CHAPTER 12

Hospice services

RECOMMENDATION

12 The Congress should eliminate the update to the hospice payment rates for fiscal year 2014.

COMMISSIONER VOTES: YES 16 • NO 0 • NOT VOTING 0 • ABSENT 1

CHAPTER 12

Hospice services

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less. Beneficiaries must "elect" the Medicare hospice benefit; in so doing they agree to forgo Medicare coverage for conventional treatment of their terminal condition. In 2011, more than 1.2 million Medicare beneficiaries received hospice services from over 3,500 providers, and Medicare expenditures totaled about $13.8 billion.

Assessment of payment adequacy

The indicators of payment adequacy for hospices, discussed below, are generally 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 2011, hospice use increased across all demographic and beneficiary groups examined. However, hospice use rates remained lower for racial and ethnic minorities than Whites.

- ***Capacity and supply of providers*—**The supply of hospices has increased substantially since 2000 and continued to grow in 2011, almost entirely due to growth in the number of for-profit providers.
- ***Volume of services*—**The proportion of beneficiaries using hospice services at the end of life continues to grow, while average length of stay

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was steady overall in 2011 after substantial growth since 2000. In 2011, 45.2 percent of Medicare beneficiaries who died that year used hospice, up from 44.0 percent in 2010 and 22.9 percent in 2000. Average length of stay among decedents, which grew between 2000 and 2010 from 54 days to 86 days, held steady at 86 days in 2011. The median length of stay during the same years remained stable at approximately 17 or 18 days.

Quality of care—At this time, we do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries since information on quality of care is very limited. The Patient Protection and Affordable Care Act of 2010 mandated that a hospice quality reporting program begin by fiscal year 2014. In 2013, hospices must report data for two quality measures or face a 2 percentage point reduction in their annual update for fiscal year 2014. The first is a pain management measure endorsed by the National Quality Forum. CMS created the second measure, in which hospices report whether they are tracking at least three quality indicators related to patient care and what those measures focus on (to help CMS identify options for future quality measures). Given the penalty for nonreporting and the limited scope of the initial measures, it is likely that the vast majority of providers will report in 2013.

Providers' access to capital—Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. Continued growth in the number of for-profit providers (a 5 percent increase in 2011) suggests that access to capital is adequate for these providers. Less is known about access to capital for nonprofit freestanding providers, for whom 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 Medicare margin, which is an indicator of the adequacy of Medicare payments relative to costs, was 7.5 percent in 2010, up from 7.4 percent in 2009. The projected 2013 margin is 6.3 percent. These margin estimates exclude nonreimbursable costs associated with bereavement services and volunteers (which, if included, would reduce margins by at most 1.4 percentage points and 0.3 percentage point, respectively). They also do not include any adjustment for the higher indirect costs observed among hospital-based and home-health-based hospices (which, if such an adjustment were made, would increase the overall aggregate Medicare margin by up to 1.9 percentage points).

Given that the payment adequacy indicators for which we have data are positive, the Commission believes that hospices can continue to provide beneficiaries with appropriate access to care with no update to payment rates in 2014. ■

Background

Medicare began offering a hospice benefit in 1983, pursuant to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The benefit covers palliative and support services for terminally ill beneficiaries who have a life expectancy of six months or less if the terminal illness follows 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 biologicals 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 condition. In 2011, more than 1.2 million Medicare beneficiaries received hospice services, and Medicare expenditures totaled about $13.8 billion.

Beneficiaries must "elect" the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for conventional treatment of the terminal illness. Medicare continues to cover items and services unrelated to the terminal illness. 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 any. 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. Under current policy, the first hospice benefit period is 90 days. For a beneficiary to initially elect hospice, 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 six months, the patient can be recertified for another 90 days. After the second 90-day period, the patient can be recertified for an unlimited number of 60-day periods, as long as he or she remains eligible.[2] For recertification, only the hospice physician has to certify that the beneficiary's life expectancy is six months or less. Beneficiaries can transfer from one hospice to another once during a hospice benefit period and can disenroll from hospice at any time.

In recent years, Medicare spending for hospice care increased dramatically. Spending reached about $13.8 billion in 2011, more than quadrupling since 2000. This spending increase was driven by greater numbers of beneficiaries electing hospice and by longer stays among hospice patients with the longest stays.

Medicare payment for hospice services

The Medicare program pays a daily rate to hospice providers for each day a beneficiary is enrolled in hospice. The hospice 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 visited the patient 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 beneficiary's terminal condition and related conditions, such as on-call services, care planning, drugs, medical equipment, supplies, patient transportation between sites of care specified in the plan of care, short-term hospice inpatient care, and other less frequently used services.

Payments are made according to a per diem rate for four categories of care: routine home care, continuous home care, inpatient respite care, and general inpatient care (Table 12-1, p. 264). A hospice is paid the routine home care rate (about $153 per day in 2013) for each day the patient is enrolled in hospice, unless the hospice provides care under one of the other categories (continuous home care, inpatient respite care, or general inpatient care). Overall, routine home care accounts for about 97 percent of hospice care days. The payment rates for hospice are updated annually by the inpatient hospital market basket index. Beginning in fiscal year 2013, the annual update is reduced by a productivity adjustment, as required by the Patient Protection and Affordable Care Act of 2010 (PPACA). An additional reduction to the market basket update of 0.3 percentage point is required in fiscal year 2013 and possibly in fiscal years 2014 through 2019 if certain targets for health insurance coverage among the working-age population are met. The payment methodology and the base rates for hospice care have not been recalibrated since initiation of the benefit in 1983.

The hospice daily payment rates are adjusted geographically to account for differences in wage rates

TABLE 12–1

Medicare hospice payment categories and rates

Category	Description	Base payment rate, 2013	Percent of hospice days, 2010
Routine home care	Home care provided on a typical day	$153.45 per day	97.3%
Continuous home care	Home care provided during periods of patient crisis	$37.32 per hour	0.5
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	$158.72 per day	0.2
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	$682.59 per day	2.0

Note: Payment for continuous home care (CHC) is an hourly rate for care delivered during periods of crisis if care is provided in the home for 8 or more hours within a 24-hour period beginning at midnight. A nurse must deliver more than half of the hours of this care to qualify for CHC-level payment. The minimum daily payment rate at the CHC level is about $299 per day (8 hours at $37.32 per hour); maximum daily payment at the CHC level is about $896 per day (24 hours at $37.32 per hour).

Source: CMS Manual System Pub 100–04 Medicare Claims Processing, Transmittal 2497, "Update to Hospice Payment Rates, Hospice Cap, Hospice Wage Index and the Hospice Pricer for FY 2013," July 20, 2012.

among local markets. Each category of care's base rate has a labor share, which is adjusted by the hospice wage index for the location where care is furnished, and the result is added to the nonlabor portion. From 1983 to 1997, Medicare adjusted hospice payments with a 1983 wage index based on 1981 Bureau of Labor Statistics data. In fiscal year 1998, CMS began using the most current hospital wage index to adjust hospice payments and applied a budget-neutrality adjustment each year to make aggregate payments equivalent to what they would have been under the 1983 wage index. This budget-neutrality adjustment increased Medicare payments to hospices by about 4 percent. In fiscal year 2010, CMS began phasing out the budget-neutrality adjustment over seven years. It was reduced by 0.4 percentage point in 2010 and by an additional 0.6 percentage point in each year from 2011 through 2013. The budget-neutrality adjustment will be reduced by an additional 0.6 percentage point each subsequent year until it is eliminated entirely in 2016.

Beneficiary cost sharing for hospice services is minimal. There is no cost sharing for hospice care other than for prescription drugs and inpatient respite care. For prescriptions, hospices may charge 5 percent coinsurance (not to exceed $5) for each prescription furnished outside the inpatient setting. For inpatient respite care, beneficiaries may be charged 5 percent of Medicare's respite care payment per day. In practice, hospices do not generally charge or collect these copays from Medicare beneficiaries. Because hospice is one of the few areas in the Medicare program with minimal or no cost sharing and hospice length of stay has increased substantially for patients with the longest stays, in the future the Commission may explore the potential for modest cost sharing for the hospice benefit. (For a more complete description of the hospice payment system, see http://www.medpac.gov/documents/MedPAC_Payment_Basics_12_hospice.pdf.)

Commission's prior recommendations

The Commission's analyses of the hospice benefit in the June 2008 and March 2009 reports found that the structure of Medicare's hospice payment system makes longer stays in hospice more profitable for providers than shorter stays. This payment structure may be spurring some providers to pursue business models that maximize profit by enrolling patients more likely to have long stays (Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2008). The mismatch between Medicare payments and hospice service intensity throughout an episode distorts the distribution of payments across providers, making hospices with longer stays more profitable than those with shorter stays. We also found that the benefit lacks adequate administrative and other controls to check the incentives for long stays in hospice and that CMS lacks data vital for effective management of the benefit. In March 2009, the Commission made recommendations to reform the hospice payment system, ensure greater accountability in use of the hospice benefit, and improve data collection and accuracy (see text box). Since that time, additional data have become available allowing us to analyze hospice visit patterns across

March 2009 Commission recommendations on hospice

The Commission's June 2008 and March 2009 reports raised concerns that the structure of the hospice payment system creates financial incentives for very long stays and that CMS does not have adequate administrative controls to check these incentives or ensure providers' compliance with the benefit's eligibility criteria. These reports found:

- a substantial increase in the number of hospices, driven almost entirely by growth in for-profit providers;
- a substantial increase in average length of stay due to increased lengths of stay among patients with the longest stays;
- higher profit margins among hospice providers with longer stays;
- longer stays among for-profit hospices than nonprofit hospices across all diagnoses;
- anecdotal reports, obtained from a Commission-convened panel of hospice industry experts, that some hospices admit patients who do not meet the Medicare hospice eligibility criteria (a life expectancy of six months or less if the disease runs its normal course) and that some hospice physicians are not engaged in the hospice certification process; and
- focused efforts by some hospices to enroll nursing home residents, a population that tends to have conditions associated with long hospice stays, as well as anecdotal reports of questionable relationships between some nursing facilities and hospices.

The Commission's several analyses of the hospice payment system show that long stays in hospice are more profitable for providers than short stays. They find that hospice visits tend to be more frequent at the beginning and end of a hospice episode and less frequent in the intervening period. The Medicare payment rate, which is constant over the course of the episode, does not take into account the different levels of effort that occur during different periods in an episode. As a result, long hospice stays, which generally have a lower average visit intensity over the course of an episode, are more profitable than short stays. The incentives in the current hospice payment system for long stays may have spurred some providers to pursue business models that maximize profit by enrolling patients more likely to have long stays. The mismatch between Medicare payments and hospice service intensity throughout an episode distorts the distribution of payments across providers, making those hospices with longer stays more profitable than those with shorter stays. To address these problems, the Commission made recommendations in March 2009 to reform the hospice payment system, to ensure greater accountability in use of the hospice benefit (which included two parts: increased accountability standards for providers and a request for the Office of Inspector General (OIG) to investigate selected hospice arrangements), and to improve data collection and accuracy. The Congress and CMS have adopted policies consistent with several of these recommendations.

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episodes of care. In the online appendixes to the March 2010 and March 2011 reports, available at http://www.medpac.gov, we analyzed patient-level data on hospice visits from a group of 17 nonprofit hospices and initial Medicare claims data on hospice visits through 2009 for the full Medicare provider population. Analyses of these data confirmed our earlier findings—that the number of hospice visits per week is higher early in a hospice episode and at the end of an episode near the time of a patient's death—and supported the need for a payment system that is better aligned with the U-shaped pattern of service intensity during a hospice care episode.

PPACA includes a number of provisions related to Medicare hospice services, including several policies consistent with some of the Commission's recommendations, particularly in the areas of greater accountability and data collection. PPACA also gives CMS the authority to revise in a budget-neutral manner the methodology for determining hospice payment rates

March 2009 Commission recommendations on hospice (cont.)

Several policies to increase provider accountability have been adopted. Effective October 2009, CMS adopted a requirement that all certifications and recertifications include a brief physician narrative explaining the clinical basis for the patient's prognosis. Effective January 2011, the Patient Protection and Affordable Care Act of 2010 (PPACA) requires a hospice physician or nurse practitioner to have a face-to-face visit with a patient before the 180th-day recertification and prior to each subsequent recertification.[3]

The Commission also recommended that the OIG study several issues related to hospice care in nursing facilities. The OIG has completed or has work under way in several of these areas. The OIG completed a study on hospices that rely heavily on nursing home patients (Office of Inspector General 2011). It found that these hospices are more likely to be for profit and to treat patients with conditions that typically have longer stays and require less complex care. The OIG recommended that CMS (1) monitor hospices that rely heavily on nursing home patients and (2) reduce payment rates for hospice services provided in nursing homes. The OIG's 2013 work plan includes additional studies examining hospices' marketing practices and financial relationships with nursing facilities.[4]

In the area of data collection, CMS expanded its data-reporting requirements for hospice claims in January 2010 consistent with the Commission's recommendation to include the length of visits in 15-minute increments, as well as additional types of visits such as physical, speech, and occupational therapist visits. PPACA mandated that CMS begin collecting additional data to inform hospice payment system reform as the Secretary of Health and Human Services determines appropriate not later than January 1, 2011.

Additional steps have been taken by the Congress and CMS on payment reform, but the pace and shape of those efforts are unclear at present. Therefore, we are reprinting the Commission's recommendation on payment reform below. That recommendation, which was made in March 2009, urged payment reform by 2013. While that time frame is no longer feasible since 2013 is already under way, the indicators that led us to make this recommendation have not changed, and thus the need for payment reform still exists and the recommendation still stands. In addition, PPACA includes a provision requiring that, beginning January 2011, Medicare perform medical reviews of hospice claims exceeding 180 days for hospices with many long-stay patients, consistent with a Commission recommendation. CMS has not yet implemented this PPACA provision, so we are also reprinting our standing recommendation on that issue below.

Recommendation 6-1, March 2009 report

The Congress should direct the Secretary to change the Medicare payment system for hospice to:

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for routine home care and other services as the Secretary of Health and Human Services determines appropriate, beginning no earlier than fiscal year 2014. PPACA includes additional hospice provisions, such as a hospice quality data pay-for-reporting program beginning in fiscal year 2014, a pilot project to test a hospice pay-for-performance program to start by January 2016, and a demonstration project to test concurrent hospice and conventional care.

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, and 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

March 2009 Commission recommendations on hospice (cont.)

- **have relatively higher payments per day at the beginning of the episode and relatively lower payments per day as the length of the episode increases,**
- **include a relatively higher payment for the costs associated with patient death at the end of the episode, and**
- **implement the payment system changes in 2013, with a brief transitional period.**

These payment system changes should be implemented in a budget-neutral manner in the first year.

Compared with the current hospice payment system, the Commission-recommended payment model would result in a much stronger relationship between Medicare payments and hospices' service intensity throughout an episode, and it has the potential to promote stays of a length consistent with hospice as an end-of-life benefit. It would also change the distribution of payments across providers. Providers with shorter stay patients, which tend to have lower margins, would see an increase in their Medicare payments, whereas providers with longer stay patients, which tend to have higher margins, would see a decrease.

Under PPACA, the Congress gave CMS the authority to revise in a budget-neutral manner the hospice payment system for routine home care and other services as the Secretary determines appropriate, not earlier than fiscal year 2014. The statute indicates that such revisions may include adjustments to the per diem payments to reflect changes in the resource intensity of services throughout a hospice episode, but it does not mandate such an approach. CMS is required to consult with hospices and the Commission on revisions to the payment system.

Measures consistent with the Commission's recommendation for increased hospice accountability have been implemented, with the exception of focused medical review (third point below). Focused medical review of hospices with unusually high rates of long-stay patients would provide greater oversight of the benefit and target scrutiny toward those providers for whom it is most warranted.

Recommendation 6-2A, March 2009 report

The Congress should direct the Secretary to:

- **require that a hospice physician or advanced practice nurse visit the patient to determine continued eligibility prior to the 180th-day recertification and each subsequent recertification and attest that such visits took place,**
- **require that certifications and recertifications include a brief narrative describing the clinical basis for the patient's prognosis, and**
- **require that all stays in excess of 180 days be medically reviewed for hospices for which stays exceeding 180 days make up 40 percent or more of their total cases.** ■

that beneficiaries who elect hospice incur less Medicare spending in the last two months of life than comparable beneficiaries who do not but also that Medicare spending for beneficiaries is higher for hospice enrollees in the earlier months before death than it is for nonenrollees. In essence, hospice's net reduction in Medicare spending decreases the longer the patient is enrolled, and beneficiaries with very long hospice stays may incur higher Medicare spending than those who do not elect hospice. (For a fuller discussion of the cost of hospice care relative to conventional care at the end of life, see the Commission's June 2008 report.)

To make cost savings more likely, the Congress included in the hospice benefit two limitations, or "caps," on payments to hospices. The first cap limits the number of days of inpatient care a hospice may 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 reimbursed at the routine home care payment rate.

TABLE 12–2

Use of hospice continues to increase

	Percent of Medicare decedents who used hospice						
	2000	2008	2009	2010	2011	Average annual percentage point change 2000–2010	Percentage point change 2010–2011
All beneficiaries	22.9%	40.1%	42.0%	44.0%	45.2%	2.1	1.2
FFS beneficiaries	21.5	39.2	41.0	43.0	44.2	2.2	1.2
MA beneficiaries	30.9	44.0	46.1	47.8	48.9	1.7	1.1
Dual eligibles	17.5	35.9	37.5	39.2	40.3	2.2	1.1
Nondual eligibles	24.5	41.5	43.4	45.5	46.8	2.1	1.3
Age (in years)							
<65	17.0	25.1	26.1	27.2	27.8	1.0	0.6
65–74	25.4	36.2	37.3	38.6	39.3	1.3	0.7
75–84	24.2	41.2	43.1	45.1	46.3	2.1	1.2
85+	21.4	45.4	48.0	50.4	52.0	2.9	1.6
Race/ethnicity							
White	23.8	41.8	43.7	45.8	47.0	2.2	1.2
African American	17.0	30.8	32.6	34.1	35.4	1.7	1.3
Hispanic	21.1	32.9	34.8	37.0	38.3	1.6	1.3
Asian American	15.2	24.5	26.0	28.1	30.0	1.3	1.9
Native North American	13.0	29.8	29.7	30.6	32.4	1.8	1.8
Sex							
Male	22.4	36.8	38.6	40.4	41.3	1.8	0.9
Female	23.3	43.0	45.1	47.2	48.6	2.4	1.4
Beneficiary location							
Urban	24.3	41.7	43.5	45.5	46.6	2.1	1.1
Micropolitan	18.5	35.8	37.5	39.8	41.4	2.1	1.6
Rural, adjacent to urban	17.6	34.7	36.9	38.7	40.2	2.1	1.5
Rural, nonadjacent to urban	15.8	30.5	32.8	34.5	35.9	1.9	1.4
Frontier	13.2	25.7	27.1	30.1	30.7	1.7	0.6

Note: FFS (fee-for-service), MA (Medicare Advantage). Beneficiary location reflects the beneficiary's county of residence grouped into four categories (urban, micropolitan, rural adjacent to urban, and rural nonadjacent to urban) based on an aggregation of the urban influence codes. "Urban" areas contain a core area with a population of 50,000 or more; "micropolitan" areas contain at least one cluster of between 10,000 and 50,000 people; "rural, adjacent to urban" are counties that are adjacent to urban areas and do not have a city of 10,000 people in the county; and "rural, not adjacent to urban" are rural counties that are not adjacent to urban areas and do not have a city of 10,000 people. "Frontier" counties have six or fewer people per square mile.

Source: MedPAC analysis of data from the denominator file and the Medicare Beneficiary Database from CMS.

The second, more visible cap limits the aggregate Medicare payments that an individual hospice can receive. It was implemented at the outset of the hospice benefit to ensure that Medicare payments did not exceed the cost of conventional care for patients at the end of life. Under the cap, if a hospice's total Medicare payments exceed its total number of Medicare beneficiaries served multiplied by the cap amount ($25,377.01 in 2012), it must repay the excess to the program.[5,6] This cap is not applied individually to the payments received for each beneficiary but rather to the total payments across all Medicare patients treated by the hospice in the cap year. The number of hospices exceeding the average annual payment cap historically has been low, but we have found that increases in the number of hospices and increases in very long stays have resulted in more hospices exceeding the cap (with the

number peaking in 2009). With rapid growth in Medicare hospice spending in recent years, the hospice cap is the only significant fiscal constraint on the growth of program expenditures for hospice care (Hoyer 2007).

Are Medicare payments adequate in 2013?

To address whether payments for 2013 are adequate to cover the costs efficient providers incur, 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. Overall, the Medicare payment adequacy indicators for hospice providers are positive. Unlike our assessments of most other providers, we could not use quality of care as a payment adequacy indicator since information on hospice quality is generally not available.

Beneficiaries' access to care: Use of hospice continues to increase

Hospice use among Medicare beneficiaries increased in 2011, continuing the trend of a growing proportion of beneficiaries using hospice services at the end of life. In 2011, 45.2 percent of Medicare beneficiaries who died that year used hospice, up from 44.0 percent in 2010 and 22.9 percent in 2000 (Table 12-2). While hospice use continued to grow in 2011, the rate of increase was not as large as prior years. Hospice use varies by beneficiary characteristics (i.e., enrollment in traditional fee-for-service (FFS) Medicare or Medicare Advantage (MA); beneficiaries dually eligible for Medicare and Medicaid and Medicare-only beneficiaries; urban and rural residence; and age, gender, and race), but it increased across all beneficiary groups in 2011.

Use of hospice is slightly more prevalent among beneficiaries enrolled in MA than in FFS, although differences in hospice use rates have narrowed over time (Table 12-2). (MA plans do not provide hospice services. Once a beneficiary in an MA plan elects hospice care, the beneficiary receives hospice services through a hospice provider paid by the Medicare FFS program but may remain enrolled in the MA plan to receive any plan supplemental benefits as well as Medicare Part D coverage for drugs not related to the terminal condition.[7]) In 2000, in rounded figures, 22 percent of Medicare FFS decedents used hospice compared with 31 percent of decedents enrolled in MA. By 2011, these use rates rose to 44 percent of Medicare FFS decedents and 49 percent of MA decedents.

Hospice use varies by other beneficiary characteristics. In 2011, a smaller proportion of Medicare decedents who were dually eligible for Medicare and Medicaid used hospice compared with the rest of Medicare decedents (about 40 percent and 47 percent, respectively) (Table 12-2). Hospice use has increased in all age groups but is more prevalent and has grown more rapidly among older beneficiaries. In 2011, more than half (52 percent) of Medicare decedents age 85 or older used hospice. Female beneficiaries were also more likely than male beneficiaries to use hospice, which partly reflects the longer average life span among women than men and greater hospice use among older beneficiaries.

Hospice use also varies by racial and ethnic groups (Table 12-2). As of 2011, hospice use was highest among White Medicare decedents followed by Hispanic, African American, Native North American, and Asian American decedents. Hospice use grew substantially among all these groups between 2000 and 2011. Nevertheless, differences in hospice use across racial and ethnic groups persist but are not fully understood. Researchers examining this issue have cited a number of possible factors, such as cultural or religious beliefs, preferences for end-of-life care, socioeconomic factors, disparities in access to care or information about hospice, and mistrust of the medical system (Barnato et al. 2009, Cohen 2008, Crawley et al. 2000).

Hospice use is more prevalent among urban beneficiaries than rural, although use has grown in all types of areas (Table 12-2). In 2011, the share of decedents residing in urban counties who used hospice was 47 percent; in micropolitan counties, 41 percent; in rural counties adjacent to urban counties, 40 percent; in rural nonadjacent counties, 36 percent; and in frontier counties, 31 percent. Use rates for beneficiaries residing in these areas increased between 0.6 percentage point and 1.6 percentage points compared with the prior year.

One driver of increased hospice use over the past decade has been growing use by patients with noncancer diagnoses, as there has been increased recognition that hospice can appropriately care for such patients.

TABLE 12–3 **Increase in total number of hospices driven by growth in for-profit providers**

Category	2000	2007	2008	2009	2010	2011	Average annual percent change 2000–2007	2007–2010	2010–2011
All hospices	2,255	3,250	3,329	3,385	3,498	3,585	5.4%	2.5%	2.5%
For profit	672	1,676	1,755	1,834	1,954	2,052	13.9	5.2	5.0
Nonprofit	1,323	1,334	1,334	1,324	1,319	1,308	0.1	–0.4	–0.8
Government/other	258	240	240	227	225	225	–1.0	–2.1	0.0
Freestanding	1,069	2,103	2,203	2,282	2,397	2,485	10.2	4.5	3.7
Hospital based	785	685	663	634	612	597	–1.9	–3.7	–2.5
Home health based	379	441	440	447	466	480	2.2	1.9	3.0
SNF based	21	21	23	22	23	23	0.0	3.1	0.0
Urban	1,424	2,190	2,268	2,323	2,430	2,534	6.3	3.5	4.3
Rural	788	1,012	1,008	1,005	1,002	985	3.6	–0.3	–1.7

Note: SNF (skilled nursing facility). Numbers may not sum to total because of missing data for a small number of providers.

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

We estimate that the share of hospice decedents with noncancer diagnoses has grown from 48 percent in 2000 to 68 percent in 2011.[8] The biggest increase in hospice enrollment among patients with noncancer diagnoses occurred among those with neurological conditions, debility, and nonspecific signs and symptoms. For example, between 2000 and 2011, the share of hospice decedents with neurological conditions (e.g., Alzheimer's or non-Alzheimer's dementia) grew from 10 percent to 16 percent. During this same period, the share of hospice decedents with debility grew from 4 percent to 10 percent, and those with nonspecific signs and symptoms increased from 2 percent to 6 percent.

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

The number of hospice providers has grown substantially since 2000. From 2000 to 2011, the total number of hospices increased 59 percent, from about 2,255 to 3,585 (Table 12-3). The number of providers grew most rapidly in the years prior to 2007, with an average annual growth rate of 5.4 percent between 2000 and 2007. The number of hospices grew at an average rate of about 2.5 percent per year from 2007 to 2010 and grew another 2.5 percent in 2011. The somewhat slower growth in the past few years may in part be influenced by guidance CMS issued in 2007 to state survey and certification agencies. This guidance placed surveys of hospices applying to be new Medicare providers (and surveys of certain other providers) in the lowest tier of their workload priorities.[9]

For-profit hospices have accounted for most of the growth in the number of hospices. Between 2000 and 2011, the number of for-profit hospices more than tripled, increasing from 672 to 2,052 (Table 12-3). During this time period, the number of nonprofits declined 1 percent and the number of government hospices declined 13 percent. As of 2011, about 57 percent of hospices were for profit, 36 percent were nonprofit, and 6 percent were government. The number of providers by ownership type in this report is based on different data sources, which we believe more accurately capture ownership type and changes in ownership, than those used for prior reports.[10] The use of the different data sources does not alter our longstanding finding of rapid growth in the number of for-profit providers.

Growth in the number of hospices occurred mostly among freestanding providers, increasing from 1,069 in 2000 to 2,485 in 2011 (Table 12-3). Over this period, the number

TABLE 12–4

Hospice use has increased substantially

Category	2000	2010	2011	Average annual change, 2000–2010	Change, 2010–2011
Number of hospice users (in millions)	0.534	1.159	1.219	8.1%	5.2%
Total spending (in billions)	$2.9	$13.0	$13.8	16.2%	6.8%
Average length of stay among decedents (in days)	54	86	86	4.8%	0.0%
Median length of stay among decedents (in days)	17	18	17	+1 day	–1 day

Note: Average length of stay is calculated for decedents who used hospice at the time of death or prior to death and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. The percent change in number of hospice users and total spending displayed in the chart may not equal the percent change calculated using the yearly data displayed in the chart due to rounding.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and the 100 percent hospice claims standard analytic file from CMS.

of hospital-based hospices declined nearly 25 percent, and the number of home-health-based hospices increased by just over 25 percent. The number of SNF-based hospices is small and changed little. As of 2011, about 69 percent of hospices were freestanding, 17 percent were hospital based, 13 percent were home health based, and less than 1 percent were SNF based. This report uses a data source to identify type of hospice (freestanding, hospital based, home health based, or SNF based) that is different from prior reports. In this report, we identify the type of hospice based on the type of cost report filed for the hospice (i.e., the hospice filed a freestanding hospice cost report or was included in the cost report of a hospital, home health agency, or SNF).[11,12]

Overall, the supply of hospices has increased substantially since 2000 in both urban and rural areas, although the number of hospices located in rural areas has declined modestly since 2007 (Table 12-3). Roughly consistent with the share of Medicare beneficiaries residing in each area, 72 percent of hospices were located in urban areas and 28 percent were located in rural areas as of 2011. Hospice location does not provide a full picture of access to services because a hospice's service area may extend beyond the boundaries of the county where it is located. In addition, as shown in our March 2010 report, there is no relationship between supply of hospices (as measured by number of hospices per 10,000 beneficiaries) and the rate of hospice use (as measured by share of decedents who use hospice before death) across states (Medicare Payment Advisory Commission 2010).

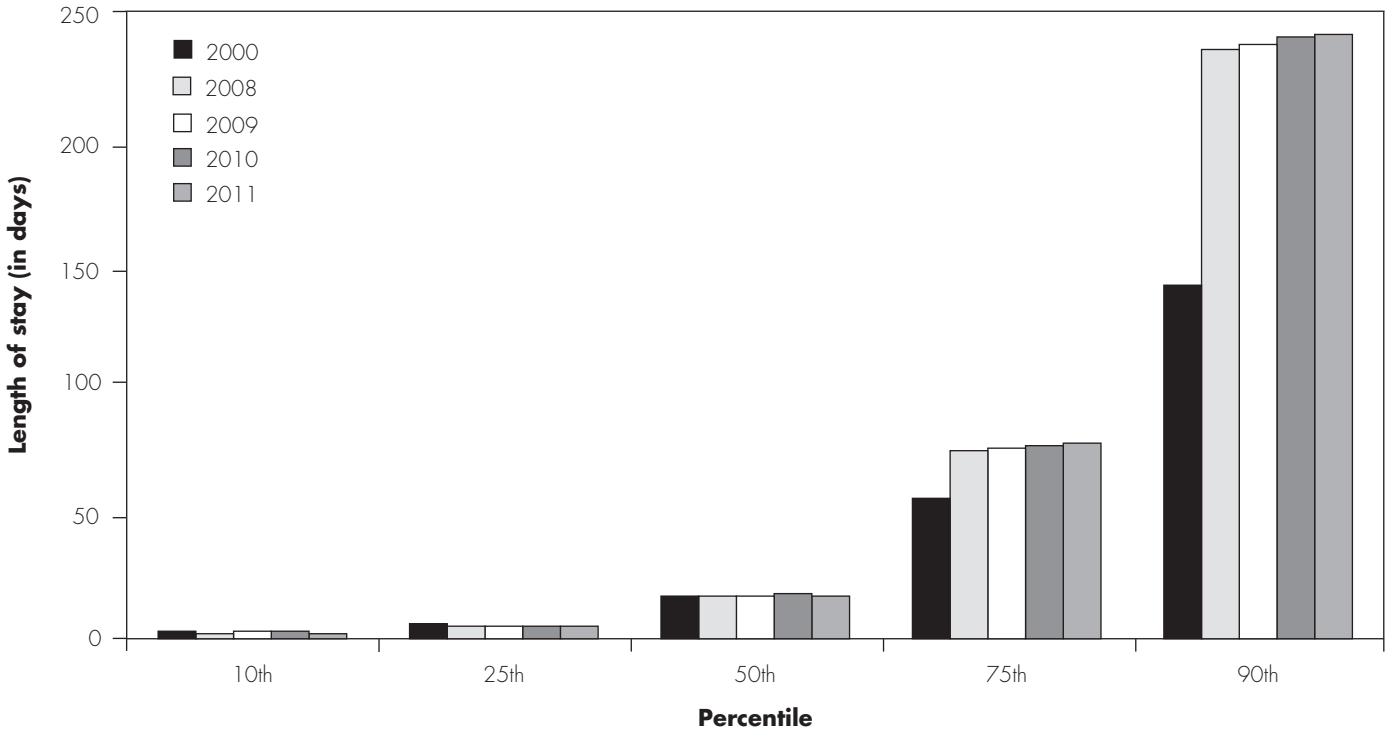
Volume of services: Number of hospice users continues to grow, while average length of stay was steady overall in 2011

The number of Medicare beneficiaries receiving hospice services increased rapidly in the last decade, more than doubling since 2000. In 2011, more than 1.2 million beneficiaries used hospice services, up from just over 0.5 million in 2000 (Table 12-4). Between 2000 and 2010, the number of hospice users increased at an average rate of 8.1 percent per year. The number of hospice users continued to grow in 2011 by 5.2 percent.

Average length of stay, which has increased substantially since 2000, grew more slowly in the last few years and changed little in 2011. Between 2000 and 2011, average length of stay among Medicare decedents increased from 54 days to 86 days. In the past few years, growth in average length of stay has slowed, increasing in 2008, 2009, and 2010 from 83 days to 84 days to 86 days, respectively, and holding steady at 86 days in 2011.

The increase in average length of stay observed since 2000 in large part reflects an increase in very long hospice stays, while short stays remained virtually unchanged (Figure 12-1, p. 272). Between 2000 and 2011, hospice length of stay at the 90th percentile grew substantially, increasing from 141 days to 241 days. Growth in very long stays has slowed in recent years. The 90th percentile of length of stay grew 5 days between 2008 and 2010 and grew 1 additional day in 2011. Median length of stay, which held steady at 17 days for most of the decade, edged upward to 18 days in 2010 and returned to 17 days in 2011. In 2011,

FIGURE 12–1 **Growth in length of stay among hospice patients with the longest stays has slowed**



Note: Length of stay is calculated for decedents who used 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/her lifetime.

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

25 percent of stays were 5 days or less, unchanged from the prior year.

The Commission has previously expressed concern about very short and very long hospice stays. With very short hospice stays, the concern is that patients enter hospice too late to fully benefit from all that hospice has to offer. As discussed in our March 2009 report, a Commission-convened panel of hospice industry representatives indicated that very short stays in hospice stem largely from factors unrelated to the Medicare hospice payment system, such as some physicians' reluctance to have conversations about hospice or a tendency to delay such discussions until death is imminent; difficulty some patients and families may have in accepting a terminal prognosis; and financial incentives in the FFS system for increased volume of services (Medicare Payment Advisory Commission 2009). The issue of the FFS system rewarding volume over quality is a broader issue that affects not only Medicare's hospice services but Medicare's other services paid under FFS. Payment system reforms such as accountable care organizations—which restructure incentives and focus on the patient's overall needs rather than fragmented services—may help reduce financial incentives that can deter hospice referral. With respect to the challenges of physician–patient communication about advanced illnesses, there may be potential for shared decision-making tools to improve the timeliness and clarity of information patients receive about their condition and treatment options and empower patients to make choices based on their preferences.

Some point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to deferring hospice care and thus short hospice stays. PPACA mandates a three-year demonstration at 15 sites to test the effect on quality and cost of allowing concurrent hospice and conventional care. However, no funding was appropriated for this demonstration, so its future is unclear. A few private

TABLE 12–5

Hospice average length of stay among decedents by beneficiary and hospice characteristics, selected years

Characteristic	Average length of stay among decedents (in days)			
	2000	2009	2010	2011
Beneficiary				
Diagnosis				
Cancer	50	53	53	52
Neurological conditions	63	132	134	137
Heart/circulatory	46	76	76	74
Debility	49	98	97	97
COPD	69	107	110	107
Other	48	85	88	86
Main location of care				
Home	N/A	87	87	88
Nursing facility	N/A	107	111	111
Assisted living facility	N/A	143	148	149
Hospice facility or hospital	N/A	14	14	15
Hospice				
Hospice ownership				
For profit	59	100	101	102
Nonprofit	49	69	70	69
Type of hospice				
Freestanding	55	87	89	89
Home health based	46	70	69	68
Hospital based	49	62	62	61

Note: COPD (chronic obstructive pulmonary disease), N/A (not available). Average length of stay is calculated for Medicare beneficiaries who died in a given year and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. Main location is defined as the location where the beneficiary spent the largest share of his/her hospice days in a given year.

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

insurers are experimenting with this approach among the commercially insured, working-age, managed care population. One insurer reported that its concurrent care program resulted in greater hospice enrollment, less use of intensive services, and lower costs (Krakauer et al. 2009). It is uncertain whether this type of approach would yield savings in a Medicare FFS environment, with the absence of health plan utilization management and an elderly population with a greater prevalence of noncancer diagnoses, which tend to result in longer hospice stays.

Length of stay varies by observable patient characteristics, such as patient diagnosis and location, which makes it possible for providers to focus on more profitable patients (Table 12-5). For example, Medicare decedents in 2011 with neurological conditions and chronic obstructive pulmonary disease had substantially higher average lengths of stay (137 days and 107 days, respectively) than those with cancer (52 days) and heart or circulatory conditions (74 days). While length of stay changed little for most diagnosis groups in the last three years, length of stay for decedents with neurological conditions increased five days between 2009 and 2011—from 132 days to 137 days.

Differences in length of stay by diagnosis are reflected in the percentile distribution of length of stay (Table 12-6, p. 274). Length of stay is similar for patients with the

TABLE 12–6

Distribution of hospice length of stay among decedents by beneficiary and hospice characteristics, 2011

	Percentile of length of stay				
Characteristic	**10th**	**25th**	**50th**	**75th**	**90th**
Beneficiary					
Diagnosis					
Cancer	3	6	17	51	126
Neurological	3	7	25	140	423
Heart/circulatory	2	4	11	54	210
Debility	3	7	23	100	280
COPD	2	5	20	105	316
Other	2	4	13	79	251
Main location of care					
Home	4	9	26	86	231
Nursing facility	3	6	21	105	332
Assisted living facility	5	12	50	180	423
Hospice facility or hospital	2	2	4	9	19
Hospice					
Hospice ownership					
For profit	3	6	21	92	295
Nonprofit	2	5	14	58	184
Type of hospice					
Freestanding	2	5	17	78	251
Home health based	2	5	15	61	183
Hospital based	2	5	14	53	160

Note: COPD (chronic obstructive pulmonary disease). Length of stay is calculated for Medicare beneficiaries who died in 2011 and used hospice that year and reflects the total number of days the decedent was enrolled in the Medicare hospice benefit during his/her lifetime. Main location is defined as the location where the beneficiary spent the largest share of his/her hospice days in 2011.

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

shortest stays, irrespective of diagnosis. For example, when stratified by diagnosis, 10 percent of patients have a length of stay of stay of two to three days regardless of their condition, and 25 percent of patients have stays of a week or less. Length-of-stay differences become more pronounced among patients with the longer stays (e.g., 75th percentile and 90th percentile). For example, patients with neurological conditions and cancer have similar lengths of stay at the 10th percentile and 25th percentile. However, compared with cancer patients, those with neurological conditions have stays that are about 1 week longer at the 50th percentile, about 3 months longer at the 75th percentile, and roughly 300 days longer at the 90th percentile.

Length of stay also varies by site of service. In 2011, average length of stay was higher among Medicare decedents whose main location of care was an assisted living facility (149 days) or a nursing facility (111 days) rather than home (88 days). Further, length of stay has increased since 2009 by four to six days in these facility settings, but by one day in the home (Table 12-5, p. 273). Length-of-stay differences across settings are most pronounced among patients with longer stays. For example, the 75th percentile of length of stay varied by about 100 days across the three settings (86 days at home, 105 days at a nursing facility, and 180 days at an assisted living facility) and the 90th percentile varied by just under 200 days (231 days, 332 days, and 423 days across the

three settings, respectively) (Table 12-6). Differences in the diagnosis profile of patients residing in assisted living facilities and nursing facilities compared with patients residing in home settings account for some of the differences in length of stay, but the markedly longer stays among assisted living facility residents are not understood and bear further monitoring and examination.

The differences in length of stay by patient characteristics are reflected in differences in length of stay by provider type. In 2011, average length of stay was substantially higher at for-profit hospices than at nonprofit hospices (102 days compared with 69 days); between 2009 and 2011, stays increased 2 days among for profits and stayed essentially the same for nonprofits. The higher length of stay among for profits has two components: (1) for profits have more patients with diagnoses that tend to have longer stays, and (2) for profits have longer stays for all diagnoses than nonprofits. These patterns reinforce the assertion that the payment system favors longer stays and that changes are needed to make it more neutral toward length of stay.

The markedly longer stays of some providers raise program integrity questions. An expert panel of hospice medical directors and executives that the Commission sponsored in fall 2008 indicated that some hospices were enrolling patients who did not meet the eligibility criteria. In March 2009, the Commission recommended several steps to improve accountability, including requiring a physician narrative on certifications and recertifications, physician or nurse practitioner face-to-face visits prior to recertification at 180 days and beyond, and focused medical review of hospice providers where stays beyond 180 days made up an unusually high share of their caseload compared with other providers. CMS implemented a physician narrative requirement in October 2009, and PPACA required face-to-face recertification visits as of January 2011 (implementation was delayed to April 2011).

The 2011 hospice claims data offer a first look at utilization patterns after implementing the face-to-face visit requirement. In 2011, average length of stay was steady, and length of stay at the 90th percentile increased by one day. With the available data it is difficult to discern what influence the face-to-face visit requirement may have had on length of stay versus other factors such as a general increase in regulatory scrutiny. Another aspect of hospice care that the face-to face visit might affect is live discharge rates if physicians or nurse practitioners find patients ineligible for hospice after conducting the visit. Face-to-face visits are required prior to recertifying any hospice patient for a third or subsequent benefit period. If the face-to-face visit requirement led to more live discharges, we would expect to see more live discharges at the end of the second benefit period (i.e., before the patient is recertified for the third benefit period) and subsequent benefit periods. The share of benefit periods ending with a live discharge changed little in 2011 compared with the prior year; if anything, they declined slightly (Table 12-7). For example, 13.6 percent of second benefit periods ended with a live discharge in 2011, down slightly from 13.9 percent in 2010.[13] It is difficult to know what is driving the slight decline in live discharges, but it could suggest more appropriate patients being admitted to hospice.

TABLE 12–7 **Percent of hospice benefit periods that ended with a live discharge, by benefit period number and year**

Hospice benefit period number	Percent of hospice benefit periods ending with a live discharge	
	2010	2011
1	9.2%	8.8%
2	13.9	13.6
3	10.6	10.7
4	10.3	10.0
5 or higher	9.0	8.3

Note: Data include benefit periods that ended between April and December of 2010 and 2011.

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, and 100 percent hospice claims standard analytic file from CMS.

One example of hospices with unusual utilization patterns are the roughly 10 percent of hospices that exceed the aggregate payment cap. As shown in our March 2011 and 2012 reports and online Appendix 12-A to this report, which is available at http://www.medpac.gov, above-cap hospices have substantially higher lengths of stay and rates of discharging patients alive than other hospices (Medicare Payment Advisory Commission 2012, Medicare Payment Advisory Commission 2011).[14] As noted in our March 2012 report, these data may suggest that above-cap hospices are admitting patients who do not meet the hospice eligibility criteria, which merits further investigation by the OIG and CMS.

TABLE 12–8 **Hospices that exceeded Medicare's annual payment cap, selected years**

	2002	2006	2008*	2009*	2010*
Percent of hospices exceeding the cap	2.6%	9.4%	10.2%	12.5%	10.1%
Average payments over the cap per hospice exceeding the cap (in thousands)	$470	$731	$571	$485	$426
Payments over the cap as percent of overall Medicare hospice spending	0.6%	2.4%	1.7%	1.7%	1.2%
Total Medicare hospice spending (in billions)	$4.4	$8.8	$11.4	$12.0	$12.9

Note: The cap year is defined as the period beginning November 1 and ending October 31 of the following year.
*Due to a change in data availability and refinements in the estimation methodology, the estimates in 2008, 2009, and 2010 are not entirely comparable to the estimates for 2002 and 2006.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data, Medicare hospice cost reports, Provider of Services file data from CMS. Data on total spending for each fiscal year from the CMS Office of the Actuary.

In 2010, 10.1 percent of hospices exceeded the cap, down from an estimated 12.5 percent in 2009 (Table 12-8).[15] This decline is a reversal of the trend we observed in the last decade of a growing share of hospices exceeding the cap.[16] Among hospices that exceeded the cap, the average amount over the cap was smaller in 2010 than in 2009, continuing the trend since 2006 of above-cap hospices exceeding the cap by smaller amounts over time. Taken together, these data may suggest that some hospices are adjusting their admissions patterns to avoid exceeding the cap or to exceed it by less. While above-cap hospices are required to return payments that exceed Medicare's cap, the government's ability to obtain repayment is less certain for hospices that close. At the extreme, one hospice provider in 2012 reportedly closed and opened as a new hospice to avoid repaying cap overpayments (Waldman 2012).

Given the concerns about very short and very long hospice stays, it may be worthwhile to consider providing physicians who refer patients to hospice with summary feedback on the length of stay of patients they refer. If referring physicians have information about the outcome of their referrals, it might help them gauge the timing of their conversations with patients about hospice and might lower the prevalence of very short stays and very long stays. Of course, there will always be some very short and very long stays in hospice because of uncertainty in predicting life expectancy and unforeseen events. But to the extent that some of these stays occur because physicians lack information about what occurs after a hospice referral, this type of feedback has the potential to influence referrals to hospice and help promote lengths of stay that are sufficient to benefit patients and are consistent with an end-of-life benefit.

Quality of care: Information on hospice quality is limited

We do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries because publicly reported information on quality is generally unavailable. PPACA mandated that CMS publish quality measures by 2012. Beginning in fiscal year 2014, hospices that do not report quality data will receive a 2 percentage point reduction in their annual payment update.

CMS has adopted two quality measures for the first year of the pay-for-reporting program. Hospices must report these measures in 2013 (based on data from the last three months of calendar year 2012) or face a 2 percentage point reduction in their payment update for fiscal year 2014. The first measure, endorsed by the National Quality Forum, focuses on pain management (i.e., the share of patients who reported being uncomfortable because of pain at admission whose pain was brought to a comfortable level within 48 hours—commonly referred to as the National Hospice and Palliative Care Organization's comfortable dying measure). The second measure is process related and is designed to help develop future quality measures. Hospices will report whether they are tracking at least three measures focused on patient care and what those measures are, which CMS indicated will help identify feasible quality measures in the future. Given the penalty for nonreporting and the limited scope of the initial

measures, it is likely that the vast majority of providers will report in 2013.

For future reporting years, CMS has expressed interest in developing a more comprehensive set of hospice quality measures for payment years after 2015. CMS has indicated that a standardized patient assessment instrument might be needed to support the collection of a broader set of quality measures. CMS has indicated that it is in the early stages of developing and testing a patient-level data set and may consider implementation as early as calendar year 2014. The patient assessment instrument that CMS is testing includes items that would support several new quality measures recently endorsed by the National Quality Forum, including process measures related to pain screening and assessment, dyspnea assessment and treatment, and provision of a bowel regimen for patients receiving opioids. CMS has also expressed interest in developing a bereaved family member survey.

As discussed in our March 2012 report, in November 2011 we convened a technical panel of hospice clinicians, researchers, quality experts, and other stakeholders to provide input on hospice quality measurement (Medicare Payment Advisory Commission 2012). Several panelists indicated that Medicare claims data might be a source of quality care indicators. For example, claims data showing hospices that provided few visits in the last days of life, provided no higher acuity hospice care (general inpatient care or continuous home care) to any patients, or had unusually high live-discharge rates could signal potentially poor quality and indicate the need for further CMS scrutiny.

Providers' access to capital: Access to capital appears to be adequate

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.

Some freestanding hospices are part of large publicly traded chain providers. Recent financial reports for these hospices have been favorable, with strong margins and cash flow. In 2011 and 2012, publicly traded hospice companies made investments to expand operations, either through acquisition of other hospice providers or through investments in new inpatient units, suggesting adequate access to capital among these providers. Also, a few publicly traded nursing home companies have reported expanding into the hospice sector through acquisitions, citing favorable margin opportunities.

Less information is available on access to capital for privately held providers. Among private equity groups, the number of merger and acquisition transactions for hospice providers, which increased in 2009, 2010, and 2011, declined in the first half of 2012. Some analysts have characterized this decline as a natural lull after a period of high acquisition activities rather than a reflection of reduced interest in the sector (Braff Group 2012a, Braff Group 2012b). The continued growth in the number of for-profit providers suggests adequate access to capital for these providers. Less is known about access to capital for nonprofit freestanding providers, which may be more limited. Hospital-based and home-health-based hospices have access to capital through their parent providers, which also appear to have adequate access to capital.

Medicare payments and providers' costs

As part of the update framework, we assess the relationship between Medicare payments and providers' costs by considering whether current costs approximate what efficient providers are expected to spend on delivering high-quality care. Medicare margins illuminate the relationship between Medicare payments and providers' costs. We examined margins through the 2010 cost-reporting year, the latest period for which cost report data and claims data are available. 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 12-9, p. 278), which is one reason for differences in hospice margins across provider types. In 2010, hospice costs per day were $143 on average across all hospice providers, a very slight increase from $142 per day in 2009.[17] Freestanding hospices had lower costs per day than home-health-based hospices and hospital-based hospices. For-profit, above-cap, and rural hospices also had lower costs per day than their respective counterparts.

The differences in costs per day among freestanding, home-health-based, and hospital-based hospices largely reflect differences in average length of stay and indirect costs. Our analysis of the Medicare cost report data indicates that, across all hospice types, those with longer average lengths of stay have lower costs per day.

TABLE 12–9

Hospice costs per day vary by type of provider, 2010

		Percentile		
	Average	25th	50th	75th
All hospices	$143	$110	$134	$167
Freestanding	138	108	130	157
Home health based	151	114	139	184
Hospital based	181	117	161	210
For profit	130	104	125	154
Nonprofit	157	121	147	184
Above cap	119	93	114	136
Below cap	145	112	137	170
Urban	146	113	137	170
Rural	126	102	126	160

Note: Data reflect aggregate cost per day for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Data are not adjusted for differences in the case mix or wages across hospices.

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

Freestanding hospices have longer stays than provider-based hospices, which accounts for some but not all of the difference in costs per day. Another substantial factor is the higher level of indirect costs among provider-based hospices. A few examples of indirect costs are management and administrative costs, accounting and billing, and capital costs. In 2010, indirect costs made up 34 percent of total costs for freestanding hospices, compared with 40 percent of total costs for home-health-based hospices and 43 percent of total costs for hospital-based hospices. The higher indirect costs among provider-based hospices suggest that their costs may be inflated because of the allocation of overhead costs from the parent provider.[18]

Hospice margins

From 2004 to 2010, the aggregate hospice Medicare margin oscillated from as low as 4.6 percent to as high as 7.5 percent (Table 12-10).[19] As of 2010, the aggregate hospice Medicare margin was 7.5 percent, up from 7.4 percent in 2009. Margins varied widely across individual hospice providers. In 2010, the Medicare margin was –11.5 percent at the 25th percentile, 6.9 percent at the 50th percentile, and 19.9 percent at the 75th percentile. Our estimates of Medicare margins from 2004 to 2010 exclude overpayments to above-cap hospices and are calculated based on Medicare-allowable, reimbursable costs consistent with our approach in other Medicare sectors.[20]

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, but it prohibits Medicare payment for these services (section 1814(i)(1)(A) of the Social Security Act). Hospices report their costs associated with providing bereavement services on the Medicare cost report in a nonreimbursable cost center. If we included these bereavement costs from the cost report in our margin estimate, it would reduce the 2010 aggregate Medicare margin by at most 1.4 percentage points.[21] This estimate of 1.4 percentage points is likely an overestimate of the bereavement costs associated with Medicare hospice patients because we are not able to separately identify the bereavement costs related to hospice patients from the costs of community bereavement services provided to the family and friends of decedents not enrolled in hospice.

We also excluded nonreimbursable volunteer costs from our margin calculations. As discussed in more detail 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 types of costs are included in the volunteer nonreimbursable cost center. If nonreimbursable volunteer costs were included in our margin calculation, it would reduce the aggregate Medicare margin by 0.3 percentage point.

Freestanding hospices have higher margins (10.7 percent) than home-health-based and hospital-based hospices (3.2 percent and –16.0 percent, respectively). Provider-based hospices have lower margins than freestanding providers due in part to their higher indirect costs (e.g., general and administrative expenses, capital costs), which are likely inflated because of the allocation of overhead costs from the parent provider. If home-health-based and hospital-based hospices had indirect cost structures similar to those of freestanding hospices, we estimate that the aggregate Medicare margin would be up to 8 percentage points higher for home-health-based hospices and 13

TABLE 12–10 **Hospice Medicare margins by selected characteristics, 2004–2010**

Category	Percent of hospices 2010	Medicare margin 2004	2005	2006	2007	2008	2009	2010
All	100%	5.0%	4.6%	6.4%	5.8%	5.5%	7.4%	7.5%
Freestanding	69	8.3	7.2	9.7	8.7	8.3	10.2	10.7
Home health based	13	3.1	3.1	3.8	2.3	3.4	5.9	3.2
Hospital based	17	–11.6	–9.1	–12.7	–10.9	–11.3	–12.2	–16.0
For profit (all)	56	11.8	9.9	12.0	10.4	10.3	11.7	12.4
Freestanding	51	12.3	10.3	12.7	11.3	11.5	12.9	13.4
Nonprofit (all)	38	0.3	1.0	1.5	1.6	0.7	3.8	3.2
Freestanding	17	3.7	3.8	5.8	5.6	3.7	6.6	7.6
Government (all)	14	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urban	71	5.9	5.1	7.1	6.3	5.9	7.9	7.8
Rural	29	–2.3	0.2	0.8	1.4	2.1	3.7	5.3
Patient volume (quintile)								
Lowest	20	–6.1	–6.6	–5.1	–7.9	–8.4	–6.5	–5.2
Second	20	–1.2	–1.6	0.3	1.0	0.1	2.0	4.0
Third	20	1.1	1.9	2.4	3.0	4.4	4.5	7.2
Fourth	20	2.8	4.4	5.8	5.8	7.2	6.8	7.1
Highest	20	7.2	5.9	8.1	7.0	6.1	9.0	8.4
Below cap	89.9	5.6	5.1	7.0	6.1	5.9	7.9	7.8
Above cap (excluding cap overpayments)	10.1	–3.4	–0.8	0.3	2.5	1.2	1.4	3.2
Above cap (including cap overpayments)	10.1	18.9	20.7	20.7	20.5	19.0	18.3	17.3

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. Margins for government-owned providers are not shown. They operate in a different context from other providers, so their margins are not necessarily comparable.

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

percentage points higher for hospital-based hospices, and the industry-wide aggregate Medicare margin would be up to 1.9 percentage points higher.[22] We intend to continue to examine the differences in the levels of indirect costs across providers and consider whether issues with the allocation of overhead from the parent provider warrant the exclusion of provider-based hospices from our margin calculations.

Hospice margins also vary by other provider characteristics, such as type of ownership, patient volume, and urban or rural location. The aggregate Medicare margin was considerably higher for for-profit hospices (12.4 percent) than for nonprofit hospices (3.2 percent). However, freestanding nonprofit hospices, which are not affected by overhead allocation issues, had a higher margin (7.6 percent) than nonprofits overall. Generally, hospices' margins vary by the provider's volume; hospices with more patients have higher margins on average. Overall, hospices in urban areas have a higher aggregate Medicare margin (7.8 percent) than those in rural areas (5.3 percent).

Hospice financial performance also varies by length of stay (Table 12-11, p. 280). In 2010, hospices with longer stays had higher margins (with margins dropping some for hospices in the longest stay category because some hospices in that category exceeded the cap and our model assumes the return of cap overpayments by these hospices).[23] As noted previously, the higher profitability of long stays reflects a mismatch between the Medicare payment system and hospices' level of effort throughout an episode. The Commission's recommendation to revise the hospice payment system to pay relatively higher rates per day at the beginning and end of the episode (near the time of the patient's death) and lower rates in the

TABLE 12–11

Hospice Medicare margins by length of stay and patient residence, 2010

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–8.9%
Second quintile	0.8
Third quintile	10.1
Fourth quintile	14.1
Highest quintile	11.6
Percent of stays > 180 days	
Lowest quintile	–8.3
Second quintile	1.5
Third quintile	10.6
Fourth quintile	14.7
Highest quintile	11.3
Percent of patients in nursing facilities	
Lowest quartile	1.5
Second quartile	6.8
Third quartile	6.8
Highest quartile	13.5
Percent of patients in assisted living facilities	
Lowest quartile	2.1
Second quartile	1.9
Third quartile	8.8
Highest quartile	11.4

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, Medicare Beneficiary Database, 100 percent hospice claims standard analytical file, and Medicare Provider of Services data from CMS.

intervening period would better align payments and costs and would likely reduce the variation in profitability across hospices and patients.

Hospices with a high share of patients in nursing facilities and assisted living facilities also have higher margins than other hospices. For example, in 2010, hospices in the top quartile of the percent of their patients residing in nursing facilities had a 13.5 percent margin compared with a margin of 6.8 percent in the middle quartiles and a 1.5 percent margin in the bottom quartile (Table 12-11).

Margins also vary by the share of a provider's patients in assisted living facilities, with a margin ranging from roughly 2 percent in the lowest two quartiles to about 11 percent in the highest quartile. Some of the difference in margins among hospices with different percentages of nursing facility and assisted living facility patients is driven by differences in the diagnosis profile and length of stay of patients in these hospices. However, there may also be efficiencies in the nursing facility setting, possibly from treatment of patients in a centralized location (e.g., lower mileage costs and staff time required for travel when a hospice treats more patients in a single location), and from overlap in aide services, supplies, and equipment provided by the hospice and nursing facility.

The OIG recently completed a report on hospices that have a large share of their patients in nursing facilities. These providers are more likely to be for profit, have longer lengths of stay, and treat patients with diagnoses that require less complex care (Office of Inspector General 2011). They also noted an overlap in payments provided to hospices and nursing facilities for aide services. The OIG recommended that CMS monitor hospices that focus on nursing facilities and reduce payments for hospice care in nursing facilities. In the Commission's letter to the Congress on repeal of the sustainable growth rate and possible offsets, the Commission included a placeholder policy to implement the OIG's recommendation for a reduction in hospice rates in nursing homes (see Appendix B, pp. 371–392).

Projecting margins for 2013

To project the aggregate Medicare margin for 2013, we model the policy changes that went into effect between 2010 (the year of our most recent margin estimates) and 2013. The policies include:

- a market basket update of 2.6 percent for fiscal year 2011, 3.0 percent for fiscal year 2012, and 2.6 for fiscal year 2013;
- a 1.0 percentage point reduction to the market update in 2013 (reflecting a productivity adjustment of –0.7 percentage point and an additional adjustment of –0.3 percentage point);
- years two through four of the seven-year phase-out of the wage index budget-neutrality adjustment factor, which reduced payments to hospices by 0.6 percentage point in each of the three fiscal years from 2011 through 2013;

- additional wage index changes, which reduced payments in fiscal years 2011 and 2013 and increased payments in fiscal year 2012;[24] and
- additional net costs associated with the face-to-face visit requirement for recertification of patients in the third and subsequent benefit periods beginning in 2011 and the quality reporting program beginning in 2013.

Taking these policy changes into account and assuming that hospice costs in 2012 and 2013 grow at a rate similar to forecasted input price growth, we project an aggregate Medicare margin for hospices of 6.3 percent in fiscal year 2013. In recent years, hospice costs have grown more slowly than market basket, and if that trend continues, the 2013 margin would be higher than we have projected. This margin projection excludes the nonreimbursable costs associated with bereavement services and volunteers (which would lower the aggregate margin at most by 1.4 percentage points and 0.3 percentage point, respectively). It also does not include any adjustment for the higher indirect costs observed among hospital-based and home-health-based hospices (which would increase the industry-wide aggregate Medicare margin by up to 1.9 percentage points).

In considering the 2013 margin projection as an indicator of the adequacy of current payment rates for 2014, one policy of note is the continued phase-out of the wage index budget-neutrality adjustment. Our 2013 margin projection reflects the first four years (through 2013) of the seven-year phase-out of the wage index budget-neutrality adjustment. In 2014, the fifth year of this phase-out will result in an additional 0.6 percentage point reduction in payments.

How should Medicare payments change in 2014?

On the basis of our review of payment adequacy for hospice services, the Commission recommends that the Congress eliminate the update to the hospice payment rates for fiscal year 2014.

Update recommendation

RECOMMENDATION 12

The Congress should eliminate the update to the hospice payment rates for fiscal year 2014.

RATIONALE 12

Our payment indicators for hospice are generally positive. The number of hospices has increased in recent years because of the entry of for-profit providers. The number of beneficiaries enrolled in hospice also continues to increase, while growth in average length of stay has leveled off. Access to capital appears adequate. The projected 2013 aggregate Medicare margin is 6.3 percent.

IMPLICATIONS 12

Spending

- Under current law, hospices would receive an update in fiscal year 2014 equal to the hospital market basket index (currently estimated at 2.6 percent), less an adjustment for productivity (currently estimated at 0.5 percent). Hospices may also face an additional 0.3 percentage point reduction in the fiscal year 2014 update, depending on whether certain targets for health insurance coverage among the working-age population are met. As a result, hospices would receive a net update of 1.8 percent or 2.1 percent (based on current estimates). Our recommendation to eliminate the payment update in fiscal year 2014 would decrease federal program spending relative to the statutory update by between $50 million and $250 million over one year and between $1 billion and $5 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to have adverse effects on beneficiaries' access to care. This recommendation is not expected to affect providers' willingness and ability to care for Medicare beneficiaries. ■

Endnotes

1 If a beneficiary does not have an attending physician, then the beneficiary 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 CMS interpreted the 180th-day recertification and each subsequent recertification to mean the recertification prior to the third benefit period and each subsequent benefit period. The first two benefit periods are 90 days (unless the patient is discharged in the middle of the benefit period), so the third benefit period typically begins after 180 days.

4 The OIG has also released or planned studies on other hospice issues. The OIG recently released a study examining use of certain Medicare Part D drugs by patients in hospices and concluded that some drugs that should be covered by hospice may be currently billed to Part D (Office of Inspector General 2012). The OIG's 2013 work plan also includes an examination of the appropriateness of general inpatient hospice care and an assessment of Medicare payments when patients are transferred from acute care hospitals to hospice general inpatient care.

5 The average annual payment cap is calculated for the period November 1 through October 31 each year. There are two methodologies for calculating the beneficiary count used in the cap calculation: a streamlined methodology and proportional methodology. For years prior to cap year 2012, the streamlined methodology is used unless the hospice has filed a lawsuit or appeal regarding the methodology, in which case the proportional methodology is used for the challenged year going forward. Beginning in cap year 2012, the proportional methodology will be used for all hospices unless they elect to remain with the streamlined methodology. In the streamlined methodology, beneficiaries are counted in a given year if they have filed an election to receive care from the hospice during the period beginning on September 28 before the beginning of the cap period and ending on September 27 before the end of the cap period. If a beneficiary receives care from more than one hospice, that beneficiary is included in the beneficiary count for a hospice and a cap year as a fraction that represents the beneficiary's total hospice days provided by that hospice in that cap year as a percent of the beneficiary's total hospice days across all hospices and all cap years. The proportional approach uses the streamlined formula for counting beneficiaries who switched hospices and applies it to all of the hospice's patients, including those who do not switch hospices.

6 This 2012 cap threshold is equivalent to an average length of stay of 168 days of routine home care for a hospice with a wage index of 1.

7 The beneficiary may stay enrolled in the MA plan after enrollment in hospice. The rate Medicare pays to the MA plan would be reduced to include only the Part D premium (assuming an MA–Prescription Drug plan) and rebate dollars. The MA plan would be responsible for providing the beneficiary with any plan supplemental benefits and any Part D drugs unrelated to the terminal condition. If the beneficiary needs Part A or Part B services for a condition not related to the terminal illness, the MA plan can provide those services or the beneficiary can seek those services from a Medicare FFS provider. If such services were provided by the MA plan, the plan would be paid the Medicare FFS rate for those services by the Medicare program, but the services would be subject to the level of cost sharing of the MA benefit package (not the FFS cost-sharing levels).

8 In 2009, cancer was the cause of death for about 22 percent of decedents age 65 or older (Centers for Disease Control and Prevention 2012). As hospice use among beneficiaries with noncancer diagnoses has grown, the share of hospice decedents with cancer has declined from 52 percent in 2000 to 32 percent in 2011. Thus, the share of hospice decedents with cancer has become increasingly similar over time to the share of deaths attributed to cancer.

9 In late 2007, CMS issued guidance to state survey and certification agencies indicating that surveys of new hospices applying to be Medicare providers (as well as other types of providers that have the option of obtaining Medicare status through accreditation rather than state surveys) should be in the lowest tier of their workload priorities. While accreditation continues to be an option for obtaining Medicare status, the financial costs associated with pursuing accreditation may have slowed entry among some providers.

10 In this report, we count hospice providers by type of ownership by matching hospice claims data to the cost report data on provider ownership type, or in cases where cost report data were not available, matched to the Provider of Services file. In previous reports, we used data on type of ownership from CMS's Providing Data Quickly (PDQ) system. We believe the cost reports more accurately distinguish hospice ownership type than the PDQ in situations where a hospice changes ownership due to an acquisition or merger or in situations where the PDQ records the hospice's ownership as "other" but the cost report indicates a specific ownership type (i.e., for profit, nonprofit, government).

11 In this report, provider type (freestanding, hospital based, home health based, and SNF based) is based on the type of cost report submitted for the hospice. In prior reports, we used the hospice's self-reported type (freestanding, hospital based, home health based, and SNF based) from the CMS PDQ system. We

believe the cost report data provide a more accurate reflection of the type of hospice than the PDQ data because some hospices in the PDQ data report being home health based even though they are included in a hospital's cost report.

12 The type of cost report filed—freestanding, home health, hospital, or SNF—does not necessarily reflect the location of individual patients served by the hospice. For example, all four types of hospices may serve some patients in nursing facilities.

13 These figures focus on beneficiaries entering the second benefit period and reflect the percentage of those beneficiaries whose second benefit period ended with a live discharge. Another way to look at live discharge rates is to focus on all hospice discharges in a year and calculate the share accounted for by live discharges. In 2011, just over 17 percent of hospice discharges involved patients who were discharged alive.

14 Above-cap hospices are more likely to be for-profit, freestanding providers and to have smaller patient loads than below-cap hospices.

15 The estimates of hospices over the cap are based on the Commission's analysis and are not identical to those of the CMS claims processing contractors. While the estimates are intended to approximate those of the 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 fiscal year 2012 hospice final rule (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 will have their cap payments calculated (or recalculated) from the challenged year going forward using the alternative methodology. At the time of writing of this report, the 2010 hospice cap calculations have not been finalized by the contractors and appeals are still possible, so uncertainty exists about which cap formula will be used to calculate cap overpayments for 2010 for individual providers. In light of this uncertainty, for estimation purposes we have assumed that the original cap methodology is used for the 2010 cap calculation for all hospices. This approach is conservative and likely results in our overstating the amount of cap overpayments and understating our margin estimates slightly.

16 Because of refinements to our methodology for calculating cap overpayments in 2008 through 2010 (due to changes in data availability and efforts to match as closely as possible the Medicare claims processing contractors' cap calculation approach), the cap estimates displayed in Table 12-8 are not entirely comparable across time. Nevertheless, on the basis of additional analyses we performed using a comparable methodology across time, we found that the percent of hospices exceeding the cap increased through 2009 and declined in 2010, while the percent of total hospice payments over the cap and the average amount of the overpayment per above-cap hospice has declined since 2006.

17 The cost-per-day calculation reflects aggregate costs for all types of hospice care combined (routine home care, continuous home care, general inpatient care, and inpatient respite care). Days reflect the total number of days the hospice is responsible for care for Medicare patients, regardless of whether the patient received a visit on a particular day. The cost-per-day estimates are not adjusted for differences in case mix or wages across hospices.

18 In general, hospices with a larger volume of patients have lower indirect costs as a share of total costs. While patient volume explains some of the difference in indirect costs across providers, freestanding hospices have lower indirect costs than provider-based hospices when comparing providers with similar patient volumes.

19 The aggregate Medicare margin is calculated by the following formula: ((sum of total payments to all providers) – (sum of total costs to all providers))/(sum of total payments to all providers). Data on total costs come from the Medicare cost reports. Data on total Medicare payments and total cap overpayments come from Medicare claims data. We present margins for 2010 because of time lags in the claims data. We have complete claims data for all hospices only through the 2010 cost-reporting year (which for some hospices includes part of calendar year 2011).

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

21 Bereavement costs are generally similar across most types of hospices; however, nonprofits report higher costs than for profits (1.9 percent and 1.0 percent of total costs in 2010, respectively).

22 These estimates are adjusted to account for differences in patient volume across freestanding and provider-based hospices.

23 Our assumption of full return of overpayments likely understates margins slightly because not all hospices fully return overpayments. For example, a hospice provider last year closed reportedly to avoid repayment of overpayments (Waldman 2012).

24 Hospices' payments increase or decrease slightly from one year to the next because of the annual recalibration of the hospital wage index. The annual wage index recalibration was expected to reduce Medicare hospice payments by 0.2 percent in 2011 and 0.1 percent in 2013 and increase payments by 0.1 percent in 2012, according to estimates in the CMS final rules or notices establishing the hospice payment rates for those years.

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