CHAPTER 5

Medicare hospice policy issues

CHAPTER 5

Medicare hospice policy issues

Chapter summary

The Commission made recommendations in March 2009 to improve the hospice payment system, increase accountability in the benefit, and improve data collection. Since then, several steps have been taken to increase accountability and data collection via the Patient Protection and Affordable Care Act of 2010 (PPACA) and CMS administrative actions, while additional steps are pending. In addition, through PPACA, the Congress gave CMS the authority to revise the hospice payment system as the Secretary determines appropriate no earlier than fiscal year 2014.

The Commission has conducted additional analyses to support the hospice payment reforms and enhanced accountability measures we have recommended. We also have examined other areas of concern, including considering whether a different payment rate is warranted for hospice provided to patients living in nursing facilities and the policy implications of unusually high rates of live discharge among some hospice providers.

***Payment reform*—**In March 2009, the Commission recommended that the hospice payment system be reformed to better align payments with the cost of providing care throughout a hospice episode. Currently, Medicare makes a flat payment per day, even though patients receive more hospice visits at the beginning and end of an episode, with fewer visits in the middle of an episode. Consequently, long stays in hospice are more profitable than short

In this chapter

stays. To address the mismatch between payments and hospice service intensity, the Commission recommended that Medicare move away from the flat per diem payment to one that is higher at the episode's beginning and end and lower in the intervening period. Using currently available data, the Commission has estimated how the labor cost of hospice visits change over the course of a hospice episode. These data demonstrate the U-shaped pattern of labor costs throughout hospice episodes and offer policymakers the evidence needed to begin reforming the payment system. We present an illustrative example of a revised payment system that can be implemented now using existing data. Given the magnitude of hospice spending devoted to long-stay patients, who are more profitable under the current payment system than other patients, it is important that an initial step toward payment reform be taken as soon as possible.

***Accountability*—**Even with payment reform, there will still be a need to ensure that hospice providers comply with the benefit's eligibility criteria.

- ***Medical review***—Consistent with a Commission recommendation, PPACA required medical review of hospice stays exceeding 180 days for hospices with an unusually large share of long-stay patients. To date, CMS has not implemented that provision. The Commission's analysis of Medicare spending data for hospice stays exceeding 180 days shows that these expenditures are sizable and underscore the need for medical review of very long stays.

- ***Hospice live discharges*—**Eighteen percent of hospice patients in 2010 were discharged alive from hospice. Among some hospices, rates were much higher. Little is known about what happens to patients after they are discharged alive from hospice. The Commission's analysis of rates of live discharge and outcomes by beneficiary and provider characteristics supports the need to ensure that beneficiaries are appropriate candidates for hospice at initial admission and throughout long episodes.

***Payment for hospice care in nursing facilities*—**The Commission previously raised the issue of whether a different payment structure is needed for hospice care in nursing facilities. Our prior work has shown that hospices with more patients in nursing homes compared with other hospices have higher than average Medicare margins. In this chapter, we find that the majority of hospice care in nursing facilities occurs when the hospice provider has multiple patients clustered within individual nursing facilities, suggesting possible efficiencies (e.g., reduced travel time and mileage costs) from treating hospice patients in a centralized location. We also find that hospices provide fewer nurse visits but more aide visits to patients residing in nursing facilities compared with patients at home. Providing more

hospice aide visits to patients living in nursing facilities is counterintuitive and raises questions of duplicate payment. The nursing home room and board fees—paid largely from Medicaid funds or by patients and families—explicitly cover aide services provided by nursing facility staff to assist residents with their personal care needs (e.g., activities of daily living). We explore the potential for a reduction to the hospice payment rate for patients residing in nursing facilities in light of the overlap in responsibilities between the hospice and the nursing facility. ■

Medicare's hospice benefit

Medicare's hospice 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; aide and homemaker services; short-term hospice inpatient care (including respite care); drugs and supplies; physical, occupational, and speech therapy; and bereavement services for the patient's family.

Beneficiaries must "elect" hospice care for defined benefit periods; in doing so, they agree to forgo Medicare coverage for conventional treatment of the terminal illness. 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. 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. 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.

Under the Medicare hospice benefit, there are four types of care: routine home care, continuous home care, general inpatient care, and inpatient respite care. Routine home care, which can be provided in a variety of settings—including the patient's home, a nursing facility, an assisted living facility, and other types of facilities—makes up more than 97 percent of hospice days. Medicare makes a flat payment per day of about $153 (adjusted for differences in wage rates across geographic areas) for routine home care, regardless of whether the hospice staff visits the patient each day.

Beneficiary cost sharing for hospice services is minimal. There is no cost sharing 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 copayments from Medicare beneficiaries. ■

Background

The Medicare hospice benefit was established in 1983 to provide beneficiaries at the end of life with an alternative to conventional medical interventions. The benefit covers palliative and support services for terminally ill beneficiaries who have a life expectancy of six months or less (see text box). In 2011, more than 1.2 million Medicare beneficiaries received hospice services, and Medicare expenditures totaled about $13.8 billion.

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 the number of 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 in for-profit hospices than in nonprofit hospices across all diagnoses;

- anecdotal reports, obtained from a panel of hospice industry experts convened by the Commission, that some hospices admit patients who do not meet the Medicare hospice eligibility criteria (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.

Our analyses suggested that these trends were driven in part by a misalignment in Medicare's hospice payment system. Medicare generally makes a flat payment per day for hospice care, but hospice visits are more frequent at the beginning and end of an episode and less frequent in the middle. The mismatch between Medicare payments and hospice visit intensity throughout an episode distorts the distribution of payments across providers, making hospices with longer average stays more profitable than hospices with shorter average stays.

To address these issues, the Commission made recommendations in March 2009 to reform the hospice payment system, to ensure greater accountability in use of the hospice benefit, and to improve data collection and accuracy. In the intervening years, several steps have been taken to increase accountability and data collection via the Patient Protection and Affordable Care Act of 2010 (PPACA) and CMS administrative actions; additional steps are pending. In addition, through PPACA, the Congress gave CMS the authority to revise the hospice payment system as the Secretary determines appropriate no earlier than fiscal year 2014.

In this chapter, we conduct additional analyses to support hospice payment reform and enhanced accountability consistent with the Commission's recommendations. We also explore whether additional changes are needed with regard to Medicare payment for hospice care in nursing facilities. With respect to payment reform, we present a new analysis confirming that the labor costs of hospice visits vary in a U-shaped pattern within a hospice episode and demonstrate how a first step in payment reform is possible with existing data. In terms of accountability, we present a new analysis that underscores the importance of CMS implementing medical review of long hospice stays and new information on the phenomenon of live discharges from hospice. Finally, we explore the potential for a reduction to the hospice payment rate in nursing facilities due to the overlap in services provided by hospice staff and nursing facility staff.

Improving Medicare's payments for hospice services

In March 2009, the Commission recommended that Medicare improve its payments for hospice services by replacing flat per diem payments for routine home care with variable per diem payments that begin at a relatively higher rate and decline as the length of the episode increases, with an additional payment at the end of the episode near the time of death. This recommendation was based on Commission analyses suggesting that flat per diem payments over the course of an episode do not align well with hospice patients' relatively greater use of resources at the beginning and end of hospice episodes.[1] This misalignment between Medicare's payments and hospices' costs creates incentives for providers to enroll patients who are more likely to have long stays because those stays are more profitable than short ones (Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2008).

The Commission recommended these payment reform changes be budget neutral in the first year. The recommendation for budget neutrality reflects the purpose of the payment reforms, which is to improve payment accuracy within and across hospice episodes and make the distribution of payments more equitable across patients and providers. Whether the aggregate level of payments is at an appropriate level or merits adjustment is a separate question, which we consider each year through our payment update recommendations.

After the Commission's payment reform recommendation, PPACA gave the Secretary of Health and Human Services the authority to revise the hospice payment system in a budget-neutral manner as she determines appropriate as soon as 2014. To date, no regulatory action has been taken on payment reform, although CMS is sponsoring contract research studying the issue and has sought input from industry and other stakeholders.

Since the Commission made its recommendation, claims data on hospice visit patterns have become available. In the online appendixes to our 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 Medicare claims data

from July 2008 through 2009 on the number of hospice visits provided to beneficiaries. Analyses of these data confirmed our earlier findings—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. These analyses support the need for a payment system that is better aligned with the U-shaped pattern of visits during a hospice care episode.

Beginning in January 2010, more detailed claims data on hospice visits became available, including information on the date and duration of visits. As demonstrated below, these data provide the building blocks for resource use estimates, which have the potential to support a revised payment system. In 2011, hospice spending on patients with stays greater than 180 days totaled nearly $8 billion, more than half of all Medicare's hospice spending that year. Given the magnitude of hospice spending devoted to long-stay patients, who are more profitable than other patients under the current payment system, it is important that an initial step toward payment reform be taken as soon as possible.

Estimating labor costs associated with hospice visits

In this analysis, we used hospice visit time data from Medicare claims for hospice services, combined with data on wage rates and benefits from the Bureau of Labor Statistics (BLS), to estimate the labor costs hospices incur in providing hospice visits. This analysis allowed us to examine the relative resource use within individual hospice episodes and across hospice episodes for patients with different lengths of stay.

In estimating labor costs, we focused on patients receiving routine home care.[2] Routine home care comprises more than 97 percent of hospice days and almost 90 percent of hospice payments. Routine home care can be provided in a variety of settings, including the patient's home, an assisted living facility, a nursing facility, and a hospice facility. In the claims data for routine home care, hospices report the date and length of visits provided by six types of staff: nurses; aides; social workers; and physical, occupational, and speech therapists.[3] The visit time reported on the claim reflects the time spent providing care to the beneficiary (or to the family, in the case of a social worker's visit). Visit time does not include travel time, documentation time, and time spent in interdisciplinary group meetings. In addition to visits, the claims data include information on social workers' phone calls.[4] We combined the data on the six types of visits with social workers' phone calls; for ease of reference, we refer to the combination of these services as "visits."

To estimate labor costs, we multiplied the visit time from the claims by the average wage rate for the type of staff providing the visit and adjusted it to include an estimate of the average benefits paid by employers using BLS data. Through this calculation, we estimated the labor cost of visits for each routine home care day in a beneficiary's hospice episode. Our analysis focused on beneficiaries who enrolled in hospice for the first time between May 1, 2010, and November 30, 2011, and who were discharged by November 30, 2011. If a patient was discharged alive and reentered hospice during the study period, we treated all of that patient's hospice care as one episode.

Labor cost of hospice visits is higher at beginning and end of an episode

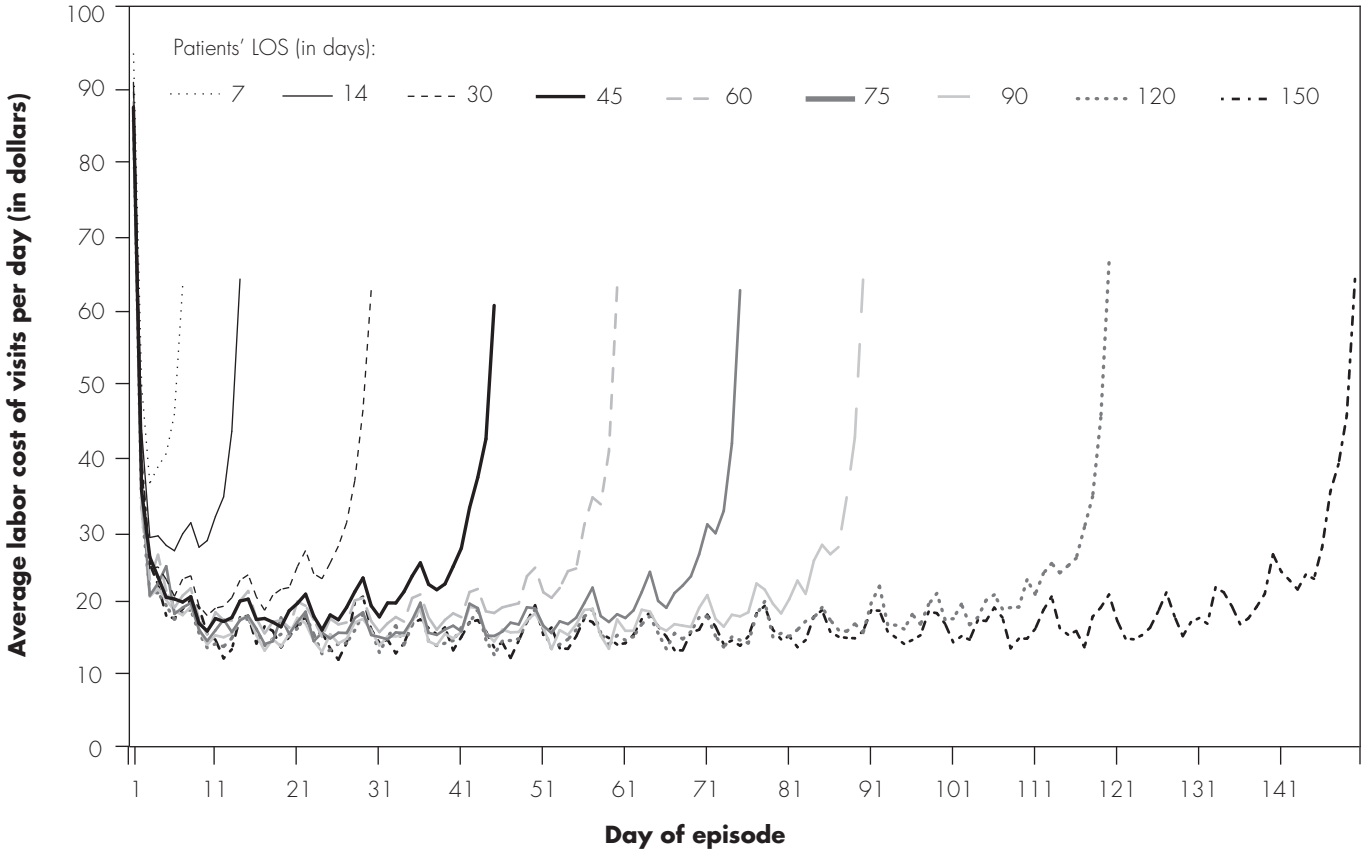
Our analysis shows that the average labor cost of visits per day follows a U-shaped trajectory for patients with different lengths of stay, suggesting that episodes of almost all lengths generally have higher visit costs at the episode's beginning and end. Figure 5-1 (p. 124) depicts the average labor cost of visits for each day in the hospice episode for patients discharged deceased with lengths of stay ranging from 7 days to 150 days. For patients with lengths of stay greater than 14 days, the average labor cost per day followed a similar trajectory. Average labor cost per day was highest on the first day, declined for the next few days, and began to flatten out by day 7 to day 10. Average labor cost per day then remained relatively flat until the last seven days of life, when labor cost increased substantially. Patients with lengths of stay of 7 days or 14 days also showed a U-shaped trajectory; however, the average labor cost per day in the middle of the episode was higher than for patients with stays of more than 14 days.

Figure 5-2 (p. 125) includes more detail on shorter stays, showing a U-shaped trajectory for stays ranging from 4 days to 14 days. Patients with different lengths of stay in this range all had higher visit intensity at an episode's beginning and end, but the average labor cost of visits per day overall was higher the shorter the stay. Stays of 1 day to 3 days had the highest average labor cost per day, with 1-day stays having the highest cost of all.

We also found that the average labor cost of visits throughout an episode was similar for patients with different primary diagnoses (Figure 5-3, p. 126). Across all diagnoses examined, we observed higher labor cost of visits per day at an episode's beginning and end near

FIGURE 5–1

Average labor cost of visits by day for hospice patients discharged deceased with selected lengths of stay (7–150 days)



Note: LOS (length of stay). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged deceased by November 30, 2011. The figure reflects only days the patient received routine home care. Length of stay reflects the number of days the beneficiary received hospice care during the time period.

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

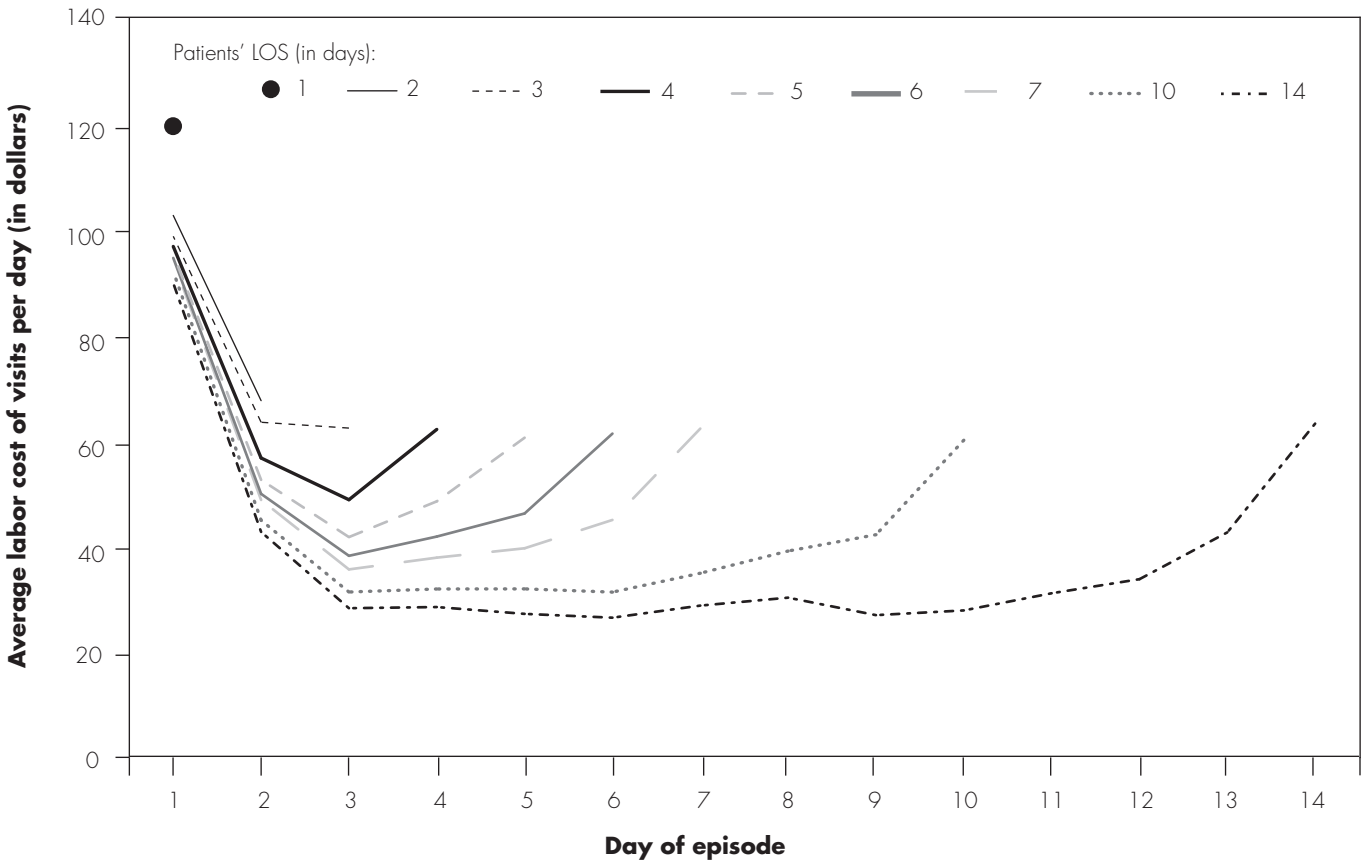
the time of death, with lower costs in the middle. Figure 5-3 (p. 126) demonstrates that length of stay, rather than diagnosis, is the main driver of visit costs.

By combining the data for all beneficiaries across all lengths of stay and type of discharge (alive or deceased), we obtain an overall picture of the average labor cost of visits for each day in a hospice stay. On average, labor cost was highest on the first day of the stay, exceeding $86 (Figure 5-4, p. 127). Average labor cost per day declined rapidly in the first few days of the stay (falling from about $37 on day 2 to $23 on days 3–4, and to $21 on days 5–7). Labor cost per day continued to decline modestly through 30 days (an average of about $18 on days 8–14 and $17 on days 15–30). After day 30, the average labor cost of visits was relatively flat at roughly $15 per day. Labor cost per day increased substantially in the last seven days of life from an average of $30 six days before death to about $64 on the day of death.

Given the pattern in these data, it is clear why longer stays in hospice are more profitable than shorter stays. Medicare pays a flat rate of about $153 per day for routine home care in fiscal year 2013, but the resource use associated with nurses, aides, social workers, and therapists is greater at the beginning and end of episodes. At the same time, resource use is much lower during the middle portion of episodes. As a result, providers' profit

FIGURE 5–2

Average labor cost of visits by day for hospice patients discharged deceased with selected lengths of stay (1–14 days)



Note: LOS (length of stay). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged deceased by November 30, 2011. The figure reflects only days the patient received routine home care. Length of stay reflects the number of days the beneficiary received hospice care during the time period.

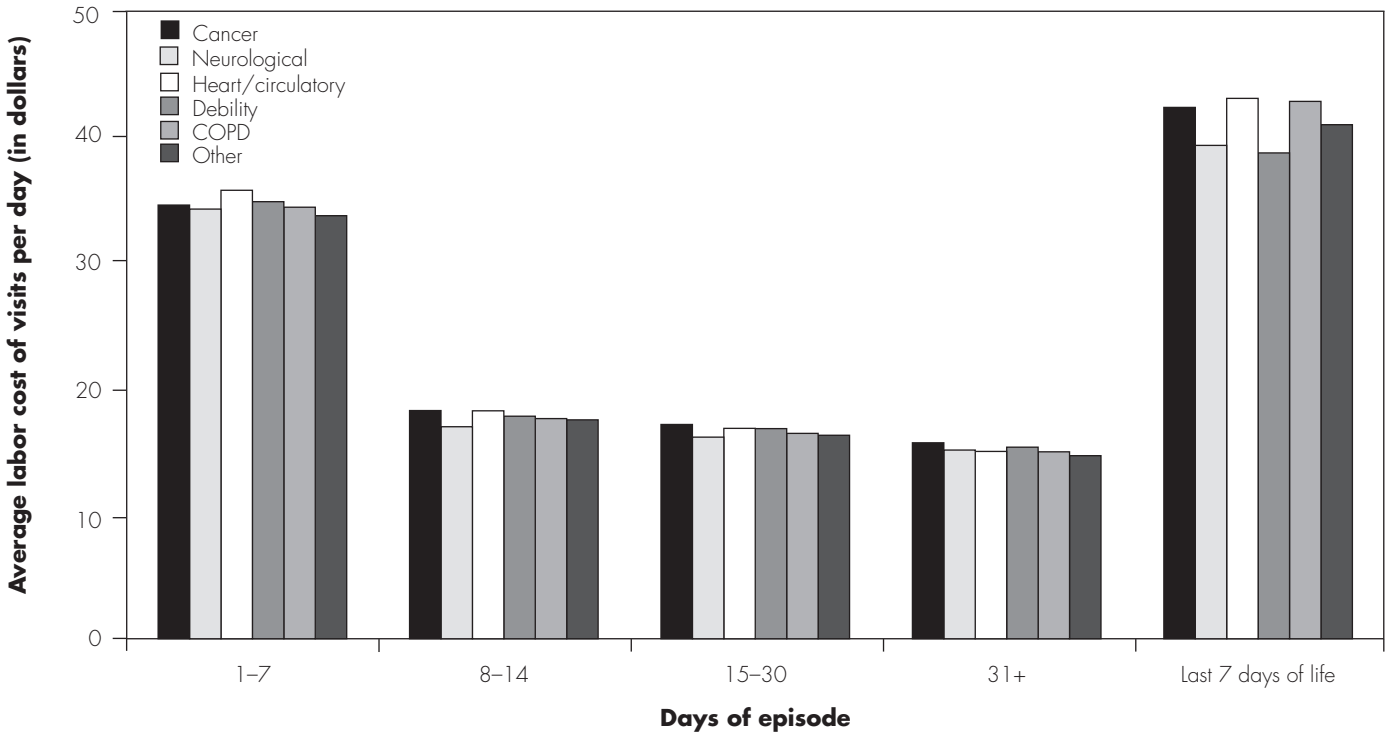
Source: MedPAC analysis of Medicare hospice 100 percent standard analytic file and the common Medicare enrollment file from CMS.

margins are higher during the middle portion of episodes. Episodes that are longer have more of the profitable "middle days." The result is that long stays in hospice are more profitable than short stays. As the Commission has noted previously, the incentives for long stays are a concern because they may have spurred some providers to pursue business models that enroll patients likely to have long stays who may not meet the hospice eligibility criteria. This mismatch between Medicare payments and hospice visit intensity throughout an episode also distorts the distribution of payments across patients and providers, making hospices with longer stays more profitable than hospices with shorter stays.

Using available data to improve hospice payments: An illustrative example

As described above, available data on the average labor cost of visits offer policymakers the evidence needed to begin reforming the payment system. Some industry stakeholders have raised concerns about the comprehensiveness of available data and have urged that payment reform wait until more data are available. For example, they point out that the claims data reflect only the labor costs associated with visits by nurses, aides, social workers, and therapists and do not reflect nonlabor costs such as drugs, supplies, and equipment. They also express concern about the lack of data on chaplain visits. Some have also expressed concern about Medicare cost

FIGURE 5–3 **Average labor cost of routine home care visits per day is similar across diagnoses**



Note: COPD (chronic obstructive pulmonary disease). Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The figure reflects only days the patient received routine home care. Data for the last seven days of life are excluded from all bars except the ones labeled "last 7 days of life."

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

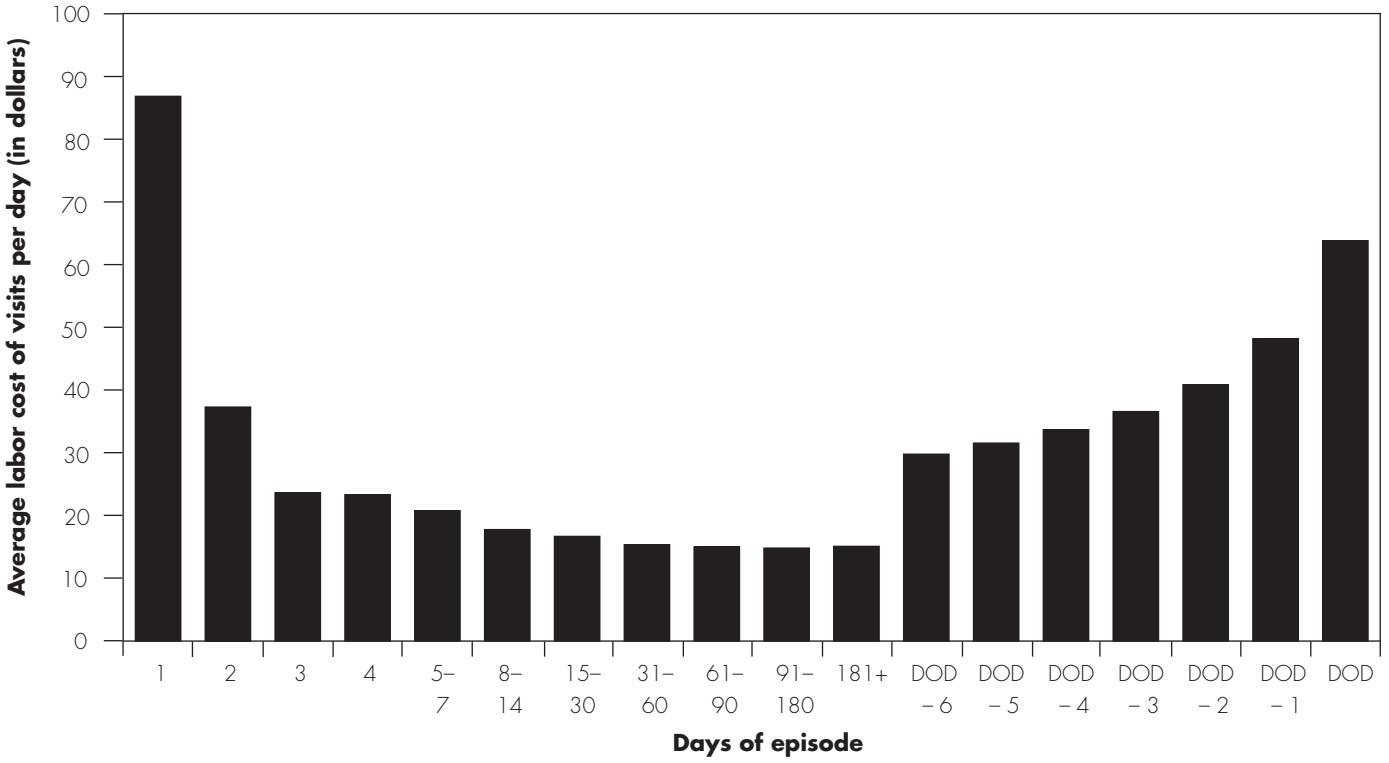
report data, particularly the accuracy of the data. In addition to concerns voiced by industry, CMS notes that most hospice claims identify only a primary diagnosis but not secondary diagnoses. In the fiscal year 2013 hospice *Federal Register* notice, CMS stated that hospices are required to report patients' secondary diagnoses, noting that the current lack of such information limits the agency's ability to assess whether case-mix adjustment is needed.

Despite the concerns voiced about existing data, a first step on payment reform is possible using available data. The Commission has developed an approach that relies almost entirely on claims data and BLS wage data, with very minimal use of cost report data. This approach should allay concerns about the accuracy of the cost report data. Our approach also addresses the lack of patient-level data on nonlabor costs and chaplain visits by adjusting only a portion of the hospice base rate rather than the full base rate. Our approach does not address the lack of data on secondary diagnoses on claims; however, we note that more expansive diagnosis information might be obtained from claims data for prehospice services. Also, as shown previously, we observe only modest differences in the average labor cost of visits by episode day across patients with different primary diagnoses.

Using data currently available, we developed an approach to setting hospice payment rates that better align with the resources used during a patient's hospice episode. To construct our illustrative payment model, we used our estimates of average labor cost of visits based on the visit time data from patient claims and the BLS data on wage rates and benefits. We assigned hospice days to one of five categories: days 1–7, days 8–14, days 15–30, days 31 and beyond, and the last 7 days of life.[5] Although our analysis

FIGURE 5–4

Average labor cost of routine home care visits per day across all patients



Note: DOD (date of death). DOD – 1 means one day before the date of death. Data for the last seven days of life are reported only in the seven DOD bars. Data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The figure reflects only days the patient received routine home care.

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

found that the first day of a hospice episode has much higher costs than subsequent early days, we chose to group days 1–7 together to avoid creating an extremely high payment rate on day 1 that might encourage 1-day stays. We estimated the average labor cost of visits per day for days 1–7, days 8–14, days 15–30, and days 31 and beyond, excluding any days in these categories that were the last 7 days of life. We also estimated the average additional labor cost for the last seven days of an episode compared with the same days of episodes that were not "last days." (This approach allowed us to estimate the additional costs of the last seven days of a stay to calculate a fixed add-on payment.) We converted the average labor cost per visit for the five groups into relative values and applied these values to the hospice base rate for routine home care to calculate the effective payment rate.[6] We adjusted the new payment rates to achieve budget neutrality in the first year under the assumption of no behavioral change.

Since the claims data do not include information on nonlabor items (e.g., drugs, supplies, and equipment) and chaplain visits, we applied our illustrative relative weights to a portion of the hospice payment rate based on the share of hospice costs attributable to those services for which we have data. We estimated that labor costs associated with the six categories of personnel included in the claims data account for at least 68 percent of hospices' direct costs. Accordingly, we adjusted 68 percent of the hospice payment rate for routine home care by our illustrative relative weights; the remaining 32 percent of the payment was unchanged.

Table 5-1 (p. 128) shows the payment weights and payment rates that resulted in our illustrative payment model. Compared with the current flat per diem payment rate, our model's per diem rate increases for the first 14 days of the stay, declines for days 15 and beyond, and is

TABLE 5–1

Illustrative example of payment weights and per diem payment rates under a U-shaped cost curve approach

Days in episode	Percent of RHC days, 2011	Average labor cost of visits per day	Relative weight	Illustrative RHC per diem payment rate, weights applied to 68% of base rate ($153.45)	Percent change in payment rate
1–7	5%	$34.59	1.97	$254.77	66%
8–14	4	17.78	1.01	154.82	1
15–30	8	16.64	0.95	148.07	–4
31+	78	15.08	0.86	138.78	–10
Last 7 days of life	5	20.11 plus applicable amount above	1.15 plus applicable weight above	119.63 plus applicable rate above	68–144 depending on LOS

Note: RHC (routine home care), LOS (length of stay). Payment rates in the chart are illustrative of an approach to revising the hospice payment system using currently available data. Rates apply only to routine home care; rates for other levels of care are unchanged. The add-on payment for the last seven days of life applies only to patients discharged deceased and is added on to the daily payment rate that would apply for those days if they were not the last seven days.

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS and the wage rates and benefits from the Occupational Employment Statistics and the Employer Cost for Employee Compensation from the Bureau of Labor Statistics.

TABLE 5–2

Effects of illustrative payment system vary as a function of length of stay

Category of hospice	Percent change in total payments
Share of stays over 180 days (in quintiles)	
Lowest quintile	6.7%
Second quintile	2.9
Third quintile	–0.3
Fourth quintile	–2.0
Highest quintile	–3.7
Freestanding	–0.9
Home health based	3.5
Hospital based	4.1
For profit	–1.5
Nonprofit	1.6
Urban	–0.1
Rural	1.0

Note: Estimates of effects reflect the change in routine home care payments providers would receive under our illustrative payment model as a percent of all revenues providers receive from Medicare (for routine home care and other types of hospice care). Payment estimates are before application of the Medicare hospice cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

higher in the last 7 days of life regardless of length of stay. Our model's per diem payment rate is 66 percent higher than the current payment rate for the first 7 days of the stay and 1 percent higher than the current rate for days 8–14. However, the per diem payment rate in our model is 4 percent lower than the current rate for days 15–30 and 10 percent lower for days 31 and beyond. In our model, the hospice would receive a fixed add-on payment of about $120 per day on each of the last seven days of the hospice patient's life. These add-on payments, when added to our model's per diem payment rates for those days, result in total payments during the last seven days of life that are between 68 percent and 144 percent higher than current payments.[7]

Variable per diem payments, such as the ones illustrated here, would better align payments with providers' costs, thereby reducing the incentives for hospices to seek out very-long-stay patients and to avoid patients who are likely to have shorter stays. While the illustrative per diem payment rates for days 15 and beyond are lower than current per diem rates, combined total payments for many episodes are higher in our model than under current policy. In our model, higher per diem payment rates in the first 14 days of an episode and add-on payments for the last 7 days of life result in higher total payments than under current policy for all episodes with lengths of stay

TABLE 5–3 **Effects of illustrative payment system vary within each hospice type**

Category of hospice	Percent of hospices in category with: Payment decline > 2 percent	Payment change < 2 percent	Payment increase > 2 percent
All	30%	31%	39%
Share of stays over 180 days			
Lowest quintile	1	7	92
Second quintile	2	27	71
Third quintile	10	69	21
Fourth quintile	47	47	6
Highest quintile	90	6	4
Freestanding	39	35	25
Home health based	10	23	67
Hospital based	6	21	73
For profit	44	35	21
Nonprofit	11	28	61
Urban	33	34	33
Rural	23	25	52

Note: Estimates of effects reflect the change in routine home care payments providers would receive under our illustrative payment model as percent of all revenues providers receive from Medicare (for routine home care and other types of hospice care). Payment estimates are before application of the Medicare hospice cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

up to 130 days for patients discharged deceased and up to 73 days for patients discharged alive. For longer episodes, total payments under our model are lower than under current policy. In our model, payment weights are set to achieve budget neutrality so overall aggregate spending is unchanged. As noted previously, we maintain budget neutrality in our model for routine home care because this effort is intended to improve payment accuracy for routine home care within and across hospice episodes and distribute these payments more equitably across patients and providers. Whether changes are needed in the aggregate level of payments for routine home care, as well as other levels of care, is a separate issue that could be considered in the future.

The effect of the illustrative payment rates on total payments to providers varies by hospice length of stay (Table 5-2). Aggregate payments to the 20 percent of hospices with the smallest share of stays exceeding 180 days would increase by 6.7 percent, while aggregate payments to the 20 percent of hospices with the greatest share of stays exceeding 180 days would decrease by 3.7 percent. Aggregate payments to for-profit hospices would decline by 1.5 percent, while payments to nonprofits would increase by 1.6 percent. Aggregate payments to freestanding facilities would decline by 0.9 percent, while payments would increase by 3.5 percent for home-health-based hospices and by 4.1 percent for hospital-based hospices. Rural hospices would see their aggregate payments increase by 1.0 percent. These shifts are driven by the payment system's impact as a function of length of stay: Freestanding and for-profit hospices tend to have patients with longer hospice stays than provider-based and nonprofit hospices and would see a decrease in their payments on average. Nonprofit hospices, provider-based hospices, and rural hospices—which traditionally have had lower Medicare margins—would see an increase in their payments on average.

Within each provider category, the effect of the payment system changes would vary across individual providers based on the extent to which the provider tends to serve patients with long stays. For each category of hospice, Table 5-3 shows the proportion of hospices that would

TABLE 5–4 **Effects of illustrative payment system revision on margins by length of stay for freestanding, below-cap hospices**

Hospices grouped by share of stays >180 days (in quintiles)	2010 margin	Simulated 2010 margin if revenues changed by the amount projected in our illustrative model
Lowest quintile	–1.3%	4.0%
Second quintile	5.9	7.8
Third quintile	12.2	11.7
Fourth quintile	15.8	14.0
Highest quintile	16.6	13.5

Note: The 2010 simulated margins reflect our estimate of what the 2010 margins would be if payments to providers changed by the percent estimated in our illustrative payment model. Margins are before the application of the Medicare aggregate cap.

Source: MedPAC analysis of hospice claims and cost report data from CMS.

experience payment changes of various magnitudes (i.e., payments increase by more than 2 percent, change by less than 2 percent, and decrease by more than 2 percent). In our payment model, a majority of hospices that are hospital- or home-health-based, nonprofit, and rural experience a payment increase greater than 2 percent. In comparison, a smaller proportion (between 21 percent and 33 percent) of freestanding, for-profit, and urban hospices experience a payment increase greater than 2 percent.

Since one objective of this type of reform is to lessen the relationship between length of stay and profitability that exists under the current payment system, we simulated the effect of the illustrative relative weights on 2010 margins by length of stay for freestanding providers that did not exceed the aggregate payment cap under current policy. We focused on freestanding providers because, unlike their institution-based counterparts, their margins are not affected by the allocation of overhead from the parent provider. We focused on below-cap hospices so that we could focus exclusively on profitability related to the underlying payment system and not the aggregate cap.[8] Under the current payment system, freestanding below-cap providers in the lowest quintile in terms of the share of stays greater than 180 days had an aggregate margin of –1.3 percent in 2010, while providers in the highest quintile of share of stays greater than 180 days had an aggregate margin of 16.6 percent (Table 5-4).

With changes in payments of the magnitude estimated in our illustrative example, the gap in margins across providers with different lengths of stay would narrow but not be eliminated. In our example, the payment increases for shorter episodes would be large enough to push the margins of freestanding providers in the lowest length-of-stay quintile from negative to positive, while the aggregate margin of providers in the two longest length-of-stay quintiles would decline about 2 to 3 percentage points.

Our margin data suggest that payment rate changes larger than those made under our model would likely be necessary to eliminate the higher profitability of longer stays. Regardless of the initial magnitude, however, our approach takes a first step in the direction of realigning payments commensurate with resources used rather than a flat payment per day. This approach has the strength that it could be done now with additional changes possible as more data become available. For example, CMS has sought comment from the industry on potential additional data collection, including possibly claim-level visit reporting by more types of personnel (chaplains and nutritional or other counselors) and claim-level reporting on durable medical equipment, supplies, and drugs. A decision on whether such data will be collected has not been announced. Even if such data were to be collected in the future, that possibility should not delay a first step toward payment reform by adjusting a portion of the payment rate based on the current visit data.

Improving hospice accountability

Even with payment reform, there will still be a need to ensure that hospice providers comply with the benefit's eligibility criteria. While payment reform will lessen the difference in profitability by length of stay, long stays are likely to remain profitable. Our prior reports found that additional administrative controls are necessary to balance the incentives for very long stays in hospice. In addition, while there are many reasons for live discharges from hospice, unusually high rates of live discharge can be a symptom of questionable provider behavior with respect to patient eligibility. In this section, we present new analysis that underscores the importance of CMS implementing medical review of very long stays to ensure that providers are complying with the eligibility criteria. This section also examines the issue of live discharges from hospice, focusing on patients with long stays. Mechanisms to increase provider accountability, including monitoring for

providers with particularly high rates of live discharge, could improve fiscal responsibility in the hospice program.

Medical review and other administrative actions

Our June 2008 and March 2009 reports found that the hospice benefit lacked adequate administrative and other controls to check the incentives for long stays in hospice (Medicare Payment Advisory Commission 2009, Medicare Payment Advisory Commission 2008). These reports raised concerns that the structure of the hospice payment system, which makes long stays more profitable than short stays, has led to substantial growth in very long hospice stays over the past decade. Since 2000, we have seen substantial growth in the longest hospice stays, while short stays have remained unchanged. For example, the 90th percentile in length of stay among Medicare decedents increased between 2000 and 2011 from 141 days to 241 days. Furthermore, length of stay is substantially higher among some diagnoses; for example, in 2011, the 90th percentile in length of stay among decedents was 423 days for patients with neurological conditions and 318 days for those with chronic obstructive pulmonary disease, compared with 241 days for hospice decedents overall. Hospice providers that exceed Medicare's annual aggregate spending cap for hospice services typically have substantially longer stays and higher live discharge rates compared with other hospices, suggesting that they enroll patients likely to have long stays who may not meet the eligibility criteria. While below-cap hospices as a group have fewer patients with stays exceeding 180 days, substantial variation exists in the prevalence of stays beyond 180 days among below-cap providers.

A Commission-convened panel of hospice medical directors and executives in the fall of 2008 provided anecdotal information suggesting that some hospices were enrolling patients who did not meet the eligibility criteria (Medicare Payment Advisory Commission 2009). While panelists discussed the challenges all hospices face in predicting life expectancy for certain diseases, they described behavior by a subset of providers that appeared to go beyond the inherent difficulties of predicting life expectancy and suggested possibly intentional disregard of the Medicare hospice eligibility criteria by some providers. Panelists also indicated that a lack of engagement in the certification process among some hospice physicians contributed to lax compliance with the eligibility criteria among some hospices. On the basis of the panel's input, the Commission recommended several steps to increase accountability, including:

- a requirement that certifications and recertifications include a physician narrative describing the clinical basis for the prognosis,
- a requirement for a hospice physician or nurse practitioner to have a face-to-face visit with a patient before the 180th day for recertification and subsequent recertifications, and
- a recommendation that CMS conduct medical review of all stays beyond 180 days for providers for whom these stays make up an unusually large share of their caseload.

Measures consistent with the first two parts of this recommendation—physician narrative and face-to-face visit requirements—have been adopted through PPACA and CMS administrative action (effective October 2009 and April 2011, respectively). Both of these initiatives are intended to strengthen hospice physician engagement in the certification and recertification processes. PPACA also includes, consistent with the third part of our recommendation, a CMS medical review requirement focused on hospices with an unusually large share of long-stay patients. To date, CMS has not implemented the medical review provision.

In 2011, Medicare hospice spending on patients with stays that exceeded 180 days was nearly $8 billion, more than half of all Medicare hospice spending that year (Table 5-5, p. 132).[9, 10] These patients accounted for about 20 percent of Medicare beneficiaries who used hospice in 2011. The significant amount of Medicare hospice expenditures on patients with stays exceeding 180 days underscores the need for CMS to have effective medical review procedures to help ensure that the benefit eligibility criteria are being followed. Because of uncertainty in predicting life expectancy, it is expected that some hospice stays will exceed 180 days. However, the current incentives in the payment system for long stays, the anecdotal reports of questionable enrollment practices by some hospices, and the wide variation in length of stay across providers suggest that there are vulnerabilities in the current system that need strengthening. Implementing the PPACA medical review provision would be a valuable step in that direction.

In 2011, Medicare spent about $2.7 billion on additional hospice care for patients who had already received at least one year of hospice (Table 5-5). Hospice stays that surpass one year raise questions about whether hospice is being used as a long-term care benefit and suggest that additional steps may be warranted beyond the PPACA

TABLE 5–5

Over half of Medicare hospice spending in 2011 was on patients whose stays exceeded 180 days

Category	Medicare hospice spending, 2011 (in billions)
All hospice users in 2011	$13.8
Beneficiaries with LOS > 180 days	7.9
Days 1–180	2.6
Days 181–365	2.5
Days 366+	2.7
Beneficiaries with LOS ≤ 180 days	5.9

Note: LOS (length of stay). LOS reflects the beneficiary's lifetime LOS as of the end of 2011 (or at the time of discharge in 2011 if beneficiary is not enrolled in hospice at the end of 2011). All spending reflected in this table occurred only in calendar year 2011. Numbers may not sum to totals due to rounding.

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS.

medical review provision and the other accountability measures already implemented (i.e., physician narrative and face-to-face visit requirement). One question that could be explored is whether there should be a patient-level length-of-stay threshold (e.g., at one year or two years) that triggers medical review for any provider. For example, it might be beneficial once length of stay reaches a certain threshold to consider instituting a new policy requiring hospice providers to submit information to the Medicare claims-processing contractors for medical review of a patient's hospice eligibility before Medicare makes additional payments to the hospice for that patient.

Live discharge from hospice

Building on research in previous Commission reports, we conducted a closer examination of the issue of patients who are discharged from hospice alive, particularly focusing on patients discharged alive after long stays. The Commission previously reported on the frequency of live discharges (Medicare Payment Advisory Commission 2013a), but little is known regarding what happens to patients after the discharge. We have expanded previous analyses by examining patterns of patients' return to hospice, their life span after discharge, variations in patterns by hospice and patient characteristics, and service use and associated expenditures after patients are discharged alive (see text box).

There are many reasons live discharges can occur, and some live discharges are expected. Some beneficiaries change their perspective about the type of care they want and decide to revoke hospice to pursue conventional care, including potentially life-prolonging therapies (Johnson et al. 2008). In other cases, if a beneficiary or family member deviates from the beneficiary's plan of care, the hospice is not required to cover services, leading the patient or the family to revoke hospice rather than bear the cost.[11] Other beneficiaries experience improved health in hospice, often referred to as the "hospice effect," or their conditions become more stable to the point that clinicians no longer estimate a life expectancy of six months or less. Accurate prediction of survival time is difficult and has been shown to be particularly difficult for patients with some noncancer illnesses, which are typically characterized by exacerbations and remissions (Kutner et al. 2004).[12]

However, unusually high rates of patients discharged alive among some providers raise concerns about questionable business practices and potential quality-of-care issues. In particular, some hospices may pursue business models that seek patients likely to have long stays, even if they may not meet the hospice eligibility criterion of having a life expectancy of six months or less. Higher rates of live discharge are one indication of this practice, as providers may discharge these long-stay patients when the hospice incurs liabilities toward the payment cap. The Commission previously reported evidence of longer stays

TABLE 5–6

Distribution of live discharge rates among all hospices, 2010

Quartiles of providers ranked by live discharge rate	Average live discharge rate
First quartile	11%
Second quartile	17
Third quartile	25
Fourth quartile	38

Note: Live discharge rate is the rate among all hospice episodes in 2010, followed through April 2012.

Source: Acumen analysis of Medicare claims data.

Methodology used to examine issues associated with live discharge

We worked with Acumen, LLC, to construct hospice episodes from claims for all episodes from 2008 through 2010. For each of the three years, we identified beneficiaries with a first live discharge in that year and defined the follow-up period as 365 days after discharge or until the beneficiary's death, whichever was earlier. We created an additional cohort with a first episode ending in live discharge in 2008 and analyzed claims from 2008 through April 2012. We limited the population to beneficiaries enrolled in Medicare Part A and Part B during their hospice episodes and the entire follow-up period. We excluded patients who died the same day as the live discharge with no claim for any other services. We also performed a set of regression analyses to control for patient characteristics (sex, age, diagnosis at admission, and length of stay before discharge) and hospice characteristics (tax status, provider type, urbanicity, chain affiliation, regional location, cap status, percentage of cancer episodes, and percentage of neurological episodes). ■

and higher frequencies of patients being discharged alive among above-cap hospices compared with other hospices (Medicare Payment Advisory Commission 2013a).

Live discharges more common among certain types of providers

Of the 1.2 million hospice episodes in 2010, 18 percent ended in live discharge.[13] Live discharge rates varied widely by provider, ranging from 11 percent in the quartile with the lowest rates to 38 percent in the quartile with the highest rates (Table 5-6).

Certain provider characteristics were associated with higher rates of live discharge. For-profit hospices were about 20 percent more likely than nonprofit hospices to discharge patients alive, and above-cap hospices were almost twice as likely as below-cap hospices to discharge patients alive (Table 5-7, p. 134). We also found that patients discharged alive from above-cap hospices were more than 20 percent more likely to be alive 180 days after discharge than patients discharged alive from below-cap hospices.

Beneficiaries with noncancer diagnoses were more likely to be discharged alive. For example, the live discharge rate among debility patients was almost three times higher than that of patients with lung and other chest cavity cancers. Overall, the live discharge rate for noncancer diagnoses was 1.7 times higher than the rate for cancer diagnoses. However, we found associations between live discharge rates and certain provider characteristics that were significant even after controlling for the proportion of cancer diagnoses among providers.

Long stays before discharge associated with long survival after discharge

Given concerns that some providers may be enrolling patients who do not meet the eligibility criteria and then discharging them, we focused on beneficiaries discharged alive after long stays and examined their patterns of care and survival postdischarge. Almost 30 percent of all hospice patients discharged alive in 2010 had hospice stays of 181 days or more before they were discharged (Table 5-8, p. 135). Many of these beneficiaries had long survival times after their long hospice episodes. In 2010, of beneficiaries discharged alive after hospice stays of at least 181 days, 73 percent were still alive 180 days after discharge. More than half (56 percent) were alive one year after discharge.

In total, 43 percent of all beneficiaries discharged alive in 2010 were still alive one year after discharge. (Of these beneficiaries, almost one-third returned to hospice care during the year.) These beneficiaries spent an average of 213 days in hospice before their first discharge, with Medicare hospice payments for these first episodes totaling $1.2 billion.

We examined Medicare spending after discharge from hospice for patients who were discharged alive. Average spending per day on Medicare services after discharge from hospice was highest for beneficiaries who had spent seven or fewer days in hospice and decreased as the length of time spent in hospice increased. For beneficiaries discharged alive after hospice stays of 181 days or more, average Medicare spending after hospice discharge was $70 per day, less than half the average per diem payment rate of $156 for hospice care.[14] This comparison is

TABLE 5–7 **Hospice characteristics associated with live discharge, 2010**

Provider characteristic	Live discharge rate	Odds ratio (95% CI)	Alive at 180 days postdischarge	Odds ratio (95% CI)
Tax status				
Nonprofit	15%		55%	
For profit	21	1.21 (1.20–1.23)	58	0.95 (0.92–0.99)
Government	16	1.05 (1.03–1.07)	55	NS
Ownership status				
Freestanding	19		57	
Hospital	13	0.92 (0.90–0.93)	55	NS
SNF	17	NS	61	NS
HHA	17	1.10 (1.09–1.12)	55	NS
Urban/rural				
Urban	20		57	
Rural	17	0.84 (0.83–0.85)	57	0.94 (0.90–0.97)
Aggregate cap status				
Below	16		56	
Above	36	1.99 (1.95–2.02)	64	1.22 (1.16–1.28)

Note: CI (confidence interval), NS (not significant), SNF (skilled nursing facility), HHA (home health agency). Live discharge rate is the rate among all hospice episodes in 2010, followed through April 2012. The odds ratio refers to the odds of a patient being discharged alive from the given provider type (or being alive at 180 days postdischarge) compared with the referent provider type in each category.

Source: Acumen analysis of Medicare claims data.

conservative since the figure for spending after discharge includes spending for all care (i.e., related to the terminal condition and not related to the terminal condition), while the daily payment rate for hospice care includes only Medicare's payment for care related to the terminal condition, and hospice enrollees can incur additional Medicare spending above this amount to treat conditions unrelated to their terminal disease or illness. The difference between total Medicare spending before and after discharge from hospice thus may be even larger. The low level of postdischarge spending for these beneficiaries suggests a comparatively low service use consistent with conditions that are relatively stable.

Furthermore, spending for beneficiaries postdischarge was clustered around the last days of life, supporting evidence in the literature that savings are associated with hospice when patients are relatively close to death but not in cases of very long survival times (Kelley et al. 2013). Following a cohort of beneficiaries discharged alive in 2008 (followed through April 2012 or end-of-life if earlier), we found that beneficiaries who died out of hospice had average spending within 30 days of death of $330 a day, compared with $107 a day for their total time out of hospice (average of 297 days out of hospice).

These data highlight key patterns in live discharges from hospice. Some rate of live discharge from hospice is expected because beneficiaries may revoke their hospice benefits for many reasons; there will also always be some patients discharged by the hospice because they no longer meet the eligibility criteria, particularly given the challenges in predicting a patient's survival time. However, we found that beneficiaries with long stays represent a sizable portion of live discharges, and long stays before discharge are associated with long survival after discharge. Evidence of very long survival postdischarge among some beneficiaries supports the need for additional mechanisms to ensure beneficiaries are appropriate candidates for hospice at initial admission and throughout long episodes.

TABLE 5–8 **Outcomes postdischarge by length of stay in hospice, 2010**

Length of stay in hospice before live discharge (in days)	Percent of all live discharges	Average days out of hospice	Percent alive at 180 days postdischarge	Average Medicare spending per day postdischarge
1–7	10%	94	27%	$242
8–14	8	107	33	219
15–30	11	116	37	204
31–60	11	140	47	161
61–90	14	208	66	85
91–180	18	203	67	92
181+	29	213	73	70
Overall		172	57	111

Note: Data reflect patients discharged alive in 2010 and followed for up to 365 days after discharge. Average days out of hospice reflects the number of days after discharge until reentry to hospice or death.

Source: Acumen analysis of Medicare claims data.

Furthermore, high rates of live discharge among some providers may indicate questionable business practices. Monitoring live discharge rates and causes among providers could improve quality and fiscal responsibility in the hospice program.

Hospice provided in nursing facilities

Beyond the payment reforms discussed in an earlier section, the Commission previously raised the issue of whether a different payment structure is needed for hospice care in nursing facilities. Our prior work has shown that hospices that have more patients in nursing homes than other hospices have higher margins (Medicare Payment Advisory Commission 2013b). We have noted that the higher profitability among hospices serving more nursing facility patients may be due partly to the diagnosis profile and length of stay of the patients they serve. However, hospices may find caring for patients in nursing facilities more profitable than caring for patients at home for reasons in addition to length of stay. There may be efficiencies in treating hospice patients in a centralized location in terms of mileage costs, staff travel time, and as a referral source for new patients. A hospice may also realize efficiencies in caring for a patient in a nursing facility because of the overlap in patient care responsibilities between the hospice and the nursing facility. In this section, we review the Commission's concerns about hospice care in nursing facilities and present two new Commission analyses, examining hospice providers' patient clusters at individual nursing facilities and hospice aide visits at nursing facilities, which suggest a reduction to the hospice payment rate in nursing facilities may be warranted.

Concerns about Medicare's payment system for hospice care delivered in nursing homes

The Commission's prior work highlighted the need for greater oversight of hospice care provided in nursing facilities and raised questions about whether a different payment level is appropriate for hospice care in nursing facilities. The Commission's concerns were based on several factors. A Commission-convened expert panel of hospice providers and researchers in October 2008 raised concerns about some hospices' relationships with nursing facilities. Panelists cited instances of some hospices aggressively marketing their service to nursing facility residents who were likely to have long lengths of stay. At the extreme, some industry sources described instances of hospice staff approaching the families of nursing facility residents with neurological diseases, offering the family "extra assistance" for the patient, without mentioning the word "hospice." Other panelists and industry sources have described situations suggesting conflicts of interest in the referral relationships between some nursing homes and hospices. For example, common ownership, a shared medical director, and other financial or in-kind transfers between some hospices and nursing facilities provide financial incentives for some nursing facilities to refer patients to hospice and steer them to particular hospice

TABLE 5–9

Over 60 percent of hospice nursing home days occur in facilities where the hospice has at least 3 patients under its care

Number of patients in an individual nursing facility under the care of the same hospice provider on the same day	Percent of hospice nursing home days, 2011
1	14.8%
2	12.5
3	10.7
4	8.9
5–9	27.1
10–19	13.4
20+	2.1
Unknown	10.5

Note: The "unknown" category reflects beneficiaries who had hospice claims that indicate services provided in a nursing facility but for whom there were no nursing facility records for that day.

Source: MedPAC analysis of Medicare hospice claims, the Minimum Data Set, and denominator file.

providers.[15, 16] These anecdotal reports of questionable financial relationships between some hospices and nursing facilities echo some of the concerns raised by the Office of Inspector General (OIG) more than 15 years ago (Office of Inspector General 1997).

Nursing facilities and hospices have incentives to refer and admit certain beneficiaries to hospice because of financial incentives potentially accruing to both types of providers. Nursing facility residents tend to have diseases with longer end-of-life trajectories than patients in the community. Since, as discussed in previous sections, long stays in hospice are more profitable than short stays, nursing facilities may offer hospices a source of patients for whom current reimbursement levels are more profitable than average. Beyond the financial advantage of longer stays, hospices and nursing facilities may realize other efficiencies from joint provision of care. When a nursing facility resident enrolls in hospice, the nursing facility continues to provide room and board services (such as assistance with activities of daily living) to the patient, while the hospice provides core palliative services related to the patient's terminal illness.[17] Because the nursing facility and the hospice both have responsibility for aspects of the patient's care, the overlap can result in reduced workload for both entities. For example, when some of a resident's care is provided by the hospice—especially care provided by hospice-supplied home health aides—there may be a reduction of effort on the part of the nursing facility's staff, who otherwise would provide assistance with activities of daily living. Even though the Medicare conditions of participation require the hospice to be responsible for professional management of the patient's hospice services, the presence of the nursing facility's own nurses and aides on site may reduce the need for the hospice to provide the same amount of services as would be provided in the patient's home. For example, family caregivers may be less comfortable than facility staff in caring for patients with certain symptoms, which might result in hospices providing more nurse visits to patients at home than in a nursing facility. The hospice may also realize reduced staffing and transportation costs when serving nursing facility patients—for example, if a nurse or home health aide visits three beneficiaries in a single facility rather than traveling to three private homes.

In March 2009, the Commission recommended that OIG investigate several issues related to hospice care in nursing facilities, including the financial relationships between hospices and long-term care facilities, differences in patterns of nursing home referrals to hospice, and the appropriateness of enrollment and marketing practices. Since that time, OIG has completed two studies on hospice in nursing homes. In September 2009, OIG reported that the majority of claims for hospice patients in nursing facilities did not meet at least one of Medicare's requirements, with the most common issues being related to the plan of care or the content of the beneficiary's hospice election statement (Office of Inspector General 2009). In 2011, OIG found that hospices that relied heavily on nursing home patients were more likely to be for profit and to treat patients with conditions that typically have longer stays and require less complex care (Office of Inspector General 2011). 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. In making the second recommendation, OIG noted the overlap in hospices' provision of aide services and the facility's provision of aide services.

Clustering of hospice patients in nursing facilities

One factor that may contribute to the more favorable margins observed among hospices with more patients in nursing facilities stems from the treatment of patients in a centralized location. A centralized location may afford

a hospice the opportunity to reduce staff time required for travel between patients as well as mileage costs. Also, hospices that focus on obtaining patients from certain facilities may incur lower costs in identifying prospective patients and potential referral sources.

To observe the degree to which hospice providers have patients clustered in individual nursing facilities, we matched Medicare hospice claims data to the nursing home Minimum Data Set to calculate the number of hospice patients an individual hospice provider had in a specific nursing facility on a single day. We estimate that at least 62 percent of days of hospice care furnished to nursing facility patients occurred in situations in which the hospice provider had three or more patients in the same facility on the same day (Table 5-9). Of that 62 percent, roughly 20 percent of days were in facilities where the provider had three or four patients, and about 42 percent of days were in facilities where the provider had five or more patients. This result confirms that hospice providers often have clusters of patients at individual facilities.

Hospice aide visits in nursing facilities

The provision of hospice aide visits in nursing facilities raises issues of duplicate payment. One role of nursing facilities is to assist patients with their personal care needs (e.g., activities of daily living). The nursing home room and board fees paid largely from Medicaid funds or by patients and families explicitly cover aide services provided by nursing facility staff to assist residents with their personal care needs.[18] In the absence of hospice, aide services are fully provided by facility staff. One question that could be explored is: Should the Medicare hospice benefit include aide services for patients residing in nursing facilities? Currently, aide visits by hospice staff account for one-third of the average labor cost of hospice visits in nursing facilities.

A different framework for considering the issue of payment for hospice care in nursing facilities is to compare the amount of aide visits provided in a nursing facility and at a patient's home. Our previous work shows that, counterintuitively, hospices provide more aide visits in nursing facilities than in patients' homes (Medicare Payment Advisory Commission 2011, Medicare Payment Advisory Commission 2010). In that work, we raised the question of whether the higher number of aide visits should be taken into account in payment rates for hospice services. Given that nursing facility patients have access to aide services through facility staff, it seems reasonable to expect that the amount of aide visits provided by hospice staff in nursing facilities be no higher than the amount provided in patients' homes. If hospices provided similar amounts of aide visits in the two settings, the average labor cost for all types of visits combined would be lower in nursing facilities than in patients' homes. This suggests that it could be appropriate to have a lower hospice payment rate in the nursing facility setting than in the home.

In the present analysis, we continue to observe that hospice staff provide more aide visits, but fewer nurse visits, to patients in nursing facilities than to patients at home (Table 5-10, p. 138).[19] For example, among patients who were in the second month of hospice care or beyond (days 31+ in Table 5-10), hospice aides averaged 2.5 visits per week to patients in nursing facilities compared with 1.8 visits per week to patients at home, a 43 percent difference in the number of aide visits per week provided by hospice staff in the two settings. In contrast, hospice nurses averaged fewer visits per week to patients in nursing facilities than to patients at home (Table 5-10).

The greater frequency of hospice aide visits in nursing facilities compared with patients' homes is reflected in estimates of the average labor cost of visits in the two settings. Because hospices provide more aide visits in nursing facilities than in the home, the average labor cost for all types of hospice visits combined appears slightly higher in nursing facilities than in patients' homes (with the exception of the last seven days of life) (Figure 5-5, p. 139). However, if hospice staff provided the same amount of aide visits to patients in the two settings, the average labor cost per day for all types of hospice visits combined would be lower in nursing facilities than in patients' homes. This is because hospice staff provide fewer nurse visits to patients in nursing facilities than to patients at home. For example, during days 15–30 of a hospice episode, the average labor cost of all types of visits combined is estimated to be $15.68 per day in patients' homes, compared with $16.01 per day in nursing facilities. If these nursing facility patients received the same amount of aide visits as patients at home, hospices' average labor cost per day for all types of visits combined would be $14.30 for patients in nursing facilities, about 9 percent less than for patients at home for days 15 to 30 of a hospice episode. Averaging across all episode days, we estimate that the average labor cost of visits per day would be between 4 percent and 7 percent lower in nursing facilities than in the home, assuming comparable levels of aide visits. These data suggest that one policy option that could be considered is a reduction of the

TABLE 5–10 **Hospices provide more aide visits in nursing facilities than in patients' homes**

	Average number of hospice nurse visits per patient per week			Average number of hospice aide visits per patient per week		
Days of episode	Home	Nursing facility	Nursing facility visits as a percent of home visits	Home	Nursing facility	Nursing facility visits as a percent of home visits
1–7	3.0	2.9	98%	1.1	1.8	156%
8–14	2.0	1.8	91	1.6	2.4	151
15–30	1.8	1.7	92	1.6	2.5	151
31+	1.6	1.5	94	1.8	2.5	143
Last 7 days of life	4.2	3.7	87	2.0	2.3	117

Note: Data include only routine home care days for beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. Data for the last seven days of life are excluded from all categories except the category labeled "last 7 days of life."

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS.

hospice payment rate for beneficiaries in nursing facilities. Similar to the approach in our payment reform model, if we adjusted a portion (68 percent) of the hospice payment rate downward by between 4 percent and 7 percent to reflect lower resource use in nursing homes, it would yield a reduction of the total hospice payment rate in nursing facilities in the range of 3 percent to 5 percent.

Future research

This chapter has focused on improving the hospice payment system and enhancing the accountability of the benefit. These steps will help to improve payment equity across providers and temper the incentives for very long hospice stays. In addition to concerns about very long hospice stays, the Commission also has concerns about very short stays. One-quarter of Medicare hospice decedents receive hospice for five days or less, a phenomenon that has been unchanged over the past decade. Very short hospice stays raise concerns that some beneficiaries enter hospice too late to fully benefit from the services that hospice has to offer. Very short hospice stays are thought to 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, the difficulty some patients and families may have in accepting a terminal prognosis, and financial incentives in the fee-for-service system for increased volume of services (Medicare Payment Advisory Commission 2009).

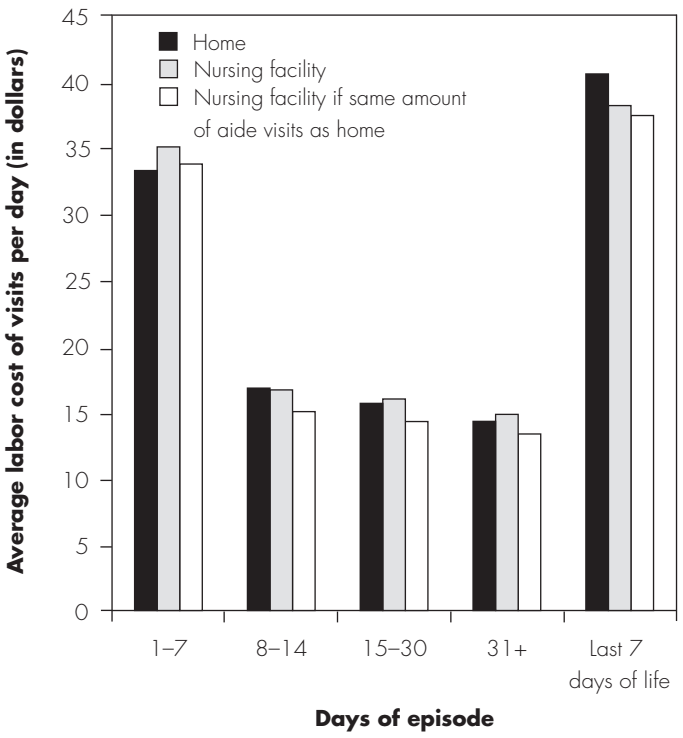
In future research, the Commission may explore ways to improve the end-of-life care options available to beneficiaries. For example, we may explore options for providing more flexibility for concurrent hospice and conventional care. Currently, to enroll in hospice, beneficiaries must agree to forgo intensive conventional care for their terminal condition and related conditions. This requirement is thought to contribute to some beneficiaries waiting to enroll in hospice until the last few days of life. Some commercial insurers have begun experimenting with allowing concurrent hospice and conventional care, with one insurer reporting that concurrent care 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 have the same effect in a Medicare fee-for-service environment, given an elderly population with a greater prevalence of noncancer diagnoses and the absence of health plan utilization management. PPACA mandates a three-year demonstration of concurrent care at 15 sites to test its effect on quality and cost; however, no funding was appropriated for the demonstration. In the future, the Commission may examine options related to concurrent care, such as considering whether there may be ways to provide flexibility for concurrent care through the Medicare Advantage program or through targeted fee-for-

service demonstrations focused on specific conditions in which concurrent care is thought to have the best chance of not increasing spending.

Another approach that may have potential to improve end-of-life care is shared decision making. Shared decision making is a process by which a physician or other health care professional communicates to the patient personalized information about the potential outcomes, probabilities, and scientific uncertainties of available treatment options, and the patient communicates his or her preferences and the relative importance he or she places on the potential benefits and harms of the various options. Shared-decision-making tools may be helpful to patients with terminal illnesses because many physicians have difficulty having conversations about death and end-of-life care. As a result, patients do not always have a full understanding of their prognosis and options for care. Some private insurers have begun using shared-decision-making tools to help physicians and patients have conversations about advanced illnesses and improve the information patients receive about their condition and care options. These approaches have the potential to help ensure that patients receive care consistent with their preferences, which may improve end-of-life care for patients who choose hospice and for those who do not. In our continued work on shared decision making, we may explore efforts by the medical community and commercial insurers to develop and implement shared-decision-making tools for patients with advanced illnesses. ■

FIGURE 5–5

Average labor cost of routine home care visits per day by setting



Note: Data reflect labor cost for the six types of visits (from nurses; aides; social workers; and physical, occupational, and speech therapists) and social worker phone calls. The data include only those beneficiaries who were first admitted to hospice between May 1, 2010, and November 30, 2011, and were discharged by November 30, 2011. The underlying data include only days when the patient received routine home care and the location of care was the home or a nursing facility. Data for the last 7 days of life are excluded from all bars except the ones labeled "last 7 days of life."

Source: MedPAC analysis of hospice claims and the common Medicare enrollment file from CMS and the wage rates and benefits from the Occupational Employment Statistics and the Employer Cost for Employee Compensation from the Bureau of Labor Statistics.

Endnotes

1 Under the Medicare hospice benefit, there are four types of care: routine home care, continuous home care, general inpatient care, and inpatient respite care. Routine home care, which can be provided in a variety of settings—including the patient's home, a nursing facility, an assisted living facility, and other types of facilities—makes up more than 97 percent of hospice days. There is a flat payment per day of about $153 for routine home care regardless of whether any visit is provided on a day.

2 Patients who received routine home care for a portion of their hospice stay and another level of care for the other portion of their stay were included in the analysis on the days they received routine home care, which allowed us to include in our analysis all days that were paid at the routine home care level of care.

3 Hospices also report physicians' visits. We did not include physicians' visits in our analysis because Medicare pays for them separately, outside the payment for routine home care.

4 A hospice is permitted to report social workers' phone calls on the claim if the call involves counseling the patient or family or is for the purpose of arranging care.

5 Our model treats all hospice days as one episode, regardless of whether a patient is discharged alive from hospice and returns to hospice or whether the patient moves from one level of hospice care to another. In implementing a U-shaped payment model for routine home care, an issue that would need to be considered is what payment rate is appropriate when a patient reenters hospice after a live discharge or moves from a higher level of care to routine home care. In considering this issue, it would be important to avoid creating financial incentives for providers to discharge and readmit patients or to move patients between levels of care for any reason other than clinical appropriateness.

6 As under current policy, payments would continue to be adjusted for geographic differences in wages.

7 The add-on payment for the last seven days of life is added to the payment rate that would otherwise apply for those days if they were not the last seven days. For example, if a beneficiary who received routine home care was discharged deceased with a length of stay of 21 days, Medicare would pay about $268 per day ($148 + $120) for days 15–21 because they were the last 7 days of life.

8 The Medicare aggregate cap limits the total payments an individual hospice can receive in a year. 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 is required to repay the excess to Medicare.

9 These aggregate spending figures do not take into account the return of cap overpayments by above-cap providers. At the time of publication, the 2011 cap overpayment amounts were not finalized by the Medicare contractors. The Commission estimated that 2010 cap overpayments were less than $150 million. Medicare's ability to fully collect these overpayments is uncertain, especially if a provider closes.

10 The nearly $8 billion estimate reflects 2011 hospice spending for patients whose stays exceeded 180 days by the end of 2011 or by the time of discharge if hospice care ceased before the end of 2011. Some patients whose stays were less than 180 days as of the end of 2011 continue to receive hospice in future years and eventually exceed 180 days of hospice care. The 2011 spending for those beneficiaries is not included in the $8 billion figure.

11 Medicare pays hospice providers a daily rate to cover all care related to the terminal condition. If a beneficiary needs care that is unrelated to the terminal condition, traditional Medicare covers the service. The hospice is responsible for all services related to the terminal condition that are in the beneficiary's plan of care; if the beneficiary pursues care related to the terminal condition that is not in the plan of care, the beneficiary may be liable for the cost. In particular, a plan of care typically does not include emergency services, consistent with the hospice emphasis on comfort over cure. Hospice has a role to educate patients and families about what to expect as death nears and provide a clear plan and information on who to call and what to do in the event of an exacerbation or crisis. If a patient or family member deviates from the plan of care to call an ambulance rather than a hospice contact, because of alarm or other factors, or pursues other emergency services not in the plan of care, in some cases the hospice may not cover services, leading the patient or family to revoke hospice rather than bear the cost.

We looked at beneficiaries who had an emergency room visit or inpatient stay on the day of or after discharge as a proxy for these services being the reason for discharge. We found that 27 percent of all beneficiaries discharged alive in 2010 had an emergency room visit or inpatient stay on the day of or after their first discharge. Use of this conventional care at discharge was associated with a quick return to hospice: 46 percent of those who had either service returned to hospice or died within seven days.

12 Effective July 1, 2012, CMS promulgated specific codes that hospices must use to specify the reason for live discharge from hospice. These codes may help separate live discharges

due to the beneficiary revoking the hospice benefit (because of beneficiary or family choice, pursuing services not in the plan of care, quality of care, etc.) from hospice-initiated discharges because the beneficiary's condition is no longer considered terminal or for other reasons.

13 Hospice episodes in 2010 were followed through April 2012.

14 The $156 amount represents the average per diem payment rate across all levels of care for beneficiaries in 2010. Other sections in this chapter cite a daily payment rate of $153, representing the per diem rate for routine care in hospice in 2013.

15 Nursing homes have the capacity to steer patients to particular hospice providers in part because a hospice must have a written agreement with a nursing facility before providing hospice services to any of the facility's residents. While the hospice is paid for hospice services by Medicare, the hospice must have a written agreement with the nursing facility that stipulates a number of issues, including what services the hospice is responsible for, the mode of communication between the organizations, and any hospice services the hospice provider will contract with the nursing facility to provide.

In addition, for patients who are dually eligible for Medicare and Medicaid, when a patient residing in a nursing facility elects hospice, most states pay the Medicaid nursing facility room and board payment to the hospice, which is then responsible for paying the nursing facility for room and board. The amount that the hospice agrees to pay the nursing facility for room and board for dual eligibles is also part of the written agreement between the two providers.

16 For example, we have heard anecdotal reports from industry sources that some nursing facilities request that hospice staff provide a certain amount of aide services in the nursing facility as a condition of referring patients to the hospice.

17 Room and board services include personal care services, assistance in activities of daily living, socializing activities, administration of medication, maintaining the cleanliness of a resident's room, and supervising and assisting in the use of durable medical equipment and prescribed therapies. Core palliative hospice services include nursing care, physician care, counseling, and medical social services related to the diagnosed terminal illness.

18 When a beneficiary dually eligible for Medicare and Medicaid in a nursing facility elects hospice, most state Medicaid programs pay the Medicaid room and board payment to the hospice, which is then responsible for paying the nursing facility the room and board payment. Under Medicaid, states are permitted to pay no less than 95 percent of the standard room and board rate to the hospice.

19 This analysis focuses on the number of visits provided by hospice staff. The length of hospice visits also varies across the two settings. Nursing facility patients typically receive slightly shorter visits (about 5 percent fewer minutes per visit) from hospice aides and hospice nurses than patients at home. An exception to this is the first week of the episode (when hospice nurses provide slightly longer visits in nursing facilities than in patients' homes) and the last seven days of life (when hospice nurses and aides provide similar visit lengths in the two settings).

References

Johnson, K. S., M. Kuchibhatla, D. Tanis, et al. 2008. Racial differences in hospice revocation to pursue aggressive care. *Archives of Internal Medicine* 168, no. 2 (January 28): 218–224.

Kelley, A. S., P. Deb, Q. Du, et al. 2013. Hospice enrollment saves money for Medicare and improves care quality across a number of different lengths-of-stay. *Health Affairs* 32, no. 3 (March): 552–561.

Krakauer, R., C. M. Spettell, L. Reisman, et al. 2009. Opportunities to improve the quality of care for advanced illness. *Health Affairs* 28, no. 5 (September–October): 1357–1359.

Kutner, J. S., S. A. Meyer, B. L. Beaty, et al. 2004. Outcomes and characteristics of patients discharged alive from hospice. *Journal of the American Geriatric Society* 52, no. 8 (August): 1337–1342.

Medicare Payment Advisory Commission. 2013a. *Online appendixes: Hospice services.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar13_Ch12_APPENDIX.pdf.

Medicare Payment Advisory Commission. 2013b. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2011. *Online appendixes: Hospice.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar11_Ch11_APPENDIX.pdf.

Medicare Payment Advisory Commission. 2010. *Online appendixes: Hospice.* Washington, DC: MedPAC. http://medpac.gov/chapters/Mar10_Ch02E_APPENDIX.pdf.

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

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

Office of Inspector General, Department of Health and Human Services. 2011. *Medicare hospices that focus on nursing facility residents.* OEI–02–10–00070. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 2009. *Hospice care for beneficiaries in nursing facilities: compliance with Medicare coverage requirements.* OEI–02–06–00221. Washington, DC: OIG.

Office of Inspector General, Department of Health and Human Services. 1997. *Hospice and nursing home contractual relationships.* OEI–05–95–0025. Washington, DC: OIG.