CHAPTER 11

Hospice

RECOMMENDATION

11 The Congress should update the payment rates for hospice for fiscal year 2012 by 1 percent.

COMMISSIONER VOTES: YES 14 • NO 0 • NOT VOTING 1 • ABSENT 2

. . . .

(For additional recommendations on improving the hospice payment system, see text box on pp. 263–265.)

CHAPTER 11

Hospice

In this chapter

- Are Medicare payments adequate in 2011?
- How should Medicare payments change in 2012?

Chapter summary

The Medicare hospice benefit covers palliative and support services for beneficiaries with a life expectancy of six months or less who choose to enroll in the benefit. In 2009, nearly 1.1 million Medicare beneficiaries received hospice services from nearly 3,500 providers, and Medicare expenditures totaled $12 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 decedents has grown substantially in recent years, suggesting greater awareness of and access to hospice services. In 2009, hospice use increased across almost all demographic and beneficiary characteristics examined. However, it remained lower among racial and ethnic minorities.

- ***Capacity and supply of providers*****—**The supply of hospices increased 50 percent between 2000 and 2009, growing on average 5 percent per year from 2000 to 2008, and 3 percent from 2008 to 2009. For-profit providers accounted for most of the increase in the number of hospices.
- ***Volume of services*****—**Use of Medicare hospice services continues to increase, with growth in both the number of hospice users and the average

length of stay. In 2009, 42 percent of Medicare decedents used hospice, up from 40 percent in 2008 and 23 percent in 2000. Between 2000 and 2009, average length of stay grew from 54 days to 86 days, reflecting longer stays among patients with the longest stays.

***Quality of care*—**At this time, we do not have sufficient data to assess the quality of hospice care provided to Medicare beneficiaries, as information on quality of care is very limited. The Patient Protection and Affordable Care Act of 2010 mandates that CMS publish quality measures in 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.

***Providers' access to capital*—**Hospices are not as capital intensive as some other provider types because they do not require extensive physical infrastructure. The continued influx of new for-profit freestanding providers, and modest growth in nonprofit freestanding providers, suggests that access to capital is adequate. 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 5.1 percent in 2008. The projected margin for 2011 is 4.2 percent. These margin estimates exclude nonreimbursable costs associated with bereavement services and volunteers (at most 1.5 percent and 0.3 percent of total costs, respectively). ■

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 are included, such as nursing care; physician services; counseling and social worker services; home health aide (also referred to as hospice aide) and homemaker services; short-term inpatient care (including respite care); drugs and biologicals for symptom control; 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 2009, nearly 1.1 million Medicare beneficiaries received hospice services and Medicare expenditures totaled $12 billion.

Beneficiaries must "elect" the Medicare hospice benefit; in so doing, they agree to forgo Medicare coverage for intensive conventional treatment for the terminal illness. Medicare continues to cover items and services unrelated to the terminal illness. A written plan of care must be established and maintained by the attending physician, the medical director, or another hospice physician and by an interdisciplinary group for each person admitted to a hospice program. 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, if any) must certify that the beneficiary has a life expectancy of six months or less if the illness runs its normal course. 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.[1] For recertification, only the hospice physician must certify that the beneficiary's life expectancy is six months or less. Beneficiaries can transfer from one hospice to another once during a hospice election period and can disenroll from hospice at any time.

In recent years, Medicare spending for hospice care increased dramatically. Spending reached $12 billion in calendar year 2009, 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

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 related to the patient's terminal illness. The hospice provider receives payment for every day a patient is enrolled, regardless of whether the hospice 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, such as on-call services, care planning, drugs and medical equipment, supplies related to the patient's terminal condition, and patient transportation between sites of care specified in the plan of care.

Payments are made according to a fee schedule that has base payment amounts for four categories of care: routine home care, continuous home care, inpatient respite care, and general inpatient care (Table 11-1, p. 262). A hospice is paid the routine home care rate ($147 per day in 2011) for each day the patient is enrolled in hospice, unless the hospice provides continuous home care, inpatient respite care, or general inpatient care. Routine home care accounts for more than 95 percent of hospice care days. The Medicare payment rates for hospice are updated annually by the inpatient hospital market basket index.[2] 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 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

TABLE 11–1 Medicare hospice payment categories and rates, FY 2011

Category	Description	Base payment rate
Routine home care	Home care provided on a typical day	$147 per day
Continuous home care	Home care provided during periods of patient crisis	$35.66 per hour
Inpatient respite care	Inpatient care for a short period to provide respite for primary caregiver	$152 per day
General inpatient care	Inpatient care to treat symptoms that cannot be managed in another setting	$652 per day

Note: FY (fiscal year). 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 $285 per day (8 hours at $35.66 per hour); maximum daily payment at the CHC level is $856 per day (24 hours at $35.66 per hour).

Source: CMS Manual System Pub 100–04 Medicare Claims Processing, Transmittal 2004, "Update to Hospice Payment Rates, Hospice Cap, Hospice Wage Index and the Hospice Pricer for FY 2011." July 23, 2010.

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 percent in 2010 and by an additional 0.6 percent in 2011; it will be reduced by an additional 0.6 percent each subsequent year, until the budget-neutrality adjustment is eliminated entirely in fiscal year 2016. The Commission's update recommendation for 2012 does not affect the phase-out of the wage index budget-neutrality adjustment.

Beneficiary cost sharing for hospice services is minimal. 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. Given that hospice is one of the only areas in the Medicare program with minimal or no cost sharing and given that 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 within the hospice benefit. (For a more complete description of the hospice payment system, see http://www.medpac.gov/documents/MedPAC_Payment_Basics_10_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 very long stays in hospice more profitable for providers than shorter stays, which may have led to inappropriate use of the benefit among some hospices (Medicare Payment Advisory Commission 2008, Medicare Payment Advisory Commission 2009). 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, to ensure greater accountability in use of the hospice benefit, and to improve data collection and accuracy (see text box). Since that time, additional data have become available on hospice visit patterns across episodes of care. These data confirm prior findings and further support the need for payment system reform. A discussion of our analysis of these additional data sources can be found in the online appendix to this chapter (http://www.medpac.gov).

The Patient Protection and Affordable Care Act of 2010 (PPACA) included 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 for routine home care and other services as the Secretary determines appropriate beginning no earlier than fiscal year 2014. PPACA includes additional

March 2009 Commission recommendations on hospice

In the Commission's June 2008 and March 2009 reports, a number of trends and issues were identified that raised concern 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 and ensure that providers comply 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;
- a positive correlation between hospice profit margins and average length of stay (i.e., profitability increases as average length of stay increases);
- anecdotal reports 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) obtained from a discussion with an expert panel of hospice industry executives convened by the Commission; 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 examination of the hospice payment system has shown that long stays in hospice are more profitable for providers than short stays. These analyses have found 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 within 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 led to inappropriate use of the benefit among some providers. 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 more Office of Inspector General (OIG) investigations), and to

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hospice provisions, such as a productivity adjustment to the hospice annual update and an additional market basket reduction beginning in fiscal year 2013, hospice quality data reporting beginning in fiscal year 2014, 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 intensive 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). To achieve this outcome, when the Congress established the hospice benefit it included two limitations, or "caps," on payments to hospices. (For a discussion of the cost of hospice care relative to conventional care at the end of life, see the Commission's June 2008 report).

The first cap limits the number of days of inpatient care a hospice may provide to not more than 20 percent of its total Medicare patient care days. This cap is rarely exceeded, and when it is, any inpatient days provided in excess of the cap are reimbursed at the routine home care payment rate.

March 2009 Commission recommendations on hospice (cont.)

improve data collection and accuracy. The Congress or CMS has adopted policies consistent with several of these recommendations.

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. Beginning in 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 recertification of the patient for the third benefit period (which typically begins after 180 days) and any subsequent benefit periods. In addition, as of January 2011, CMS is required to perform a medical review of claims for patients with stays exceeding 180 days for hospices with many long-stay patients.

In the area of data collection, CMS in January 2010 expanded its data-reporting requirements for hospice claims consistent with the Commission 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 determines appropriate not later than January 1, 2011.

Additional steps have been taken in the areas of payment reform and OIG studies. Because it is unclear how these initiatives will evolve, we are reprinting our recommendations below.

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

- **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, this payment model would result in a much stronger relationship between Medicare payments and hospices' level of effort in providing care throughout an episode and promote stays of a length consistent with hospice as an end-of-life benefit.

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

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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 first electing hospice multiplied by the cap amount ($22,386.15 in 2008), it must repay the excess to the program.[3,4] This cap is not applied individually to the payments received for each beneficiary, but rather to the total payments across all Medicare patients admitted to the hospice in the cap year. The number of hospices exceeding the average annual payment cap has historically 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 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).

March 2009 Commission recommendations on hospice (cont.)

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 does not mandate such an approach. CMS is required to consult with hospices and the Commission on revisions to the payment system.

The Secretary should direct the Office of Inspector General to investigate:

- **the prevalence of financial relationships between hospices and long-term care facilities such as nursing facilities and assisted living facilities that may represent a conflict of interest and influence admissions to hospice,**
- **differences in patterns of nursing home referrals to hospice,**
- **the appropriateness of enrollment practices for hospices with unusual utilization patterns (e.g., high frequency of very long stays, very short stays, or enrollment of patients discharged from other hospices), and**
- **the appropriateness of hospice marketing materials and other admissions practices and potential correlations between length of stay and deficiencies in marketing or admissions practices.**

Questions have been raised about the appropriateness of certain practices among some hospices, including relationships between hospices and long-term care facilities and enrollment and marketing practices. A comprehensive review of these relationships and practices by the OIG would provide greater understanding of the nature of these relationships and practices and the degree to which inappropriate behavior may be occurring. In addition, some hospice providers have unusual utilization patterns for their patients (regardless of the site of care) such as a high frequency of very long stays or unusual discharge practices, and a closer examination of these hospices' admission and discharge practices by the OIG would bring more accountability to the benefit.

The OIG work plan for 2011 includes studies examining several issues related to hospice use in nursing facilities. One OIG study will focus on nursing facilities with high hospice utilization and will examine hospice use patterns, relationships between nursing facilities and hospices, and marketing materials. Another OIG study will focus on services hospices provide to nursing facility patients, including hospice-provided aide services. This study also intends to look at coordination of care between nursing facilities and hospices, contractual relationships between these providers, and the appropriateness of general inpatient care. ■

Are Medicare payments adequate in 2011?

To address whether payments for the current year (2011) are adequate to cover the costs efficient providers incur and how much providers' costs should change in the coming year (2012), we examine several indicators of payment adequacy. Specifically, we assess beneficiaries' access to care by examining the capacity and supply of hospice providers and 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 for other providers, we could not use quality of care as a payment adequacy indicator, as information on hospice quality is generally not available.

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

Hospice use among Medicare decedents has grown substantially in recent years, suggesting increased awareness of and access to hospice services. In 2009, about 42 percent of Medicare decedents used hospice, up from almost 23 percent in 2000 (Table 11-2, p. 266). From 2008 to 2009, the proportion of Medicare decedents

TABLE 11–2

Use of hospice continues to increase

	Percent of Medicare decedents who used hospice						
	2000	2006	2007	2008	2009	Average annual percentage point change, 2000–2008	Percentage point change, 2008–2009
All beneficiaries	22.9%	37.0%	38.9%	40.1%	42.0%	2.2%	1.9%
FFS beneficiaries	21.5	36.2	38.0	39.2	40.9	2.2	1.7
MA beneficiaries	30.9	41.3	42.9	44.0	46.0	1.6	2.0
Dual eligibles	17.5	32.5	34.5	35.9	37.5	2.3	1.6
Nondual eligibles	24.5	38.4	40.3	41.5	43.4	2.1	1.9
Age (in years)							
<65	17.0	23.7	24.5	25.1	26.0	1.0	0.9
65–74	25.4	34.2	35.6	36.2	37.3	1.4	1.1
75–84	24.2	38.1	40.1	41.2	43.1	2.1	1.9
85+	21.4	41.0	43.5	45.4	48.0	3.0	2.6
Race/ethnicity							
White	23.8	38.5	40.5	41.8	43.7	2.3	1.9
African American	17.0	28.2	29.9	30.8	32.5	1.7	1.7
Hispanic	21.1	31.2	32.6	32.9	34.7	1.5	1.8
Asian American	15.2	21.9	22.9	24.5	26.0	1.2	1.5
Native North American	13.0	27.5	28.8	29.8	29.7	2.1	–0.1
Gender							
Male	22.4	34.1	35.9	36.8	38.5	1.8	1.7
Female	23.3	39.4	41.5	43.0	45.0	2.5	2.0
Beneficiary location							
Urban	29.4	38.5	40.4	41.7	43.5	1.5	1.8
Rural, adjacent to urban	19.2	32.7	35.0	36.2	38.0	2.1	1.8
Rural, nonadjacent to urban	16.7	28.6	30.8	31.5	33.6	1.9	2.1

Note: FFS (fee-for-service), MA (Medicare Advantage). Beneficiary location reflects the beneficiary's county of residence grouped into three categories (urban, rural adjacent to urban, and rural nonadjacent to urban) based on an aggregation of the rural–urban continuum codes.

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

using hospice grew from about 40 percent to 42 percent. While hospice use varied by beneficiary characteristics (i.e., enrollment in fee-for-service (FFS) and managed care, dual and nondual eligibles, age, gender, race, urban and rural residence), it increased substantially across all beneficiary groups between 2000 and 2008 and increased in 2009 for all groups except Native North American beneficiaries.

Use of hospice is slightly more frequent among beneficiaries in Medicare Advantage than FFS, although differences in hospice use rates have narrowed over time. In 2000, in rounded figures, 22 percent of Medicare FFS decedents used hospice compared with 31 percent of Medicare Advantage decedents. By 2009, these use rates rose to 41 percent of Medicare FFS decedents and 46 percent of Medicare Advantage decedents.

Hospice use also varies by other beneficiary characteristics. In 2009, a slightly smaller proportion (38 percent) of Medicare decedents who were dually eligible for Medicare and Medicaid used hospice compared with the rest of Medicare decedents (43 percent). Hospice use was more common among older beneficiaries, with use rates ranging from 26 percent among Medicare decedents under age 65 to 48 percent among Medicare decedents age 85 or older. 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.

Table 11-2 also shows differences in hospice use by racial and ethnic groups. As of 2009, hospice use was highest among white Medicare decedents followed by Hispanic decedents, African American decedents, Native North American decedents, and Asian American decedents. Hospice use grew substantially among all these groups between 2000 and 2008. Hospice use continued to grow in 2009 among all groups except Native North Americans. The hospice use rate among Native North American Medicare decedents, which increased from 13 percent to almost 30 percent between 2000 and 2008, declined slightly (one-tenth of a percentage point) in 2009. Despite a substantial increase in hospice use over the last decade for all racial and ethnic groups, 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 (Cohen 2008, Crawley 2000).

Hospice use is more prevalent in urban than in rural areas, although use has grown in both areas (as defined by the rural–urban continuum code for the beneficiary's county of residence). As shown in Table 11-2, between 2000 and 2009, hospice use grew from 29 percent to almost 44 percent for Medicare decedents in urban counties, from 19 percent to 38 percent in rural counties that are adjacent to urban ones, and from almost 17 percent to almost 34 percent in rural counties that are not adjacent to urban ones. These three categories of urban and rural counties are an aggregation of the nine rural–urban continuum codes that distinguish counties by both urban and rural and population size. In all nine county categories (from the largest urban to the most rural), hospice use rates among Medicare decedents grew over the last decade. For example, among the least densely populated rural counties (population of less than 2,500) that are not adjacent to urban ones, hospice use among Medicare decedents increased between 2000 and 2009 from 14 percent to 31 percent (not shown in Table 11-2).

One driver of increased hospice use over the last decade has been substantial growth in hospice election by patients with noncancer diagnoses, as there has been increased recognition that hospice can appropriately care for such patients. Patients with noncancer diagnoses accounted for 69 percent of all hospice users in 2008, up from 47 percent in 1998 (Centers for Medicare & Medicaid Services 2009). This greater share of hospice patients with noncancer diagnoses reflects substantial growth in the enrollment of such patients. For example, between 1998 and 2008, the number of hospice users with debility increased from just over 8,500 to nearly 107,000, and the number with either Alzheimer's disease or non-Alzheimer's dementia grew from about 28,000 to 174,000 (Centers for Medicare & Medicaid Services 2009).

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 over the last decade. From 2000 to 2009, the total number of hospices increased 50 percent, from just over 2,300 to nearly 3,500 (Table 11-3, p. 268). The most rapid growth occurred between 2003 and 2007, with an average annual growth rate of about 7 percent. The number of providers grew an additional 4 percent in 2008 and 3 percent in 2009. The somewhat slower growth in the last few years may in part be influenced by guidance CMS issued in 2007 to state survey and certification agencies that placed surveys of hospices applying to be new Medicare providers (and surveys of certain other providers) in the lowest tier of their workload priorities.[5]

For-profit hospices account for most of the growth in the number of hospices. Overall, the number of for-profit hospices grew 142 percent from 2000 to 2009, while the number of nonprofits declined 1 percent and hospices with government or other ownership structures increased 27 percent over this time period. From 2000 to 2008, the number of for-profit hospices grew on average 11 percent per year and an additional 5 percent in 2009. In comparison, the number of nonprofit hospices declined slightly between 2000 and 2008 and increased 1 percent in 2009. Among nonprofit hospices, the number of freestanding providers (not classified separately in Table 11-3) increased modestly over the last decade, with growth

TABLE 11–3

Total number of hospices rose substantially between 2000 and 2009, driven by growth in for-profit hospices

Category	2000	2002	2004	2006	2007	2008	2009	Percent change, 2000–2009
All hospices	2,318	2,349	2,642	3,069	3,253	3,381	3,476	50%
For profit	756	823	1,090	1,465	1,637	1,744	1,828	142
Nonprofit	1,198	1,155	1,154	1,164	1,168	1,178	1,184	–1
Government/other	364	371	398	440	448	459	464	27
Freestanding	1,188	1,276	1,566	1,948	2,125	2,257	2,358	98
Home health based	556	514	522	565	572	572	569	2
Hospital based	560	544	541	540	538	532	528	–6
SNF based	14	15	13	16	18	20	21	50

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of data from CMS Providing Data Quickly system, https://pdq.cms.hhs.gov, accessed November 1, 2010.

of 2 percent per year from 2000 to 2008 and 1 percent in 2009. As of 2009, about 53 percent of hospices were for profit, 34 percent were nonprofit, and 13 percent were government or other ownership structures.

Growth in the number of hospices occurred predominantly among freestanding providers. Between 2000 and 2009, the number of freestanding hospices grew 98 percent. The number of home-health-based and hospital-based hospices changed only modestly. Home-health-based hospices grew 2 percent overall between 2000 and 2009 and declined 1 percent in 2009. From 2000 to 2009, hospital-based hospices declined 6 percent overall, with a 1 percent decline in 2009. In contrast, skilled nursing facility (SNF)-based hospices grew from 14 providers to 21 providers during the same period.[6] As of 2009, 68 percent of hospices were freestanding, 16 percent were home health based, 15 percent were hospital based, and fewer than 1 percent were SNF based.[7]

The increase in the supply of hospices occurred in both rural and urban areas. Between 2000 and 2009, the number of hospices in urban areas grew about 62 percent and the number in rural areas grew about 31 percent (not shown in Table 11-3). As of 2009, about 30 percent of hospices were located in rural areas and 70 percent were in urban areas. 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. For example, some hospices in urban areas provide service to rural areas.

Growth in the number of hospices between 2000 and 2009 varied by state, ranging from robust growth (more than doubling in Alabama, Louisiana, Mississippi, South Carolina, Texas, and Utah) to small declines (in Arkansas, Kentucky, Maryland, New York, and North Dakota).[8] The District of Columbia experienced no change. Four states with the highest share of hospices reaching the aggregate payment cap in 2008 (Alabama, Mississippi, South Carolina, and Utah) had above-average growth in the number of hospices between 2000 and 2008, with increases in the number of providers ranging from about 100 percent to 274 percent during that time. More hospice providers does not necessarily translate into more access to care. As shown in our March 2010 report, hospice enrollment rates (as measured by the percent of Medicare decedents who used hospice) are unrelated to the supply of hospice providers (as measured by the number of hospices per 1,000 Medicare decedents) in a state (Medicare Payment Advisory Commission 2010). Furthermore, between 2005 and 2009, each state experienced an overall increase in hospice use among Medicare decedents. Among the five states with the most growth in hospice use over this period, the number of providers did not change in one state, grew modestly in two states, and increased at an above-average rate in two states. This result reaffirms

TABLE 11–4

Volume of hospice use increased substantially between 2000 and 2009

Category	2000	2008	2009	Annual percent change, 2000–2008	Percent change, 2008–2009
Number of hospice users	513,000	1,055,000	1,088,000	9.4%	3.1%
Total spending (in billions)	$2.9	$11.2	$12.0	18.4	7.1
Average length of stay among decedents (in days)	54	83	86	5.5	3.6
Median length of stay among decedents (in days)	17	17	17	0.0	0.0

Note: Average 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, the Medicare Beneficiary Database, and the 100 percent hospice claims standard analytic file from CMS.

our finding that the number of hospice providers is not necessarily a measure of access to care.

Volume of services: Growth in the number of hospice users and average length of stay have increased Medicare hospice spending substantially

The number of Medicare beneficiaries receiving hospice services has increased rapidly over the last decade, more than doubling between 2000 and 2009. In 2009, nearly 1.1 million beneficiaries used hospice services, up from just over 0.5 million in 2000 (Table 11-4). The number of hospice users increased rapidly between 2000 and 2008, at an average rate of 9.4 percent per year, and continued to grow in 2009 at a rate of 3.1 percent.

Average length of stay also increased substantially over the last decade. Medicare decedents in 2009 who used hospice had an average stay of 86 days (over the course of their lifetime), compared with 54 days for Medicare decedents in 2000. Growth in length of stay has slowed somewhat in the last few years. Average length of stay among Medicare decedents increased 3.6 percent between 2008 and 2009, compared with an average growth rate of 5.5 percent per year from 2000 to 2008.

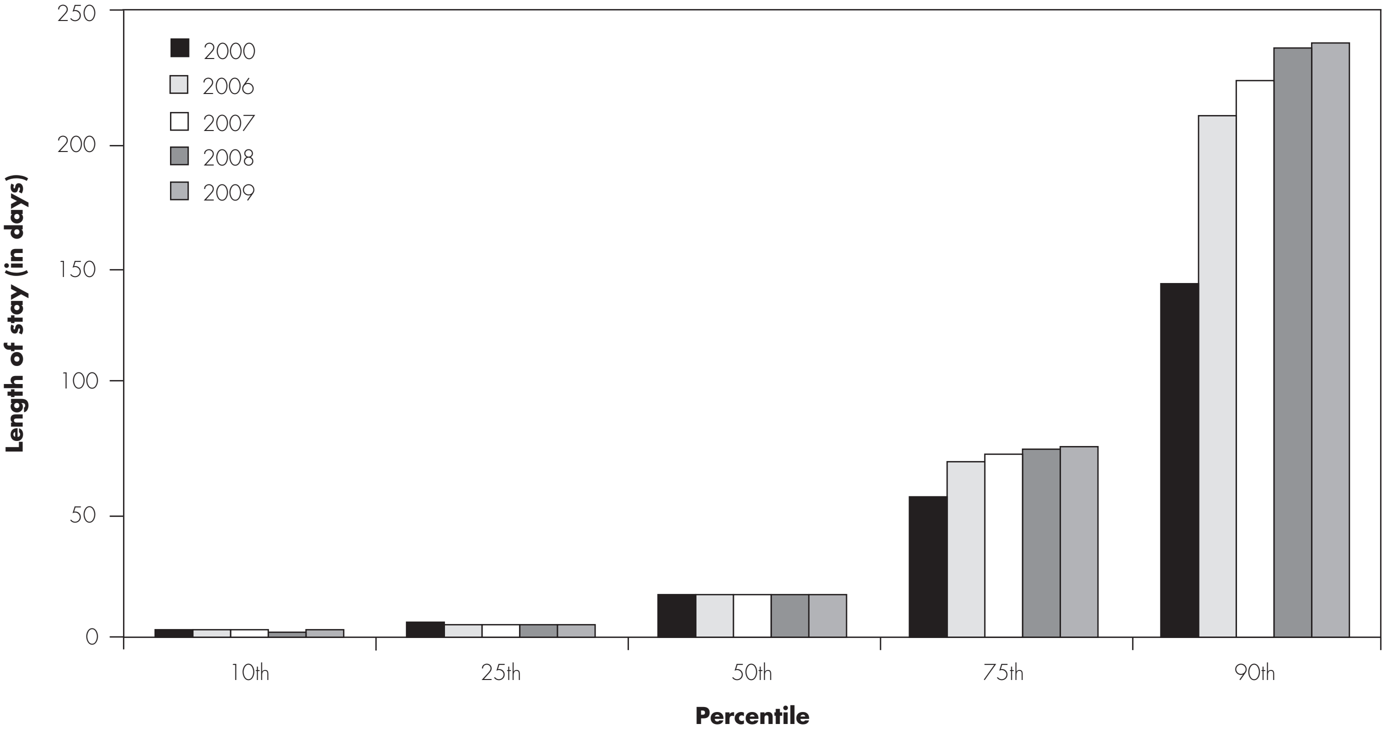
The increased average length of stay reflects in large part an increase in very long hospice stays, while short stays remained virtually unchanged (Figure 11-1, p. 270). Between 2000 and 2009, hospice length of stay at the 90th percentile grew substantially, increasing from 141 days to 237 days. Growth in very long stays slowed somewhat in 2009, as the 90th percentile between 2008 and 2009 grew by just 2 days, from 235 days to 237 days. In contrast, the median stay during the last decade held steady at 17 days and the 25th percentile decreased slightly from 6 days to 5 days.

Both the increase in length of stay for patients with the longest stays and the persistence of very short stays are concerns. With very long stays, the concern is that incentives in the payment system may be spurring some providers to pursue business models that maximize profit by enrolling very-long-stay patients who may not meet the hospice eligibility criteria. At the extreme, some providers may be using hospice as a long-term care benefit rather than as an end-of-life benefit.

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, an expert panel that we convened of hospice industry representatives indicated that very short stays in hospice largely stem from factors unrelated to the Medicare hospice payment system, such as reluctance among physicians, patients, and their families to recognize a terminal situation and the financial incentives of acute care providers to continue treating a terminal patient (Medicare Payment Advisory Commission 2009). Some point to the requirement that beneficiaries forgo intensive conventional care to enroll in hospice as a factor that contributes to short hospice stays. PPACA mandates a three-year demonstration at 15 sites to test the effect of allowing concurrent hospice and conventional care on quality and cost. One private insurer has experimented with this

FIGURE 11–1

Very long hospice stays have grown longer while short stays remained virtually unchanged



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.

approach among its commercially insured, working age, managed care population and found it resulted in more hospice enrollment, less use of intensive services, and lower costs (Krakauer et al. 2009). It remains to be seen 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.

As discussed in our June 2008 report, the increase in long hospice stays appears to be partly the result of the enrollment of more beneficiaries with noncancer diagnoses, for whom it may be more difficult to predict life expectancy. For example, average length of stay among Medicare decedents in 2008 ranged from 53 days for beneficiaries with cancer to 129 days for beneficiaries with neurological conditions (Table 11-5). Over the last decade, with increased recognition that hospice can care for patients with noncancer diagnoses, more patients with noncancer diagnoses have enrolled in hospice (now constituting roughly two-thirds of hospice patients) and length of stay has grown. But other factors are also at work. Over the last decade, there has been rapid entry of for-profit providers, whose patients on average have longer stays than those of nonprofit providers overall and within diagnosis groups.

Average length of stay also varies by site of service. Among Medicare decedents in 2008, average length of stay was longest for beneficiaries residing in assisted living facilities (142 days), followed by nursing facilities (104 days), and patients residing at home (86 days). Differences in the diagnosis profile of patients residing in facilities explain some of the difference in average length of stay compared with patients at home. The markedly longer stays among assisted living facility residents (who currently constitute 7 percent of hospice patients) compared with nursing facility residents is not understood and bears further monitoring and examination.

Some providers, particularly those that exceed the aggregate payments cap, have a higher average length of stay across all diagnoses. The percent of hospices that exceeded the cap in 2008 is estimated to be about 10 percent (Table 11-6). Medicare hospice payments over the cap represented 1.7 percent of total hospice payments in 2008. Because of the unavailability of certain claims data in 2008, we used a different methodology for estimating cap overpayments in 2008 than we used in previous years. For this reason, comparison of the 2008 cap estimates with prior years may not be reliable. On the basis of additional analyses we performed using our new methodology, we believe that the percent of hospices exceeding the cap increased each year from 2002 through 2008, while total payments over the cap have declined since 2006. We are continuing to explore additional refinements to our methodology.

As discussed in our June 2008 report, above-cap hospices are more likely to be for-profit, freestanding facilities and to have smaller patient loads than below-cap hospices (Medicare Payment Advisory Commission 2008). While above-cap hospices treat more patients with conditions that tend to have longer lengths of stay (e.g., Alzheimer's disease and other neurological conditions), within each diagnosis group, above-cap hospices had longer stays than below-cap hospices. For example, 47 percent of hospice patients with chronic obstructive pulmonary disease in 2008 had stays beyond 180 days in above-cap hospices, compared with 24 percent of patients in below-cap hospices (Table 11-7, p. 272).

One other facet of hospice care we examine is the frequency with which hospice providers' patients do not remain in hospice until death because their disease

TABLE 11–5

Hospice average length of stay among decedents by beneficiary and hospice characteristics, 2008

Characteristic	Average length of stay among decedents (in days)
Beneficiary	
Diagnosis	
Cancer	53
Neurological conditions	129
Heart/circulatory	76
Debility	94
COPD	104
Other	83
Site of service	
Home	86
Nursing facility	104
Assisted living facility	142
Hospice	
For profit	98
Nonprofit	68
Freestanding	86
Home health based	70
Hospital based	63

Note: COPD (chronic obstructive pulmonary disease). Average length of stay is calculated for Medicare beneficiaries who died in 2008 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.

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, and CMS Providing Data Quickly system.

TABLE 11–6

Hospices that exceeded Medicare's annual payment cap, selected years

	2002	2004	2006	2007	2008*
Percent of hospices exceeding the cap	2.6%	5.8%	9.4%	10.4%	10.2%
Average payments over the cap per hospice exceeding the cap (in thousands)	$470	$749	$731	$612	$571
Payments over the cap as percent of overall Medicare hospice spending	0.6%	1.7%	2.4%	2.0%	1.7%
Total Medicare hospice spending (in billions)	$4.4	$6.6	$8.8	$10.4	$11.2

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, the 2008 estimates are based on a different methodology than the 2002–2007 estimates and are not comparable.

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

TABLE 11–7

Hospice length of stay by diagnosis for above-cap and below-cap hospices, 2008

Diagnosis	Percent of stays beyond 180 days among hospice users: Above-cap hospices	Percent of stays beyond 180 days among hospice users: Below-cap hospices
All	41%	19%
Cancer	19	9
Neurological conditions	48	30
Heart/circulatory	44	18
Debility	43	23
COPD	47	24
Other	48	22

Note: COPD (chronic obstructive pulmonary disease). Data reflect the percent of hospice users in 2008 whose hospice stay was beyond 180 days.

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data and the Medicare Beneficiary Database from CMS.

may not follow the expected course and they may no longer meet the eligibility criteria or they may choose to withdraw from hospice and return to conventional care. However, if some hospices have rates of discharging patients alive that are substantially higher than most other hospices it raises concerns that some hospices may be pursuing business models that seek out patients likely to have long stays who may not meet the hospice eligibility criteria and then discharging them when they incur substantial cap liabilities. Comparing hospices that do and do not exceed Medicare's aggregate payment cap, we find that above-cap hospices have substantially higher rates of patients being discharged alive from hospice. About 44 percent of discharges in above-cap hospices involved patients who were discharged alive compared with 16 percent of discharges in below-cap hospices (Table 11-8). This pattern holds true when comparing patients with similar diagnoses. For example, among patients with heart and circulatory conditions discharged from hospice in 2008, 52 percent of discharges by above-cap hospices were live discharges compared with 16 percent in below-cap hospices.

The longer stays and higher frequency of patients being discharged alive from hospice among above-cap hospices compared with other hospices suggest that above-cap hospices may be admitting patients before they meet the hospice eligibility criteria. A pattern of certain providers enrolling hospice patients for long periods of time and then discharging them back to traditional Medicare is disruptive for beneficiaries and may result in patients not receiving the most appropriate mix of services. It also raises fiscal concerns for the Medicare program if some hospices do not comply with the benefit's eligibility criteria and merits further investigation by the Office of Inspector General and CMS.

Some hospices have asserted that Medicare's aggregate cap impedes access to hospice care. As we saw in our March 2010 report, the hospice cap is unrelated to the prevalence of hospice use across states. Looking at states with the highest rate of hospice enrollment among Medicare decedents in 2008, in some states a substantial portion of hospices exceeded the cap and in other states very few or no hospices exceeded the cap (Table 11-9). For example, Iowa, Delaware, Colorado, Oregon, and Rhode Island have very high hospice use rates and no, or very few, hospices exceeding the cap. This finding demonstrates that exceeding the cap is not a reflection of high hospice enrollment rates.

Quality of care: Information on hospice quality is very limited

Studies indicate that hospice improves the quality of remaining life for patients who elect it and is associated with greater family satisfaction with patients' end-of-

TABLE 11–8

Hospice live discharges as a percent of all hospice discharges, by diagnosis, for above- and below-cap hospices, 2008

Diagnosis	Hospices: Above cap	Hospices: Below cap
All	44%	16%
Cancer	24	10
Neurological conditions	37	18
Heart/circulatory	52	16
Debility	49	21
COPD	52	20
Other	55	22

Note: COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of 100 percent hospice claims standard analytical file data and the denominator file from CMS.

life care (Kane et al. 1984, Miller et al. 2003, Teno et al. 2004). However, publicly reported information on hospice quality across providers is generally not available at this time. The absence of publicly available hospice quality data reflects the fact that hospice quality measures are still under development.

PPACA requires CMS to publish hospice quality measures by October 1, 2012. The measures must generally be endorsed by the contracting entity under Section 1890(a) (i.e., the National Quality Forum (NQF)), although the Secretary does have the authority to adopt measures that have not been endorsed in certain circumstances. It is expected that NQF will announce a call for measures in the near future. Hospices that do not report quality information will receive a 2 percentage point reduction in the market basket update beginning in fiscal year 2014. In addition, PPACA mandates that CMS test value-based purchasing for hospice care no later than January 1, 2016.

Developing standardized empirical quality measures for hospice that can be used for program administration—either to compare provider performance or to adjust payments under future pay-for-performance programs—presents unique challenges. The set of hospice characteristics that are correlated with quality is not clear-cut and structural, process, and outcome measures are scarce. Measures that rely on family perceptions of care are more common, but establishing the validity of those characteristics may be difficult because they are subjective. Measures that rely on hospice patient satisfaction exist but are less common and apply only to a subset of patients who are able to provide feedback on care near the end of life. Despite these challenges, there are a number of efforts to develop hospice quality measures and collect data.

Family and patient surveys

As discussed in our March 2010 report, two associations—the National Hospice and Palliative Care Organization (NHPCO) and the National Association for Homecare and Hospice—field surveys of family members to evaluate their perceptions of hospice care. These data do not cover all hospices and are not publicly available.[9] The American Hospice Foundation has developed a hospice "report card" that will provide a vehicle for public reporting of quality and other data to allow comparisons of hospices' performance in terms of quality. The hospice report card, for which data are not currently available, relies on measures from NHPCO's Family Evaluation of Hospice Care (FEHC) survey (e.g., measures on symptom management) as well as administrative data (American Hospice Foundation 2010). Florida has a consumers' report card on hospice quality that utilizes data from the FEHC survey (Florida Agency for Healthcare Administration 2010). The report card, however, does not differentiate well among hospices.[10] Across most hospices and most quality measures, the ratings are uniformly five stars (highest rating), with only a few cases of four stars.

TABLE 11–9

Hospice cap is unrelated to use of hospice services across states, 2008

Ten states with highest hospice use rates	Percent of: Decedents using hospice	Percent of: Hospices exceeding the cap
Arizona	58%	25%
Utah	54	28
Florida	53	10
Iowa	50	0
Delaware	48	0
Colorado	48	2
Oregon	48	0
Rhode Island	46	0
Texas	45	11
Michigan	45	3

Source: MedPAC analysis of the denominator file, the Medicare Beneficiary Database, 100 percent hospice claims standard analytical file data, Medicare hospice cost reports from CMS, and the CMS Providing Data Quickly system.

Florida has also begun requiring hospices to submit data on three outcome measures obtained through surveying patients and families: (1) percent of patients in severe pain at admission who experienced a reduction in pain to a specified level by the fourth day in hospice, (2) percent of patients who thought they received the right amount of pain medication, and (3) percent of patients or families who would recommend hospice to others (Florida Department of Elder Affairs 2010). Performance varied most on the first measure and less so on the other two measures. For the first measure, the percent of patients in severe pain at admission who experienced a reduction in pain by the fourth day, performance varied from 50 percent to 100 percent across hospices, with the majority of hospices reporting that 87 percent or more of these patients experienced a reduction in pain. Across hospices,

TABLE 11–10

Hospice costs per day vary by type of provider, 2008

	Average	Percentile 25th	 50th	 75th
All hospices	$141	$107	$132	$165
Freestanding	135	103	127	158
Home health based	150	109	135	170
Hospital based	175	120	150	193
For profit	127	98	119	153
Nonprofit	156	120	146	181
Above cap	111	91	110	134
Below cap	144	110	135	169
Urban	143	109	135	168
Rural	124	102	124	158

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.

the percent of patients or families who thought the patient received the right amount of pain medication ranged from 93 percent to 100 percent. The percent of patients or families who would recommend hospice to others ranged from 97 percent to 100 percent across hospices, with the exception of one hospice that scored much lower.

CMS initiatives on hospice quality measures

CMS does not currently require hospices to report quality data but has conducted projects to identify and test possible hospice quality measures. In 2006, CMS began the PEACE project with the Carolinas Center for Medical Excellence, Medicare's quality improvement organization for North and South Carolina, to identify quality measures for end-of-life care and analyze the instruments available to gather data on those measures.[11] The PEACE project devised a list of 34 potential hospice quality measures. After the conclusion of the PEACE project, CMS conducted a follow-up project, the hospice Assessment Intervention and Measurement (AIM) project, to test 12 of the quality measures identified by the PEACE project in 7 hospices and 1 palliative care program in New York. The 12 measures fall into a range of areas: structure and process of care, care for physical symptoms and psychosocial symptoms, social and cultural aspects of care, care of the imminently dying, ethical and legal aspects of care, and adverse events. Some examples of the quality measures tested are the percentage of patients with certain symptoms—such as pain, nausea, and anxiety—who receive treatment or experience symptom relief within a specified time period. Most of the quality measures rely on information reported in the patient's medical record. One of the 12 quality measures (percentage of families reporting that the hospice attended to family needs for information about medication, treatment, and symptoms) relies on information from the patient's family and is based on NHPCO's FEHC. The AIM project was recently completed and it remains to be seen whether quality measures tested in this project or measures identified through other means will be used for the quality reporting initiative. CMS recently embarked on work with a contractor, RTI International, to obtain input on quality measure development and reporting for hospice and eventually to implement the PPACA quality reporting requirement. CMS recently held a listening session and open-door forum to obtain feedback on hospice quality measures and reporting. In the future, we intend to use the information on hospice quality obtained through the AIM project and other sources to inform our own research concerning hospice quality, including engaging an expert panel to provide input on hospice quality issues.

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

Hospices in general are not as capital intensive as some other provider types because they do not require extensive physical infrastructure (although some hospices have chosen to build 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. One large publicly traded hospice chain recently reported strong cash flow and margins and limited debt. Another publicly traded hospice company, which was recently part of a merger with another large multisector health care provider, has reported strong hospice earnings. The firm's debt is reflective of the costs of the recent merger and not an indicator of Medicare payment adequacy for hospice.

While less information is available on access to capital for freestanding providers that are privately held as for profit or nonprofit, the continued influx of for-profit providers and the modest growth in nonprofit freestanding providers suggest that capital is accessible. 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 2008 cost-reporting year, the latest period for which both cost report data and claims data are available. An important driver of margins is providers' costs. To better understand the variation in margins across providers, we have also examined the variation in costs per day across providers.

Hospice costs

Hospice costs per day vary substantially by type of provider. This variation is one reason we observe differences in hospice margins across provider types in our margin analyses. In 2008, hospice costs per day were $141 on average across all hospice providers (Table 11-10).[12] 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 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 types of hospices, those with longer average lengths of stay have lower costs per day. 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. In 2008, indirect costs made up 33 percent of total costs for freestanding hospices, compared with 40 percent of total costs for home-health-based hospices and 42 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.[13]

Hospice margins

From 2002 to 2008, the aggregate hospice Medicare margin oscillated from as low as 4.6 percent to as high as 6.6 percent (Table 11-11, p. 276).[14] As of 2008, the aggregate hospice Medicare margin was 5.1 percent, down from 5.8 percent in 2007. Margins varied widely across individual hospice providers. In 2008, the Medicare margin was –16.2 percent at the 25th percentile, 4.4 percent at the 50th percentile, and 19.1 percent at the 75th percentile. Our estimates of Medicare margins from 2002 to 2008 exclude overpayments to above-cap hospices and are calculated based on Medicare allowable, reimbursable costs consistent with our approach in other Medicare sectors.[15,16]

We excluded nonreimbursable bereavement costs from our margin calculations. The statute requires that hospices offer bereavement services to the family members of their deceased Medicare patients. However, the statute prohibits Medicare payment for bereavement services (Section 1814(i)(1)(A) of the Social Security Act). 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 2008 aggregate Medicare margin by 1.5 percentage points. However, this 1.5 percentage point figure may overestimate the bereavement costs associated with hospice patients. Bereavement costs reported on the Medicare cost report may include more than just the costs of bereavement services furnished to families of hospice patients. As a community service, many hospices offer bereavement services to the community at large, including families of decedents who were not hospice patients.[17] According to some industry cost report experts, some hospices report the cost of bereavement services provided to the families of hospice and nonhospice patients combined on the Medicare cost report. We do not know how much of the bereavement costs on the Medicare cost report reflect services associated with nonhospice patients. But bereavement costs associated with hospice patients may not have as large an effect on margins as the 1.5 percentage points we estimated. Across most hospice types, bereavement costs estimated from the Medicare cost report are similar. Some differences, however, are observed between nonprofit and for-profit providers, with

TABLE 11–11

Hospice Medicare margins, 2002–2008

Category	Percent of hospices 2008	2002	2003	2004	2005	2006	2007	2008
All	100%	5.5%	6.6%	5.0%	4.6%	6.4%	5.8%	5.1%
Freestanding	67	9.2	10.9	8.3	7.2	9.7	8.7	8.0
Home health based	17	2.0	3.9	3.1	3.1	3.8	2.3	2.7
Hospital based	16	–9.1	–14.0	–11.6	–9.1	–12.7	–10.6	–12.2
For profit (all)	52	14.9	15.7	11.8	9.9	12.0	10.4	10.0
Freestanding	45	15.6	16.6	12.3	10.3	12.7	11.3	11.3
Nonprofit (all)	35	0.2	1.1	0.3	1.0	1.5	1.7	0.2
Freestanding	16	3.5	5.6	3.7	3.8	5.8	5.6	3.2
Government*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Urban	69	6.1	7.4	5.9	5.1	7.1	6.4	5.6
Rural	31	0.7	0.1	–2.3	0.2	0.8	1.4	1.3
Patient volume (quintile)								
Lowest	20	–6.3	–2.2	–6.1	–6.6	–5.5	–8.0	–9.8
Second	20	–3.7	–4.1	–1.2	–1.6	0.3	1.0	–1.6
Third	20	3.8	1.6	1.1	1.9	2.4	3.1	3.9
Fourth	20	4.6	3.3	2.8	4.4	5.8	5.9	6.3
Highest	20	7.2	9.6	7.2	5.9	8.1	7.1	6.0
Below cap	90	5.2	6.7	5.6	5.1	7.0	6.1	5.5
Above cap (excluding cap overpayments)	10	14.3	3.5	–3.4	–0.8	0.3	2.5	1.0
Above cap (including cap overpayments)	10	30.9	23.9	18.9	20.7	20.7	20.5	19.0

Note: N/A (not available). Margins for all provider categories exclude overpayments to above-cap hospices, except where specifically indicated. Margins are calculated based on Medicare allowable, reimbursable costs.
* Government-owned providers 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.

bereavement costs being about 2.0 percent and 1.1 percent of total costs, respectively. We do not know what effect, if any, bereavement services provided to the families of nonhospice patients has on the difference in costs between for-profit and nonprofit hospices. We intend to explore these issues in our future research.

We also excluded nonreimbursable volunteer costs from our margin calculations. When the hospice benefit was established, the Congress included in the statute a requirement that a hospice use "volunteers in its provision of care and services in accordance with standards set by the Secretary, which standards shall ensure a continuing level of effort to utilize such volunteers" (Section 1861(dd)(2)(E) of the Social Security Act). In addition, the statute requires that hospices keep records on the use of volunteers, including documenting the resulting cost savings and service expansions achieved. According to the regulation implementing the Medicare hospice benefit, the intent of the volunteer requirement was to ensure that the establishment of the hospice benefit "did not diminish the voluntary spirit of hospices" (Health Care Financing Administration 1983). To implement the volunteer requirement, the Secretary established that hospices must use volunteers to provide administrative services and patient care equal to at least 5 percent of total patient care hours provided by paid staff or contractors. While volunteers provide cost savings for hospices to the extent that they substitute for care or services that otherwise would be provided by paid staff, hospices incur costs in recruiting and training volunteers. According to conversations with some cost report experts, we believe that volunteer recruitment and training costs are captured in our margin estimates because they are reported in reimbursable cost centers. Only costs reported in the volunteer nonreimbursable cost center (e.g., mileage reimbursements) are excluded from our margins. If nonreimbursable volunteer costs were included in our margin calculation, it would reduce the aggregate Medicare margin by 0.3 percentage point.[18] According to survey data from NHPCO, hospices relied on 468,000 volunteers in 2009, with the majority (about 58 percent) providing assistance to patients and their families averaging 47 hours of service per volunteer per year (National Hospice and Palliative Care Organization 2010). About 21 percent of volunteers provided clinical support (e.g., clerical work) and another 21 percent provided general support (e.g., fundraising or board of directors) (National Hospice and Palliative Care Organization 2010).[19] Volunteers provided 5.6 percent of clinical staff hours in hospices in 2009 according to NHPCO. In future work, we intend to explore the rationale for Medicare's volunteer requirement for hospice providers in light of changes that have occurred in the hospice industry since the benefit's inception and consider whether the volunteer requirement is still warranted or should be altered or eliminated.

Freestanding, for-profit, and urban hospices have higher margins than their counterparts. In 2008, freestanding hospices had an aggregate Medicare margin of 8.0 percent, compared with home-health-based hospices at 2.7 percent and hospital-based hospices at –12.2 percent. The aggregate Medicare margin was considerably higher among for-profit hospices (10.0 percent) than among nonprofit hospices (0.2 percent). Among nonprofit hospices, differences were substantial in the margins for freestanding and provider-based hospices. In 2008, among freestanding hospices, nonprofit hospices had an aggregate Medicare margin of 3.2 percent, compared with 2.5 percent for home-health-based hospices and –11.0 percent for hospital-based hospices. The aggregate Medicare margin was higher for urban hospices (5.6 percent) than for rural hospices (1.3 percent). Generally, hospices' margins vary by the size of the provider; hospices with more patients have higher margins on average.

Hospice financial performance also varies depending on the length of stay and the setting where the patient receives care (Table 11-12). Hospices with longer stays have higher margins (with margins dropping some for hospices in the longest stay category because our model presumes the return of cap overpayments by hospices that exceed the cap). In addition, hospices with a high share of patients in nursing facilities and assisted living facilities have higher margins than other hospices. For example, in 2008 hospices in the top quartile in terms of the percent of their patients residing in nursing facilities and assisted living facilities had a 13.7 percent margin compared with a margin of 4.8 percent in the next highest quartile. Hospices in the lowest two quartiles had lower margins (2.8 percent and –3.3 percent). Some of the difference in margins among hospices with different concentrations 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, when comparing hospices with similar lengths of stay, those with more nursing and assisted living facility patients have higher margins, possibly reflecting cost savings from treating more patients in a centralized location. We

TABLE 11–12

Hospice Medicare margins by length of stay and patient residence, 2008

Hospice characteristic	Medicare margin
Average length of stay	
Lowest quintile	–10.1%
Second quintile	0.4
Third quintile	7.2
Fourth quintile	11.8
Highest quintile	7.5
Percent of stays > 180 days	
Lowest quintile	–11.0
Second quintile	1.9
Third quintile	5.1
Fourth quintile	14.4
Highest quintile	6.5
Percent of patients in nursing facilities or assisted living facilities	
Lowest quartile	–3.3
Second quartile	2.8
Third quartile	4.8
Highest quartile	13.7

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.

are continuing to conduct further analyses to explore cost differences across sites of care.

Differences in margins across freestanding, home-health-based, and hospital-based hospices are in part due to differences in indirect costs, which are higher for provider-based hospices and 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 their margins would be 8 to 11 percentage points higher and the industry-wide aggregate Medicare margin would be 2 percentage points higher.[20] 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.

Projecting margins for 2011

To project the aggregate Medicare margin for 2011, we model the policy changes that went into effect between 2008 (the year of our most recent margin estimates) and 2011. The policies include:

- a market basket update of 3.6 percent for fiscal year 2009, 2.1 percent for fiscal year 2010, and 2.6 percent for fiscal year 2011;
- the first two years of the seven-year phase-out of the wage index budget-neutrality adjustment factor, which reduced payments to hospices by 0.4 percent in fiscal year 2010 and by an additional 0.6 percent in fiscal year 2011;
- additional wage index changes, which reduced payments in fiscal years 2010 and 2011; and
- additional net costs in 2011 associated with the new face-to-face visit requirement for recertification of patients in the third benefit period and in subsequent benefit periods.

Taking into account these policy changes and assuming that hospice costs generally grow at a rate similar to forecasted input price growth, we project an aggregate Medicare margin for hospices of 4.2 percent in fiscal year 2011. This margin projection excludes the nonreimbursable costs associated with bereavement services and volunteers (which would lower the aggregate margin at most by 1.5 and 0.3 percentage points, 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 overall aggregate Medicare margin by as much as 2 percentage points).

How should Medicare payments change in 2012?

Our indicators of payment adequacy are generally positive. The Commission believes hospices can operate within the Medicare payment system with a modest update in fiscal year 2012.

Update recommendation

RECOMMENDATION 11

The Congress should update the payment rates for hospice for fiscal year 2012 by 1 percent.

RATIONALE 11

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, average length of stay, and total hospice payments have also increased. Access to capital appears adequate. The projected 2011 aggregate Medicare margin is 4.2 percent.

IMPLICATIONS 11

Spending

- Under current law, hospices would receive an update in fiscal year 2012 equal to the hospital market basket index (currently estimated at 2.6 percent). Our recommendation for a 1 percent update in fiscal year 2012 would decrease federal program spending by between $50 million and $250 million over one year and by less than $1 billion over five years.

Beneficiary and provider

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

Endnotes

1 When first established under the Tax Equity and Fiscal Responsibility Act of 1982, 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.

2 The Patient Protection and Affordable Care Act of 2010 (PPACA) makes changes to the annual update to hospice payments in future years. Hospice payments will continue to be updated based on the hospital market basket, subject to certain adjustments stipulated by PPACA. Beginning in fiscal year 2013, a productivity adjustment will be applied to the market basket update. The market basket also will be reduced by an additional 0.3 percentage point in fiscal year 2013 and potentially an additional 0.3 percentage point in each fiscal year from 2014 to 2019 if certain targets for health insurance coverage among the working age population are met.

3 The average annual payment cap is calculated for the period November 1 through October 31 each year. For the year ending October 31, 2008, the cap was about $22,386. 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, each hospice counts the fraction that represents the portion of the beneficiary's total hospice stay spent in that hospice.

4 The most recent cap threshold for cap year ending October 31, 2010, is $23,874.98.

5 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.

6 This count of SNF-based hospices does not include freestanding hospices that are owned by a company that also owns nursing facilities. While we do not have an estimate of the number of freestanding hospices that are part of these types of joint ownership arrangements, joint ownership relationships exist among some hospice and nursing home chains.

7 The number of hospital-based hospices may be understated and the number of home-health-based hospices may be overstated, because some hospices that are part of hospital-based home health agencies may report being home health based rather than hospital based.

8 Not mentioned in the text, Alaska and Nevada also experienced substantial growth in the number of hospices in percentage terms (more than doubling) but a modest increase in the raw number of providers (from 1 in 2000 to 5 in 2009 for Alaska and from 7 in 2000 to 19 in 2009 for Nevada).

9 The Agency for Healthcare Research and Quality's (AHRQ) National Healthcare Quality Report includes aggregate statistics on certain hospice quality measures based on Family Evaluation of Hospice Care data supplied by the National Hospice and Palliative Care Organization (NHPCO). The focus of the measures has included family perceptions of pain management, consistency of care with patients' wishes, and timeliness of referral to hospice. The data are for the subset of hospices that submit Family Evaluation of Hospice Care data to NHPCO, which AHRQ reports reflects a nonrandom data collection and a 40 percent response rate (Agency for Healthcare Research and Quality 2009).

10 Part of the reason the Florida report card does not distinguish performance well among hospices may be the broad definition it uses of favorable performance. For example, on questions that asked the family to rate the overall care provided by the hospice or the response by hospice staff on weekends and evenings, there were five possible responses: excellent, very good, good, fair, and poor. The report card assigned stars based on the percentage of favorable responses, with favorable defined as a rating of good, very good, or excellent.

11 PEACE stands for prepare, embrace, attend, communicate, and empower.

12 In the cost-per-day calculation, costs reflect aggregate cost 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.

13 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.

14 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 the Medicare claims data. We present margins for 2008 (rather than 2009 like other sectors) because of time lags in the claims data. Currently, we have complete claims data for all hospices only for the 2008 cost-reporting year (which for some hospices includes part of calendar year 2009). For about 97 percent of hospices, we have complete claims data on Medicare payments for the 2009 cost-reporting year. In the future, we intend to explore whether there may be ways to minimize the time lag in the Medicare claims data to obtain an additional year of data on hospice payments for all providers.

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

16 The margin estimates for the period 2002–2005 in this report differ from the estimates for the same time period published in our June 2008 report. The margin estimates in this report exclude overpayments to above-cap providers and exclude Medicare nonreimbursable costs, whereas the prior margin estimates did not.

17 According to survey data from NHPCO, about 92 percent of hospices offer bereavement services to the community at large. Community members (i.e., survivors of decedents who were not enrolled in hospice) account for 18 percent of individuals receiving bereavement services from hospices (National Hospice and Palliative Care Organization 2010).

18 Fundraising costs are also considered nonreimbursable and are not included in our margin calculations. These costs amount to 1.5 percent of total costs.

19 Volunteers engaged in general support services (e.g., fundraising or board of directors) do not count toward the requirement that hospice volunteers provide services equal to at least 5 percent of patient care provided by paid staff or contractors.

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

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