the patient).

Hospices' scores on these seven measures related to processes of care at hospice admission are very high. In 2019, median performance ranged from 98.0 percent to 100 percent across the seven individual measures. Performance on the composite measure—reflecting the share of patients for whom all 7 measures were appropriately performed—was slightly lower (93.8 percent) and ranged from 85.6 percent at the 25th percentile to 97.8 percent at the 75th percentile (Table 11-9, p. 328). Although the high scores on these quality measures are encouraging, the Commission has several concerns about these measures. Because they are process measures, it is uncertain how much they affect quality from the perspective of patients and families. The seven individual measures are "topped out," which CMS defines as scores so high and unvarying that meaningful distinctions and improvement in performance can no longer be made, and the composite measure is nearly topped out. According to the Commission's principles, Medicare quality programs should include population-based measures, such as outcomes, patient experience, and value, and quality measurement should not be unduly burdensome for providers. Therefore, in our view, CMS should retire process measures that are topped out and

TABLE 11–9 **Scores on the seven hospice process measures are mostly topped out, 2019**

Measures of processes of care at admission	Provider percentiles scores on process measures		
	25th	50th	75th
Composite measure of seven processes of care at admission	85.6%	93.8%	97.8%
Seven individual measures			
Treatment preferences	99.8	100.0	100.0
Beliefs and values	98.2	99.7	100.0
Dyspnea screening	98.8	99.8	100.0
Dyspnea treatment	96.6	98.8	100.0
Pain screening	97.2	99.2	100.0
Pain assessment	93.1	98.0	100.0
Bowel regimen	97.2	99.6	100.0
Visits in the last three days of life	81.6	90.2	95.2

Note: For the seven process measures related to care at admission, the numbers in the chart refer to the share of times a hospice appropriately performed a process measure at admission (among patients for whom the process measure was relevant). The composite of all seven process measures represents the share of patients for whom the hospice appropriately performed all seven process measures (or all of the subset of process measures relevant to the patient) at admission.

Source: MedPAC analysis of Hospice Item Set data from CMS.

weakly correlated with health outcomes of importance to beneficiaries and the program.

The quality reporting program also includes a measure of the share of hospice decedents who received at least one registered nurse, physician, nurse practitioner, or physician assistant visit in the last three days of life. Providers' performance on this measure shows some variation and potential room for improvement among some providers. In 2019, providers' scores at the 25th, 50th, and 90th percentiles ranged from 81.6 percent, to 90.2 percent, to 95.2 percent, respectively (Table 11-9). Performance on this measure at each of these percentiles has increased slightly (less than a percentage point) since the prior measurement period (January 2018 to December 2018) (data not shown).

Hospice performance on the CAHPS hospice survey

The Hospice Quality Reporting Program requires hospice providers (except new providers and, if they request an exemption, very small providers) to participate in a CAHPS hospice survey. The survey gathers information from the patient's informal caregiver (typically a family member) after the patient's death.[16] The survey addresses aspects of hospice care that are thought to be important to patients and for which informal caregivers are positioned to provide information. In particular, the survey collects information on how the hospice performed in the following areas: communicating, providing timely care, treating patients with respect, providing emotional support, providing help for symptom management, providing information on medication side effects, and training family or other informal caregivers in the home setting.

In the aggregate, hospices' performance on the CAHPS survey was stable in the most recent period (January 2018 to December 2019) compared with the prior period (January 2017 to December 2018).[17] CAHPS scores were highest on measures related to providing emotional support and treating patients with respect (on average, 90 percent to 91 percent of caregivers chose the most positive response in those areas) (Table 11-10). Scores were lowest in the areas of providing help for pain and symptoms, providing timely care, and training caregivers (on average 75 percent to 78 percent of caregivers chose the most positive response in those areas). In terms of an overall

TABLE 11–10 **Scores on hospice CAHPS® quality measures, January 2018 to December 2019**

	National average	25th percentile	50th percentile	75th percentile
Providing emotional support	90	88	91	93
Caregiver rates hospice 9 or 10	81	77	82	85
Caregiver recommends hospice	84	80	85	89
Treating patients with respect	91	89	91	93
Help for pain and symptoms	75	71	75	79
Hospice team communication	81	77	81	84
Providing timely help	78	74	78	83
Caregiver training	76	72	76	80

Note: CAHPS® (Consumer Assessment of Healthcare Providers and Systems®). These scores reflect the share of respondents who reported the "top-box"—meaning the most positive survey response. The national average score is across providers. The percentile scores reflect provider-level performance data.

Source: MedPAC analysis of Hospice CAHPS data from CMS for period January 2018–December 2019.

assessment of the hospice provider, about 81 percent of caregivers rated the hospice a 9 or 10 on a 10-point scale, and about 84 percent would definitely recommend the hospice to others on average. While average hospice CAHPS scores have been steady, we lack an absolute benchmark for performance on these measures to judge how much potential room for improvement remains. Although 100 percent is theoretically a benchmark for performance, we would not necessarily expect a provider furnishing high-quality care to receive positive scores from 100 percent of caregivers. Nonetheless, with some measures showing average performance in the mid-70 percent range and with some variation in performance across providers, opportunities for improvement likely exist.

A recent Government Accountability Office (GAO) study examined hospices' performance on the hospice item set process measures and the CAHPS survey, focusing on differences by type of ownership (Government Accountability Office 2019). In general, GAO found that average scores were similar for for-profit and nonprofit providers. However, GAO analyzed the 10 percent of providers with the lowest scores on these quality measures and found that for-profit providers accounted for a disproportionate share of the lowest scoring decile.

Another source of information on quality comes from an OIG report examining data from state survey agencies and accrediting organizations on deficiencies of and complaints about hospice providers (Office of Inspector General 2019). OIG found serious deficiencies or severe complaints among a small group of providers and more common deficiencies in compliance with regulatory requirements among a broader set of providers. Over the five years from 2012 to 2016, OIG found that 80 percent of hospices had at least one deficiency, and 20 percent of hospices had at least one serious deficiency. Most common deficiencies were failure to meet certain care planning requirements, lack of timely aide supervision, and deficiencies related to patient assessments. OIG also found that one-third of hospice providers had at least one complaint filed against them over the five-year period (including complaints that were and were not substantiated). OIG identified a group of 313 hospice providers as poor performers in 2016, defined as providers that had at least one serious deficiency or one substantiated severe complaint that year. Most of the 313 poor performers had prior deficiencies or complaints, and 40 of these providers had at least one prior serious deficiency or substantiated severe complaint.

With quality measurement in general, the Commission consistently maintains that outcome measures are preferable to process measures. Although outcome

TABLE 11–11 **Rates of hospice live discharge and reported reason for discharge, 2017–2019**

Category	2017	2018	2019
Live discharges as a share of all discharges, by reason for live discharge			
All live discharges	16.7%	17.0%	17.4%
No longer terminally ill	6.5	6.3	6.5
Beneficiary revocation	6.4	6.6	6.5
Transferred hospice providers	2.1	2.2	2.3
Moved out of service area	1.4	1.6	1.7
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%	8.5%	8.6%
25th percentile	12.2	12.0	12.3
50th percentile	18.1	17.9	18.9
75th percentile	27.1	27.8	29.5
90th percentile	41.4	42.5	46.6

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.

measures for hospice are particularly challenging, the Commission believes outcome measures such as patient-reported pain and other symptom-management measures merit further exploration. CMS is currently developing a new patient assessment instrument for hospice, the Hospice Outcomes & Patient Evaluation (HOPE) instrument. An interim report by CMS's contractor Abt Associates indicates that the instrument will be designed to collect information on patients' and families' needs at different points throughout an episode (not just at admission and discharge) and is intended to support the development of outcome measures related to symptoms such as pain (Abt Associates 2020).

CMS is also considering use of a claims-based quality measure, referred to as the Hospice Care Index, that would identify hospice providers with unusual patterns of care (Centers for Medicare & Medicaid Services 2020a). The measure would use claims data in several domains to identify hospice providers with outlier utilization and provision of services compared with other hospice providers. In January 2021, CMS presented a specification to the National Quality Forum Measure Applications Partnership for the hospice care index that would identify outlier utilization patterns across 10 indicators: 4 related to the provision of visits (i.e., weekend skilled nurse visits, gaps in nurse visits, amount of nurse visit minutes, visits near the of life), 4 related to live discharges and burdensome transitions, 1 related to per beneficiary spending, and 1 related to provision of high acuity care (i.e., continuous home care and general inpatient care) (National Quality Forum 2021). At this time, it is unknown whether CMS will pursue adoption of this measure.

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 2019, the aggregate rate of live discharge (that is, live discharges as a share of all discharges) was 17.4 percent (Table 11-11) and has been on a slight upward trend since 2017. In 2019, hospice claims data show "beneficiary revocation" and "beneficiary not terminally ill" as the most common reasons for live discharge, each accounting for 6.5 percent of all discharges that year.

Live-discharge rates vary by patient diagnosis. In 2019, the rate was higher for hospice beneficiaries with chronic obstructive pulmonary disease (26 percent), neurological conditions (21 percent), and heart and circulatory conditions (20 percent) than for those with cancer (12 percent) or other diagnoses (14 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 11-4, p. 322).

Some providers have unusually high live-discharge rates. In 2019, among providers with more than 30 discharges, the median live-discharge rate was about 19 percent, but 10 percent of providers had live-discharge rates in excess of 46 percent (Table 11-11). 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 than average live-discharge rates—45 percent for hospices with 30 or fewer discharges compared with 17 percent for hospices of all sizes.

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 his or her hospice enrollment, transfers hospice providers, or moves out of the area). Some stakeholders argue that live discharges initiated by the beneficiary—such as revocation of his or her hospice enrollment—should not be included in a live-discharge measure because, some stakeholders assert, these discharges reflect beneficiary preferences and are not in the hospice's control. 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.

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 2019, the number of for-profit providers grew by about 6.3 percent, indicating that capital has been accessible to these providers. Although the pandemic affected hospice providers' operations in a number of ways, financial reports from publicly traded hospice companies for the third quarter of 2020 were generally favorable: These companies reported revenue growth, favorable margins, or both. After an initial decline in patient volume at the outset of the pandemic, publicly traded firms also reported that hospice patient admissions, average daily census, or both had returned to near, similar, or above prepandemic levels. Reports from publicly traded companies that have multiple lines of business suggest that the pandemic generally had less of an effect on volume for their hospice providers than for some other types of providers. According to financial reports, at the end of 2020, the hospice sector continued to garner investment interest and is expected to continue to do so in 2021. Several publicly traded hospice firms expressed interest in acquiring additional hospice providers. According to an executive of one publicly traded company, the hospice sector offers growth opportunities and margin levels that are favorable compared with the health care sector overall (Amedisys 2020). It is also notable that CMS's changes to the hospice payment system in 2016 have generally been viewed as modest.

TABLE 11–12 **Total hospice costs per day varied by type of provider, 2018**

	Average total cost per day
All hospices	$148
Freestanding	142
Home health based	159
Hospital based	213
For profit	130
Nonprofit	175
Above cap	134
Below cap	150
Urban	150
Rural	136

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

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

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 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 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

As part of our assessment of payment adequacy, we examine the relationship between Medicare payments and providers' costs by considering whether current costs approximate what providers are expected to spend on the efficient delivery of high-quality care. Medicare margins illuminate the relationship between Medicare payments and providers' costs. Specifically, we examined margins through the 2018 cost reporting year, the latest period for which complete cost report and claims data were available.[18] To understand the variation in margins across providers, we also examined the variation in costs per day across providers.

Hospice costs

Hospice costs per day vary substantially by type of provider (Table 11-12), which is one reason for differences in hospice margins across provider types. In 2018, hospice costs per day across all hospice providers averaged about $148, about the same as the previous year's average. The flat average cost per day between 2017 and 2018 is partly accounted for by a shift in the mix of hospice days, with the share of days accounted for by RHC (the lowest cost level of care) increasing in 2018.[19,20] Freestanding hospices had lower costs per day than provider-based hospices (i.e., home health–based hospices and hospital-based hospices). For-profit, above-cap, 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 cost 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 (Table 11-4, p. 322). 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 11-13 presents estimates of hospice costs by level of care for freestanding and provider-based hospices in 2018. In that year, the payment rates by level of care (routine home, continuous home, general inpatient, and

TABLE 11–13

Hospice costs and payment rates by level of care, 2018

Category	2018 cost per day*				FY 2018 payment rate per day*	Share of days 2018
	Average	25th percentile	50th percentile	75th percentile		
Routine home care	$132	$110	$131	$159	$164	98.2%
General inpatient care	915	525	808	1,195	744	1.2
Inpatient respite care	530	219	298	510	173	0.3
Continuous home care* (dollars per hour)	48	19	47	81	41	0.2

Note: FY (fiscal year). Medicare payment rates and costs are rounded to the nearest dollar.
*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.

inpatient respite care) were out of balance relative to estimated costs. The costs for RHC, which account for the vast majority of days in hospice, averaged $132 per day, while the payment rate averaged $164. Medicare's payment rate for the other three less frequently provided levels of care was lower than the average and median costs per day for freestanding providers. For example, in 2018, the estimated cost per day for general inpatient care was $915 on average and $808 at the median, compared with a payment rate of $744. The fiscal year 2020 rebasing raised the payment rates for CHC, IRC, and GIP substantially to address the gap between estimated costs and payment rates seen in Table 11-13. The fiscal year 2020 payment rate for RHC was reduced slightly (2.72 percent) to maintain budget neutrality, but it remains substantially above estimated cost.

Hospice margins

In 2018, the aggregate Medicare margin for hospice providers was 12.4 percent, similar to 2017 (12.5 percent) (Table 11-14, p. 334).[21] Medicare margins varied widely across individual hospice providers: –5.0 percent at the 25th percentile, 11.7 percent at the 50th percentile, and 25.3 percent at the 75th percentile (data not shown). Our estimates of Medicare margins exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs consistent with our approach in other Medicare sectors.[22]

We excluded nonreimbursable bereavement 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. If we included bereavement costs from the cost report in our margin estimate, it would reduce the 2018 aggregate Medicare margin by at most 1.3 percentage points. This figure likely overestimates the bereavement costs associated with Medicare hospice patients because, in addition to bereavement costs associated with hospice patients, the estimate could include the costs of community bereavement services offered to the family and friends of decedents who were not enrolled in hospice. Also, some hospices fund bereavement services through donations. Hospice revenues from donations are not included in our margin calculations.

We also exclude nonreimbursable volunteer costs from our margin calculations. As discussed in our March 2012 report, 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 nonreimbursable cost centers. It is unknown what costs are included in the volunteer

TABLE 11–14 **Hospice Medicare margins by selected characteristics, 2014–2018**

Category	Share of hospices 2018	2014	2015	2016	2017	2018
All	100%	8.2%	9.9%	10.9%	12.5%	12.4%
Freestanding	80	11.6	13.8	14.0	15.3	15.1
Home health based	10	3.5	3.3	6.2	8.1	8.4
Hospital based	10	–20.8	–23.8	–16.7	–13.8	–16.5
For profit	70	15.3	17.7	17.9	20.0	19.0
Nonprofit	27	–0.4	0.1	2.2	2.5	3.8
Urban	81	8.7	10.4	11.4	12.9	12.6
Rural	19	3.3	4.8	6.3	8.9	10.3
Patient volume (quintile)						
Lowest	20	–4.9	–5.3	–3.1	–1.1	–3.1
Second	20	2.0	4.3	6.2	6.7	5.6
Third	20	9.8	10.7	11.2	13.8	13.8
Fourth	20	9.9	13.0	13.1	15.2	14.0
Highest	20	8.4	9.9	11.1	12.5	12.7
Below cap	83.7	8.4	9.9	10.7	12.6	12.5
Above cap (excluding cap overpayments)	16.3	6.0	9.8	12.6	12.1	10.1
Above cap (including cap overpayments)	16.3	18.8	21.4	20.2	21.9	21.8

Note: Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. 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, 100 percent hospice claims standard analytical file, and Medicare Provider of Services file from CMS.

nonreimbursable cost center. If nonreimbursable volunteer costs were included in our margin calculation, it would reduce the aggregate Medicare margin by 0.4 percentage point.

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 11-14). In 2018, freestanding hospices had higher margins (15.1 percent) than home health–based or hospital-based hospices (8.4 percent and –16.5 percent, respectively) (Table 11-14). Provider-based hospices typically have lower 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 2018, the aggregate Medicare margin was considerably higher for for-profit hospices (19.0 percent) than for nonprofit hospices (3.8 percent). The margin for freestanding nonprofit hospices was higher (7.6 percent) than the margin for nonprofit hospices overall (data not shown). Generally, hospices' 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 aggregate Medicare margin (12.6 percent) than those in rural areas (10.3 percent).

In 2018, above-cap hospices had favorable margins even after the return of overpayments. Above-cap hospices had a margin of about 21.8 percent before the return of overpayments but had a margin of 10.1 percent after

the return of overpayments. The margin for below-cap hospices was 12.5 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 average margin ranged from –3.0 percent for hospices in the lowest quintile to 21.7 percent for hospices in the second highest quintile (Table 11-15). Hospices in the quintile with the greatest share of their patients exceeding 180 days had a 15.5 percent average margin after the return of cap overpayments, but without the hospice aggregate cap, these providers' margins would have averaged 21.7 percent (latter figure not shown in table).

Hospices with a large share of patients in nursing facilities and assisted living facilities (ALFs) also have higher margins than other hospices (Table 11-16, p. 336). For example, in 2018, the 50 percent of hospices with the highest share of patients residing in nursing facilities had a margin of about 15 percent compared with a roughly 9 percent margin for providers with fewer nursing facility patients. For the half of providers with the largest share of patients residing in ALFs, the margin was about 15 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 ALF 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 facilities serving as referral sources for new patients. Nursing facilities can also be a more efficient setting for hospices to provide care because of the overlap in responsibilities between the hospice and the nursing facility. 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 2018 margin estimates reflect hospices' financial performance in the third year of the new RHC payment structure, which began in January 2016. CMS's payment reforms—which move away from a single base rate for RHC to a two-tiered base rate and provide additional payments for certain visits in the last seven days of life—were expected to modestly reduce the variation in profitability across hospices. In fact, the variation across providers by length of stay initially narrowed, but widened in 2018. When providers were 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, in 2018, the difference in margins across those quintiles increased to about 26 percentage points, nearing the variation in margins that existed before the payment system changes.

TABLE 11–15 **Hospice Medicare margins by length of stay, 2018**

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–2.8%
Second quintile	8.5
Third quintile	16.8
Fourth quintile	20.8
Highest quintile	17.6
Share of stays >180 days	
Lowest quintile	–3.0
Second quintile	7.5
Third quintile	18.4
Fourth quintile	21.7
Highest quintile	15.5

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

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

Projecting margins for 2021

To project the aggregate Medicare margin for 2021, we model the policy changes that went into effect between

TABLE 11–16

Hospice Medicare margins by providers' share of patients residing in facilities, 2018

Hospice characteristic	Medicare margin
Share of patients in nursing facilities	
Lowest half	9.3%
Highest half	14.8
Share of patients in assisted living facilities	
Lowest half	7.7
Highest half	15.2

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

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

2018 (the year of our most recent margin estimates) and 2021. The policies include annual payment updates in 2019, 2020, and 2021 of 1.8 percent, 2.6 percent, and 2.4 percent, respectively. The updates for these years reflect the market basket update, a productivity adjustment, and, for 2019, an additional legislated adjustment of –0.3 percentage point. In addition, in response to the coronavirus PHE, the Congress suspended the 2 percent sequester from May 2020 to March 2021, which effectively increased Medicare payment rates by 2 percentage points for the first half of fiscal year 2021. 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. Overall, we do not anticipate a substantial shift in hospices' cost structure as a result of the pandemic. For our 2021 margin projection, we assume a rate of cost growth equal to the projected growth in the market basket (which is slightly higher than hospice cost growth in recent years). Taking these factors into account, for 2021, we project an aggregate Medicare margin for hospices of 13 percent. This margin projection excludes nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce the aggregate margin by at most 1.3 percentage points and 0.4 percentage point, respectively).

Policy to modify the hospice aggregate cap

Last year, in the March 2020 report, 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 2021. Rather than recommend an across-the-board reduction, the Commission recommended payments in fiscal year 2021 be frozen at the fiscal year 2020 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 (Medicare Payment Advisory Commission 2020). Because the hospice payments are wage adjusted but the aggregate cap is not, the cap is stricter in some areas of the country than others. Wage adjusting the cap would make it equitable across all providers.[23] The Commission also recommended that the aggregate cap be reduced by 20 percent. This reduction to the cap 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 has yet to act on the Commission's recommendation to modify the aggregate cap.

Given that our findings are similar this year with regard to payment adequacy (e.g., a strong aggregate Medicare margin but wide variation in profitability by length of stay), the rationale for the Commission's March 2020 cap recommendation stands. Last year, we simulated the effect of the cap recommendation using historical data (2017). We have repeated that simulation with the most recently available data (2018) to provide an updated sense of its impact. An important caveat to our simulations of the hospice cap policy is that the simulation is based on historical data and makes no projections or behavioral assumptions.

Under the Commission's cap recommendation, we estimate the share of hospices exceeding the cap would increase, while many providers would remain well under the cap. In our simulation, the estimated share of hospices exceeding the cap in 2018 would change from

TABLE 11–17

Simulated share of providers exceeding the aggregate cap in 2018 under rebasing and a policy to modify the aggregate cap

	Share of providers exceeding the cap	
	2018 actual	2018 simulated with rebasing and modified cap
All	16%	28%
Freestanding	20	34
Home health based	5	11
Hospital based	0	1
For profit	23	39
Nonprofit	1	5
Urban	19	32
Rural	4	14

Note: This analysis simulates the effect of rebasing and the 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.

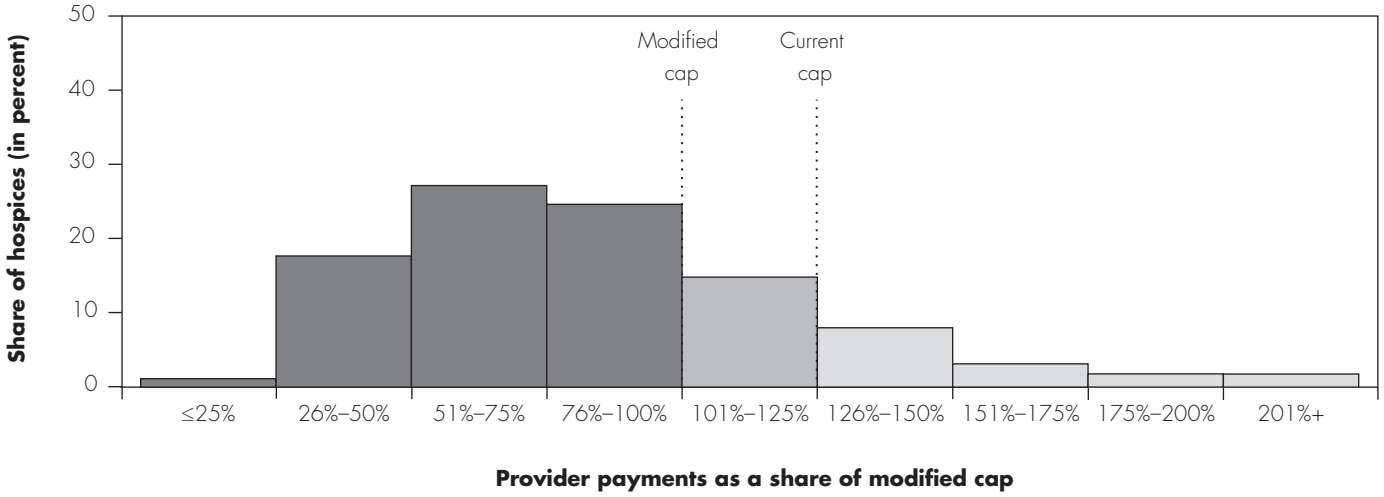
Source: MedPAC analysis of Medicare claims data for hospice providers.

16 percent (the estimated actual rate) to 28 percent under the policy to wage adjust and reduce the cap (Table 11-17).[24] The additional providers estimated to exceed the cap under the proposed policy are predominantly for profit (92 percent) and freestanding (94 percent), with a long average length of stay (249 days) and a high 2018 aggregate Medicare margin (22 percent) (data not shown). Despite the estimated increase in the share of hospices exceeding the cap, a sizable share of providers would remain substantially below the cap (Figure 11-2, p. 338). Under the modified cap policy, if a provider's payments as a share of the modified cap is less than 100 percent, the provider remains below the cap. Across all providers, our simulation finds that nearly half (46 percent) of hospices would be at least 25 percent below the cap under this policy (i.e., payments as a share of the modified cap would be less than or equal to 75 percent). As described in detail 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 the cap policy would have reduced aggregate Medicare program payments in 2018 by about 3.2 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 5 percent in the fourth quintile and about 15 percent in the fifth (highest) quintile), while payments for other hospices would remain largely unchanged (Table 11-18, p. 339). The effects of the cap policy by category of hospice provider depends 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 we discussed in our March 2020 report, the current aggregate cap in 2020 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

FIGURE 11–2 **Many hospices would remain substantially below the cap under the modified cap policy**



Note: The figure simulates the amount that providers would have been above or below the cap in 2018 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 chart.

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

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, in cap year 2020, if half of the hospice's patients each had a length of stay of 30 days, the other half could have an average length of stay of up to 335 days before that provider would exceed the 2020 cap.[25] The length-of-stay patterns in this hypothetical example are much longer than typical for the hospice population (both for patients with 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 the Office of Inspector General 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 the text box on potential directions for payment policy, pp. 341–344.

In aggregate, both urban and rural providers are estimated to experience reduced payments under the cap policy modification; however, these payment reductions would occur among the subset of urban and rural providers with disproportionately long stays and high margins. For example, both urban and rural providers in the two highest length-of-stay quintiles had substantial profit margins in 2018, with payment-to-cost ratios ranging from 1.19 to 1.30; they would experience payment declines under the cap policy modification, as seen in Table 11-19 (p. 340). Table 11-19 also shows that rural providers with fewer long-stay patients and lower margins (e.g., providers in the

TABLE 11–18 **Simulated effect on hospice payments of the 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	–3.2%
Freestanding	–3.7
Home health based	–1.2
Hospital based	0.0
For profit	–5.3
Nonprofit	–0.4
Urban	–3.2
Rural	–3.8
Share of stays >180 days	
Lowest quintile	0.0
Second quintile	0.0
Third quintile	–0.1
Fourth quintile	–4.7
Highest quintile	–14.5

Note: This analysis, using 2018 data, simulates the policy to wage adjust and reduce the cap by 20 percent. The simulation assumes no changes in utilization in response to the policy. The figures reported here by ownership are based on the hospice ownership designation in the Medicare cost report.

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 (which is based on an analysis of historic claims data).

two lowest length-of-stay quintiles) would see no change in their payments under the policy to modify the cap.

How should Medicare payments change in 2022?

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. The Commission has concluded that aggregate payments are more than sufficient to cover providers' costs and that the payment rates in 2022 should be held at their 2021 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 stay and high margins.

RECOMMENDATION 11

For fiscal year 2022, the Congress should eliminate the update to the 2021 Medicare base payment rates for hospice and wage adjust and reduce the hospice aggregate cap by 20 percent.

RATIONALE 11

Our indicators of access to care are 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,

TABLE 11–19

Simulated effect of rebasing and policy to modify the aggregate cap on 2018 payment-to-cost ratios for urban and rural hospices

	2018 payment-to-cost ratios					
	All providers		Urban providers		Rural providers	
Providers grouped by share of stays greater than 180 days	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	0.97	0.99	0.98	1.00	0.92	0.93
Second quintile	1.07	1.08	1.07	1.09	1.04	1.04
Third quintile	1.21	1.20	1.21	1.20	1.17	1.16
Fourth quintile	1.28	1.21	1.27	1.20	1.30	1.27
Highest quintile	1.20	1.01	1.19	1.02	1.29	1.00

Note: This analysis, using 2018 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.

and average length of stay increased in 2019. In 2018, the rate of marginal profit was 16 percent. As the number of for-profit providers increased by 6.3 percent, access to capital appears strong. The aggregate Medicare margin in 2018 was 12.4 percent, nearly the same as the prior year. The projected 2021 margin is 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's recommendation would keep the payment rates unchanged in 2022 at the 2021 levels for all providers and would also restate the Commission's March 2020 recommendation to modify the hospice aggregate cap to focus payment reductions on providers with disproportionately long stays and high margins. Our recommendation would bring aggregate 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

Spending

- Under current law, hospices are projected to receive an update in fiscal year 2022 equal to 2.4 percent (based on a projected market basket of 2.7 percent and a projected productivity adjustment of 0.3 percent). Our recommendation would decrease federal program spending relative to the statutory update by $750 million to $2 billion 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. ■

Potential hospice payment policy directions

CMS has taken steps to improve payment accuracy in the hospice payment system but concerns remain about distortions in the system that favor long stays, wide variability in profitability by length of stay, and aberrant utilization patterns among some hospice providers. Several policy directions could be considered in the future to address these issues, including adjustments to the routine home care (RHC) payment levels, episode-based payment, and compliance threshold policies.

RHC payment levels and u-shaped curve

In January 2016, CMS implemented reforms to the hospice payment system that represented the first changes to the payment structure since the benefit's inception in 1983. CMS moved from paying a single, uniform, daily rate for RHC to two per diem rates for days 1 to 60 and 61 and beyond ($199 and $157 per day, respectively, in 2021). Medicare also pays an additional amount ($60 per hour in 2021) for registered nurse and social worker visits that occur during the last seven days of life (up to four hours per day) for patients receiving RHC.

These modifications to the RHC payment structure were intended to better align payments with the costs of providing hospice care throughout an episode. Because hospices tend to provide more services at the beginning and end of an episode and fewer in the middle, long stays were more profitable than short stays under a flat per diem payment rate. In March 2009, the Commission recommended that Medicare move away from the flat per diem to one that is higher at the beginning and end of an episode and lower in the intervening period. The RHC payment structure that CMS implemented in 2016 moves in this direction and has modestly reduced the variability in profitability by length of stay.

Opportunities exist to refine the RHC payment structure to more closely resemble the u-shaped cost structure reflected in hospice visit patterns throughout an episode. Such changes could be a step toward improving payment accuracy and could modestly reduce payments for long stays, but would not be expected to substantially alter incentives under the hospice payment system for long hospice stays.

CMS established the two RHC payment rates using Medicare claims data on hospice visit minutes throughout patient episodes. CMS estimated the labor costs associated with these visit minutes using data on wages and benefits for the different types of staff furnishing the visits. Taking a similar approach, Figure 11-3 (p. 342) shows our estimate of the average labor cost associated with visits throughout an episode using 2018 data. The labor cost estimates reflect only time spent with the patient (and do not reflect travel time, phone calls (except for social worker phone calls), or care coordination or care management that occurs outside of the presence of the patient).

Labor costs associated with visits for patients receiving RHC are highest in the first few days of the episode and decline over the next few days and weeks of the episode, until flattening out at about 60 days (Figure 11-3, p. 342).[26] Under the current RHC payment structure, hospice providers are paid the same rate for days 1 to 60, even though costs decline over the course of the first 60 days of the episode. The RHC payment rates could be honed to include finer payment categories that reflect the different levels of visit intensity early in the episode.

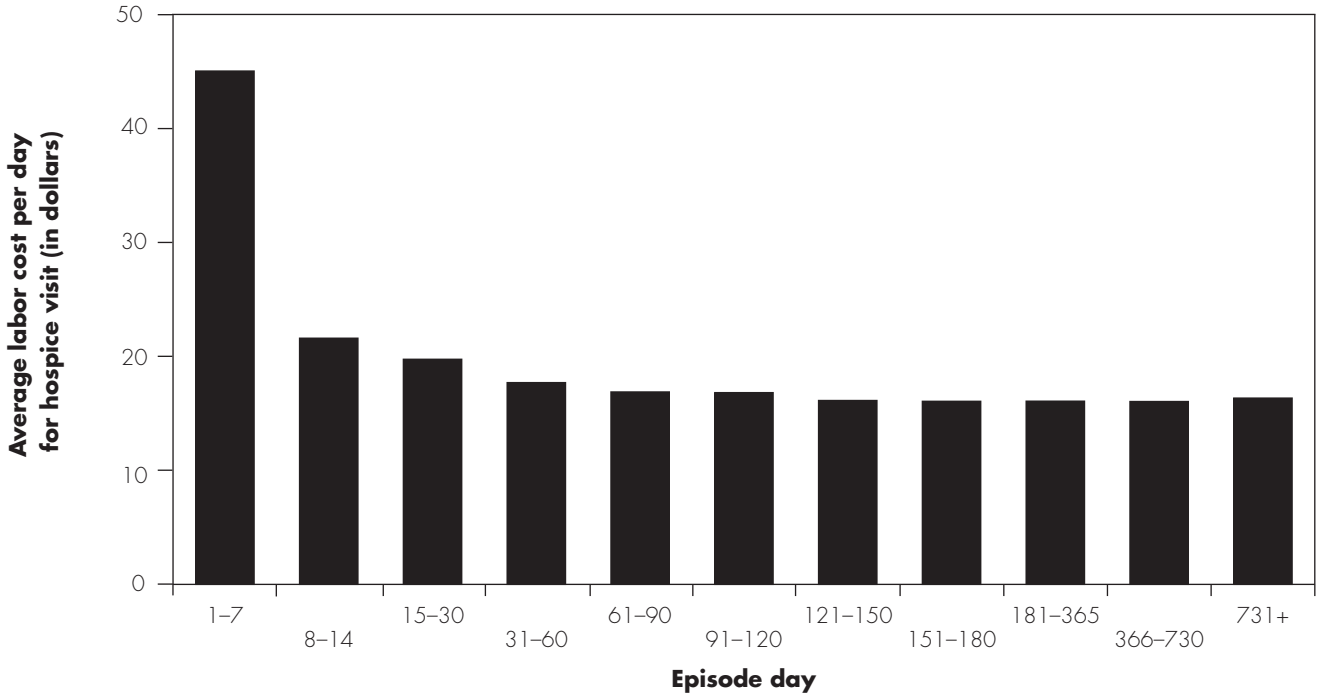
For example, five per diem payment rates could be established to more closely mirror costs in the visit data: days 1–7, days 8–14, days 15–30, days 31–60, and days 61+. As illustrated in Table 11-20 (p. 343), under this alternative payment structure, the relative payment weight and the resulting hospice payment daily payment rate would increase for the first 7 days of a hospice episode and would decrease for days 8–60, while the rate for days 61 and beyond would not change. This latter category accounts for more than two-thirds of RHC days. Compared with net payments under the current payment system, net payments under the alternative approach would increase for stays of roughly 30 days or less and decrease for stays of 31 days and longer. Payments for very long stays would be reduced, but the overall percentage reduction in total payments for long stays would be modest because the payment rate for days 61 and beyond would be unchanged. Thus, we expect this approach would provide some

(continued next page)

Potential hospice payment policy directions (cont.)

FIGURE 11–3

Average labor cost per day for hospice visits by episode day for routine home care, 2018



Note: The figure reflects only days when patients received routine home care. "Episode day" reflects the day within the hospice episode (and does not represent final length of stay). The last seven days of life are included in the chart within whichever episode-day category they fall and are not broken out separately. The average labor cost per day for hospice visits is calculated by taking the amount of visit minutes reported on hospice claims multiplied by an estimate of the national average wage rate (including benefits) for the type of practitioner performing the visit. For social workers, we include in this estimate time spent on both visits and phone calls, which are each reported on the claims.

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and Acumen LLC lifetime length of stay file.

improvement in payment accuracy, especially for short stays, and would modestly reduce payments for long stays, but would not be expected to substantially alter the incentives for long stays. A potential concern with this approach is that the higher payment rate for days 1–7 might spur some providers to seek out patients in the last days of life rather than earlier in the disease trajectory when hospice could potentially offer patients more benefits.

Reduction in the daily payment rate for long hospice stays

Although a small share of hospice patients have long stays, these patients account of the majority of hospice spending. In 2019, patients with stays exceeding 180 days accounted for nearly 60 percent of total hospice spending. Among decedents in 2019 who received hospice care, 10 percent had a hospice lifetime length of stay of 266 or more days. Hospices' profitability increases as its share of cases with long stays increases (until the provider exceeds the aggregate cap).

For patients with long stays, hospice may be substituting for other types of care such as custodial home care, which is generally financed out-of-pocket or by Medicaid or Medicare-covered home health care. As hospice length of stay increases, hospice aide

(continued next page)

TABLE 11–20

Comparison of average labor cost per day and relative payment weights for different RHC payment rate structures

	Alternate payment structure: 5 levels of payment		Current payment system with two rates: Days 1–60 and days 61+	
Episode days	Average labor cost per day	Relative weight	Average labor cost per day	Relative weight
1–7	$45.08	2.4	$24.10	1.3
8–14	21.62	1.2	24.10	1.3
15–30	19.77	1.1	24.10	1.3
31–60	17.72	1.0	24.10	1.3
61+	16.29	0.9	16.29	0.9

Note: RHC (routine home care).

Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

minutes make up an increasingly larger portion of total visit minutes while nurse minutes decline. The greater share of hospice time devoted to aide visits among patients with the longest stays suggests that hospice is performing some of the same functions as custodial care. With long stays in hospice, a larger portion of care is occurring earlier in the disease trajectory, so patients are likely to be stable for longer periods of time, compared with patients with shorter stays who are nearer to the end of life and typically experience increased needs for hospice nursing and psychosocial supports.

Although there are important differences between hospice, custodial home care, and Medicare-covered home health care, there may be merit in considering a payment adjustment for very long hospice stays that brings the hospice payments for long stays closer to the payment rate for these other types of care. For example, a reduction to the hospice daily payment rate could be considered when a hospice stay exceeds a specified day threshold (e.g., for days 181 and beyond). A number of factors could be considered in establishing a payment rate for hospice days above the threshold, including the type and frequency of visits that hospices typically provide, payment rates for these types of practitioner visits when furnished by other providers such as home health agencies, and the types of other services and supports beyond visits that hospice providers furnish and the costs associated with these services.

Episode payment For hospice, Medicare pays a daily rate for each day a beneficiary is enrolled in hospice. As an alternative to a per diem payment system, we could explore the use of an episode payment system for hospice. Because of the substantial variation in hospice length of stay across patients, it would be important to have episodes that are of a short duration. Short episodes (e.g., 30 days) could reduce the potential for systematic overpayments or underpayments or lessen the incentives for patient selection. In the Center for Medicare & Medicaid Innovation's value-based insurance design model that includes hospice in Medicare Advantage (MA), CMS has developed a 30-day episode payment to pay MA plans for hospice beneficiaries (with the payment rate for the first 30 days adjusted based on number of days of care provided

(continued next page)

Potential hospice payment policy directions (cont.)

(1–6 days, 7–15 days, 16+ days) to account for very short stays). As part of exploring an episode payment approach for fee-for-service hospice providers, we could consider whether episode payment rates should decline over time when patients have multiple episodes (an increase in payment for care in the last days of life). Such a structure could be considered to address variation in profitability by length of stay.

Compliance threshold The Commission has found that some hospice providers have outlier utilization patterns, such as unusually long stays and high live-discharge rates. These providers could be focusing on patients likely to have long, profitable stays who may not meet the eligibility criteria. High live-discharge rates are also a concern as they could signal a hospice's poor admitting practices or quality of care, or an approach on the part of some hospices to discharge patients as the hospice approaches the aggregate cap.

An argument could be made that the care provided by hospices with unusually long stays and high live discharge rates is different in comprehensiveness and intensity compared with the end-of-life care furnished by other hospice providers. For example, unusually high live discharge rates seem inconsistent with the core mission of hospice, which is to support patients through the last days of life, a time when symptom burden and the need for supports is often greatest. Hospices treating a mix of patients with very long stays are providing a larger share of the care they furnish earlier in the disease trajectory when patients may be more stable and have less-intense care needs.

Compliance thresholds such as the 60-percent rule for inpatient rehabilitation facilities and the 50-percent rule for long-term care hospitals are examples of how Medicare has sought to counter incentives for patient selection in payment systems in other sectors and to encourage providers to focus on patients most appropriate for that level of care. We could consider this type of approach for hospice providers. For example, a policy could be developed under which hospice providers whose live-discharge rate or length of stay for its patient population exceeds a specified threshold would in subsequent years receive a reduced payment rate for all patients. Having such a policy in place could help reduce the potential for patient selection under the hospice payment system and reduce the incentive for hospice business models to focus on revenue-generating strategies. ■

Endnotes

1 If a beneficiary does not have an attending physician, he or she 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.

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 before 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 compare it with a "pseudo"-enrollment period created for non-hospice 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 non-hospice 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 2021 cap year is aligned with the federal fiscal year (October 1, 2020, to September 30, 2021). 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 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 5).

8 Under section 319 of the Public Health Services Act, the Secretary of Health and Human Services may determine that a disease or disorder presents a public health emergency (PHE) or that a PHE, including significant outbreaks of infectious disease or bioterrorist attacks, otherwise exist. The Secretary first determined the existence of a coronavirus PHE, based on confirmed cases of COVID-19 in the U.S., on January 31, 2020. At the time of publication, the coronavirus PHE has been renewed four times, most recently on January 7, 2021.

9 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.

10 Statistics on hospice use rates and length of stay for 2017 through 2019 may differ from estimates in prior reports because they are based on different data sources and incorporate some refinements to our methodology. However, these differences do not change the conclusion that hospice use among decedents and average lifetime length of stay continue to increase. We have moved from using the Medicare Denominator File to the Common Medicare Enrollment to identify decedents and beneficiary characteristics. These statistics include U.S. territories whereas previously they had not.

11 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.

12 Between 2018 and 2019, the share of days accounted for by RHC increased slightly from 98.2 percent to 98.4 percent because the number of RHC days increased 7 percent, while the number of GIP and CHC days declined (2 percent and 4 percent, respectively). The number of IRC days also increased about 8 percent, but IRC is an infrequently used level of care, so it remained about 0.3 percent of days in 2019.

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

14 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.

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

Marginal profit = (payments for Medicare services – (total Medicare costs – fixed building and equipment costs)) / Medicare payments.

This comparison is a lower bound on the marginal profit because we do not consider any potential labor costs that are fixed.

16 The response rate for hospice CAHPS in the most recent period was 32 percent (https://www.hospicecahpssurvey.org/en/scoring-and-analysis).

17 Hospice CAHPS data are available for rolling two-year periods.

18 We present margins for 2018 because our margin estimates exclude cap overpayments to providers. To calculate this exclusion accurately, we need the next year's claims data (i.e., the 2018 cap overpayment calculation requires 2019 claims data).

19 Between 2017 and 2018, the share of days accounted for by RHC rose slightly from 98.1 percent to 98.2 percent, while the share of days accounted for by GIP and CHC dropped from 1.6 percent to 1.5 percent. Because there are substantial cost differences between the lower cost RHC and the higher cost GIP and CHC levels of care, these small shifts in the mix of days contributed to the flat cost per day between 2017 and 2018.

20 Several other factors could have also contributed to the flat average cost per day between 2017 and 2018, such as the increase in average length of stay and the increase in the share of revenues accounted for by freestanding providers (which have lower costs than provider-based hospices).

21 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.

22 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.

23 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

24 These estimates are based on constant 2018 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.

25 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.

26 Although not broken out separately in Figure 11-3 (p. 342), the labor cost of visits increases in the last seven days of life.

References

Abt Associates. 2020. *November 2019 Technical expert panel: Hospice Quality Reporting Program summary report.* Rockville, MD: Abt Associates.

Amedisys. 2020. Amedisys Corporation (AMED) CEO, Paul Kusserow on Q3 2020 results—Earnings call transcript. https://seekingalpha.com/article/4383625-amedisys-inc-amed-ceo-paul-kusserow-on-q3-2020-results-earnings-call-transcript.

Barnato, A. E., D. L. Anthony, J. Skinner, et al. 2009. Racial and ethnic differences in preferences for end-of-life treatment. *Journal of General Internal Medicine* 24, no. 6 (June): 695–701.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2020a. Hospice Quality Reporting Program Forum Hospice Care Index (claims-based measure) August 2020. https://www.cms.gov/files/document/hqrp-forum-august-2020-slides.pdf.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2020b. Medicare Advantage value-based insurance design model calendar year 2021 model participation. Fact sheet. https://www.cms.gov/newsroom/fact-sheets/medicare-advantage-value-based-insurance-design-model-calendar-year-2021-model-participation.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2011. Medicare program; hospice wage index for fiscal year 2012. Notice of CMS ruling. *Federal Register* 76, no. 89 (May 9): 26731–26735.

Cohen, L. L. 2008. Racial/ethnic disparities in hospice care: A systematic review. *Journal of Palliative Medicine* 11, no. 5 (June): 763–768.

Crawley, L., R. Payne, J. Bolden, et al. 2000. Palliative and end-of-life care in the African American community. *Journal of the American Medical Association* 284, no. 19 (November 15): 2518–2521.

Direct Research. 2015. *Spending in the last year of life and the impact of hospice on Medicare outlays (updated August 2015).* Report prepared by Direct Research for the Medicare Payment Advisory Commission. Washington, DC: Medicare Payment Advisory Commission.

Gilstrap, L. G., H. A. Huskamp, D. G. Stevenson, et al. 2018. Changes in end-of-life care in the Medicare Shared Savings Program. *Health Affairs* 37, no. 10 (October): 1693–1700.

Government Accountability Office. 2019. *Medicare hospice care: Opportunities exist to strengthen CMS oversight of hospice providers.* GAO–20–10. Washington, DC: GAO.

Government Accountability Office. 2004. *Medicare hospice care: Modifications to payment methodology may be warranted.* GAO–05–42. Washington, DC: GAO.

Harris, K., L. Christopher, H. M. Brower, et al. 2020. *Evaluation of the Medicare Care Choices Model: Annual report 3.* Report prepared by staff from Abt Associates for the Centers for Medicare & Medicaid Services. Rockville, MD: Abt Associates. https://innovation.cms.gov/data-and-reports/2020/mccm-thirdannrpt.

Hoyer, T. 2007. The future of hospice. *Caring*, November 6–8.

LoPresti, M. A., F. Dement, and H. T. Gold. 2016. End-of-life care for people with cancer from ethnic minority groups: A systematic review. *American Journal of Hospice and Palliative Care* 33, no. 3 (April): 291–305.

Martin, M. Y., M. Pisu, R. A. Oster, et al. 2011. Racial variation in willingness to trade financial resources for life-prolonging cancer treatment. *Cancer* 117, no. 15 (August 1): 3476–3484.

Medicare Payment Advisory Commission. 2020. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2017. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2014. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2013. *Report to the Congress: Medicare and the health care delivery system.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2012. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2010. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2009. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2008. *Report to the Congress: Reforming the delivery system.* Washington, DC: MedPAC.

National Quality Forum. 2021. MAP Post-Acute Care/Long-Term Care Workgroup. http://www.qualityforum.org/ProjectMaterials.aspx?projectID=75370.

Office of Inspector General, Department of Health and Human Services. 2019. *Hospice deficiencies pose risks to Medicare beneficiaries.* OEI–02–17–00020. Washington, DC: OIG.

Plotzke, M., T. J. Christian, E. Axelrod, et al. 2015. *Medicare hospice payment reform: Analysis of how the Medicare hospice benefit is used.* Report prepared for the Centers for Medicare & Medicaid Services. Cambridge, MA: Abt Associates.

Teno, J. M., P. Gozalo, A. N. Trivedi, et al. 2018. Site of death, place of care, and health care transitions among US Medicare beneficiaries, 2000–2015. *Journal of the American Medical Association* 320, no. 3 (July 17): 264–271.