CHAPTER 7

Skilled nursing facility services

RECOMMENDATIONS

7-1 The Congress should eliminate the market basket update and direct the Secretary to revise the prospective payment system for skilled nursing facilities for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

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

7-2 The Congress should direct the Secretary to reduce payments to skilled nursing facilities with relatively high risk-adjusted rates of rehospitalization during Medicare-covered stays and be expanded to include a time period after discharge from the facility.

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

CHAPTER 7

Skilled nursing facility services

Chapter summary

Skilled nursing facilities (SNFs) furnish short-term skilled nursing and rehabilitation services to beneficiaries after a stay in an acute care hospital. In 2010, more than 15,000 SNFs furnished covered care to almost 1.7 million fee-for-service (FFS) beneficiaries. In 2011, Medicare spent almost $32 billion on SNF care.

Assessment of payment adequacy

To examine the adequacy of Medicare's payments, we analyzed access to care (including the supply of providers and volume of services), quality of care, provider access to capital, Medicare payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compared the performance of SNFs with relatively high and low Medicare margins and efficient SNFs with other SNFs. Most indicators of payment adequacy for SNFs were positive.

Beneficiaries' access to care—Access to SNF services remains stable for most beneficiaries.

- ***Capacity and supply of providers***—The number of SNFs participating in the Medicare program decreased less than 1 percent between 2010 and 2011. Three-quarters of beneficiaries live in a county with five or more SNFs, and less than 1 percent lives in a county without one. Available

In this chapter

- Are Medicare payments adequate in 2012?
- How should Medicare payments change in 2013?
- Discouraging avoidable rehospitalizations from SNFs
- Medicaid trends

SNF bed days in freestanding facilities remained unchanged between 2009 and 2010, with occupancy rates stable at 88 percent.

- ***Volume of services***—Days and admissions on a per FFS beneficiary basis decreased slightly between 2009 and 2010, reflecting fewer hospital admissions (a prerequisite for Medicare coverage). Still, use rates were higher in 2010 than in 2006.

Quality of care—SNF quality of care in 2009 was basically unchanged from the prior year. Two indicators of quality in SNFs are the rates at which patients are discharged to the community within 100 days of admission and rehospitalization of patients with any one of five potentially avoidable specific conditions.

Providers' access to capital—Because most SNFs are part of a larger nursing home, we examine nursing homes' access to capital. Lending is expected to be slow in 2012. Uncertainties surrounding federal and state budgets and possible rate freezes or reductions have made borrowers and lenders wary. This lending environment reflects the economy in general, not the adequacy of Medicare payments. Medicare remains a preferred payer.

Medicare payments and providers' costs—Increases in payments between 2009 and 2010 outpaced increases in providers' costs, reflecting the continued concentration of days in the highest payment case-mix groups. In 2010, the average Medicare margin for freestanding SNFs was 18.5 percent; it was the 10th year in a row with Medicare margins above 10 percent.

Financial performance continued to vary across freestanding facilities—a function of distortions in the prospective payment system and cost differences of providers. Compared with SNFs with relatively low Medicare margins, SNFs with the highest Medicare margins had greater shares of days in intensive rehabilitation case-mix groups and smaller shares of days in medically complex groups. SNFs with high Medicare margins also had standardized costs per day (adjusted for differences in wages and case mix) that were 30 percent below SNFs with low Medicare margins. Our analysis of relatively efficient SNFs found that it is possible to have below-average costs, above-average quality, and more than adequate Medicare margins.

Several pieces of evidence indicate that Medicare could rebase its payments to more closely match provider costs:

- high and sustained Medicare margins,
- widely varying costs unrelated to case mix and wages,
- cost growth well above the market basket that reflects little fiscal pressure from the Medicare program,

- the ability of many SNFs (more than 900) to have consistently below-average costs and above-average quality of care,
- the continued ability of the industry to maintain high margins despite changing policies, and
- in some cases Medicare Advantage payments to SNFs that are considerably lower than the program's FFS payments.

We project the Medicare margin to be 14.6 percent in fiscal year 2012.

A rehospitalization policy

SNF patients who are rehospitalized raise Medicare spending and are exposed to hospital-acquired infections and disruptive care transitions. Beginning in October 2012, a readmission policy will penalize hospitals with high readmission rates for certain conditions. A rehospitalization policy for SNFs would create comparable policies for SNFs and hospitals, thereby encouraging providers in both settings to work together to better manage the transitions between them. By aligning provider incentives across sectors, a rehospitalization policy represents a step toward payments for larger bundles of services.

Risk-adjusted rehospitalization rates for patients with potentially avoidable conditions vary almost threefold across facilities and notable differences exist by facility type and ownership. This variation indicates considerable room for improvement for many facilities. A rehospitalization policy that penalizes facilities with high risk-adjusted rates over multiple years would target providers with aberrant patterns of rehospitalizations, recognize that some rehospitalizations are appropriate, and reduce the incentive to selectively admit beneficiaries with specific characteristics.

Medicaid trends

As required by the Patient Protection and Affordable Care Act of 2010, we report on Medicaid utilization, spending, and non-Medicare (private pay and Medicaid) margins. Medicaid finances mostly long-term care services provided in nursing homes but also covers copayments for dual-eligible beneficiaries who stay 21 or more days in a SNF. The number of Medicaid-certified facilities decreased slightly between 2010 and 2011. Between 2009 and 2010, Medicaid-covered days increased slightly, while spending decreased slightly. Non-Medicare margins improved between 2008 and 2010 but remained slightly negative (–1.2 percent), while total margins for all payers and all lines of business improved to 3.6 percent in 2010. ■

TABLE 7–1

A growing share of Medicare stays and payments go to freestanding SNFs and for-profit SNFs

	Facilities		Medicare-covered stays		Medicare payments	
Type of SNF	**2006**	**2010**	**2006**	**2010**	**2006**	**2010**
Total number	15,178	15,207	2,454,263	2,418,442	$19.5 billion	$26.2 billion
Freestanding	92%	94%	89%	93%	94%	96%
Hospital based	8	6	11	7	6	4
Urban	67	70	79	81	81	83
Rural	33	30	21	19	19	17
For profit	68	70	67	70	73	74
Nonprofit	26	25	29	25	24	22
Government	5	5	4	3	3	3

Note: SNF (skilled nursing facility). Totals may not sum to 100 percent due to rounding and missing values.

Source: MedPAC analysis of the Provider of Services, Medicare Provider Analysis and Review files, and Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system for 2006–2010.

Background

Skilled nursing facilities (SNFs) provide short-term skilled nursing care and rehabilitation services, such as physical and occupational therapy and speech–language pathology services. Examples of SNF patients include those recovering from surgical procedures, such as hip and knee replacements, or from medical conditions, such as stroke and pneumonia. Of the beneficiaries who use post-acute care (defined as home health care, inpatient rehabilitation, long-term care hospital, or SNF services after a hospitalization), 29 percent use SNF services. Almost 1.7 million fee-for-service (FFS) beneficiaries (4.3 percent) used SNF services at least once in 2010 and program spending was almost $32 billion in fiscal year 2011.

Medicare covers up to 100 days of SNF care per spell of illness after a medically necessary inpatient hospital stay of at least three days.[1] For beneficiaries who qualify for a covered stay, Medicare pays 100 percent of the payment rate for the first 20 days of care. Beginning with day 21, beneficiaries are responsible for copayments. For calendar year 2012, the copayment is $144.50 per day.

Most SNFs are part of a nursing home that treats patients who generally require less intensive, long-term care services than the skilled services required for Medicare coverage. The term "skilled nursing facility" refers to a provider that meets Medicare requirements for Part A coverage.[2] Most SNFs (more than 90 percent) are dually certified as a SNF and as a nursing home. Thus, a facility that provides skilled care often also furnishes long-term care services that Medicare does not cover. Medicaid is the predominant payer in nursing homes, accounting for 63 percent of days.

The mix of facilities and the facility type where beneficiaries seek care continue to shift toward freestanding and for-profit facilities (Table 7-1). Between 2006 and 2010, freestanding facilities and for-profit facilities accounted for growing shares of Medicare stays and spending. In 2010, 70 percent of SNFs were for profit; they treated about 70 percent of stays but accounted for almost three-quarters of Medicare payments.

Medicare-covered SNF patients are typically a small share of a facility's total patient population but a larger share of the facility's payments. At the median in 2010, Medicare-covered SNF days made up 12 percent of total patient days in freestanding facilities but 23 percent of facility revenue. The most frequent hospital conditions referred to SNFs for post-acute care were joint replacement, septicemia, kidney and urinary tract infections, hip and femur procedures except major joint replacement, and heart failure and shock. The top 10 conditions were the same for hospital-based, freestanding, nonprofit, and for-profit facilities.

TABLE 7–2 **Broad case-mix groups used in Commission analyses**

Group used in Commission analyses	Description
Medically complex	Includes days classified into two broad categories: clinically complex and special care groups. Clinically complex groups are used to classify patients who have burns, septicemia, or pneumonia; or who receive chemotherapy, oxygen therapy, intravenous medications or transfusions while a patient. Special care groups include patients who are comatose; have quadriplegia, chronic obstructive pulmonary disease, septicemia, diabetes requiring daily injections, fever with specific other conditions, cerebral palsy, multiple sclerosis, Parkinson's disease, respiratory failure, a feeding tube, pressure ulcers of specific sizes, foot infections; who receive radiation therapy or dialysis while a resident; or require parenteral/intravenous feedings, or respiratory therapy for 7 days.
Intensive rehabilitation	Includes ultra high and very high rehabilitation case-mix groups. Rehabilitation groups are based on minutes of rehabilitation furnished per week. Ultra high is for those patients who received over 720 minutes per week; very high includes patients who received 500 to 719 minutes per week.

SNF prospective payment system and its shortcomings

Medicare uses a prospective payment system (PPS) to pay for each day of service.[3] Information gathered from a standardized patient assessment instrument—the Minimum Data Set—is used to classify patients into case-mix categories, called resource utilization groups (RUGs). RUGs differ by the services SNFs furnish to a patient (such as the amount and type of therapy and the use of respiratory therapy and specialized feeding), the patient's clinical condition (such as whether the patient has pneumonia), and the patient's need for assistance to perform activities of daily living (such as eating and toileting). Medicare's payments for SNF services are described in Medicare Basics, available on the Commission's website (http://www.medpac.gov/documents/MedPAC_Payment_Basics_11_SNF.pdf).

Almost since its inception, the SNF PPS has been criticized for not accurately targeting payments for nontherapy ancillary (NTA) services, such as drugs, and for encouraging the provision of unnecessary therapy services. Payments for NTA services are included in the nursing component even though NTA costs are much more variable than nursing care and are not correlated with it. The PPS encourages the provision of therapy because its payments are not proportional to costs—rather, as therapy costs increase, therapy payments rise even faster (Garrett and Wissoker 2008, Medicare Payment Advisory Commission 2008). In 2008, the Commission recommended that the PPS be revised to base therapy payments on patient characteristics (not service provision), establish separate payments for NTA services, and implement an outlier policy (Medicare Payment Advisory Commission 2008). A revised PPS would raise payments for medically complex care (and the SNFs that treat them) (see Table 7-2 for definition of medically complex) and lower payments for high-intensity therapy (and the SNFs that treat them) (Wissoker and Garrett 2010). As a result, payments would be more equitable across facilities.

Since its first efforts, the Commission has updated its PPS design work in two ways. First, it explored designs for the NTA component that met the criteria CMS laid out for this component (Centers for Medicare & Medicaid Services 2009). These designs retained most of their ability to predict NTA costs and considerably improved the accuracy of payments for NTA services, while meeting CMS's criteria (Wissoker and Garrett 2010). Second, after comparing an alternative PPS design with current (2012) policy, the Commission found that a revised design would improve the predicted costs per day and would redistribute payments from SNFs with high shares of therapy stays to SNFs with high shares of medically complex stays (Wissoker and Zuckerman 2012). For example, we estimate that payments would increase 16 percent for SNFs with low shares of rehabilitation days and decrease 7 percent for SNFs with the highest shares (Table 7-3). For SNFs with the highest shares of intensive therapy days, payments would decrease 10 percent, while payments to SNFs with the lowest shares

would increase 26 percent. SNFs with high shares of special care and clinically complex days would increase 17 percent and 18 percent, respectively.

The effects of a revised payment design would vary considerably across SNFs by type and ownership, reflecting differences in patient mixes and therapy practices. Aggregate payments would increase for hospital-based facilities and nonprofit facilities and decrease slightly for freestanding facilities and for-profit facilities. Payments would increase slightly (less than 2 percent) for rural facilities. However, effects on individual facilities would vary substantially from these aggregates, depending on their patient mix and therapy practices. For example, more than three-quarters of hospital-based SNFs would see their payments increase by at least 10 percent, but payments would decline for a small share of them. Four of 10 nonprofit facilities would see their payments increase by at least 10 percent, but payments would decrease by the same amount to a small share (5 percent) of facilities. Estimated impacts on for-profit facilities would be more evenly distributed. Payments would increase by at least 10 percent for 17 percent of for-profit facilities, while 12 percent of for-profit facilities would see their payments decrease by the same amount.

TABLE 7–3 **A revised PPS would redistribute payments across SNFs**

SNF group	Percent change in payments relative to current (2012) policy
Rehabilitation days	
High share	–7%
Low share	16
Intensive therapy days	
High share	–10
Low share	26
Special care days	
High share	17
Low share	–7
Clinically complex days	
High share	18
Low share	–4
Freestanding	–1
Hospital-based	27
Nonprofit	8
For profit	–2
Rural	2
Urban	0

Note: PPS (prospective payment system), SNF (skilled nursing facility). High share is the top 10th percentile of the distribution of shares of cases. Low share includes facilities in the bottom 10th percentile except for the clinically complex subgroup, where it includes the bottom 25th percentile. Intensive therapy includes days classified into ultra high and very high rehabilitation case-mix groups. Special care cases include cases that classify into special care case-mix groups, such as patients with chronic obstructive pulmonary disease or Parkinson's disease, or who require parenteral/intravenous feedings. Clinically complex cases include cases that classify into clinically complex case-mix group, such as patients with pneumonia or septicemia, or who require intravenous medications.

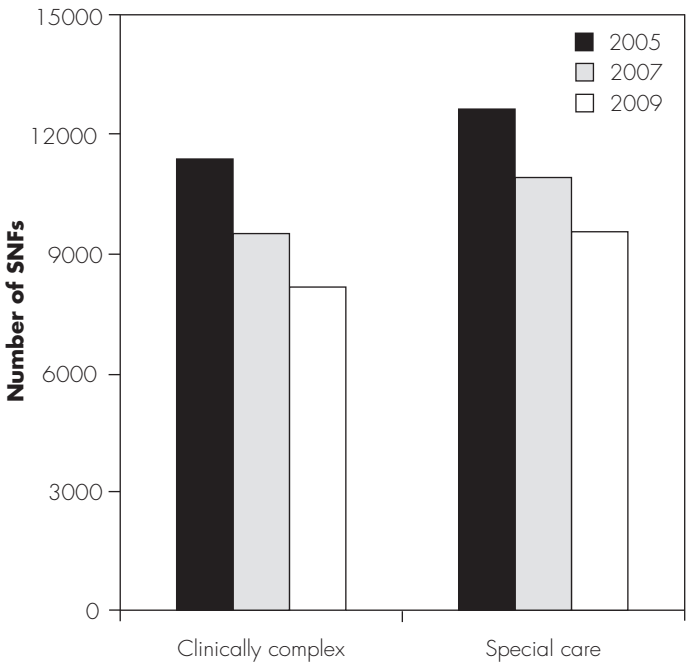
Source: Wissoker and Zuckerman 2012.

CMS's revisions to the SNF PPS

CMS has taken steps to enhance payments for medically complex care but more work remains. In 2010, CMS revised the case-mix classification system (to RUG version IV) by revising the definitions of the groups and adding 13 case-mix groups for medically complex patients (see Table 7-2). At the same time, CMS shifted program dollars away from therapy care and toward medically complex care (Centers for Medicare & Medicaid Services 2009, Centers for Medicare and Medicaid Services 2011).[4] While these changes may make treating medically complex patients more financially attractive, payments for NTA services still do not match a patient's NTA care needs because payments for them continue to be tied to the nursing component. Nursing payments vary 5-fold but NTA costs vary more than 10-fold. CMS has curbed therapy payments but they are unlikely to be sufficient to undercut the incentive to generate therapy volume.

CMS implemented policies to more accurately pay for rehabilitation therapy furnished in groups or concurrently. It also now requires new patient assessments to be conducted when the amount of therapy changes or stops, which will more closely match payments to services provided. The impact of these policy changes will vary considerably by facility and its practices before the policy changes. Although CMS does not have the statutory authority to revise the base rates, it has shifted money from the therapy component to the nursing component by revising the relative weights associated with case-mix groups. While this change lowered therapy payments, it was done in a budget-neutral way so that aggregate payments to SNFs were kept at the same level. As a result, overall payments are likely to remain very high relative to SNFs' aggregate costs.

FIGURE 7–1 **The number of SNFs that admitted clinically complex and special care cases decreased between 2005 and 2009**



Note: SNF (skilled nursing facility). Category based on admitting case-mix group assignment. The clinically complex category includes patients who are comatose; have burns, septicemia, pneumonia, internal bleeding, or dehydration; or receive dialysis or chemotherapy. The special care category includes patients with multiple sclerosis or cerebral palsy, those who receive respiratory services seven days per week, or patients who are aphasic or tube-fed.

Source: MedPAC analysis of 2010 Q2 DataPro data from CMS.

Even with these important revisions, CMS has not modified the basic incentive to furnish therapy to qualify patients into higher payment case-mix groups. The industry has shown it is adept at modifying its practices in response to changes in policy, varying the mix and amount of therapy provided, and it will most likely continue to do so. For example, in 2010 when CMS payments were lowered by 1.1 percent, total spending increased almost 5 percent from 2009. The industry achieved this increase in part by shifting more days into the highest payment case-mix groups. Between 2009 and 2010, the share of rehabilitation days classified into intensive therapy increased 5 percentage points (to 76 percent). Similar responsiveness to rule changes was observed when CMS began to more accurately pay for concurrent therapy.[5] Before the rule change, 28 percent of therapy was furnished concurrently; after the rule change, less than 2 percent was.

Are Medicare payments adequate in 2012?

To examine the adequacy of Medicare's payments, we analyzed access to care (including the supply of providers and volume of services), the quality of care, providers' access to capital, Medicare payments in relation to costs to treat Medicare beneficiaries, and changes in payments and costs. We also compared the performance of SNFs with relatively high and low Medicare margins and efficient SNFs with other SNFs.

Beneficiaries' access to care: Access is stable for most beneficiaries

We do not have direct measures of access. Instead, we consider the supply and capacity of providers and evaluate changes in volume. We also examine the mix of SNF days to assess the shortcomings of the PPS that can result in delayed admission for certain types of patients.

Capacity and supply of providers: Supply remains stable

Since 2001, the number of SNFs participating in the Medicare program decreased less than 1 percent, to 15,161 in 2011. Between 2010 and 2011, there were 46 fewer SNFs, even though 70 facilities began participating in the program. Most of these new participants were for profit and freestanding.[6] Five hospital-based units began participating in the Medicare program in 2011, but many more stopped, so there were 37 fewer hospital-based facilities by the end of 2011. Most terminations were voluntary. The ownership mix has been fairly stable, with for-profit facilities composing 70 percent of the industry. Most SNFs are freestanding (96 percent).

Most beneficiaries live in counties with multiple SNFs. Three-quarters of beneficiaries live in counties with 5 or more SNFs and the majority of beneficiaries (59 percent) live in counties with 10 or more. Few beneficiaries (less than 1 percent) live in a county without a SNF.

Other measures of capacity include the number of SNF beds available during the year and occupancy rates. SNF bed days available (days available for occupancy after adjusting for beds temporarily out of service due to, e.g., renovation or patient isolation) were unchanged between 2009 and 2010 in freestanding facilities. Since 2001, the increase in bed days available averaged 6 percent a year. In 2010, the median occupancy rates were 88 percent in

TABLE 7–4 **Small decline in SNF volume between 2009 and 2010, but still above 2006 levels**

					Percent change	
	2006	2008	2009	2010	2006–2010	2009–2010
Volume per 1,000 fee-for-service beneficiaries						
Covered admissions	72	73	72	71	–1.4%	–1.4%
Covered days (in thousands)	1,892	1,977	1,963	1,938	2.4	–1.3
Covered days per admission	26.3	27.0	27.3	27.1	3.0	–0.7

Note: SNF (skilled nursing facility). Data include 50 states and the District of Columbia.

Source: Calendar year data from CMS, Office of Research, Development, and Information.

freestanding facilities and 81 percent in hospital-based units, indicating capacity to admit beneficiaries seeking SNF care.

The Commission is concerned that the number of SNFs admitting medically complex patients (for definitions, see Table 7-2, p. 176) declined between 2005 and 2009 (Figure 7-1). Medically complex admissions were more concentrated in fewer SNFs compared with rehabilitation admissions.[7] The decline is likely to reflect the relative attractiveness of the patients for rehabilitation case-mix groups, which encourages some facilities to furnish enough therapy to medically complex patients so they qualify for higher payment rehabilitation case-mix groups. In addition, some medically complex patients (such as those requiring ventilator, tracheostomy, or wound care) require specific facility and staffing capabilities that may not be available at all SNFs.

This concentration is more likely to affect minority beneficiaries because they made up a disproportionate share of medically complex admissions. In 2009, minorities made up 20 percent of medically complex admissions, even though they made up 14 percent of all SNF admissions. Rural facilities (in particular those located in the least populated areas), nonprofit SNFs, and hospital-based units were disproportionately represented in the group of SNFs with the highest shares (top 10th percentile) of medically complex patients. We also examined whether the number of medically complex admissions was related to the presence of long-term care hospitals (LTCH) in a market. We found that the mix of medically complex days at facilities was only weakly related to whether there was an LTCH in the same market. Facilities located in counties with high and low numbers of LTCH beds per capita had almost identical shares of medically complex days, while facilities in markets without an LTCH had higher shares (8 percent higher).

Although policy changes and the new case-mix groups implemented by CMS may increase the willingness of SNFs to admit medically complex patients, our analysis indicates that revisions to the PPS are still needed to improve the accuracy of payments. Changes implemented by CMS increased payments for a patient with moderate care dependencies and requiring ventilator care from $361 a day in 2010 to $528 in 2012. However, the PPS continues to disadvantage SNFs that admit high shares of medically complex cases. A revised PPS would increase payments substantially for these patients and mitigate the financial disincentive for SNFs to admit them (Table 7-3, p. 177).

Volume of services: After a steady increase, small declines between 2009 and 2010

In 2010, about 4 percent of FFS beneficiaries used SNF services. We examine utilization on a FFS beneficiary basis because the counts of users, days, and admissions do not include service use by beneficiaries enrolled in Medicare Advantage (MA) plans. Because MA enrollment continues to increase, changes in reported utilization could reflect a declining number of FFS beneficiaries rather than reductions in service use.

SNF volume per FFS beneficiary declined between 2009 and 2010: Admissions went down 1.4 percent, covered days were 1.3 percent lower, and covered days per admission decreased 0.7 percent (Table 7-4). The small decline in admissions is expected because inpatient hospital stays, which are required for Medicare coverage

of SNF services, also declined (a little more than 1 percent). Despite the reduction, covered days and covered days per admission were higher in 2010 than in 2006.

SNF use is uneven among beneficiaries of different races. In 2010, admissions per 1,000 FFS beneficiaries were 14 percent higher for whites than for beneficiaries of other races. Although admission rates were lower for other races, their lengths of stay were longer than those for white beneficiaries, perhaps reflecting differences in case mix. Other studies have found that racial differences in SNF use have narrowed over time, which may in part be explained by increased use of assisted living facilities by whites (Konetzka and Werner 2009). In addition, racial minorities are more likely than white beneficiaries to use home health care and informal home care. Other research found that personal resources and preferences also shape the use of long-term care (Jenkins 2001).

Intensification of rehabilitation services unexplained by health status factors

Between 2001 and 2010, the share of days classified in rehabilitation case-mix groups increased from 75 percent to 91 percent. Within the rehabilitation case-mix groups, intensive therapy days (those classified in the ultra high and very high case-mix groups) made up more than three-quarters of the days in 2010. Facilities differed in the amount of intensive therapy they furnished. Freestanding SNFs with the largest growth (top quartile) in daily Medicare revenues between 1999 and 2009 had almost double the share of days classified into intensive rehabilitation case-mix groups (77 percent) compared with SNFs with low revenue growth (40 percent), even though they treated similar mixes of shares of dual-eligible, minority, and very old beneficiaries and their case-mix indexes varied by only 3 percent.

Patient frailty has increased but is nowhere near the levels of change in therapy provision. Between 2005 and 2009, patients' ability to perform activities of daily living (as measured by the Barthel score) and their cognitive function (as measured by the cognitive performance scale) declined 7 percent and 4 percent, respectively. For an overlapping period, between 2006 and 2008, the Office of Inspector General (OIG) found that SNFs increasingly billed for higher payment RUGs, even though the ages and diagnoses of beneficiaries were largely unchanged (Office of Inspector General 2011). For each age group (65–70 years old, 70–75 years old, etc.) and for the most frequent admitting diagnoses, billing for the highest rehabilitation case-mix groups increased by at least 10 percentage points. The OIG concluded that beneficiary characteristics did not explain the patterns of case-mix groups or lengths of stay.

Two factors could explain the growth in intensive therapy days during this period. First, facilities increasingly provided therapy concurrently rather than in one-on-one sessions because the facility was paid as if one-on-one therapy had been furnished even when two patients were treated at the same time. When the base rates were established, almost all therapy was furnished in one-on-one therapy sessions. Since then, the provision of concurrent therapy grew to make up 28 percent of therapy provision in 2006 (Centers for Medicare & Medicaid Services 2009).[8] In October 2009, CMS changed the counting of concurrent therapy minutes to more accurately reflect the resources used to furnish them. As a result, the use of this modality declined (Centers for Medicare & Medicaid Services 2011). Despite the change in policy, the share of days classified into the highest rehabilitation case-mix groups continued to increase between 2009 and 2010.

Second, Medicare's rules allowed SNFs to bill for therapy that was not provided. Under the SNF PPS, payments are determined by assessing each patient during a limited window of time, but this assessment is used to establish payments over a longer period of time. Until recently, Medicare rules did not require facilities to reassess patients when their therapy care needs changed and the program did not reconcile payments with the actual amount of therapy provided. Providers could furnish a high level of therapy during the assessment window so that the days were assigned to high-payment case-mix groups and, after the assessment period, providers could lower their provision until the next assessment window began. In addition, providers may have become more efficient at scheduling therapy so that more therapy can be furnished with the same number of staff (LeadingAge 2011).

While shorter hospital stays could have shifted some therapy provision from the hospital to the SNF sector, growth in therapy days far outpaced this shift. For example, for the five highest volume diagnosis related groups discharged to SNFs, hospital lengths of stay decreased 1 percent to 6 percent between 2007 and 2009. In contrast, total therapy days increased 15 percent and the most intensive therapy days rose 36 percent during this period.

Some of the shift in rehabilitation days may be explained by a shift in site of service from inpatient rehabilitation facilities (IRFs) to SNFs, as IRFs comply with a rule

requiring that at least 60 percent of IRF patients have 1 of 13 specified conditions. Under this rule, only a subset of patients recovering from major joint replacement, the largest category of IRF admissions in 2004, count toward the threshold. Of the top 10 diagnosis related groups with discharges to IRFs in 2010, major joint replacement had the highest volume of patients who were discharged to SNFs. Between 2004 and 2010, the share of beneficiaries who were discharged from a hospital to a SNF with this condition increased by 5 percentage points (from 33 percent to 38 percent), the share discharged to home health care increased by 11 percentage points (from 21 percent to 32 percent), and the share discharged to an IRF decreased by 16 percentage points (from 28 percent to 12 percent).

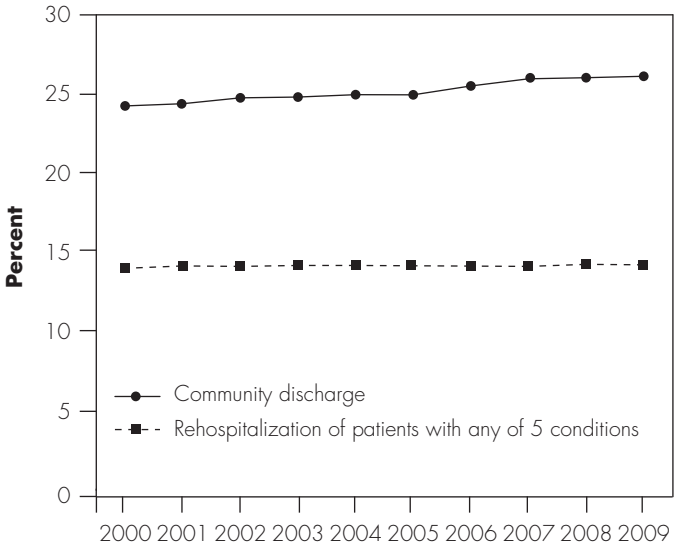
Quality of care: SNF quality virtually unchanged from prior year

The quality of care furnished to patients during a Medicare-covered SNF stay continues to show mixed results (Figure 7-2). Since 2000, one outcome measure (the risk-adjusted rate of discharge to the community) showed slight improvement and the other (the risk-adjusted rate of rehospitalization of patients with any of five care-sensitive conditions) exhibited almost no change. Both measures showed almost no change between 2008 and 2009.[9]

In 2009, the most recent year for which data are available, the risk-adjusted rate at which SNFs discharged patients to the community within 100 days—26 percent—was essentially the same as in the prior year. Since 2000, the rate has increased less than 2 percentage points, indicating very slightly improved quality. Nonprofit facilities and hospital-based facilities had higher risk-adjusted community discharge rates than other SNFs, and urban facilities had slightly higher community discharge rates than rural facilities.

In 2009, the risk-adjusted rate at which Medicare-covered SNF patients with any of five potentially avoidable conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) were rehospitalized was 14.2 percent, almost the same as in 2000. The lack of improvement in the rates likely reflects the financial incentive to rehospitalize patients and suggests the need to create counterincentives to minimize unnecessary transfers of patients back to the hospital. Once beneficiaries' characteristics—such as ability to perform activities of daily living, cognitive function, and comorbidities—were accounted for, the outcome differences by racial group were not statistically significant.

FIGURE 7–2 **Risk-adjusted SNF quality measures show little improvement since 2000**



Note: SNF (skilled nursing facility). Increases in rates of discharge to community indicate improved quality. The five conditions include congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance. Increases in rehospitalization rates indicate worsening quality. Rates are calculated for all facilities with 25 or more stays.

Source: Rates calculated by MedPAC based on a risk adjustment model developed by the Division of Health Care Policy and Research, University of Colorado at Denver and Health Sciences Center (Min et al. 2011).

Providers' access to capital: Slow lending environment in 2012

A vast majority of SNFs operate within nursing homes; therefore, in assessing SNFs' access to capital we look at access for nursing homes. Most operators make their bottom line using Medicare profits and lenders and owners use Medicare patient mix as one metric of a facility's financial health. Well-run facilities, especially those with a high Medicare patient mix and in markets close to hospitals, remain a steady investment.

Lending by the Department of Housing and Urban Development (HUD) continues to be an important source of funds. Since 2008, HUD's lending dramatically increased as a result of an overhaul of its federally insured mortgage program for nursing homes under Section 232/222.[10] Between 2010 and 2011, the number of HUD-financed projects increased 14 percent (to 421 projects), with insured amounts totaling $3.4 billion in 2011 (Department of Housing and Urban Development 2011). HUD is expected to maintain the same level of activity for 2012, but projects may be smaller (Moore 2011).

Nursing home bankruptcies in the early 2000s

Studies of the bankruptcies in this sector concluded that the prospective payment system (PPS) was not responsible for poor financial performance of some skilled nursing facilities. A Government Accountability Office study of the bankruptcies of nursing home chains in the early 2000s found that the bankruptcies were the result of decisions companies made regarding their expansion and subsequent contraction of their ancillary service businesses, the way they structured their facilities' capital costs, and accounting adjustments made to recognize lower-than-expected revenue streams (Government Accountability Office 2000). Another study found that nursing home closures were the result of many factors, most of which are not related to Medicare's PPS (Castle et al. 2009, Zinn et al. 2009). These factors include the number of survey deficiencies, change in ownership, measures of efficiency, high Medicaid share, implementation of case-mix-based payments for Medicaid, low Medicaid payments, being hospital based or part of a chain, and location in markets with many other facilities. ■

HUD underwriting considers the known and anticipated reductions in Medicare and Medicaid payments, a facility's past performance on inspections, and other quality metrics in evaluating loan applicants.

While capital has been available this year, market analysts and lenders we spoke with thought little borrowing will occur in 2012, given uncertainties about the effects of the Medicare policy changes implemented by CMS and possible future reductions to Medicare and Medicaid payments. Reductions in payment rates are relatively easy to evaluate, but the effects of changes to the therapy rules are more difficult to project. Lenders and borrowers are assessing the impact of these changes and are likely to wait until midyear 2012 before considering new projects. The impact on individual operators will vary by the amount of Medicare business, their rehabilitation business model, their capital structure, their geographic diversity, and the mitigation strategies (see p. 191) operators employ (Doctrow and Bernstein 2011). Analysts we spoke with believe operators will be able to mitigate the effects of the payment reductions and policy changes but vary considerably in their assessment of how much. Some companies will diversify their portfolios and increase their private pay mix (Gerace 2011). Some analysts have concluded that most operators should remain profitable and continue to be good investments (Ecker 2011, Pruitt 2011).

Recent interviews with market analysts noted that the industry is not as highly leveraged as it was in the late 1990s, and many operators have more cash on hand. It is unlikely that any of the medium and larger companies will face bankruptcy as a result of recent changes to Medicare and Medicaid policies. Analysts do not expect a replay of the bankruptcies in the early 2000s (see text box) (Pruitt 2011).

Medicare payments and providers' costs: Medicare margins continue to increase

Between 2009 and 2010, Medicare payments increased faster than Medicare costs, resulting in an aggregate 2010 Medicare margin of 18.5 percent. Medicare margins continued to vary more than twofold. Examining the range in financial performance, we found that high-margin SNFs had considerably lower costs and, to a smaller extent, higher payments (and more intensive therapy) than low-margin SNFs. The variation in Medicare margins and cost per day were not attributable to differences in patient mix. One group of SNFs consistently furnished relatively low-cost, high-quality care and had substantial Medicare margins. Some MA plans' payments were considerably lower than Medicare's FFS payments.

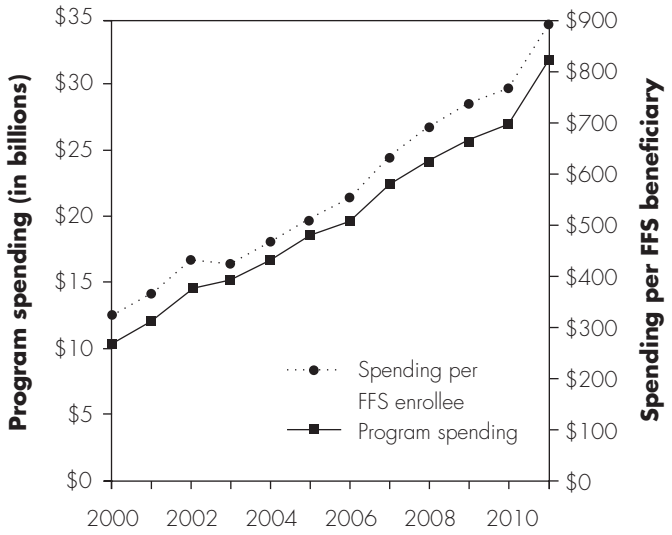
Trends in spending and cost growth

In fiscal year 2011, program spending for SNF services increased to almost $32 billion, up more than 17 percent from 2010 (Figure 7-3). This spike in spending reflects overpayments prompted by implementation of the new case-mix groups in fiscal year 2011. On a per FFS beneficiary basis, estimated spending increased to $891.

Between 1999 and 2010, the cumulative increase in payments (75 percent) far exceeded increases in costs (Figure 7-4). Costs per day rose 45 percent between 1999 and 2010, with larger increases for therapy and NTA costs and slower increases for routine costs. Cost increases have consistently outpaced market basket updates.

FIGURE 7–3

Overpayments in 2011 increased program spending on SNFs



Note: SNF (skilled nursing facility), FFS (fee-for-service). Years are fiscal years.

Source: CMS, Office of the Actuary, 2011.

In the early years of the PPS, the Congress raised SNF payments through legislation effective 2000 and 2001 by an estimated 18 percent and 8 percent, respectively (Centers for Medicare & Medicaid Services 2000, Centers for Medicare & Medicaid Services 2001). These provisions allowed facilities to transition immediately to full PPS rates (instead of a three-year blend of facility-specific and federal rates) and included across-the-board increases and increases for select case-mix groups and rate components.[11]

The mix of hospital-based and freestanding facilities included in the base year differs from the mix of facilities today. Hospital-based facilities have costs per day that are about double those of freestanding facilities. Although CMS included only part of the cost difference in establishing the base year (1995), the share of hospital-based facilities was higher, so their costs contributed more to the base than they would today.[12] In 2000, hospital-based facilities made up 12 percent of SNFs; by 2011, they were 6 percent but made up just 4 percent of SNF revenues.

SNF Medicare margins continue to grow

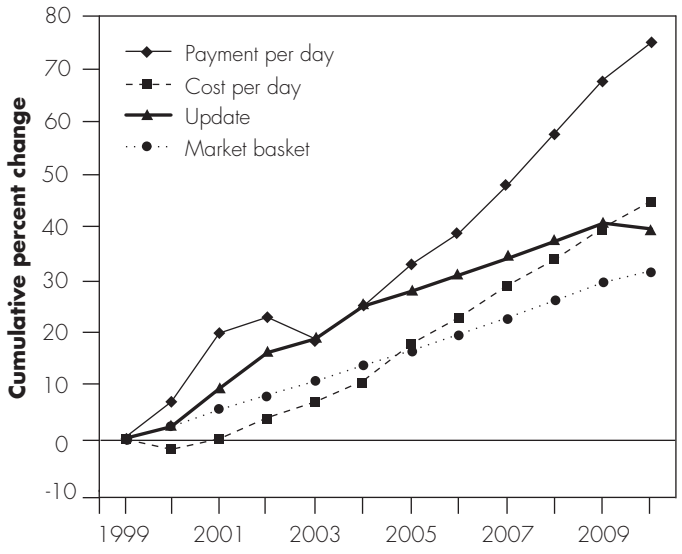
The Medicare margin is a key measure of the adequacy of the program's payments because it compares Medicare's payments with the costs to treat beneficiaries. A total margin, in contrast, reflects the financial performance of the entire facility across all lines of business (such as ancillary and therapy services, hospice, and home health care) and all payers. Total margins are presented as context for the Commission's update recommendation.

SNF aggregate Medicare margins have steadily increased since 2005 (Table 7-5, p. 184). The revised case-mix groups implemented in 2006 led to even higher Medicare margins, reflecting the continued concentration of days in the highest paying case-mix groups. In 2010, the aggregate Medicare margin for freestanding SNFs was 18.5 percent, the 10th consecutive year with average margins above 10 percent. Since 2006, Medicare payments per day have increased faster than costs per day, resulting in growing SNF margins. From 2009 to 2010, aggregate Medicare payments per day grew 4.2 percent, while Medicare costs per day grew 3.6 percent.

Medicare margins have also become less variable. In 2006, there was a fivefold difference between the margin at the 25th and 75th percentiles; in 2010, there was a threefold difference. In 2010, one-half of freestanding SNFs had Medicare margins of 18.9 percent or more, while one-quarter of them had Medicare margins at or below 9

FIGURE 7–4

Cumulative change in payments and cost per day, payment updates and the market basket update, 1999–2010



Source: MedPAC analysis of freestanding skilled nursing facility Medicare cost reports from 1999 to 2009 and *Federal Register* final rules for fiscal years 1999 to 2010.

TABLE 7–5

Freestanding SNF Medicare margins continue to increase

	2003	2004	2005	2006	2007	2008*	2009	2010
Facility count	10,941	11,252	11,301	11,379	11,622	12,557	12,954	12,836
Margin, by group								
All SNFs	10.9%	13.7%	13.1%	13.3%	14.7%	16.6%	18.0%	18.5%
Intensive therapy								
High share	13.0	16.6	16.3	17.1	18.7	19.9	21.0	21.6
Low share	5.0	7.8	5.9	4.4	4.2	8.5	10.2	10.3
Medically complex								
High share	11.0	12.3	11.5	10.4	10.6	13.5	15.1	15.5
Low share	10.0	12.7	12.6	14.0	15.4	17.0	18.1	18.4
Dual eligible								
High share	8.6	11.0	10.6	10.1	10.6	12.3	14.0	14.5
Low share	10.5	14.3	13.4	14.4	16.2	19.1	19.5	20.2
Urban	10.3	13.2	12.6	13.1	14.5	16.3	17.9	18.5
Rural	13.8	16.1	15.2	14.3	15.5	18.0	18.7	18.4
For profit	13.3	16.1	15.2	15.7	17.2	19.1	20.2	20.7
Nonprofit	1.4	3.5	4.5	3.5	4.1	6.9	9.6	9.5
Government**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: SNF (skilled nursing facility), N/A (not available). High and low refers to the top and bottom quartile of the distribution of shares of days.
*CMS reported an increased number of SNFs filed cost reports attributed to the consolidation of audit operations at Medicare contractors. Because more "low utilization" facilities filed cost reports, more SNFs met the Commission's data screens to be included in the analysis.
**Government-owned providers operate in a different context from other providers, so their margins are not necessarily comparable.

Source: MedPAC analysis of freestanding SNF cost reports, 2003–2010.

percent, and one-quarter had Medicare margins of 26.9 percent or higher.

There has been a large decline in the number of SNFs with negative Medicare margins and the size of their losses. In 1999, 51 percent of freestanding SNFs had negative Medicare margins and their median margin was –19 percent. In 2010, 13 percent of freestanding SNFs had negative margins and their median Medicare margin was –10 percent. Seven percent of SNFs had negative Medicare margins three years in a row and the majority of them (63 percent) were located in counties where there were at least six other SNFs.

The widely varying financial performance of freestanding SNFs indicates that the PPS needs to be revised to more closely match payments to patient characteristics and not to the services furnished. Facilities with high shares of intensive rehabilitation therapy had considerably higher Medicare margins than facilities with low shares. Facilities with high shares of medically complex days and dual-eligible days had somewhat lower margins than facilities with low shares of these days. The disparity between for-profit and nonprofit facilities is considerable and reflects differences in their patient mix, service provision, and cost differences. The for-profit SNFs' aggregate Medicare margin was 20.7 percent, compared with 9.5 percent for nonprofit facilities. Until 2010, rural facilities had higher margins than urban facilities, especially in the early years of the PPS. This year, the margins are comparable.

Hospital-based facilities (6 percent of facilities) continued to have negative Medicare margins (–67 percent), in large part reflecting their higher daily costs and shorter stays (they average less than half the length of stay in freestanding facilities). Their higher costs are a function of higher staffing levels and a mix more heavily weighted toward professional staff. They also have higher ancillary

TABLE 7–6 **Freestanding SNF Medicare financial performance in 2010 by location**

Measure	Urban	Rural			
		Micropolitan	Adjacent to urban	Nonadjacent to urban	Frontier
Medicare margin	18.5%	18.6%	18.4%	18.0%	15.2%
Cost per day	$385	$336	$322	$315	$316
Payment per day	472	413	395	384	373

Note: SNF (skilled nursing facility). Micropolitan counties are rural counties that include a city of 10,000 to 50,000 people. Frontier counties have six or fewer people per square mile.

Source: MedPAC analysis of freestanding SNF cost reports for 2010.

costs, which may indicate that physicians view SNF stays as an extension of the inpatient stay and may not fully adjust their practice to the fact that the patient has moved into a lower intensity, post-acute care setting. Our recommended changes to the SNF PPS would increase payments to hospital-based facilities by an estimated 27 percent.

The Commission has examined hospital-based SNFs and their impact on the hospital's financial performance. Administrators consider the SNF units in the context of the hospital's overall business model and the SNF's impact on the inpatient margin, inpatient length of stay, and inpatient capacity to treat additional acute care patients. Our analysis of 2010 hospital cost reports found that SNF services contributed to the bottom line financial performance of the hospitals. Hospitals with SNFs had lower inpatient costs per case and higher inpatient Medicare margins than hospitals without SNFs.

The aggregate total (all payer, all lines of business) margin for freestanding SNFs in 2010 was 3.6 percent, with one-quarter of facilities having total margins at or below –1.3 percent and one-quarter with total margins equal to or greater than 8.2 percent. Total margins are driven in large part by low Medicaid payments. This industry's overall financial health is shaped by state policies regarding the level of Medicaid payments and the ease of entry into a market (e.g., whether there is a requirement for a certificate of need). There are many reasons why using Medicare payments to cross-subsidize Medicaid payments is ill-advised (see text box, p. 186). Additional factors in a facility's total financial performance are the share of revenues from private payers (generally considered favorable), their other lines of business (such as ancillary, home health, and hospice services), and nonpatient sources of income (such as investment income).

Medicare SNF margins for freestanding rural and urban facilities

In 2010, aggregate freestanding rural and urban Medicare margins were similar except for frontier locations, where the margins were lower though still high (Table 7-6). Unlike in other sectors, total facility volume did not have a strong relationship to Medicare margin (Table 7-7). Though the lowest volume facilities had lower Medicare

TABLE 7–7 **Freestanding SNF Medicare margins in 2010 by total facility volume**

	Margin by quintile of total facility days				
	Lowest	2nd	3rd	4th	5th
Urban	9.0%	17.4%	20.8%	19.7%	18.7%
Rural	16.4	18.3	20.6	18.9	16.6

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding SNF cost reports for 2010.

Medicare's skilled nursing facility payments should not subsidize payments from Medicaid or other payers

Industry representatives contend that Medicare payments should subsidize payments from other payers—namely, Medicaid. However, the Commission believes such cross-subsidization is not advisable for several reasons. First, using Medicare rates to supplement low Medicaid payments results in poorly targeted subsidies. Facilities with high shares of Medicare payments—presumably the facilities that need revenues the least—would receive the most in subsidies from the higher Medicare payments, while facilities with low Medicare shares—presumably the facilities with the greatest need—would receive the smallest subsidies. Medicare and Medicaid shares vary widely across facilities (Table 7-8). As a result, the impact of the Medicare subsidy would vary considerably across facilities, putting more dollars into facilities with high Medicare use (and low Medicaid use), which are likely to have higher Medicare margins than other facilities.

In addition, Medicare's subsidy does not discriminate between states with relatively high and low payments. In 2009, Medicaid payments to nursing homes varied twofold, yet Medicare's high payments subsidize facilities even in states with relatively high Medicaid rates. If Medicare raises or maintains its high payment levels, states could be encouraged to further reduce their Medicaid payments and, in turn, create pressure to raise Medicare rates. Higher Medicare payments could further encourage providers to select patients based on payer source or to rehospitalize dual-eligible patients to qualify them for a Medicare-covered, higher payment stay. Finally, Medicare's current overpayments represent a subsidy of trust fund dollars (and its taxpayer support) to the low payments made by states and private payers. If the Congress wishes to help certain nursing facilities (such as those with high Medicaid shares), it would be more efficient to do so through a separate targeted policy. ■

TABLE 7–8 **Distributions of Medicare and Medicaid share of freestanding facility days in 2010**

	Percentile of facility days				
	10th	25th	Median	75th	90th
Medicare share	5%	8%	12%	17%	25%
Medicaid share	0	45	63	74	82

Source: MedPAC analysis of freestanding skilled nursing facility cost reports for 2010.

margins than other facilities, the highest volume facilities did not have higher Medicare margins than others. Current SNF policy includes separate rural and urban base rates for each component. These analyses suggest that no other rural adjusters are needed.

Financial performance is not related to patient characteristics but is related to RUG assignment

To help evaluate the range in SNF margins, we compared the characteristics of freestanding facilities with the highest and lowest Medicare margins (those in the bottom and top 25th percentiles of Medicare margins). We found that lower daily costs and higher payments associated with the high therapy case-mix groups and not patient characteristics (other than case-mix group assignment) contributed to the differences in financial performance between SNFs with the lowest and highest Medicare margins (Table 7-9).

High-margin SNFs had costs per day 30 percent below those of low-margin SNFs, after adjusting for differences in wage levels and case mix. The lower daily costs of

TABLE 7–9

Cost and payment differences, not patient characteristics, explain variation in Medicare margins for freestanding SNFs in 2010

Characteristic	Top margin quartile	Bottom margin quartile	Ratio of bottom to top quartile
Cost measures			
Standardized cost per day	$269	$366	0.7
Standardized ancillary cost per day	$121	$154	0.8
Standardized routine cost per day	$150	$206	0.7
Average daily census (patients)	89	71	1.3
Facility occupancy rate	88%	89%	1.0
Revenue measures			
Medicare payment per day	$453	$409	1.1
Share of days in intensive therapy	75%	61%	1.2
Medicare share of facility revenue	27%	15%	1.8
Share of medically complex days	3%	5%	0.6
Patient mix			
Case-mix index	1.16	1.16	1.0
Dual-eligible share of beneficiaries	40%	27%	1.5
Percent minority beneficiaries	10%	4%	2.5
Percent very old beneficiaries (over 85 years old)	33%	38%	0.9
Medicaid share of days	64%	62%	1.0
Facility mix			
Percent for profit	91%	59%	N/A
Percent urban	75%	72%	N/A

Note: SNF (skilled nursing facility), N/A (not available). Values shown are medians for the quartile. Top margin quartile SNFs were in the top 25 percent of the distribution of Medicare margins. Bottom margin quartile SNFs were in the bottom 25 percent of the distribution of Medicare margins. Standardized costs per day are Medicare costs adjusted for differences in area wages and the case mix (using the nursing component's relative weights) of Medicare beneficiaries. Intensive therapy days are days classified into ultra high and very high rehabilitation case-mix groups. The number of freestanding SNFs in each quartile is 3,164.

Source: MedPAC analysis of 2010 freestanding SNF cost reports.

the high-margin SNFs are partly explained by their higher average daily census (and greater economies of scale). Differences in patient characteristics (shares of beneficiaries who are dual eligible, minority, or very old) do not explain the cost differences across facilities. Facilities with high margins had identical case-mix indexes—as measured by the relative weights associated with the nursing component of the case-mix groups. We use the nursing component (as opposed to the payment weight of the case-mix group) to avoid distorting the measure of patient complexity by the amount of therapy furnished, which could be unrelated to patient care needs. We found similar differences between SNFs with and without negative margins.

On the revenue side, high-margin SNFs had average Medicare payments per day that were 10 percent higher than low-margin SNFs. Their higher payments reflect larger shares of ultra high and very high rehabilitation case-mix groups. Low-margin SNFs either did not treat patients with extensive rehabilitation care needs or they furnished fewer services to them. High-margin SNFs also had fewer medically complex days than low-margin SNFs. By tying payments to patient characteristics, the PPS design recommended by the Commission would redistribute Medicare payments to SNFs based on their mix of patients, not the amount of therapy furnished, and improve the financial performance of SNFs with low shares of rehabilitation days (see p. 177).

Identifying relatively efficient skilled nursing facilities

We defined relatively efficient skilled nursing facilities (SNFs) as those with relatively low costs per day and reasonably good quality care between 2006 and 2008. The cost per day was adjusted for differences in case mix (using the nursing component relative weights) and wages. Quality measures were risk-adjusted rates of community discharge and rehospitalization for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Quality measures were calculated for all facilities with at least 25 stays.

The method we used to assess performance attempts to limit drawing incorrect conclusions about performance based on poor data. Using three years to categorize SNFs as efficient (rather than just one year) avoids categorizing providers based on random variation or one "bad" year. In addition, we separated a SNF's assignment to a group from examination of the group's performance to avoid having a facility's poor data affect both its own categorization and the assessment of the group's performance. Performance over three years (2006 through 2008) was used to categorize SNFs into relatively efficient and other groups; once the groups were defined, we evaluated their performance in 2009 and 2010. Thus, a SNF's erroneous data could result in inaccurate assignment of the SNF to a group, but because the group's performance is assessed with data from later years, these "bad" data would not affect the assessment of the group's performance.

The mix of efficient providers was fairly comparable to the mix of all freestanding SNFs. Efficient SNFs were slightly more likely to be rural (rural SNFs made up 31 percent of efficient SNFs compared with their 29 percent share of freestanding SNFs) and slightly more likely to be nonprofit (nonprofits were 25 percent of efficient SNFs compared with their 23 percent share of freestanding facilities). ■

Ownership of low-margin and high-margin facilities did not mirror their industry mix. Although for-profit facilities make up two-thirds of SNFs, they composed a smaller share (59 percent) of the low-margin facilities and 91 percent of the high-margin group.

High margins achieved by relatively efficient SNFs

The Commission is required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 to consider the costs associated with efficient providers. We examined the financial performance of freestanding SNFs with consistent cost and quality performance (see text box for definitions). To measure costs, we looked at costs per day that were adjusted for differences in area wages and case mix. To assess quality, we examined risk-adjusted rates of community discharge and potentially avoidable rehospitalizations. To be included in the group of relatively efficient SNFs, a SNF had to be in the best third of the distribution of one measure and not in the bottom third on any measure for three consecutive years (2006 through 2008). According to this definition, 10 percent of SNFs provided relatively low-cost, high-quality care.

Our analyses found that SNFs can have relatively low costs and provide good quality care while maintaining high margins (Table 7-10). Compared with the average, relatively efficient SNFs had community discharge rates that were 38 percent higher, rehospitalization rates that were 17 percent lower, and costs per day that were 10 percent lower.

Compared with other SNFs, efficient SNFs had patients of higher complexity as measured by their nursing component case-mix index and the share of days classified in medically complex case-mix groups. Although the two groups of SNFs have comparable shares of therapy days, efficient SNFs furnished less intensive therapy. We did not find differences between relatively efficient and other SNFs in terms of their occupancy rates or size of facility. In growth trends since 2000, relatively efficient facilities were slightly more likely to have experienced low cost growth (in the bottom third of the distribution of growth in cost per day) and less likely to have experienced high revenue growth (in the top third of the distribution of growth in revenue per day) than other facilities.

We recognize that a SNF may appear to be efficient in providing its own care but may not be when considering a patient's entire episode of care. For example, SNFs that discharge patients to other post-acute care services may keep their own costs low but shift costs to other settings and thus raise total program spending. In this scenario, a SNF would appear to be low cost but in terms of the entire episode of care it may not be.

In the future, we plan to examine the total costs of the episode of care to assess the SNFs' practice patterns in a broader context. Rehospitalization makes up a large portion of an episode's costs and therefore it may be a reasonable proxy for episodes with high costs. However, the measure will not capture differences in "downstream" post-acute care use. In addition, as patient assessment data at discharge become available, we may consider expanding the analysis to include measures of improvement in functional status.

Variation in costs per day for freestanding SNFs not related to patient demographics or facility characteristics

Costs per day varied by more than 60 percent across all freestanding providers after differences in wages and case mix were taken into account (Table 7-11, p. 190). Within each subgroup, standardized costs varied consistently by 20 percent to 30 percent between the 25th and 75th percentiles, with larger differences between the 10th and 90th percentiles. Across the subgroups, median standardized cost per day varied 7 percent, from $263 to $282 per day. The relatively small differences in standardized cost per day across the subgroups indicate that most of the variation is not related to location, case mix, ownership, or beneficiary demographics.

Fee-for-service payments are considerably higher than some Medicare Advantage payments

Another indicator that Medicare's payments are too high is the comparison of MA and FFS payments. We compared Medicare FFS and MA payments at five large nursing home companies where such information is publicly available. These companies report managed care payments and note that MA is the majority of this business. Medicare's FFS payments ranged from 19 percent to 68 percent higher than MA rates in 2010 (Table 7-12, p. 191). FFS and MA rates were even further apart for 2011 (ranging from 12 percent to 75 percent) because of the FFS overpayments associated with implementation of the new case-mix groups.[13] It is unlikely that these large differences in payments are due solely to the comorbidities of the enrollees in FFS and MA. However, until encounter level data are available, we cannot compare the patient severity of MA and FFS enrollees who use SNFs.

TABLE 7–10 **Relatively efficient SNFs maintained high Medicare margins**

Measure	Relatively efficient SNFs	Other SNFs
Percent of SNFs	10%	90%
Performance in 2009		
Relative*:		
Community discharge rate	1.38	0.95
Rehospitalization rate	0.83	1.02
Cost per day	0.9	1.02
Median:		
Medicare margin	22.0%	18.2%
Performance in 2010		
Relative* cost per day	0.92	1.01
Median:		
Medicare margin	22.0%	18.9%
Facility case-mix index	1.23	1.17
Share therapy days	92%	93%
Share intensive therapy days	68%	72%
Share medically complex days	5%	4%
Total margin	5.1%	3.8%
Medicaid share of facility days	59%	63%
Trends in performance, 2001–2009		
Percent with low cost growth	14%	86%
Percent with high revenue growth	12	88

Note: SNF (skilled nursing facility). Efficient SNFs were defined by their cost per day and two quality measures (community discharge and rehospitalization rates) for 2006 through 2008. Efficient SNFs were those in the lowest third of the distribution of one measure and not in the bottom third on any measure in each of three years. Costs per day were standardized for differences in case mix (using the nursing component relative weights) and wages. Quality measures were rates of risk-adjusted community discharge and rehospitalization of patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge. Quality measures were calculated for all facilities with at least 25 stays. Intensive therapy days include days classified into the ultra high and very high case-mix groups. Low cost growth included facilities in the lowest third of the distribution of cost growth between 2001 and 2010. High revenue growth included facilities in the highest third of the distribution of revenue growth between 2001 and 2010. The number of facilities included in the analysis was 9,011.
*Measures are relative to the national average.

Source: MedPAC analysis of quality measures for 2005–2009 and Medicare cost report data for 2005–2010.

TABLE 7–11 **Variation in freestanding SNFs' standardized costs per day, 2009**

Group of SNFs	Median	Within-group variation: Ratio of 90th to 10th percentile	Within-group variation: Ratio of 75th to 25th percentile
All freestanding	$270	1.6	1.3
Location			
Rural	263	1.6	1.3
Urban	272	1.5	1.2
Ownership			
Nonprofit	280	1.7	1.3
For profit	266	1.7	1.3
Share of dual-eligible beneficiaries			
Low share	282	1.6	1.3
High share	263	1.6	1.3
Minority share			
Low share	267	1.6	1.3
High share	265	1.6	1.3
Very old beneficiaries (over 85 years old)			
Low share	270	1.5	1.2
High share	274	1.7	1.3

Note: SNF (skilled nursing facility).

Source: MedPAC analysis of freestanding skilled nursing facility Medicare cost reports from 2009 and Medicare denominator file.

Payments and costs for 2012

In assessing the payment update for 2013, the Commission considers the estimated relationship between SNF costs and Medicare payments in fiscal year 2012. Our modeling of costs assumes a middle point between historical cost growth and the market basket for 2011 and the market basket increase for 2012.

To estimate 2012 payments, the Commission considers policy changes that went into effect in 2011 and 2012 and the legislated SNF market basket increases. Our modeling of payments in 2011 and 2012 includes:

- The market basket updates for each year.
- A forecast error correction of –0.6 percent in fiscal year 2011. CMS makes corrections when forecast errors are larger than 0.5 percent in either direction. In this case, the error was –0.6 percent and CMS lowered the update in fiscal year 2011 by 0.6 percent.
- A market basket update in fiscal year 2012 that is offset by the productivity adjustment of 1.0 percent, as required by the Patient Protection and Affordable Care Act of 2010 (PPACA).
- Estimates of overpayments in fiscal year 2011 and reductions to payments in fiscal year 2012. When changes to a case-mix classification system are introduced, CMS uses the best available data to make across-the-board adjustments so that payments under the "new" classification system are the same as under the "old" system. Although intended to be budget neutral, the new classification generated $4.47 billion in additional payments in fiscal year 2011. To reestablish budget neutrality between the old and new systems, CMS corrected the overpayment by lowering payments in fiscal year 2012 by $4.47 billion (about an 11 percent reduction to payments after considering the market basket update and the productivity adjustment).

TABLE 7–12

Comparison of Medicare fee-for-service and Medicare Advantage daily payments in 2010 for five companies

	Payment		
Company	**FFS**	**MA**	**Ratio of FFS to MA payment**
Ensign Group	$578	$345	1.68
Extendicare	471	422	1.12
Kindred	485	409	1.19
Skilled Healthcare Group	515	379	1.45
Sun HealthCare	476	374	1.27
Average ratio			1.34

Note: FFS (fee-for-service), MA (Medicare Advantage). The MA payments are listed in the reports as managed care payments. Some companies' notes state that MA makes up the majority of these rates.

Source: Securities and Exchange Commission 10-K annual reports for 2010 filed by Extendicare, Kindred, Skilled Healthcare Group, and Sun HealthCare Group. Ensign Group data are from its third-quarter 2011 results report.

In modeling revenue for 2012, we did not include industry responses to the policy and payment changes CMS made in fiscal year 2012. In prior years, the industry as a whole has been adept at modifying their practices to mitigate the impact of policy changes, shifting the amount and modalities of therapy to their advantage. This responsiveness is likely to continue, although market analysts and company reports vary considerably in their assessment of the combined impact of the policy changes. The fiscal pressure exerted by changes to the patient assessments and payments for concurrent and group therapy will vary by operator and their past practices but generally will increase facilities' attention to controlling their costs.

Market analysts we spoke with and publicly traded companies report a variety of strategies to dampen the impact of the changes and note that some mitigation strategies will take time to implement. Mitigation strategies include lowering administrative and supply expenses, examining the terms of contracts with therapy providers and compensation packages, reducing the use of overtime and contract labor, and expanding the company's mix of private pay patients (Ensign Group 2011, Kindred Healthcare 2011). Providers may evaluate their patient assessment practices and their use of concurrent and group therapy to maximize assignment of days in case-mix groups (Field and Augustine 2011). Although changes to the assessment requirements may increase some providers' costs, they may also yield higher payments. One analyst we spoke with said that before CMS's policy changes, payments were sufficiently high that operators did not have to focus on the efficiency of their provision of therapy and asserted that now they will. Two publicly traded companies said they could provide the same quality of care with lower costs and continue to grow (Kindred Healthcare 2011, Sun Healthcare 2011).

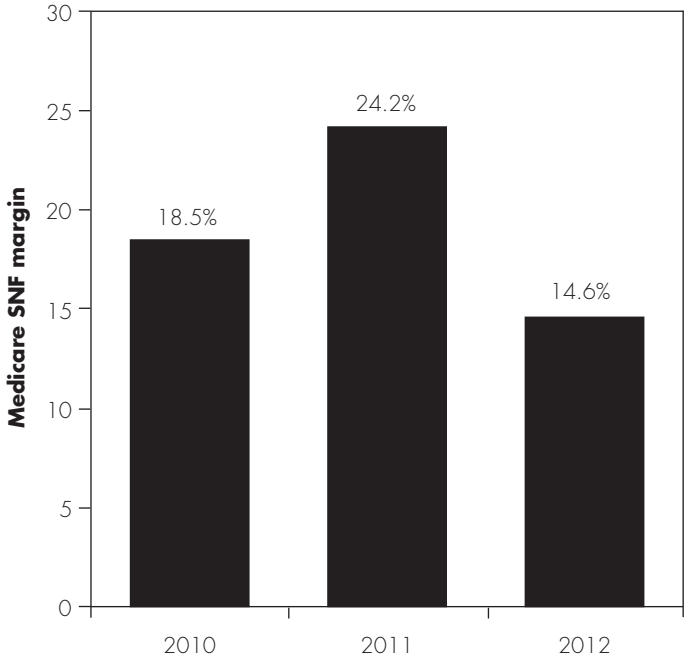
Based on estimates of the changes in revenues and costs between 2010 and 2012, the projected aggregate Medicare SNF margin is 14.6 percent. The industry has emphasized the 11 percent cut to payments in fiscal year 2012, but the reduction was taken from a level that included the overpayments (Figure 7-5, p. 192). We estimate that margins in fiscal year 2011 were 24 percent. Despite the reductions, payment rates in fiscal year 2012 are 3.7 percent higher than they were in fiscal year 2010.

How should Medicare payments change in 2013?

Last year, in its discussion of the update recommendation for SNFs, the Commission noted that it would examine whether Medicare's payments to SNFs need to be rebased

FIGURE 7–5

SNF Medicare margins projected to remain high even after payment reductions in 2012



Note: SNF (skilled nursing facility). Margin for 2010 is actual; margins for 2011 and 2012 are projected.

Source: MedPAC analysis.

(Medicare Payment Advisory Commission 2011). In considering rebasing, the Commission found:

- Aggregate Medicare margins for SNFs have been above 10 percent since 2000 and the distribution has narrowed over time.
- Variation in Medicare margins are not related to differences in patient characteristics.
- Cost differences are unrelated to wage levels, case-mix, and beneficiary demographics.
- Relatively efficient SNFs, with relatively low costs and high quality, indicate that payments could be lowered without adversely affecting the quality of care.
- FFS payments to some SNFs were considerably higher than some MA payments.
- The industry has responded to the level of Medicare's payments in two ways: Medicare's cost growth has consistently been above the SNF market basket since 2001 and revenues increased even when payment rates were lowered in 2010.

These factors show that the PPS has exerted too little fiscal pressure on providers. Moreover, Medicare payments, which are financed by taxpayer contributions to the trust fund, currently subsidize payments from Medicaid and private payers. If the Congress wishes to help nursing facilities with high Medicaid payer mix, a better targeted and separately financed program could be established to do so. Finally, the shortcomings of the PPS design result in large disparities in performance across facilities.

In 2013, there are no policy changes known at this time aside from the required update and productivity adjustment. The payment update in current law for fiscal year 2013 is the forecasted change in input prices as measured by the SNF market basket minus a productivity factor. The market basket for SNFs in 2013 is projected to be 2.7 percent and the productivity adjustment is estimated to be 0.9 percent, but CMS will update both before establishing the payment rates for 2013.

To estimate the impact of revising the PPS design and rebasing the level of payments, we modeled payments assuming the PPS is revised in 2013 (and payments were kept at 2012 levels) and the rebasing of payments begins in 2014 with a 4 percent reduction in payments. Under a revised and rebased PPS, there would continue to be a disparity in Medicare financial performance among SNFs but the differences would be smaller. As previously discussed, the current payment system favors facilities that select rehabilitation patients over medically complex patients. The Commission's work with the Urban Institute identified changes in the SNF PPS that would produce greater equity in payments across types of patients and, as a result, redistribute payments from SNFs that focus on rehabilitation to those that focus on medically complex patients (Medicare Payment Advisory Commission 2008, Wissoker and Zuckerman 2012). The revised design would have the effect of moving payments from SNFs with high Medicare margins to SNFs with lower Medicare margins. A revised PPS would increase payments for nonprofit, rural, and hospital-based facilities and facilities that treat high shares of dual-eligible beneficiaries and minority beneficiaries.

The Commission estimated 2014 Medicare margins with a revised PPS and, as an initial step toward rebasing, payments were lowered by 4 percent. The industry-wide Medicare margin would be roughly 7 percent. Facilities with high shares of medically complex, dual-eligible, minority, or very old patients would have positive margins. Although differences would be narrower, nonprofit SNFs

are expected to continue to have lower margins than for-profit facilities because nonprofit facilities have higher costs.

RECOMMENDATION 7-1

The Congress should eliminate the market basket update and direct the Secretary to revise the prospective payment system for skilled nursing facilities for 2013. Rebasing payments should begin in 2014, with an initial reduction of 4 percent and subsequent reductions over an appropriate transition until Medicare's payments are better aligned with providers' costs.

RATIONALE 7-1

Under this update recommendation, payments would not be updated for 2013. The evidence indicates that Medicare beneficiaries continue to have access to SNF services, and Medicare payments far exceed Medicare costs. Under policies in law for 2011 and 2012, we project the Medicare margin for freestanding SNFs to exceed 14 percent in 2012. SNF payments appear more than adequate to accommodate cost growth without an update in 2013.

The recommendation considers the distribution of payments and variability in financial performance under Medicare that result from shortcomings in the PPS. It requires the Secretary of Health and Human Services to revise the PPS in fiscal year 2013—and these revisions would be done in a budget-neutral fashion. By redistributing payments, the revisions would level the playing field between providers before the rebasing of payments would begin in fiscal year 2014. A revised design would redistribute payments away from intensive therapy care that is unrelated to patient care needs (while still establishing high payments for patients with high care needs) and toward medically complex care. A needs-based design would improve the accuracy of payments and narrow the disparities in financial performance that result from the mix of cases facilities treat and their therapy practices but would not, and should not, address disparities that result from inefficiencies.

The recommendation also considers the level of Medicare payments. CMS should begin the process of rebasing payments in 2014 by lowering payments by 4 percent and continuing with a transition over an appropriate period of time until payments are better aligned with provider costs. An example of a transition period and an end point for rebasing payments is to lower payments over three years until the base payment equals the 95th percentile of standardized costs per day for efficient providers. Setting base payments at the 95th percentile of efficient providers has the advantage of considering cost and quality in establishing base rates while maintaining some fiscal pressure. Using standardized costs to establish the base rate sets aside differences in providers' costs related to wages and case mix but puts providers at risk for their inefficiencies. Other benchmarks, such as a point on the distribution of cost per day for all providers, are also possible.

The Commission recognizes the need to proceed cautiously but deliberately to help ensure there are no unintended disruptions caused by rebasing, including key elements that reflect this prudence. The recommendation notes that the PPS should be revised first (in 2013) so that payments are redistributed before reductions occur. Reductions would not begin until 2014. It also includes a transition: Reductions would be taken incrementally, with the lowering of payments in 2014 as the first step in aligning payments with costs.

The Commission is focused on ensuring beneficiaries' access to SNF care. Some of the variation in financial performance reflects patient selection and service provision that are unrelated to patient characteristics. The recommended changes should not impair beneficiary access to care; in fact, they should improve access to services for beneficiaries who are disadvantaged by the design of the current payment system. At the same time, the industry should be able to furnish services while having positive Medicare margins, including facilities with higher concentrations of medically complex, dual-eligible, minority, or very old beneficiaries. The Commission will continue to monitor beneficiary access, quality of care, and financial performance and may consider future recommendations based on industry performance.

IMPLICATIONS 7-1

Spending

- The spending implications of this recommendation are that it would lower program spending relative to current law by between $250 million and $750 million for fiscal year 2013 and between $5 billion and $10 billion over five years. Savings occur in 2013 because current law requires a market basket increase (estimated to be 2.7 percent) and, as required by PPACA, a productivity adjustment (which would lower payments by an estimated 0.9 percent). The spending implication of this recommendation is based on Medicare spending projections that were

TABLE 7–13 **Variation in risk-adjusted rehospitalization rates from SNFs in 2009**

Group of SNFs	Number of facilities	Percent of beneficiaries rehospitalized		
		25th percentile	Median	75th percentile
All	14,062	13.4%	17.7%	21.8%
Freestanding	13,146	14.4	18.1	22.0
Hospital based	916	6.2	9.5	14.3
Urban	9,848	14.1	18.0	21.7
Rural	4,214	11.7	16.9	21.9
For profit	10,089	14.9	18.7	22.5
Nonprofit	3,289	10.3	14.8	19.1

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of DataPro data for 2009.

made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- We do not expect an adverse impact on beneficiary access. Revising the PPS will result in fairer payments across all types of care, making providers more likely to admit and treat beneficiaries with complex care needs. We do not expect the recommendation to affect providers' willingness or ability to care for Medicare beneficiaries. Provider payments will be lower but the differences in Medicare margins will be smaller. Impacts on individual providers will be a function of their mix of patients and current practice patterns. The recommendation will not eliminate all the differences in Medicare margins between providers because there are large differences in providers' costs.

Discouraging avoidable rehospitalizations from SNFs

Avoidable rehospitalizations of SNF patients expose beneficiaries to hospital-acquired infections and poor care transitions (such as medication errors). At the same time, they unnecessarily raise spending for Medicare. Among dual-eligible beneficiaries, researchers found that SNFs were the most likely source of potentially avoidable hospitalizations compared with Medicaid nursing facilities, patients receiving home and community-based services, and other community services. Rehospitalizations from SNFs accounted for more than $700 million in hospital stays in 2005, with hospitalizations originating in a nursing home contributing an additional $1.9 billion (Walsh et al. 2010).

Last year, the Commission stated that it would examine a rehospitalization policy for SNFs as one way to improve care for beneficiaries and lower Medicare spending. Beginning in October 2012, a readmission policy will penalize hospitals with high readmission rates for certain conditions. A rehospitalization policy for SNFs would create comparable policies for SNFs and hospitals, thereby encouraging providers in both settings to manage the transitions between them to avoid penalties. SNFs would have a financial incentive to furnish the care necessary to avoid rehospitalizations for conditions that are potentially avoidable, such as pneumonia and dehydration. Under current policy, SNFs have an incentive to rehospitalize high-cost patients as a way to shift costs they would otherwise incur onto hospitals.

Many factors influence rehospitalization rates

Rehospitalizations occur for many reasons (Mor et al. 2010). Some of these factors are within a SNF's control;

others are not. Influences at least partly within a facility's control include:

- staffing level, skill mix, and frequency of staff turnover (Grabowski et al. 2008, Kane et al. 2003, Konetzka et al. 2008a, Konetzka et al. 2008b);
- drug mismanagement (such as inappropriate drug choices or dosing) (Lau et al. 2005, Mustard and Mayer 1997);
- transition care—such as discharge counseling, medication reconciliation, patient education regarding self-care, and communication among providers, staff, and the patient's family; and
- hospice use and the presence of advance directives (Grabowski et al. 2008, Mor and Grabowski 2008).

Other important factors not within a facility's control include premature discharges from the hospital (that are undetected until after admission to the SNF), worsening of a patient's condition that requires medical attention typically not available in a SNF, and physician preferences and concerns about malpractice (Grabowski et al. 2008, Perry et al. 2010).

Given this complexity, a rehospitalization policy needs to create incentives for providers to improve while accommodating the variation across patients and the fact that some rehospitalizations are appropriate. Any condition, even a potentially avoidable one, is not always preventable and some conditions are best treated in a hospital. That said, a rehospitalization policy would prompt facilities to change their staffing, ensure good care transitions, improve their medication management, and educate families about advance directives and hospice services so that unnecessary hospitalizations do not occur.

Because a rehospitalization policy would align the incentives of providers across sectors, it represents a stepping stone toward paying for larger bundles of services. Entities contemplating the development of an accountable care organization or bundled payments for a larger package of services would gain experience in managing care across settings so that rehospitalizations are minimized. A hospital may be encouraged to retain its SNF or to devote underused space to one because it facilitates better care coordination and helps manage the risk associated with larger payment bundles.

Rehospitalization rates vary by type of SNF and ownership

The Commission reports the rate of risk-adjusted rates of rehospitalization for beneficiaries with any of five conditions (respiratory infections, congestive heart failure, kidney and urinary tract infections, electrolyte imbalance, and sepsis). These conditions are considered potentially avoidable because, with high-quality nursing care and monitoring, facilities could treat many of these patients in-house rather than rehospitalizing them. Patients with any of these five conditions account for three-quarters of rehospitalizations from SNFs (Kramer et al. 2007).

In 2009, there was considerable variation in risk-adjusted rehospitalization rates, suggesting room for improvement for many SNFs. Rates were about 13 percent at the 25th percentile (the best quartile) and about 22 percent at the 75th (the worst) quartile (Table 7-13). At the extremes, there was almost a threefold difference between the 10th percentile and the 90th percentile (not shown). The median rate for freestanding facilities was almost double that for hospital-based facilities. Hospital-based facilities have lower rates in part because they have ready access to ancillary services and there is an increased presence of physicians and registered nurses who can diagnose and treat emerging conditions more rapidly, obviating the need for a readmission to the hospital. Some hospital-based facilities are also selective about the SNF patients they admit, referring two-thirds of SNF-bound patients to other SNFs (Medicare Payment Advisory Commission 2007). Rural facilities had lower median rates than urban facilities, in part because more of them are hospital based. The lowest rural facility rates were more than 2 percentage points lower than urban rates (11.7 percent compared with 14.1 percent at the 25th percentile).

There was also considerable variation by ownership, with for-profit facilities having risk-adjusted rates higher than those for nonprofits (18.7 percent versus 14.8 percent). Findings by ownership reflect the differences between hospital-based and freestanding facilities because most for-profit facilities are freestanding. These ownership results are consistent with the findings from studies of hospitalization rates of nursing home residents. Compared with nonprofit facilities, for-profit nursing homes had almost twice the rehospitalization rate for suspected pneumonia cases (Konetzka et al. 2004). Another study found that chain-affiliated homes had twice as many hospitalizations for infections as independent and nonprofit nursing homes, and for-profit homes had three times as many (Zimmerman et al. 2002).

TABLE 7–14 **Comparison of SNFs with the best and worst risk-adjusted rehospitalization rates in 2009**

SNF characteristic	Best (bottom 25th percentile)	Worst (top 25th percentile)
Rehospitalization rate (median)	9.9%	24.5%
Percent:		
For profit	52	83
Hospital based	19	2
Medicare margin (2009)	15.6%	20.1%
Median share of:		
Medically complex days	4%	4%
Dual-eligible beneficiaries	29	38

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of DataPro data for 2009.

SNFs with the best rates (bottom quartile) had rehospitalization rates less than half those of SNFs with the worst rates (top quartile; Table 7-14). SNFs with the worst rehospitalization rates were much more likely to be for profit (they made up 83 of this quartile compared with their two-thirds share of the industry) and had higher Medicare margins. The two groups had the same shares of medically complex days.

SNFs with the highest rehospitalization rates treated more dual-eligible beneficiaries, which may reflect that some facilities rehospitalize beneficiaries with long-term stays so they requalify for Part A–covered stays. Previous Commission work found that SNFs with high rates of repeat rehospitalizations (users with at least four SNF stays in two years) had high Medicaid shares, had high Medicare margins, and were disproportionately for profit. Repeat users were more likely to be dual eligible and had higher hierarchical condition category risk scores than other SNF users. Other researchers report 30-day (all cause) rehospitalization rates were more than a third higher for individuals who had previously been in a nursing home compared with those who had resided in the community (26.8 percent vs. 19.4 percent) (Mor et al. 2010).

Some facilities have consistently high and low risk-adjusted rehospitalization rates (Table 7-15). Among the worst performers, more than 900 facilities were consistently in the worst quartile 3 years in a row, and almost 200 were in the worst 10th percentile in each of 3 years. Among facilities with the best rates, 326 facilities were in the best 10th percentile in each of 3 years and 732 were in this best decile for 2 of 3 years.

Examples of efforts to lower hospitalizations

Some facilities have partnered with insurers and health systems to lower their hospitalization rates. Aetna recently announced a performance-based contract with Genesis HealthCare, a nursing home chain (Anderson 2011). The program will be implemented in the firm's facilities in four states and aim to lower hospitalizations by 10 percent to 20 percent. Interventions include expanding the hours RNs and physicians are available in facilities, improved discharge planning, and adherence to treatment plans. Geisinger and its partner providers have implemented care coordination strategies to improve the transition between nursing facilities and hospitals. Strategies focus on medication reconciliation, early detection of worsening conditions, prevention of falls and skin deterioration, and enhanced communication within the care team (Davis 2010). Early results show between 13 percent and 67 percent fewer rehospitalizations in six participating homes.

In a quality improvement effort funded by the Commonwealth Fund, 25 facilities undertook early detection of potential problems (such as dehydration), in-facility treatment of select conditions (such as respiratory and urinary tract infections), and improved end-of-life care strategies (such as advance care planning and palliative care). The preliminary results of this study suggest that the savings (from fewer self-reported hospitalizations) range from 17 percent to 24 percent, depending on how engaged the facility was, and the savings could fund the hiring of a full-time advance practice nurse or physician assistant (Ouslander et al. 2011).

CMS began a voluntary value-based purchasing demonstration in 2009, involving about 200 facilities in 3 states (New York, Wisconsin, and Arizona). The demonstration awards bonuses to facilities with good performance, if there are estimated savings at the state level. Performance in four domains is measured, including hospitalization rates for a facility's long-stay and short-stay residents. CMS is in the process of evaluating the demonstration's first-year results.

Defining the rehospitalization measure

The rehospitalization policy needs to establish which types of cases to include in the measure. One ready-to-use measure is the risk-adjusted rate of rehospitalization of patients with five conditions considered to be potentially avoidable (respiratory infections, congestive heart failure, urinary tract infections, electrolyte imbalance, and sepsis). A measure that considers these conditions would put facilities at risk for conditions they could often treat and would give providers a focus on the care processes that need improvement. For example, providers would begin to focus attention on appropriate staff competencies, mix, and level; adequate medical staff backup on nights and weekends; clear delineation of appropriate versus inappropriate hospitalizations; adoption of clinical guidelines and best practices for potentially avoidable conditions; and increased staff, resident, and family attention to advance directives and hospice care (Ouslander and Berenson 2011). A policy aimed at improving the related nursing care and care processes is likely to affect other stays, not just Medicare-covered ones. One disadvantage of basing a policy on specific conditions, however, is that providers might be encouraged to change their coding of these conditions to avoid a penalty. In addition, providers may focus narrowly on improving the care for select conditions rather than on raising quality across the board. Because patients with the five conditions capture a large share of rehospitalizations, the selectivity of this measure is less of an issue than a more narrowly defined measure.

Broader definitions of rehospitalization could also be considered and would give the policy more heft. An all-cause measure reflects the belief that all rehospitalizations should be avoided and puts facilities at more risk. This definition would avoid the potential problem that providers might change their coding practices to circumvent the cases counted in the rehospitalization measure. Another way to expand the measure would be to include hospitalizations from both SNF and long-term care stays of dual-eligible beneficiaries. Even if Medicare does not pay for the stay, it pays for the Part B services furnished to dual-eligible beneficiaries receiving long-term care.

Defining the time period covered by the measure

A rehospitalization policy also needs to define the time period captured by the measure. The Commission supports a measure that covers the entire Medicare-covered SNF stay—that is, it would vary up to 100 days. There are two reasons to design a measure that covers the entire length of the stay. First, if a SNF policy considered rehospitalizations within a time shorter than the benefit period, it would miss a significant share of rehospitalizations (Figure 7-6, p. 198). For example, one-third of SNF stays exceed 30 days. Second, a measure that does not cover the duration of the stay would not hold the SNF accountable for the care it furnishes throughout the stay and it might encourage SNFs to delay rehospitalizations until the measurement period was over to avoid having the stay count toward a rehospitalization penalty.

The measure should eventually be extended to a period beyond the SNF stay, which would help ensure effective transitions between the SNF and the home or the next post-acute care provider. The extension would put hospitals and SNFs at similar risks for rehospitalizations that occur within a defined period after the beneficiary is discharged from their immediate care.

Because the periods covered by the hospital and SNF readmission policies are likely to differ, the hospitals' and SNFs' incentives would often, but not always, be aligned (Figure 7-7, p. 199). In the future, with 30-day windows after discharge for hospitals and SNFs, both sectors would have an incentive to promote successful care transitions from one provider to the next and, in the case of patients going home, the coordination of follow-up

TABLE 7–15 **Number of SNFs with consistently the highest (worst) and lowest (best) rehospitalization rates**

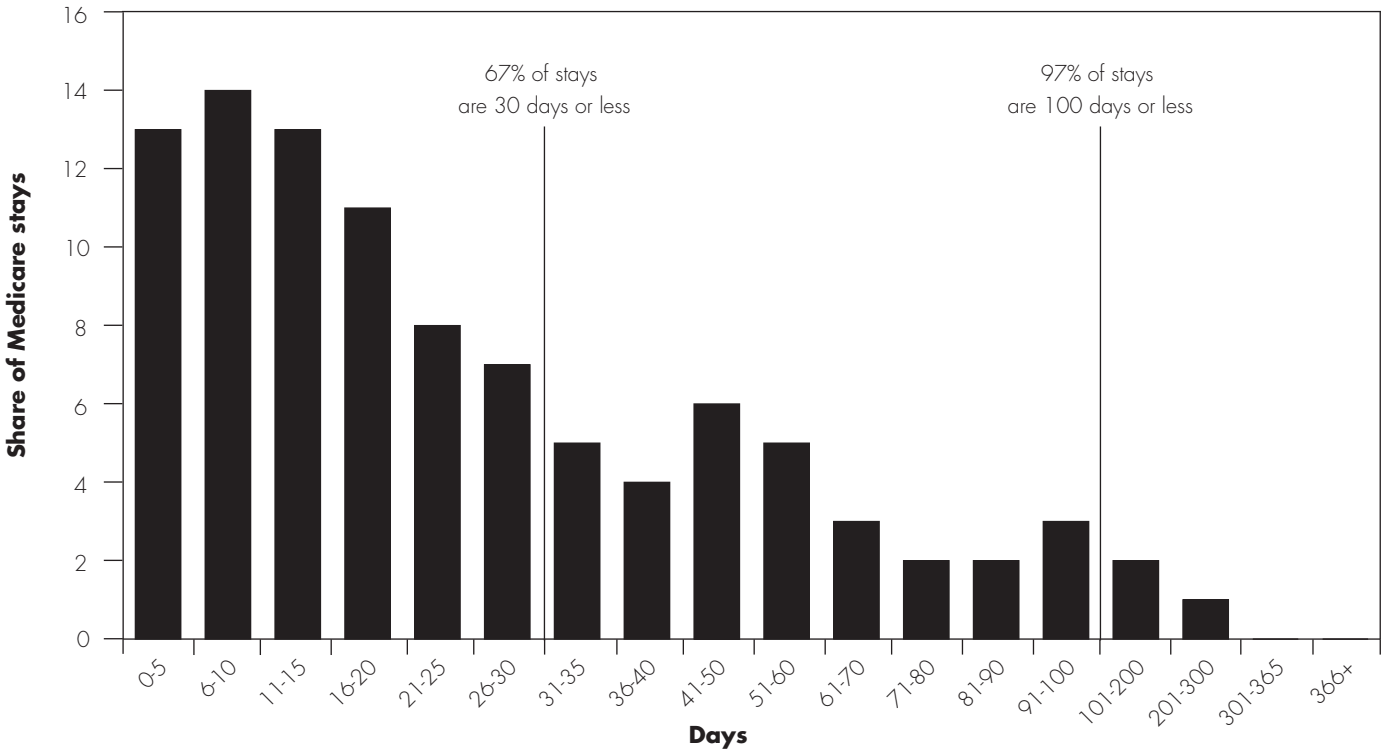
Definition of performance	Number of SNFs
In worst group (top 10th percentile)	
3 years in a row	198
2 out of 3 years	675
In best group (bottom 10th percentile)	
3 years in a row	326
2 out of 3 years	732

Note: SNF (skilled nursing facility). The rehospitalization rate is for patients with any of five conditions (congestive heart failure, respiratory infection, urinary tract infection, sepsis, and electrolyte imbalance) within 100 days of hospital discharge while the beneficiary is still in the SNF. The rate includes facilities with at least 25 stays.

Source: MedPAC analysis of 2009 DataPro data.

FIGURE 7–6

Distribution of Medicare length of stay in SNFs, 2009



Note: SNF (skilled nursing facility).

Source: MedPAC analysis of Data Pro data 2009.

care. If a patient is rehospitalized from the SNF within 30 days of discharge from the hospital, the stay would count in both the SNF and the hospital measures. The hospital would have an incentive to avoid prematurely discharging the patient, and the SNF would have an incentive to manage the care it furnishes to avoid unnecessary rehospitalizations. If a rehospitalization occurred more than 30 days from hospital discharge but while the beneficiary was still in the SNF, the rehospitalization would count for the SNF but not for the hospital. This asymmetry is reasonable because a rehospitalization this far into a SNF stay is more likely to reflect the quality of care received at the SNF than a premature discharge from or the care received at the hospital. A rehospitalization that occurred within 30 days of discharge from the SNF would count in the SNF measure (including discharges to its own long-term care beds) and it would count in the hospital measure if it occurred within 30 days of the hospital discharge. Because other post-acute care providers (such as home health agencies) do not have rehospitalization policies, a SNF could be penalized even though a subsequent post-acute care provider would not be. In the future, the Commission will evaluate the role other post-acute care providers play in rehospitalizations.

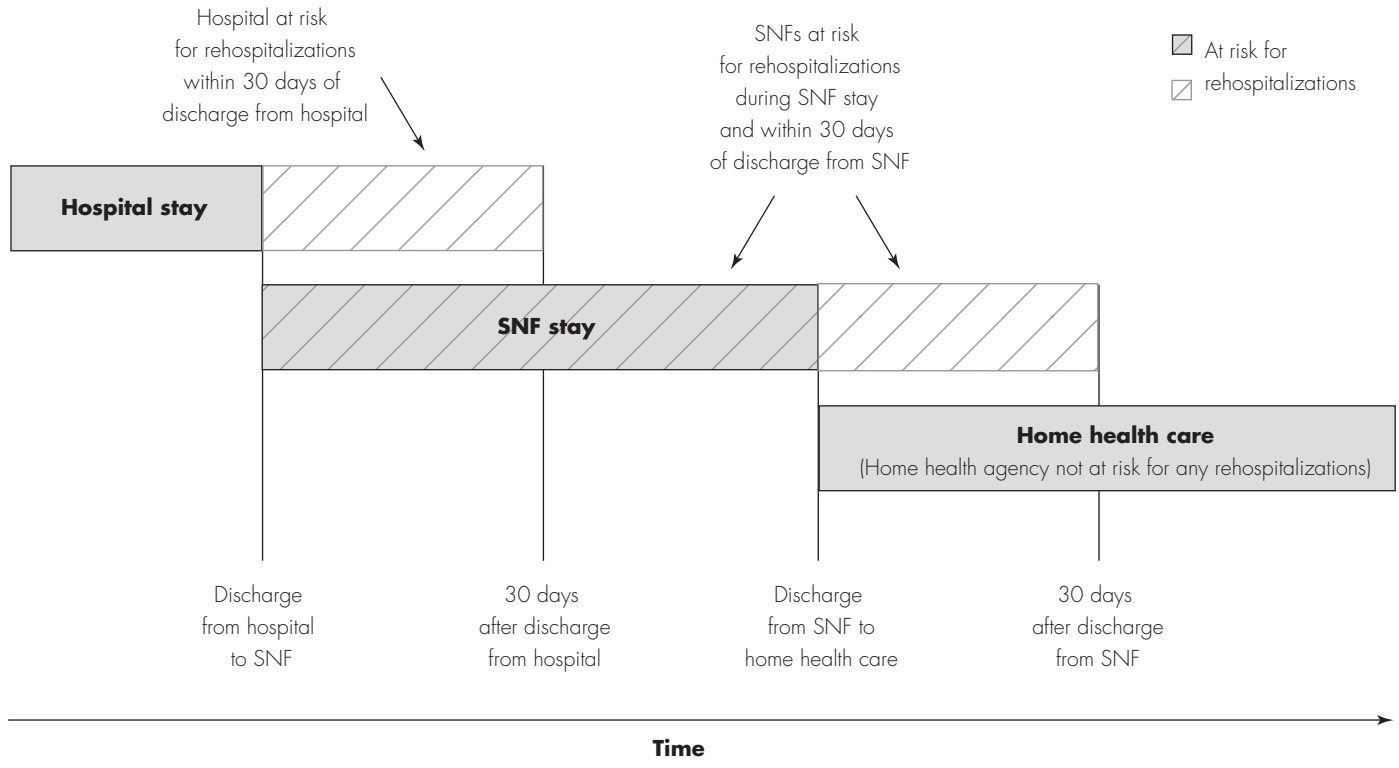
Rehospitalizations during the post-discharge window could be reported separately from the stay-based measure or included in a combined measure. Because the processes and actors are likely to differ from those related to the stay-based care, a separate measure might give the SNF more actionable information. For example, a high rehospitalization rate for patients after discharge from the SNF could point to shortcomings in the community-based care or limitations in the patient's and family's ability to manage the patient's conditions at home. In contrast, a high rate of rehospitalizations of patients still in the SNF would point to the care processes in the facility.

Penalties associated with a policy

To align the SNF rehospitalization policy design with the hospital readmission policy, the SNF penalty would target facilities with above-average rates over multiple

FIGURE 7–7

Providers at risk with a SNF rehospitalization policy



Note: SNF (skilled nursing facility). Chart illustrates a policy that includes a 30-day window after discharge from the SNF.

years. Relative performance has the key advantage of not assuming every hospitalization was avoidable or penalizing a provider for rehospitalizing any specific beneficiary. Using multiple years' experience avoids penalizing providers for one "bad" year. For consistency with the hospital policy, a penalty could range up to a 3 percent reduction in payments. The facility-specific rates should be publicly reported so that providers can gauge their relative performance and beneficiaries may use this information in selecting a post-acute care provider.

RECOMMENDATION 7-2

The Congress should direct the Secretary to reduce payments to skilled nursing facilities with relatively high risk-adjusted rates of rehospitalization during Medicare-covered stays and be expanded to include a time period after discharge from the facility.

RATIONALE 7-2

A rehospitalization policy for SNFs will counter the financial incentive they have to rehospitalize beneficiaries and will better align hospitals' and SNFs' incentives to lower unnecessary rehospitalizations. The Secretary should be given the flexibility to align the rehospitalization policy with the hospital readmission policy. The Secretary could start with a risk-adjusted measure for five conditions, since a risk-adjustment method is available and would facilitate implementation. The SNF penalty would target facilities with above-average rates over multiple years and not examine how individual cases were handled. Because the measure focuses on rates and consistently poor performance, it accommodates the lack of a perfect risk adjustment method yet encourages quality improvement.

Once a risk-adjusted measure has been established, the measure should be expanded to cover 30 days after discharge so that facilities would be encouraged to ensure effective care transitions for patients going home. Because the relevant actors and care processes shaping rehospitalizations during a SNF stay and after discharge are different, the Secretary may elect to report these measures separately. In the future, the rehospitalization

TABLE 7–16

Number of nursing homes treating Medicaid enrollees declined slightly between 2001 and 2011

	2001	2003	2005	2007	2009	2010	2011	Percent change 2001–2011
Number of facilities	16,070	15,857	15,466	15,238	15,093	15,084	14,999	–6.7%

Source: Certification and Survey Provider Enhanced Reporting on CMS's Survey and Certification Providing Data Quickly system, 2001–2011.

rate could also be expanded to include rehospitalizations for all causes.

A phased approach would allow CMS to move forward with a policy and begin to lower rates while a risk-adjusted measure that includes 30 days after discharge is developed. It would also give providers time to fully understand the policy and its potential impacts and to develop the infrastructure necessary to lower rehospitalization rates. CMS may also use the phase-in to develop resources to assist providers in understanding their rehospitalization rates. Regardless of the measure, adequate risk adjustment is key to making fair comparisons across providers and for holding providers accountable for their behavior. CMS will need to monitor provider behavior after the measurement window to ensure providers are not shifting care to beyond the window.

IMPLICATIONS 7-2

Spending

- Savings from a SNF rehospitalization policy would depend on what share of rehospitalizations were included in the measure and the parameters of the penalty. To estimate savings, we assumed a policy design that penalizes SNFs with above-average rates and penalties phased in to a maximum of 3 percent. This recommendation would lower program spending relative to current law by between $50 million and $250 million for fiscal year 2013 and by $250 to $750 million over five years. We assumed no behavioral change from providers, so we did not include any hospital savings in our estimate. The spending implication of this recommendation is based on Medicare spending projections that were made prior to a sequester, as the recommendation was developed and voted on before the sequester was triggered and became current law. If a Medicare sequester does occur, it will change the spending implication of the recommendation.

Beneficiary and provider

- Beneficiary care should improve as SNFs focus on care processes and better communication between providers that lower their rehospitalization rates. Transition care between hospitals and SNFs should improve, thus increasing the quality of care for beneficiaries. The recommendation should not adversely affect beneficiary access or affect providers' willingness or ability to care for Medicare beneficiaries. Payments would be lowered for providers with consistently high rates of rehospitalizations.

TABLE 7–17

Medicaid-covered nursing facility days increased, 2001–2010

	2001	2003	2005	2007	2009	2010	Percent change, 2001–2010
Number of days	214,355	216,824	222,542	226,112	245,969	252,091	17.6%

Note: Nursing facility days include skilled and nursing facility levels of care. Days are in thousands of days.

Source: Medicare skilled nursing facility cost reports from 2001–2010.

Medicaid trends

Section 2801 of PPACA requires the Commission to examine spending, utilization, and financial performance trends under the Medicaid program for providers with a significant portion of revenues or services associated with the Medicaid program. We report nursing home spending and utilization trends for Medicaid and the financial performance for non-Medicare payers. Medicaid revenues and costs are not reported in the Medicare cost reports.

Medicaid covers nursing home (long-term care) and skilled nursing care furnished in nursing facilities. Medicaid pays for long-term care services that Medicare does not cover. For beneficiaries who are dually eligible for Medicaid and Medicare, Medicaid pays the Medicare copayments required of beneficiaries beginning on day 21 of a SNF stay.

Utilization

There were more than 1.6 million users of Medicaid-financed nursing home services in 2008, a 5 percent decline from 2001 (Centers for Medicare & Medicaid Services 2010). Fewer users reflect many states' efforts to divert nursing home admissions to community-based services.

The number of nursing homes certified as Medicaid providers declined slightly between 2010 and 2011 (about half a percent) and almost 7 percent between 2001 and 2011 (Table 7-16). The vast majority of nursing homes are certified as Medicare and Medicaid providers.

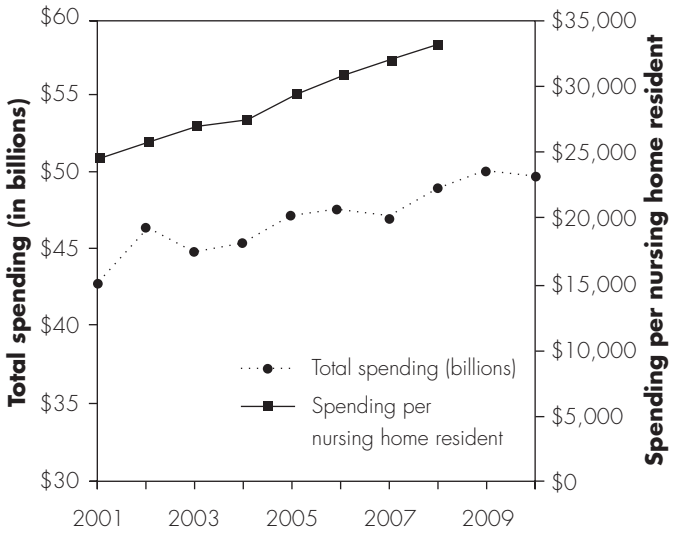
During the same period, Medicaid-covered days (both nursing home level and SNF level) increased 17.6 percent (Table 7-17). More recently, between 2009 and 2010, Medicaid-covered days increased (2.4 percent). Medicaid days made up an average of 63 percent of nursing facility days in 2010.

Spending

In 2010, Medicaid spent just under $50 billion (combined state and federal funds) on nursing homes (Figure 7-8). Spending increases averaged 1.7 percent annually between 2002 and 2010, for a total of 16 percent over the period. Year-to-year changes in spending were variable, increasing in some years and decreasing in others. Between 2009 and 2010, spending decreased 0.8 percent.

FIGURE 7–8

Total and per user Medicaid spending on nursing homes



Note: Data for 2009 and 2010 spending per nursing home resident are not available.

Source: Total spending data come from CMS, Office of the Actuary. Per user spending come from Health Care Financing Review 2010 Statistical Supplement available at https://www.cms.gov/MedicareMedicaidStatSupp.

On a per user basis, spending per nursing home resident averaged $33,097 in 2008, a 29 percent increase from 2001.

In 2009, Medicaid payments for a day of nursing home care varied twofold across states (Table 7-18, p. 202). Twelve states' average payments were 10 percent or more below the national average ($160 per day), while 11 states' average payments were 10 percent or more above it. However, these payment levels look different after adjusting for local wage rates. For example, payments in Arkansas are 12 percent below average (0.88), but after adjusting for the wage levels in the state its payments are above average (1.03). Conversely, payments in New Jersey appear to be above average (1.07) until its relatively high wage level is considered; then, its payments fall to below average (0.89). The relative payments of several states decline substantially after adjusting for wage levels. For example, Connecticut's payments were 33 percent above average without wage adjustment but are only 10 percent higher once wage rates are considered.

TABLE 7–18

State Medicaid payments to nursing homes in 2009 vary twofold

State	Average payment		Wage-adjusted average payment	
	Daily rate	Payment relative to national average	Wage-adjusted daily Medicaid rate	Payment relative to national average
Alabama	$166	1.02	$193	1.15
Arkansas	144	0.88	173	1.03
Colorado	175	1.07	172	1.02
Connecticut	217	1.33	185	1.10
Delaware	211	1.29	193	1.15
Idaho	178	1.09	187	1.11
Illinois	117	0.72	117	0.69
Indiana	151	0.93	164	0.98
Iowa	126	0.77	149	0.89
Kansas	135	0.83	157	0.94
Kentucky	144	0.88	163	0.97
Louisiana	134	0.82	155	0.92
Massachusetts	197	1.21	169	1.00
Michigan	162	1.00	163	0.97
Minnesota	162	1.00	153	0.91
Mississippi	180	1.10	211	1.25
Missouri	126	0.77	141	0.84
Montana	159	0.98	179	1.06
Nebraska	120	0.74	140	0.83
Nevada	181	1.11	164	0.98
New Hampshire	195	1.20	188	1.12
New Jersey	174	1.07	150	0.89
New York	229	1.40	198	1.18
North Carolina	157	0.96	172	1.02
North Dakota	181	1.11	212	1.26
Ohio	167	1.03	176	1.05
Oklahoma	129	0.79	158	0.94
Oregon	211	1.30	191	1.14
Pennsylvania	189	1.16	193	1.15
Rhode Island	186	1.15	160	0.95
South Carolina	148	0.91	162	0.96
South Dakota	114	0.70	138	0.82
Tennessee	148	0.91	166	0.99
Texas	122	0.75	134	0.80
Utah	150	0.92	168	1.00
Vermont	182	1.12	177	1.05
Virginia	150	0.92	161	0.96
Washington	165	1.01	148	0.88
Wisconsin	163	1.00	163	0.97
Wyoming	166	1.02	182	1.08
Average	163		168	

Note: States are missing because they did not respond to the survey. Average payments reflect differences in case mix accounted for by each state's case-mix system. Each state's average wage-adjusted payment was calculated by weighting each county's area wage index by the Medicaid days in each county.

Source: Unadjusted data were collected by Brown University. 2011. Shaping Long Term Care in America Project. Project funded in part by the National Institute on Aging (1P01AG027296) and MedPAC.

TABLE 7–19 **Nursing home non-Medicare margins were negative but total margins were positive**

Type of margin	2000	2002	2004	2006	2008	2009	2010
Non-Medicare margin	–0.7%	–2.8%	–1.3%	–0.9%	–2.6%	–1.2%	–1.2%
Total margin	0.9	1.1	1.7	2.2	2.1	3.4	3.6

Note: Non-Medicare margins include the revenues and costs associated with non-Medicare payers (Medicaid and private payers). Total margins include the revenues and costs associated with all payers and all lines of business, including nursing facility, hospice, and rehabilitation therapy services and nonpatient revenues such as investment income.

Source: MedPAC analysis of freestanding 2000–2010 skilled nursing facility cost reports

The differences between Medicaid's and Medicare's payments are sometimes compared. Although Medicare's payments are much higher than Medicaid's, the acuity of the average Medicare beneficiary is considerably higher, as reflected in the average nursing case-mix index for Medicaid and Medicare patients. In 2008, the average Medicare nursing case-mix index was 36 percent higher than that for Medicaid residents. Differences in the therapy case-mix indexes were even larger. The therapy case-mix index of Medicare beneficiaries was almost 13 times that for Medicaid patients (Plotzke and White 2009). Medicare's payments for the average Medicaid resident would have been $212, compared with $380 for the average Medicare patient.

Although states' revenues have begun to rebound since 2010, their Medicaid spending and enrollment outpaced this growth. As a result, most states project budget gaps for fiscal year 2012 (National Conference of State Legislatures 2011). Funds from the American Recovery and Reinvestment Act of 2009, which temporarily increased federal funding match rates in fiscal years 2009 and 2010, are nearly exhausted and states' shares of Medicaid spending will increase in fiscal year 2012. States expect their financial situation to continue to slowly improve—the number of states with deficits and the sizes of the deficits are expected to decline in fiscal year 2013 (National Conference of State Legislatures 2011). Medicaid costs are expected to make up an increasing share of states' budgets and outpace state revenue collections, resulting in a tight fiscal environment for states (National Governors Association and the National Association of State Budget Officers 2011).

To control their Medicaid spending, states have pursued four strategies: freeze or reduce payments to providers, increase enrollment in managed care, raise copayments (particularly on prescription drugs), and expand the use of home and community-based services. Industry-sponsored research found that Medicaid shortfalls as a share of payments increased from 9 percent in 2009 to a projected 10 percent in 2011 (Eljay LLC 2011). The majority of states did not lower payments to nursing homes in fiscal years 2011 (6 states) and 2012 (14 states) (Smith et al. 2011). More frequently, Medicaid payments to nursing homes were frozen (24 states in fiscal year 2011 and 17 states in fiscal year 2012). About 20 states each year raised their payments.

States have also increasingly used provider taxes to raise federal matching funds. In fiscal year 2012, 41 states had provider taxes on nursing homes, up from 35 states in fiscal year 2009 (Smith et al. 2011). In the future, states' ability to use this vehicle may be limited. Several federal deficit reduction proposals include caps on provider taxes (currently at 6 percent) that states can use to make up their share of Medicaid spending (Smith et al. 2011).

Non-Medicare and total margins in nursing homes

In 2010, non-Medicare margins (i.e., for Medicaid and private payers) were slightly negative and total margins (reflecting services to all patients across all lines of business and including revenue sources) were positive (Table 7-19). The aggregate non-Medicare margin was –1.2 percent in 2010. Total margins have steadily increased since 2000 and were 3.6 percent in 2010.

Non-Medicare margins were slightly more variable than total margins and centered on a much lower median (–1.8 percent compared with the median total margin 3.3 percent). About one-quarter of facilities had non-

TABLE 7–20 **Distribution of non-Medicare and total margins in nursing homes in 2010**

	Percentile				
Type of margin	**10th**	**25th**	**50th**	**75th**	**90th**
Non-Medicare	–16.7%	–8.3%	–1.8%	4.0%	9.8%
Total	–7.3	–1.3	3.3	8.2	13.0

Note: Non-Medicare margins include the revenues and costs associated with non-Medicare payers (Medicaid and private payers). Total margins include the revenues and costs associated with all payers and all lines of business, including nursing facility, hospice, and rehabilitation therapy services and nonpatient revenues such as investment income.

Source: MedPAC analysis of freestanding 2010 skilled nursing facility cost reports

Medicare margins equal to or less than –8.3 percent, while one-quarter had non-Medicare margins that equaled or exceeded 4.0 percent (Table 7-20). One-quarter of facilities had total margins at or below –1.3 percent, while one-quarter of facilities had margins at or above 8.2 percent. ■

Endnotes

1 A spell of illness begins when a beneficiary has not had a hospital or SNF stay for 60 consecutive days.

2 For services to be covered, the SNF must meet Medicare's conditions of participation (COPs) and agree to accept Medicare's payment rates. Medicare's COPs relate to many aspects of staffing and care delivery, such as requiring a registered nurse in the facility for 8 consecutive hours per day and licensed nurse coverage 24 hours a day, providing physical and occupational therapy services as delineated in each patient's plan of care, and providing or arranging for physician services 24 hours a day in case of an emergency.

3 The program pays separately for some services, including certain chemotherapy drugs, customized orthotics and prosthetics, ambulance services, dialysis, outpatient and emergency services furnished in a hospital, computed tomography, MRI, radiation therapy, and cardiac catheterizations.

4 In 2010, CMS raised nursing component payments by an estimated 21 percent and lowered therapy component payments by 41 percent. As a result of this shift, the nursing component for patients in the highest extensive services case-mix groups will increase more than 90 percent and payments for patients in the highest special care case-mix group (such as patients with chronic obstructive pulmonary disease) will increase almost 80 percent.

5 Concurrent therapy is the practice of treating multiple patients, who are engaged in different therapy activities, at the same time. Group therapy is the practice of treating multiple patients, who are engaged in the same therapy activities, at the same time. In concurrent therapy, CMS limits Medicare coverage to two patients being treated by a therapist at the same time, thus halving the per capita cost of this modality because the therapist's time is allocated over the two patients. In group therapy, CMS requires that no more than four patients can be treated at the same time by a therapist and this modality cannot comprise more than one-quarter of the patient's total therapy time.

6 A facility may begin to participate in the program but may not be "new." For example, a facility could have a change in ownership (and be assigned a new provider number) or in its certification status from Medicaid-only to dually certified for the Medicaid and Medicare programs. We use the number of SNFs that terminated their participation in the Medicare program as a proxy for the facilities that closed.

7 In 2009, SNFs with the highest shares of medically complex admissions (the top quartile) treated 57 percent of all these patients whereas in 2005, they treated 47 percent of these patients. The distribution of rehabilitation shares was more even across facilities. In 2009, SNFs with the highest rehabilitation shares (the top quartile) treated 33 percent of all rehabilitation admissions).

8 In fiscal years 2011 and 2012, CMS changed the policies that resulted in Medicare paying for concurrent and group therapy as if they were being furnished in one-on-one sessions.

9 The risk-adjusted rates were calculated slightly differently this year to more accurately reflect the changes in each facility's mix of patients over time relative to the average facility rate in a base year, 2000. Last year, we adjusted each year's measures for the mix of cases treated by SNFs in that year and compared it with the average patient rate in a base year. This year, the base-year comparison is with the average facility rate, a more appropriate benchmark. While this affects the levels reported, the trends are identical to those previously reported.

10 The HUD Section 232 program finances new or substantial reconstruction of nursing homes. The Section 232/222(f) program finances the refinancing or purchase of existing facilities.

11 The Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act increased payments by 20 percent for 15 case-mix groups, allowed facilities to transition immediately to the full federal rate (instead of taking 3 years to transition from a blend of facility-based and fully federal rates), and increased the federal portion of the payments across the board by 4 percent for all groups. Combined, these policies added about 18 percent to payments (Centers for Medicare & Medicaid Services 2000). The Benefits Improvement and Protection Act raised payments for the nursing component by 16.66 percent and replaced the 20 percent increase for the 15 groups with a 6.7 percent increase for all rehabilitation case-mix groups, while leaving in place the 20 percent adjustment for nonrehabilitation case-mix groups. These provisions raised payments by 8 percent (Centers for Medicare & Medicaid Services 2001).

12 CMS set the base rates equal to the weighted average of freestanding costs plus half the difference between the freestanding mean and a weighted mean of all SNFs (hospital based and freestanding).

13 The differences for Extendicare are smaller than for other companies because almost half of its contracts with managed care companies are based on the FFS system.

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