CHAPTER 3

Post-acute care providers

RECOMMENDATIONS

Section 3A: Skilled nursing facility services

The Congress should eliminate the update to payment rates for skilled nursing facility services for fiscal year 2008.

COMMISSIONER VOTES: YES 14 • NO 0 • NOT VOTING 0 • ABSENT 3

Section 3B: Home health services

The Congress should eliminate the update to payment rates for home health care services for calendar year 2008.

COMMISSIONER VOTES: YES 13 • NO 0 • NOT VOTING 1 • ABSENT 3

Section 3C: Inpatient rehabilitation facility services

The Congress should update payment rates for inpatient rehabilitation facility services by 1 percent for fiscal year 2008.

COMMISSIONER VOTES: YES 14 • NO 0 • NOT VOTING 0 • ABSENT 3

Section 3D: Long-term care hospital services

The Secretary should eliminate the update to payment rates for long-term care hospital services for rate year 2008.

COMMISSIONER VOTES: YES 13 • NO 1 • NOT VOTING 0 • ABSENT 3

CHAPTER 3

Post-acute care providers: An overview of issues

Chapter summary

Prospective payment systems (PPSs) for each setting were developed and implemented separately to control growth in spending and encourage more efficient provision of services in each setting. While the PPSs have changed the pattern of service use within each setting, we do not have adequate data to evaluate whether beneficiaries are better or worse off because of the changes. Three barriers undermine the program's ability to know if it is purchasing high-quality care in the least costly post-acute care (PAC) setting consistent with the care needs of the beneficiary. These barriers include:

- ***Inaccurate case-mix measurement***—In three of the four settings, case-mix measures do not accurately reflect the resources used to treat certain types of patients; as a result, the measures do not track differences in the costs of care.
- ***Incomparable data on the quality and outcomes of care***—Without a common instrument for patient assessment, we cannot compare the costs, quality of care, and patient outcomes across PAC settings.

In this chapter

- ***Lack of evidence-based standards***—Because we have few standards to determine appropriate care, beneficiaries may not receive medically necessary, high-quality care in the least costly PAC setting consistent with their clinical conditions.

The same barriers limit our ability to assess differences in financial performance within each post-acute setting. We do not know if the large variations in financial performance within a setting are the result of differences in the mix of patients treated, their patients' outcomes, or their relative efficiencies.

As a first step in understanding this variation, we examined some of the factors underlying financial performance as measured by unit costs and Medicare margins. We examined each PAC sector separately and then compared our findings across all four settings. Because a provider's performance can vary from year to year, we examined providers with consistent financial performance (measured by unit costs and Medicare margins) since implementation of the PPSs. We found that providers with consistently low unit costs used fewer resources, had higher occupancy rates, and had higher Medicare margins than providers with consistently high costs. Providers with consistently high Medicare margins had much lower unit costs and slower cost growth than providers with consistently low Medicare margins. Before concluding that low-cost providers within a sector are efficient, we need to know if they furnished comparable quality of care and if their patients achieved similar outcomes. Future work will examine these relationships. ■

Medicare covers beneficiaries in four post-acute care (PAC) settings: skilled nursing facilities (SNFs), home health agencies (HHAs), inpatient rehabilitation facilities (IRFs), and long-term care hospitals (LTCHs). Medicare spent about $42 billion on care in these settings, representing about 13 percent of total Medicare spending in 2005.

Prospective payment systems (PPSs) for each setting were developed and implemented separately to control growth in spending and encourage more efficient provision of services in each setting. Each PPS encourages parsimonious use of resources to produce a day, episode, or discharge. Providers that keep costs below the payment rates, based on average costs, achieve a positive margin, while those with above-average costs do not.

Implementation of the payment systems has changed the patterns of service use within PAC settings. Although the HHA and SNF PPSs initially curbed spending, it has started to rise again. HHAs provided fewer visits per episode and SNFs furnished more therapy. The number of LTCHs and patients treated in them continues to grow. Without adequate data to assess patient outcomes, we cannot evaluate whether beneficiaries are better or worse off because of the changes. In addition, large variations in financial performance exist across providers in each setting, but we lack the information to know whether these differences are due to the mix of patients treated, their patients' outcomes, or their relative efficiencies.

Barriers to an integrated post-acute care system

The Commission previously stated that the individual "silos" of PAC do not function as an integrated system—in which a common patient instrument is used to assess patient care needs and guide placement decisions, payments reflect the resource needs of the patients and not the setting, and outcomes gauge the value of the care furnished. Several barriers inhibit the integration of the current systems and undermine the program's ability to purchase high-quality care in the least costly PAC setting consistent with the care needs of the beneficiary. These barriers include:

- inaccurate case-mix measurement,
- incomparable data on the quality and outcomes of care, and
- the lack of evidence-based standards.

Inaccurate case-mix measurement

In three of the four PAC settings, case-mix measures do not accurately reflect the resources used to treat certain types of patients; as a result, the measures do not track differences in the costs of care.

- The SNF PPS includes strong incentives for facilities to furnish therapy but does not adjust payments for differences in the need for nontherapy ancillary services (e.g., drugs). As a result, the case-mix system encourages providers to admit rehabilitation patients and discourages them from treating beneficiaries who need a high level of medical care. The Commission plans to work on identifying the patient characteristics associated with the need for nontherapy ancillary services that could be used in a payment system.
- The HHA PPS also encourages the provision of therapy services. The dramatic drop in home health care visits and the shift toward rehabilitation care has changed the nature of this product, yet the PPS has not been refined to accurately reflect current practice patterns.
- A recent study of the LTCH PPS found that variations in profitability by case-mix group result from a systematic understatement of the costs for cases that use relatively more ancillary services (RTI 2006). Refining the case-mix weights could correct this bias.

Incomparable quality and outcome data

An overarching limitation in moving toward a more integrated PAC system is the lack of comparable information across settings. The PAC settings do not use a common patient assessment tool to gather information about the functional status, diagnoses, comorbidities, and cognitive status of patients. Medicare requires three of the four settings to use a patient assessment tool, but each setting uses a different one.[1] As a result, the program cannot compare costs, quality of care, and patient outcomes while controlling for differences in the mix of patients treated. In short, the program cannot measure the value it gets from PAC purchases.

Even within a setting, the case-mix, quality, and outcome data that are gathered make it difficult, if not impossible, to compare providers. For example, our ability to assess the quality of care that SNFs provide to beneficiaries is

limited because few quality measures focus specifically on the care provided during a short-term post-acute stay. Though the Commission uses two risk-adjusted measures to evaluate SNF care—the rate of preventable rehospitalizations and the rate of discharges to the community—CMS does not track either measure. And because SNFs do not assess patients at admission or discharge, patient progress during a stay—such as changes in functional status—cannot be directly evaluated. Because LTCHs are not required to use a patient assessment tool, comparable quality and outcome data are limited to what is available on hospital claims.

The Deficit Reduction Act of 2005 (DRA) requires CMS to conduct a demonstration that supports PAC payment reform across settings. CMS has taken steps to respond to the mandate. The demonstration is scheduled to begin in January 2008 and will develop a PAC assessment instrument to be used at hospital discharge and across all PAC settings, and will gather patient assessment and cost information at all PAC settings. A report on that demonstration is not scheduled to be delivered until July 2011. Thus, while CMS envisions an integrated system and has taken a key step toward developing one, it is years away from implementing one.

Lack of evidence-based standards

The lack of evidence-based standards of care (to identify which patients need how much care) results in large variations in practice and costs, with no way to discern the appropriate level of care. Beneficiaries may not receive medically necessary, high-quality care in the least costly PAC setting consistent with their clinical conditions. Although the program has some patient and facility criteria (as indicated in the text box) to match patient care needs to the treatment setting, there is some overlap in the types of patients treated across settings. For example, patients who need wound care or require rehabilitation after hip surgery are treated in various PAC settings, with very different cost implications for the program. This lack of clarity in the products Medicare buys makes it impossible for the program to be a value-based purchaser. PAC providers have a financial incentive to take profitable patients, yet inadequate mechanisms are in place to make sure patients are treated in the most appropriate setting.

The lack of evidence-based standards also means that even within a setting we do not know which treatments are necessary for which types of patients. Guidelines do not exist for many conditions to delineate how much care is typically needed, when more care is likely to result in better outcomes, and when patients are unlikely to improve with additional treatment. The home health care product is particularly difficult to define in terms of medical necessity and spell of illness.

Implications for financial performance

The barriers that undermine the integration of care across PAC settings—inaccurate case-mix measurement, incomparable quality and outcome information, and lack of evidence-based standards of care—also limit our ability to assess differences in financial performance across providers in the same setting. Without an adequate case-mix adjuster, observed differences in costs could reflect differences in the mix of patients treated rather than efficiency. Differences in costs could also be attributable to variations in the quality of care furnished and the outcomes patients achieve.

The current PPSs are likely to continue to be used for Medicare payments until PAC services are integrated. To counter incentives to stint on services, an important strategy is to base a portion of providers' payments on the quality of care they furnish. Under such an arrangement, updates would establish the level of payments for a PAC setting and pay-for-performance programs would distribute that money to reward providers for their performance.

The Commission developed four principles for Medicare's pay-for-performance programs.

- The program should reward providers based on improving care and exceeding certain benchmarks to have the broadest effect on providers' incentives and thus beneficiaries' care.
- The program should be funded initially by setting aside a small proportion of payments (e.g., 1 percent to 2 percent of payments) to minimize possible disruption to beneficiaries and providers.
- The program should distribute all withheld dollars every year; pay for performance is a way to improve quality of care, not to realize savings.
- The program should have a process to update the measures to reflect changes in quality measurement and practice patterns.

Medicare criteria for admissions to post-acute care settings

Medicare uses a combination of facility- and patient-level policies and criteria to direct beneficiaries to post-acute care settings. These criteria attempt to match patient care needs to the service intensity (and cost) of the setting.

- ***Home health agencies:*** Patients must require part-time (fewer than eight hours per day) or intermittent (temporary but not indefinite) skilled care (nursing or therapy) and must be homebound (cannot leave home without considerable effort).
- ***Skilled nursing facilities:*** Patients must require skilled nursing or rehabilitative care in an inpatient setting and have had a recent (within the past 30 days) hospitalization of at least 3 days.
- ***Inpatient rehabilitation facilities:*** Patients must be able to tolerate (and require) at least three hours of rehabilitation per day; facilities are limited in the mix of conditions they treat to receive inpatient rehabilitation facility payment rates.
- ***Long-term care hospitals:*** The average length of stay must be at least 25 days. In 2004, the Commission recommended and CMS is considering patient- and facility-level criteria to delineate the types of patients appropriate for this level of care. CMS contracted with the Research Triangle Institute (RTI), which recently made a series of recommendations to develop patient and facility criteria and to improve the consistency in policies between long-term care and acute care hospitals (see text box on RTI's study, p. 228). Long-term care hospitals within hospitals are also limited in the share of patients they can accept from their host hospital. The 25 percent limit is intended to prevent premature transfers from acute hospitals, ensure that the hospitals within hospitals do not function as a kind of step-down unit of the host hospital, and promote treatment decisions that are clinically, not financially, based.

Even with these criteria, there is some overlap in the types of patients treated in different PAC settings. ■

The PAC settings vary in their readiness for pay for performance. Several risk-adjusted quality measures for home health care could be used for pay for performance and the Commission recommended that CMS develop valid risk-adjusted measures of adverse events. CMS is developing a pay-for-performance demonstration that is expected to begin in October 2007. The other settings are further from being ready to implement pay-for-performance programs. In SNFs, risk-adjusted measures that focus on evaluating short-stay patients' abilities to perform activities of daily living have not been developed. Even more problematic is the fact that patients are not assessed at admission and discharge, so measuring improvement is not possible. In IRFs, CMS is developing measures based on the patient assessment used in that setting. As noted before, LTCHs do not report patient assessment information so CMS has little data upon which to develop performance measures.

Variation in performance across PAC settings

Within each PAC setting, provider performance varies considerably and some providers perform consistently better than others. In examining differences in Medicare margins, the Commission reported that size, case mix, location, and type of control explained very little of the variation across HHAs (MedPAC 2005). In all four settings, Medicare margins varied by ownership, raising questions about how good performance can be achieved. In our examination of the variation in financial performance of acute care hospitals, we found that hospitals with consistently positive Medicare margins had shorter stays, higher occupancy rates, lower costs, and lower growth in costs—factors that reflect management decisions and expertise (MedPAC 2006).

TABLE 3–1

Many providers with consistently low costs used fewer resources, had higher occupancy rates, and achieved better financial performance in 2004

	Providers with consistently:	
	Low costs	**High costs**
Resource use		
HHA visits per episode (in visits)	16.8	20.1
SNF average LOS (in days)	37.4	30.1
IRF average LOS (in days)	10.9	13.3
LTCH average LOS (in days)	26.2	28.6
Occupancy rates		
SNFs	90%	91%
IRFs	72	58
LTCHs	76	57
Medicare margins		
HHAs	32.8%	–5.1%
SNFs	32.4	–12.4
IRFs	32.8	–16.3
LTCHs	21.3	–2.7

Note: HHA (home health agency), SNF (skilled nursing facility), LOS (length of stay), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital). For each type of provider, we defined consistently low (and high) costs as those in the bottom (and top) quartile of the distribution for a set of years. For HHAs and IRFs the years were 2002 through 2004, for SNFs they were 2001 through 2004, and for LTCHs they were 2003 and 2004. Table shows aggregate margins. A margin is calculated as payments minus costs, divided by payments.

Source: MedPAC analysis of HHA, SNF, IRF, and LTCH Medicare cost reports.

As a first step in understanding this variation, we examined some of the cost factors underlying financial performance. Because a single year may not accurately represent a provider's performance, we compared providers with consistently low unit costs with those that had consistently high unit costs, and we compared providers with consistently high and low Medicare margins.[2] We conducted these analyses for selected years after the PPSs were introduced, examining each PAC sector separately, and then compared our findings across the four settings.[3] We separately examined hospital-based and freestanding IRFs, hospital-within-hospital and freestanding LTCHs, and rural and urban SNFs and HHAs; generally, we did not see different patterns across these subgroups.

Providers with consistently low costs used fewer resources, had higher occupancy rates, and had better financial performance

In the study periods, between 12 percent and 16 percent of providers had consistently low unit costs.[4] One way they achieved their cost position was through their more sparing use of resources within the episode or discharge. HHAs with consistently high costs furnished about 20 percent more visits within their episodes than HHAs with consistently low costs (Table 3-1). IRFs and LTCHs with consistently high costs had longer stays than IRFs and LTCHs with consistently low costs (22 percent longer in the case of IRFs and 9 percent longer in the case of LTCHs).

We found a different result for SNFs: Those with consistently low costs had longer stays. This result reflects the incentives of the payment system, which pays on a per day basis. Longer stays increase a facility's Medicare revenues and may lower unit costs by spreading fixed costs over more days. However, given that many SNFs are part of a nursing facility, the SNF length of stay may not be a good indicator of the entire facility's ability to spread fixed costs.

IRFs and LTCHs with consistently low costs also had considerably higher occupancy rates than IRFs and LTCHs with consistently high costs. Higher occupancies should translate into lower unit costs as their fixed costs (e.g., capital and administration) are spread over more units. Overall, SNFs did not follow this pattern; those with consistently low and high costs had comparable occupancy rates, although rural SNFs with consistently low costs did have higher occupancy rates than rural SNFs with consistently high costs. Unlike IRFs and LTCHs, in which Medicare beneficiaries account for about 70 percent of days, SNFs are often part of a larger nursing facility in which Medicaid patients account for most days. The SNF occupancy rates may give an incomplete picture of a facility's size and ability to spread fixed costs. We did not examine occupancy rates in HHAs since this care is not facility based.

Providers with consistently low costs achieved some of their economies of scale by having higher volume and volume growth than providers with consistently high costs. Higher volume allows facilities to spread their fixed costs over more services, thereby lowering unit costs. However, we do not know if the volume that allowed low-cost facilities to achieve their economies of scale was always appropriate. The lack of standards for PAC services makes it difficult to know if additional units of service

are clinically beneficial or could have been provided in a lower cost setting. As a result, behavior that may lower a provider's costs is not necessarily better for the program.

The differences in 2004 Medicare margins for consistently low-cost and high-cost providers were considerable. Consistently low-cost providers had aggregate margins in the 20 percent to 30 percent range, whereas consistently high-cost providers had aggregate margins that were negative, sometimes quite negative. Because providers with consistently low and high margins are a select group, with about 15 percent of providers in each group, their margins are considerably different from the aggregate margins we reported previously. However, the aggregate margin for the entire cohort for each setting for each year is very similar to that previously published by MedPAC.

Within each PAC setting, providers with consistently better financial performance had lower unit costs and slower growth in costs

Providers with consistently high Medicare margins had considerably lower unit costs in 2004 than providers with consistently low Medicare margins (Table 3-2). Unit costs in 2004 for consistently high-margin providers were one-half to two-thirds of the costs of providers with consistently low margins. For example, in 2004 the episode costs of HHAs with consistently high margins were 59 percent of the episode costs of HHAs with consistently low margins ($1,219 compared with $2,081 per episode). As might be expected, we found that consistently high-margin HHAs, IRFs, and LTCHs used fewer resources (visits or days) within an episode or discharge.

We also compared the daily costs of SNFs with consistently high and low margins with the daily costs of competitor SNFs (those located within 15 miles of the reference SNF). We found that SNFs with consistently high margins had daily costs 15 percent lower than their competitors ($199 compared with $234 per day (data for competitors not shown)). In contrast, SNFs with consistently low margins had daily costs more than 20 percent higher than their competitors. We did not do this comparison for the other providers; many markets do not have more than one IRF or LTCH, while HHAs have more fluid markets because the care is furnished in the beneficiary's home.

For three of the four PAC settings, unit costs grew more slowly for providers with consistently high margins than for those with consistently low margins. For example, between 2002 and 2004 costs per discharge for IRFs with consistently high margins grew annually at one-third the rate of IRFs with consistently low margins. The difference in cost growth between consistently low- and high-margin LTCHs was even larger—a 1 percent decline compared with a 7 percent increase. The differences in cost growth between HHAs with consistently high and low margins were small (1 percent); rural HHAs with consistently high margins had slower cost growth than rural HHAs with consistently low margins.

TABLE 3–2

Providers with consistently better financial performance had lower unit costs and slower cost growth

	Providers with consistently:	
	High Medicare margins	**Low Medicare margins**
Unit costs in 2004		
HHAs per episode	$1,219	$2,081
SNFs per day	199	320
IRFs per discharge	7,968	14,417
LTCHs per discharge	26,739	38,956
Average annual cost growth		
HHAs (2002–2004)	1.0%	0.0%
SNFs (2001–2004)	2.5	3.9
IRFs (2002–2004)	1.0	3.0
LTCHs (2003–2004)	–1.0	7.0

Note: HHA (home health agency), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital). For each type of provider, we defined consistently low (and high) margins as those in the bottom (and top) quartile of the distribution for a set of years. For HHAs and IRFs the years were 2002 through 2004, for SNFs they were 2001 through 2004, and for LTCHs they were 2003 and 2004.
The analyses of HHAs and SNFs include only freestanding providers.
Table shows median unit costs and annual cost growth.

Source: MedPAC analysis of HHA, SNF, IRF, and LTCH Medicare cost reports.

Conclusion

In recent years, PAC providers with consistently better financial performance generally had lower resource use, lower unit costs, and slower growth in cost. Before concluding that low-cost providers are efficient, we need

to know if they compromised the quality of care they furnished or if they selected certain types of patients. To become a value-based purchaser, Medicare needs to know whether paying more for care buys better patient outcomes. Future work will examine the relationship between financial performance and the quality of care and patient outcomes.

Broad PAC reform that the Commission favors—and the post-acute demonstration mandated by the DRA envisions—has begun but is several years away. In the meantime, services furnished in PAC settings will likely continue to be paid for under the respective PPSs. Within each setting, then, the program must continue to ensure that payments are adequate, while discouraging patient selection and encouraging providers to furnish high-quality services. ■

Endnotes

1 SNFs use the Minimum Data Set, HHAs use the Outcome and Assessment Information Set, and IRFs use the IRF–Patient Assessment Instrument. Medicare does not require LTCHs to use a patient assessment tool.

2 Consistently low-cost providers were defined as having been in the bottom quartile of the cost distribution for each of the years studied; consistently high-cost providers were in the top quartile of the cost distribution for each year. Providers with consistently high and low margins were defined as having been in the top and bottom quartile, respectively, of Medicare margins for the years of the study.

3 Consistent performances were defined across four years for SNFs (2001–2004), three years for HHAs and IRFs (2002–2004), and two years for LTCHs (2003 and 2004). The analyses of HHAs and SNFs included freestanding providers. We excluded IRFs owned by HealthSouth because of questions about the accuracy of their cost reports for the years of the analyses. Costs were standardized for differences in wages, case mix (using the patient classification systems incorporated into each PPS), and, in the case of LTCHs, short-stay outliers. The study's cohort included 70 percent of IRFs, LTCHs, and freestanding SNFs. The HHA cohort was smaller (51 percent) because we lacked complete volume data to conduct our analyses.

4 In each setting's cohort, the shares of providers with consistently low costs were: 12 percent of HHAs, 14 percent of SNFs, 15 percent of IRFs, and 16 percent of LTCHs.

References

Medicare Payment Advisory Commission. 2006. *Report to the Congress: Medicare payment policy.* Washington, DC: MedPAC.

Medicare Payment Advisory Commission. 2005. *Report to the Congress: Home health agency case mix and financial performance.* Washington, DC: MedPAC.

Research Triangle Institute. 2006. *Long-term care hospital (LTCH) payment system monitoring and evaluation: Phase II report.* Waltham, MA: RTI.