CHAPTER 6

Toward better value in purchasing outpatient therapy services

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Chapter summary

Spending for outpatient therapy services—including physical therapy, occupational therapy, and speech-language pathology services—almost doubled to $3.9 billion from 2000 to 2004 yet the Commission knows very little about the value of this purchasing. There is little information about who receives services and no information about their outcomes, making it hard to evaluate program spending.

The large expenditure growth was the result of more beneficiaries using these services and more services being furnished to each user. Spending per beneficiary also varied considerably. Without additional information, we can not know if the spending growth and variation reflect differences in the types of patients treated or if patients who received more services had better outcomes. The spending patterns also raise questions about how to allow beneficiaries to get the services they need without requiring Medicare and patients to pay for services that are medically unnecessary.

In this chapter

To learn about alternative strategies to ensure appropriate use of outpatient therapy, the Commission convened an expert panel and interviewed numerous researchers, medical directors at companies that process Medicare claims, representatives from companies that market guidelines and outcomes tracking systems, and private plan representatives. Of the strategies explored, developing guidelines and tracking resource use and patient outcomes are the most promising avenues for CMS to pursue.

Like all fee-for-service methods, the payment system used for outpatient therapy generally encourages providers to furnish services to therapy users. Only patients using many services are affected by the spending limitations imposed on a per beneficiary basis. CMS needs better information about the therapy needs of beneficiaries and their outcomes to consider alternative payment methods. This will require the agency to develop patient assessment tools that gather information about beneficiaries' risk factors and their outcomes. More than one tool may be required given the diverse care needs of patients receiving therapy and speech-language pathology services. Concurrent pilot studies could be used to evaluate alternative data collection methods and the feasibility of using the tools in a wide range of settings for a diverse patient population. Data gathered from the pilot studies could be used to establish benchmarks for therapy practice, develop risk-adjustment methods to predict the care needs of patients, and refine the therapy caps and the exceptions process.

With more complete information about therapy and speech-language pathology service users and patient outcomes, CMS can consider how to reform the payment system so that the program gets value for its purchasing. One option is to pay for a bundle of services that varies by patient condition, with protections for unusual situations or care needs. Another is to develop an incentive payment system that encourages therapists and speech-language pathologists to provide high-quality care and also be conservative in furnishing services. In either payment approach, adequate risk-adjustment methods are essential to making providers financially neutral toward the

types of patients they treat. Given that outpatient therapy makes up a relatively small share of Medicare spending, CMS will want to select cost-effective interventions to make best use of its limited resources.

On January 1, 2006, the therapy caps that limit program spending per beneficiary were reinstated. As required by the Congress, CMS implemented an exceptions process allowing beneficiaries to apply for approval of medically necessary services beyond the spending limits in 2006. CMS will need to carefully monitor this process to ensure that these additional services were medically necessary. ■

Spending on outpatient therapy services has almost doubled since 2000, yet the Commission knows very little about the value of this purchasing. CMS noted that the growth in minor procedures, which includes outpatient therapy services, was a key contributor to recent increases in fee schedule spending in its letter to the Commission in March 2005 and again in April 2006 (Kuhn 2005, Kuhn 2006). However, it is difficult to evaluate this spending without better information about the care needs of beneficiaries and their outcomes.

Background

About 12 percent of beneficiaries use outpatient therapy. (The text box on page 122 provides basic information about the types of therapy services, Medicare coverage, and Medicare payments.) Therapy users, particularly users of occupational therapy (OT) and speech-language pathology (SLP) services, are disproportionately female and tend to be older than beneficiaries who do not use therapy services.

Providers of outpatient therapy

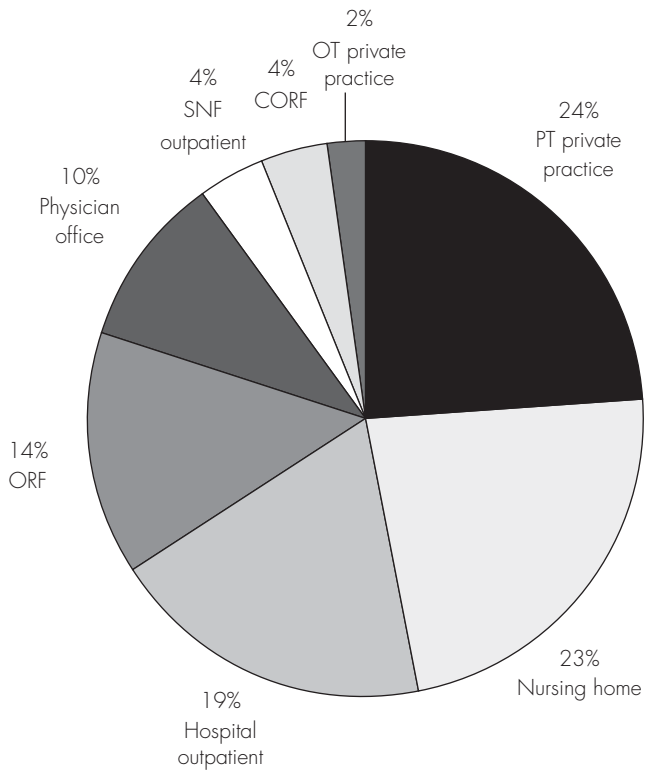
Outpatient therapy services are furnished in many different settings (Figure 6-1). Therapists in private practice work in their own offices or as employees of physician-owned group practices. If a therapist works in a physician's office, the therapist may bill Medicare independently or furnish the service as "incident to" a physician visit.[1] Incident to services must be supervised by a physician.

Services furnished in therapists' private practices and in nursing homes account for the largest share of Medicare payments for outpatient therapy.[2] Though hospital outpatient departments treat over a third of therapy users, they make up a smaller share of Medicare spending. On average, hospital outpatient departments treat beneficiaries for a shorter period of time and furnish fewer services per day (Ciolek and Hwang 2004a). Nursing homes treat about 15 percent of users but account for a larger share (23 percent) of Medicare spending. Data are not available to determine if this spending variation reflects differences in the types of patients treated.

Other outpatient therapy settings include physicians' offices, occupational therapists in private practice, outpatient rehabilitation facilities (ORFs), and comprehensive outpatient rehabilitation facilities (CORFs).[3] The vast majority of users (93 percent) do not receive services from multiple providers. Most SLP services are furnished in institutional settings.

FIGURE 6–1

Outpatient therapy is furnished by many different entities



Note: PT (physical therapist), ORF (outpatient rehabilitation facility), SNF (skilled nursing facility), CORF (comprehensive outpatient rehabilitation facility), OT (occupational therapist). Based on share of Medicare spending in 2004. PT private practice and OT private practice include therapists employed by physician groups who bill independently and are not furnishing services incident to physician services.

Source: MedPAC analysis of the 5 percent file of carrier and fiscal intermediary claims for 2004.

Therapy caps

The Balanced Budget Act of 1997 imposed limits on Medicare payments for all outpatient therapy service providers except hospital outpatient departments.[4] Two therapy caps were in effect for calendar year 1999. One cap limited spending per beneficiary to $1,500 for physical therapy (PT) and SLP combined; the other capped spending at $1,500 per beneficiary for OT services. Beginning in 2000, the Congress suspended both caps for all but about three months in 2003 until January 1,

What are outpatient therapy services?

Outpatient therapy services include physical therapy (PT), occupational therapy (OT), and speech-language pathology services (SLP) services.

- ***PT services***—restore and maintain physical function and treat or prevent impairments, functional limitations, and disabilities that may result from disease, disorders, conditions, or injury. Examples include therapeutic exercise, such as aerobic conditioning, and therapeutic activities, such as agility and balance training.

- ***OT services***—improve and compensate for a patient's ability to conduct activities of daily living, such as training for food preparation after the loss of a limb or developing strategies to optimize balance and coordination to help a patient with a hip fracture get dressed.

- ***SLP services***—help patients with difficulties communicating and swallowing as a result of disease, injury, or surgery. For example, stroke patients may receive SLP services to recover their ability to speak.

Outpatient therapy does not include services furnished to a beneficiary during a Part A-covered hospital or skilled nursing facility stay or a home health care episode. These therapies are included in the payments made to those settings.

Medicare's spending on outpatient therapy services is relatively concentrated. Of the three therapies, PT makes up over three-quarters of Medicare spending and users. In 2004, two services (therapeutic exercise and therapeutic activities, both billed by PT and OT) accounted for over half of all therapy spending. The SLP service with the highest spending—treatment of swallowing dysfunction—accounted for only 3 percent of total therapy spending.

Most PT and OT services are billed in 15-minute increments. For example, a 45-minute session is billed as 3 units of a therapy service. The majority of SLP services are not timed and, in most instances, providers can bill only one unit per visit.

What are Medicare's coverage rules?

Medicare covers outpatient therapy services as long as the services are furnished by a skilled professional, are appropriate and effective for the patient's condition, and are of reasonable frequency and duration. The beneficiary must be under the care of a physician, who must approve the plan of care every 30 days. The patient must have a treatable condition and be improving. Medicare does not cover outpatient therapy services that maintain a level of functioning or serve as a general exercise program. Therapists and speech-language pathologists must meet the standards and conditions required by regulation.[5] Qualified physical and occupational assistants are also covered as long as they are supervised. Athletic trainers, chiropractors, and nurses do not meet the qualification and training requirements for therapists.[6]

How does Medicare pay for therapy services?

Medicare pays for outpatient therapy services under Part B. Payments are established in the physician fee schedule for each unit of service, regardless of where the services are provided. As with most services covered under Part B, Medicare pays 80 percent of the payment amount and the beneficiary is responsible for a 20 percent coinsurance. Providers of speech-language pathology services can not bill Medicare independently—these services must be billed through an institution, a physician, or a therapist in private practice.

As with other fee-for-service payments, this method of payment does not encourage providers to be mindful of the resources used to treat most beneficiaries because only the highest users are affected by spending limits imposed by the therapy caps. ■

2006. During the moratorium, program spending on therapy services was unlimited, assuming the services met other coverage requirements. On January 1, 2006, the therapy caps went back into effect. Both caps limit annual spending to $1,740 per beneficiary.[7]

The Deficit Reduction Act of 2005 required the Secretary of Health and Human Services to establish an exceptions process allowing beneficiaries to request an exemption from the therapy caps if the services they require are medically necessary (the text box on page 124 describes the exceptions process). This process applies to services furnished during calendar year 2006. The exceptions process counters a key criticism of the therapy caps: They disadvantage beneficiaries with high-care needs and the providers who treat them. Without an exceptions process, beneficiaries who needed therapy services above the spending limits had to pay for them out of pocket, go without them, or use hospital outpatient providers, which are exempt from the therapy caps. Now, with the exceptions process in place, beneficiaries who need services above the caps can apply to have those services covered without changing providers.

The other main concern about the caps is not addressed, even with the exceptions process: Providers are not encouraged to furnish the least amount of services to achieve good patient outcomes under a fee-for-service system. Until spending reaches the therapy limits, providers may furnish more services than the patient benefits from. Providers who use resources above the therapy limits to achieve better outcomes are penalized under a cap system.

Information available on therapy claims

Medicare claims have limited information about the characteristics of users, making valid comparisons across patients and measuring outcomes impossible or extremely difficult. Claims do not include information about the functional status of the patient at the start or end of a course of treatment. Functional status measures include the patient's ability to perform physical and personal activities, cognitive state, and living environment (e.g., the social support available). As a result, the Commission can not evaluate a patient's functional status or whether it changed over time, or group patients with similar care needs.

The claims information also does not include reliable diagnosis and impairment (e.g., leg or back pain) information about the patients receiving therapy and SLP services. Institutions are not required to submit specific diagnoses on their claims. The most common code used for PT services is not a diagnosis; it is "other physical therapy." Another problem with the diagnosis coding is that although a single claim may include more than one type of service furnished during the visit, providers are not required to list separate diagnoses for each service rendered. As a result, patients may be treated for two conditions during the same visit but the claim may include only one diagnosis code.

The claims do not consistently include information about a patient's comorbidities and they do not include acuity measures of a patient's symptoms, which affect a patient's need for services. Over three-quarters of beneficiaries have one chronic condition and a majority of beneficiaries have two or more (MedPAC 2004). Yet, only about half of the outpatient claims have two or more diagnoses codes on them. The number and type of comorbidities (e.g., arthritis, osteoporosis, cardiac and pulmonary conditions, diabetes, and depression) affect a patient's functional status (Groll et al. 2005, Stewart et al. 1989). Researchers have also found that patients with common chronic conditions have worse mental health and bodily pain compared to patients without them (Stewart et al. 1989). These factors will limit a patient's ability to improve and increase the time needed to recover.

Finally, except for therapists in private practice, individual therapists and speech-language pathologists typically do not have unique provider numbers. As a result, it is not possible to compare practice patterns of individual providers. In addition, we can not compare service use across different practice arrangements because therapists practicing as part of a physician group can not be distinguished from those practicing as part of a group of therapists.

Growth in Medicare spending since 2000

Since the therapy caps were lifted in 2000, spending has almost doubled to $3.9 billion in 2004 (Figure 6-2, p. 125). Between 2000 and 2004, spending increases averaged 18 percent a year. PT and OT grew slightly faster than SLP services.

The large growth is a combination of more beneficiaries using therapy services and more services being furnished

CMS exceptions process for spending above the therapy caps

CMS has designed a two-part exceptions process to the therapy caps retroactive to January 1, 2006. Assuming other coverage requirements are met (e.g., services are medically necessary and restorative in nature), patients with qualifying conditions or complexities may use the automatic process for exception from the therapy caps. These circumstances include a patient having 1) one of a list of specific conditions for which the patient is being treated or 2) one of a list of comorbidities or clinically complex situations that will affect the patient's rate of recovery. Manual exceptions, which must be made in writing with supporting documentation, will be considered for patients who are not eligible for the automatic exceptions process but whose care needs are believed to require services beyond the therapy limits. A manual request may seek approval for up to 15 visits. There are no visit limits on automatically granted requests (CMS 2006a, CMS 2006b).

The list of conditions that qualify a patient to use the automatic process for exception is extensive and includes joint replacement, Parkinson's disease, multiple sclerosis, stroke, osteoarthritis, various bone fractures, open wounds, and dysphasia. Complexities that qualify a patient to use the automatic process for exemption include comorbidities that otherwise do not qualify a patient to use the automatic exception process (e.g., diabetes, chronic obstructive pulmonary disease, congestive heart failure, and hypertension) or situations that are likely to prolong a patient's recovery time. Clinically complex situations that qualify a patient to use the automatic process for exemption from the therapy caps include:

- The beneficiary was discharged from a hospital or skilled nursing facility within 30 days.
- The beneficiary has a generalized musculoskeletal condition or a condition that affects multiple sites.
- The beneficiary has a cognitive disorder (e.g., depression or dementia) that will affect the rate of recovery.
- The beneficiary requires both physical therapy and speech-language pathology services concurrently.
- The beneficiary had a prior episode of outpatient therapy during the calendar year for a different condition.
- The beneficiary requires the therapy to be able to return to a previous place of residence.
- The therapy will decrease a beneficiary's need for assistance with activities of daily living or instrumental activities of daily living.
- The beneficiary does not have access to a hospital outpatient department.

The exceptions process is purposefully broad. Previous analysis had indicated that in many diagnosis groups there were at least some patients who would have exceeded therapy caps had they been in place (Ciolek and Hwang 2004c).

Many private payers handle exceptions to their standard coverage limits (typically defined by a number of days or visits) with manual review processes. Often, a therapist or nurse conducts an initial review. A physician then conducts a second level of review. CMS had to develop a process that would be mostly automated given the volume of claims and the lack of infrastructure to conduct reviews. The specificity of CMS's criteria will increase consistency in how the companies that process Medicare claims—known as claims contractors—consider beneficiaries' applications. ■

to each user (Table 6-1). Since 2000, the number of users grew by an average of 8 percent a year, much faster than the 1 percent to 2 percent growth in beneficiaries each year. In part, the increase probably reflects the growing number of beneficiaries with chronic conditions. Another contributing factor is likely the expanded number of elective surgeries (both inpatient and outpatient) for which outpatient therapy is appropriate follow-up treatment.

For example, the number of hip and knee replacements grew 34 percent during this same time period. It is also possible that outpatient therapy now substitutes for services furnished on an inpatient basis more frequently. Discussions with therapy association representatives also indicated that some of the service growth reflected beneficiaries' desire to remain active and independent. Finally, until CMS clarified the definition of a therapist in 2004, nontherapists—such as athletic trainers—provided therapy services, which could have expanded the number of providers furnishing services.

Service intensity also drove therapy expenditures. Spending per user grew an average of 9 percent per year. Although fee raises during this period account for some of the increase, the number of units billed grew by an average of 13 percent per year. Growth in commonly furnished services, not new modalities, drove the increases. Due to the lack of data on functional status, we can not assess if the spending led to better patient outcomes.

Growth by provider setting

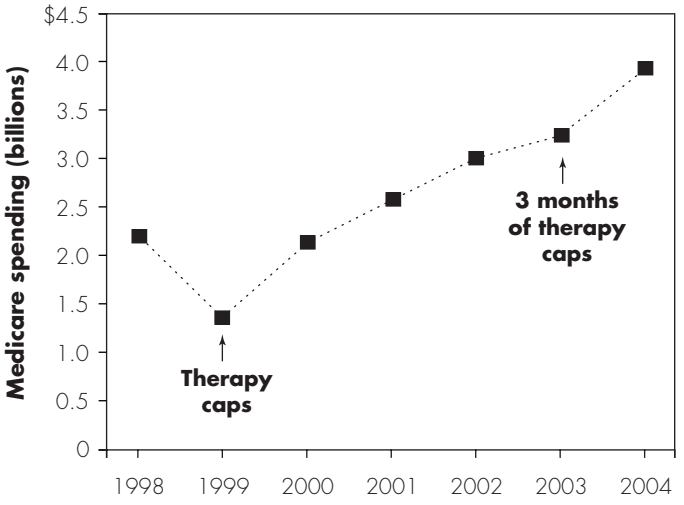
Since the therapy caps were lifted in 2000, spending increased annually an average of 18 percent but the growth rates varied considerably by setting. The largest spending growth occurred for therapists in private practice (Figure 6-3, p. 126).

Several factors help explain private practice's rapid growth.[8] In 1998, the skilled nursing facility prospective payment system was implemented. In response, facilities cut back on the therapists they employed. Many therapists who were laid off established their own practices. In 1999, CMS changed the conditions of participation so that owners of therapy practices did not have to be on site and do all the billing for services furnished by licensed therapists. Licensed employee therapists could independently bill the program, resulting in more therapists in private practice.

Also in 1999, institutional therapy providers moved from cost-based reimbursement to payments established under the physician fee schedule. With the elimination of any payment differentials between settings, many therapists

FIGURE 6–2

Medicare spending on outpatient therapy services has almost doubled since 2000



Note: Therapy caps were in effect for all of 1999 and for three months in 2003.

Source: MedPAC analysis of the 5 percent file of carrier and fiscal intermediary claims for 1998–2004.

TABLE 6–1

Outpatient therapy users and service intensity have increased since 2000

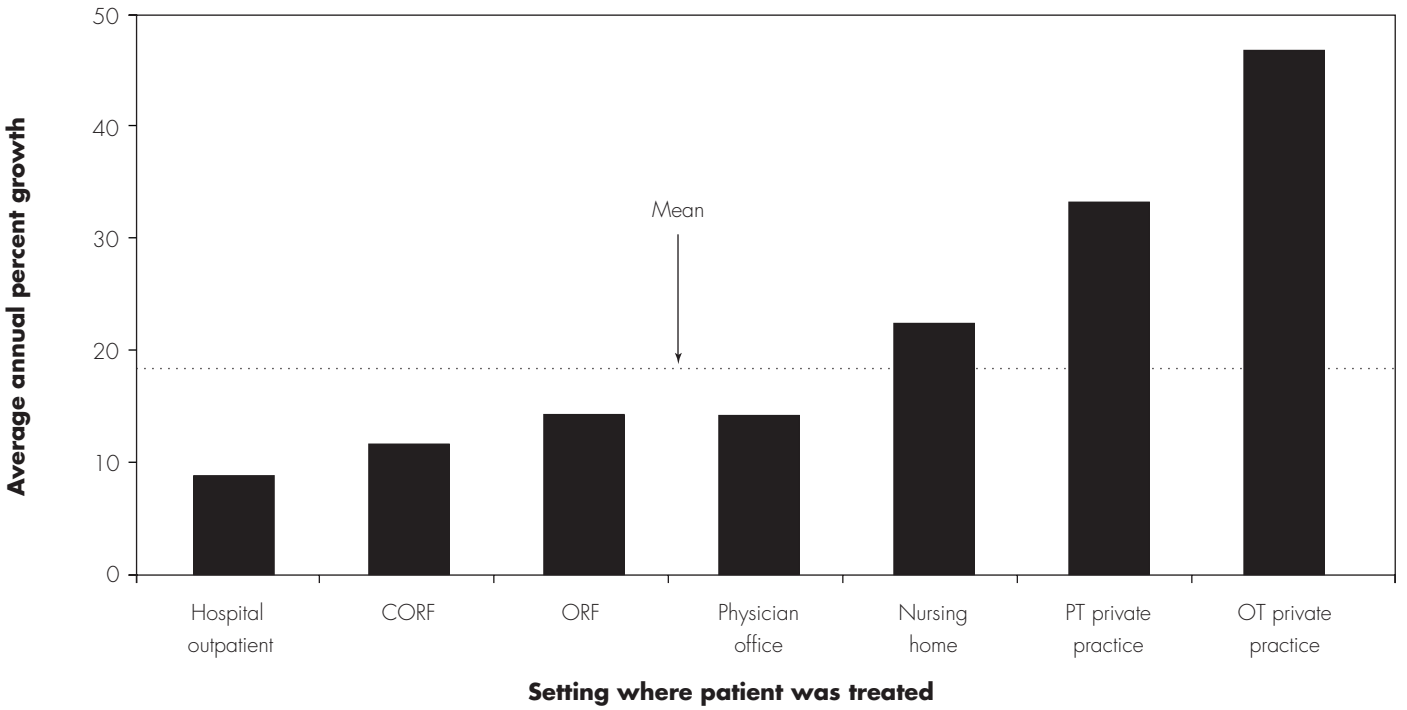
	1998	1999*	2000	2001	2002	2003*	2004	Average annual change 2000–2004
Spending (billions)	$2.1	$1.4	$2.0	$2.5	$3.0	$3.2	$3.9	18%
Users (millions)	3.1	3.0	3.3	3.7	4.0	4.2	4.5	8
Spending per user	$671	$469	$621	$693	$749	$760	$883	9

Note: *Indicates the year in which the therapy caps were operational (full year in 1999, 3 months in 2003).

Source: MedPAC analysis of the 5 percent file of carrier and fiscal intermediary claims for 1998–2004.

FIGURE 6–3

Medicare spending on therapists in private practice grew faster than that for other providers, 2000–2004



Note: CORF (comprehensive outpatient rehabilitation facility), ORF (outpatient rehabilitation facility), PT (physical therapist), OT (occupational therapist). PT private practice and OT private practice include therapists employed by physician groups who bill independently and are not furnishing services incident to physician services.

Source: MedPAC analysis of 5 percent fiscal intermediary and carrier 2000–2004 claims files.

changed their practice from an ORF to an independent practice as a way to avoid the survey and certification requirements of institutional settings.

Finally, CMS clarified in March 2003 that therapists could be employees of physicians' practices but still be considered in independent practice. This clarification enabled physicians to employ therapists but not be responsible for supervising their work. As a result of all of the outlined changes, the number of therapists in private practice who furnished services to beneficiaries more than doubled and accounted for over a quarter of all therapy spending in 2004.

Our interviews with various stakeholders identified a factor that may contribute to increases in therapy use, but we could not verify whether the practice is widespread. Some physicians may hire therapists as part of their group practice and then refer patients to them as a way to generate income.[9] The "in-office ancillary" exception states that therapy services are exempt from the Stark restrictions that limit physicians from referring patients to entities in which they have an ownership stake.[10]

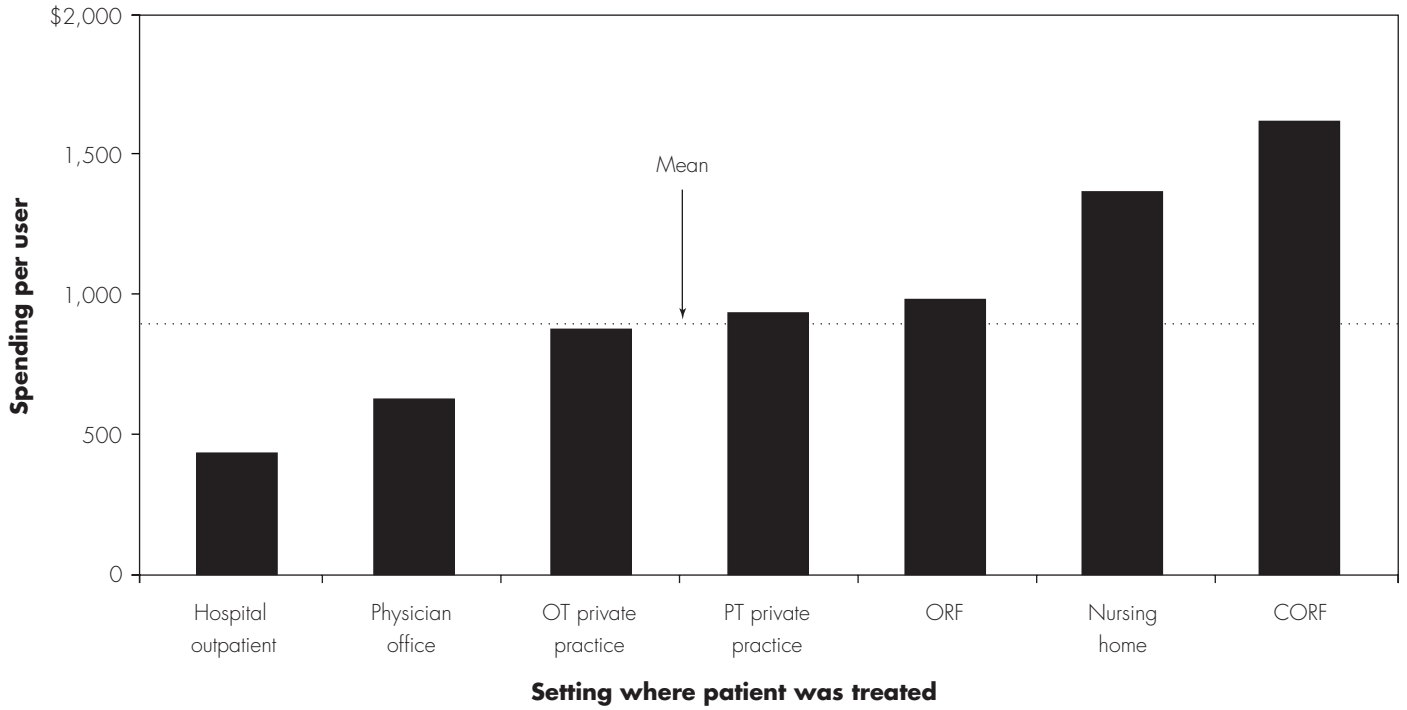
Variation in spending

In 2004, spending averaged $883 per user but this was substantially influenced by very high spending for a small number of users; the median was $435. Spending varied considerably by diagnosis, setting, and state. Several clinical experts with whom we spoke mentioned the difficulty of comparing service users due to the heterogeneity of the patients seen in outpatient therapy settings.

Variation by diagnosis

Spending varied considerably depending on the medical condition being treated. In 2002, PT spending for an episode of care—where an episode represented a group

FIGURE 6–4 **Per user spending on outpatient therapy varied threefold across settings**



Note: OT (occupational therapist), PT (physical therapist), ORF (outpatient rehabilitation facility), CORF (comprehensive outpatient rehabilitation facility). PT private practice and OT private practice include therapists employed by physician groups who bill independently and are not furnishing services incident to physician services.

Source: MedPAC analysis of 5 percent fiscal intermediary and carrier 2004 claims files.

of visits associated with PT—ranged from $416 for ankle sprain episodes to $1,012 for spinal cord injury episodes (Ciolek and Hwang 2004a).[11] This range will affect the share of patients in each diagnosis code who are likely to be exempt from the therapy caps. For example, in 2002, an estimated 13 percent of patients with lower back pain and 29 percent of patients with difficulty in walking would have exceeded the PT/SLP cap had one been in place (Ciolek and Hwang 2004c). This wide range in care needs underlines the importance of having an adequate patient classification system and risk-adjustment methodology for comparing patient outcomes and resource use.

Variation by setting

While spending averaged $883 per user, there was more than a threefold difference across settings (Figure 6-4). The least costly setting was hospital outpatient departments, while the most expensive was CORFs. Because the information about patients is limited, the Commission does not know if the variation across settings is due to differences in the types or complexity of patients treated or if patients who received more services had better outcomes. The Government Accountability Office (GAO) found that in Florida CORFs furnished more services to beneficiaries compared with other types of facility-based providers (GAO 2004). Differences in patients' prior hospitalization diagnoses and demographic information did not explain this disparity. The GAO could not examine whether patients treated in CORFs had better outcomes.

One study that examined the costs of episodes of care across settings found that care furnished for the same clinical condition (as reported by the diagnosis code) varied in duration and the services furnished per day. For example, PT episodes for musculoskeletal conditions of the knee and lower leg were 35 percent longer and had 56 percent higher payments per day in CORFs compared to hospital outpatient departments. As a result, episode payments were more than twice as high in CORFs

compared to the hospital setting (Ciolek and Hwang 2004a).

Because CORFs are concentrated geographically, we looked at where beneficiaries get therapy and SLP services in states with no CORFs. In these states, a high proportion of users received services at hospital outpatient departments.

Variation by state

There are also large spending differences by state. Commission analyses found that in 2004, Mississippi and Florida had the highest average outpatient therapy spending per user ($1,426 and $1,126, respectively), while spending in North Dakota and Minnesota was less than half these amounts.[12] In states with low per user spending in 2004, users were more likely to be treated in hospital outpatient departments (the setting with the lowest per beneficiary spending), compared with states with high per user spending. Because payment rates are the same across providers, differences are attributable to the volume and intensity of services. The different local coverage policies of claims contractors may also be a factor.

Medical necessity of services

In addition to differences across providers in patient complexity and outcomes achieved, another source of variation may be the amount of medically unnecessary services furnished to beneficiaries. Studies conducted by GAO and the Office of Inspector General (OIG) of the Department of Health and Human Services resulted in recommendations that CMS have its contractors conduct adequate medical reviews of outpatient therapy claims and increase provider education about coverage rules, local medical review policies, and documentation requirements (GAO 2004, OIG 2001, OIG 2000a, OIG 2000b). CMS has clarified its policies regarding therapy services and posted education materials regarding physical therapy services on the web (CMS 2005, CMS 2004). In a recent study of physical therapy services billed by physicians, OIG found that most of the claims it reviewed did not meet program requirements (OIG 2006). Its analysis of Medicare claims data from 2000 to 2004 revealed instances of unusually high volumes of claims, which suggest that the services are vulnerable to abuse.

Although Medicare claims contractors provide some oversight of the services furnished, their reviews are limited and inconsistent across contractors. Some contractors look for multiple billings on the same day for services that are not time-based (e.g., patient evaluations), which typically can be billed only one per day. Some contractors have edits on timed services that set a limit for the maximum number of minutes that can be billed on a single day, with the idea that most beneficiaries can not tolerate more than a set amount. Some contractors also look to see if the number of services billed over a given time period is reasonable, with the idea that most beneficiaries would no longer be improving. A CMS contractor noted that edits could also be developed for clinically illogical service combinations billed during a single day (Ciolek and Hwang 2004b).

GAO recommended that the Secretary implement improvements in CMS's automated system for identifying claims that are likely to be improper (GAO 2005). In the Deficit Reduction Act of 2005, the Congress subsequently required that clinically appropriate edits be implemented by July 1, 2006.

Although no data are likely to definitively confirm a patient's need for services, patient-level information could be used to predict a patient's care needs and rehabilitation potential based on similar patients. This information could be used to monitor resource use and outcomes and identify aberrant practices.

Alternative ways to manage therapy service use

The increased number of users and services furnished and the large variation in spending raise questions about how best to allow beneficiaries to get the services they need while paying for only services that are medically necessary. The therapy caps may control spending for beneficiaries who use unusually high amounts of care, but will not address the appropriateness of care for beneficiaries using low and moderate amounts of care. Other strategies are needed to make sure that users can benefit from therapy services and that the amount of therapy provided is appropriate for the beneficiary's condition. The Commission consulted a variety of experts—including researchers, medical directors at Medicare claims contractors, providers, product vendors, and private payers—to learn about alternative ways to manage therapy use. The text box describes a panel we convened and the experts we consulted.

Expert advice on ways to manage therapy service use

The Commission convened an expert panel of researchers, medical directors of claims contractors, and private plan representatives to consider some of the policy options available to the program. We asked the 15 panelists to evaluate the evidence for delineating therapy care needs of elderly patients and to consider the current activities undertaken by Medicare claims contractors and private payers to manage service use. We also asked them to identify the information that CMS needs to collect to assess patient outcomes and develop a payment system with adequate risk adjustment.

We also conducted over 25 interviews with post-acute care researchers and representatives from companies that market guidelines and outcomes tracking systems, private plans, and users of guidelines and tracking systems. We asked the private plan representatives to describe their approach to managing therapy use and their assessment of whether the approach could work for Medicare. The representatives from outcomes tracking companies described the product, the predictive model and risk-adjustment methodology, the outcomes measures, and the mix of patients in their database. We asked the guideline company representatives to describe how the guidelines are developed and revised, outline how their clients use them (prospectively, concurrently, or retrospectively), and evaluate the evidence basis underlying the guidelines. ■

Outsource managing the benefit

Some payers contract out the management of therapy services (mostly PT and OT) to companies specializing in orthopedic specialty benefits. These companies offer a range of services, including utilization management, medical review, and establishment and management of a network of therapy providers. Focusing on musculoskeletal conditions, these companies manage service use, identify inappropriate care, and reduce claim appeals. Their clients, typically large insurers and a range of managed care organizations, are generally not set up to manage the relatively small cost items spread over a period of time that characterize most therapy services.

Benefit management companies generally perform pre-authorization and concurrent review services using their own guidelines based on clinical expertise, published medical association recommendations, and medical literature. At admission, a therapist assesses a patient's functional status (e.g., range of motion, level of pain, and ability to perform activities of daily living). A proprietary model estimates the number of visits the patient will require to reach a certain level of improvement. The therapist provides services until the patient reaches the targeted outcomes or fails to improve. Peer therapists or nurses conduct medical reviews for patients who require additional visits to ensure that the plan of care continues to match the patient's care needs. By comparing service use to norms, these companies manage therapy use based on the patient's clinical condition and progress.

In cases where the company manages a network of therapy providers, contracts delineate the terms of payment. One company explained that it pays providers on a per visit basis (not per service) as a way to decrease the number of modalities furnished during a visit. If the company were to bundle payments to span episodes of care, it might overpay for patients who reach their goals earlier than expected. Daily payments, the company said, focus providers on the medical necessity of every day of care.

Contracting out the management of a therapy benefit generally complements other review activities that the payer does in-house to monitor the appropriateness of their subscribers' or enrollees' service use. For example, these payers and plans often conduct their own medical reviews of hospitalizations but have determined that managing an in-house review of therapy services is not cost effective. In contrast, the scale of the Medicare program makes concurrent review infeasible without spending considerably more on administrative expenses.

Increase copayments

One way to encourage appropriate use of therapy services would be to make the beneficiary responsible for a larger share of the payments. While not a common strategy, some private plans have adopted higher copayments for therapy services as a way to lower the demand for services. One plan told us that by shifting its definition of therapy services from primary to specialty care, it raised the copayment for each therapy visit from $15 to $25. The following year, service use declined by about 8 percent. Another plan examined the differences in therapy use across its Federal Employees Health Benefits plans and found that groups with the highest copayments had the lowest service use. As a result, it encouraged employers to raise copayments and about half have done so. However, the plan reported that many employers were reluctant to raise copayments because the approach is viewed as taking away benefits.

Medicare would likely face opposition from providers and beneficiaries to proposals to raise the copayments for all therapy services above the current 20 percent. Another strategy might be to consider tiered copayments. In this model, a beneficiary's use of services would be compared to some benchmark, such as the average use by patient condition. For service use within an acceptable range, copayments would remain at 20 percent. If service use exceeded the norm by some significant amount, the beneficiary would pay higher copayments for those services that were above some threshold. CMS would need to establish practice norms by patient condition—for example, based on average service use for older users or, ideally, evidence-based practice guidelines. Without adequate risk adjustment, beneficiaries with higher care needs could face difficulties accessing services or being penalized for needing more care.

Use practice guidelines to manage resource use

Some private payers, providers, and benefit management companies use commercially available practice guidelines to review and approve the number of visits furnished to a patient. Although guideline products (such as those marketed by McKesson/InterQual, Apollo Managed Care Consultants, and Milliman) differ in the details of the patient groupings and the care they recommend, there are broad similarities. For any given clinical condition, such as osteoarthritis in the shoulder, the guidelines often include clinical criteria used to evaluate whether therapy or SLP services are indicated (e.g., limited range of motion), the recommended modalities of treatment (e.g., therapeutic exercise), and the average number or range of visits. The guidelines are developed in an iterative fashion. Staff clinicians compile and review the existing medical evidence, which includes peer-reviewed journals, other published data, guidelines developed by health research organizations and professional organizations, expert opinion, and unpublished data. Increasingly, guidelines include a rating of the quality of the evidence used to establish them.[13] Draft recommendations are then reviewed and revised by an external group of experts.

Most often, guidelines are used by payers and providers in two ways. First, they are applied concurrently to an ongoing treatment regimen to approve continued service provision. Using condition-specific guidelines and an associated estimated number of visits, a peer reviewer asks the provider to confirm a patient's diagnosis and rehabilitation potential (like Medicare, most payers require patients to be improving) to ensure that continued care is medically necessary. Second, guidelines are used retrospectively to compare providers' practices to those of other providers or to norms, such as national average visits. Service provision that is unusually high or low is flagged for follow-up review and, in some cases, provider education.

The therapy associations have also been active in disseminating information about best practices. Based on expert panels it convened, the American Occupational Therapy Association reviewed the evidence basis for specific conditions and published "evidence briefs" on selected topics, such as stroke and Parkinson's disease. The American Physical Therapy Association (APTA) has undertaken two guidelines-related activities to increase the evidence basis for practicing therapists. First, it wrote a guide to help physical therapists identify preferred tests and interventions used to treat a variety of conditions. Though explicitly not intended to serve as clinical guidelines, the guide promotes appropriate service provision (APTA 2003). Second, it established a "Hooked on Evidence" website that includes a database of the current research evidence on physical therapy interventions.

Experts with whom we spoke had mixed opinions about applying guidelines to beneficiary service use. They differed in their assessment of the quality of evidence underlying the currently available guidelines. Some

thought the guidelines lacked a strong foundation in randomized controlled trials, while others thought that the basis was strong enough to guide practice.[14] Most agreed that guidelines could reduce the variation in service use but that they would need to be tailored to an elderly population if used by Medicare. Existing guidelines are generally written for a younger, healthier population and do not directly consider comorbidities and other factors that may increase a beneficiary's care needs. Guidelines not tailored to the Medicare population, especially if used to establish payments, could encourage providers to select low-cost patients and to ignore treating the full spectrum of patients' care needs (Boyd et al. 2005). Many thought that guidelines encouraged providers to furnish the approved number of visits rather than to consider a beneficiary's continued need for therapy services.

Assuming the guidelines created were age appropriate, they would be useful in several ways. First, CMS could compare a provider's service use to the guidelines as a way to detect unusually low or high service provision. While many claims contractors have local coverage policies that identify specific service use, national guidelines would be a way to standardize contractors' policies. National guidelines could be used to modify the payment process, with some method to allow exceptions for beneficiaries with unique care needs. In addition, guidelines could be used to educate providers and referring physicians about conditions and how much service has been shown to be effective for them, based on the literature. Finally, the guidelines might form the basis of a bundled payment method, such as episodes of therapy treatment.

Using guidelines for prior authorization or concurrent review is costly and probably not cost effective for Medicare. One health system told us its prior authorizations cost about $30 per review and it had discontinued them. A carrier medical director told us his organization had used concurrent reviews to detect maintenance therapy, but had discontinued them because of their questionable value. Claims contractors told us that additional reviews, besides automated edits, created additional workload that could not be supported by current funding levels.

Track service use and patient outcomes

Providers increasingly monitor patient outcomes and service use to identify potentially inappropriate (either high or low) service use and to evaluate the resource use and patient outcomes. Some providers use vendor software, such as LIFEware[SM] and Focus On Therapeutic Outcomes, Inc. (FOTO), to assess patients' functional status at admission and discharge and to compare their outcomes and resource use with the practices of other providers whose data are in the vendor's databank. APTA has developed an outcomes tracking and database called CONNECT as part of an electronic patient record system that will enable a physical therapy practice to compare its practice patterns to others.

By tracking the number of visits furnished and patient outcomes, these systems allow clinicians to use the information to reduce the number and mix of services billed during a visit to achieve a desired outcome. One integrated health system told us it had lowered therapy use by 8 percent by tracking service use and outcomes in combination with standardizing patient evaluations and decision making algorithms. Another integrated health system uses vendor software that includes a risk-adjusted predictive model and an extensive database of patients to estimate the average number of visits likely to be needed to achieve a specific improvement in outcomes. Based on these estimates, it pre-approves a number of visits that varies by patient condition. The system plans to create incentives for providers to furnish the least amount of services to achieve good patient outcomes.

Tracking resource use and patient outcomes is essential to establishing practice norms and to evaluating program spending. In addition to flagging aberrant practice, benchmarks could be used to vary the therapy caps by patient condition. Limits could be lower for beneficiaries with modest care needs and higher for beneficiaries with extensive care needs. Limits that vary by condition would encourage providers to be mindful of the amount of services furnished to all beneficiaries, not only the beneficiaries affected by the current therapy caps. Similarly, practice norms could form the basis of a new payment system.

Pay differently for therapy services

Many plans are not using innovative payment methods as a way to manage therapy provision. Often, they pay on a per service basis and limit the number of visits or days of therapy care. Some have shifted to paying per day, as a way to control the number of units billed during a visit. As already discussed, some plans use guidelines and tracking systems to guide the approval of and payment for continued service provision.

TABLE 6–2

CMS does not collect much of the information useful for predicting and comparing beneficiaries' therapy care needs

Data element	Item available in Medicare data: Yes	No
Age	✓	
Gender	✓	
Diagnoses and impairments[a]	✓	
Comorbidities[a]	✓	
Acuity of condition at onset		✓
Type of injury (sprain, strain, fracture, or post-surgical)		✓
Severity (e.g., the number of days since onset or surgery)		✓
Ability to perform physical activities at admission and discharge		✓
Ability to conduct daily activities and routines at admission and discharge		✓
Cognitive status at admission and discharge (including depression, distress, and degree of community integration)		✓
Motivation and self-efficacy		✓
Social support and assistance		✓
Environmental factors, such as accessibility of residence		✓
Treatment setting[b]	✓	
Previous medical use, including surgical history[c]	✓	
Pain		✓

Note: [a] The information gathered about a patient's diagnosis and comorbidities is often incomplete.
[b] Setting may reflect aspects of case mix and severity that are not measured by other variables.
[c] Data are available if various Medicare claims files are linked.

Source: Information gathered from the CMS stakeholders' meeting (February 9, 2006) and MedPAC interviews with clinical experts.

Many experts with whom we spoke noted that Medicare needs to pay for outpatient therapy and SLP services so that providers are not financially encouraged to furnish services. One clinician told us that the current method was a barrier to practicing cost effectively because to do so could lower service billings and result in "lost" revenue. He noted that until payers consider patient outcomes in their payment method, evidence-based practice is not encouraged. One integrated health system, Presbyterian Health Plan, plans to pay providers on the basis of their resource use (e.g., how many visits were furnished) and the patient outcomes (e.g., functional improvement). Payments to a provider will vary depending on how the resources used and patient outcomes compare to what is predicted for the patient.

Information needed to evaluate Medicare's therapy purchases

Without better information, CMS can not evaluate the value of the therapy and SLP services furnished to beneficiaries. It does not know if higher program spending resulted in better outcomes. And without information about who uses these services and their outcomes, CMS can not design a payment system that encourages providers to be mindful of the resources used while achieving good outcomes for their patients.

The agency needs two types of information. First, more complete information about a beneficiary's impairment and risk factors would indicate their care needs and rehabilitation potential. Second, functional status measures at admission and discharge would provide information on functional improvement—a critical outcome. Linking patient characteristics, resource use, and patient outcomes will allow CMS to assess when service provision is efficient and when patients improve. CMS will need to consider the investments it can afford to make, given that demands for program improvements far outstrip its resources.

Patient characteristics related to therapy care needs

Many patient characteristics and risk factors are related to outpatient therapy care needs. These include a patient's impairment and comorbidities, physical status at admission, and cognitive status at admission (including motivation and participation). In addition, the living environment (e.g., social support and assistance available to the patient) also shapes a patient's need for rehabilitation services.

Currently, CMS does not collect information on most of the risk factors identified by experts and stakeholders and does not gather any patient assessment information to indicate a patient's functional status (Table 6-2). Extensive data matching of beneficiary information from different claims files would be required to use data on prior medical service use.

Tools for collecting functional status measures

Although there are over 75 functional status instruments, many are specific to a disease or impairment. Often, a tool's accuracy or relevance declines as it tries to measure patients outside the range of patients it was designed to assess. Generic tools, such as the Short Form–36, are insensitive to some differences in physical disabilities and are unable to discriminate among patients at the upper and lower bounds of their accuracy.[15] In addition, the measures gathered from the various tools differ and the data gathered from them can not be compared (McHorney and Cohen 2000).

The Commission looked at four tools to learn about the possibilities for gathering outcomes data. The tools vary considerably in the range of patient conditions they typically assess and their survey method. Two tools—the Patient Inquiry® tool developed by FOTO, Inc. and the Activity Measure for Post-Acute Care (AM–PAC)—use computer adaptive technology and item response theory methodology to estimate functional status (see text box on page 134). Two tools use more traditional survey methods—the Outpatient Physical Therapy Improvement and Assessment Log (OPTIMAL) and the National Outcomes Measurement System (NOMS). Each tool has its relative strengths.

The Patient Inquiry® tool

The Patient Inquiry® tool has been used primarily to assess orthopedic patients in over 200 outpatient clinics.[16] FOTO's database includes over 1.6 million records, including over 300,000 patients who used the computer adaptive technology tool. The Patient Inquiry® tool estimates a patient's functional status, functional improvement, and number of visits needed for a specific functional improvement. Its predictive model includes a risk-adjustment method that considers the patient's age, impairment, acuity, severity, and surgical history to estimate the number of visits and the expected functional improvement. As FOTO extends its data collection to include complex medical and neurological patients, it will refine its risk-adjustment methodology and patient classifications.

FOTO's software also links resource use to functional improvements, allowing providers who purchase the measurement system to evaluate their resource use and patient outcomes. Its reporting features enable users to compare therapists' and site-specific measures (the number of visits and functional gains) to national averages.

FOTO has a grant from CMS to explore the feasibility of a pay-for-performance system for PT and OT services. FOTO is refining its risk-adjustment methodology using its historical data and information collected on Medicare beneficiaries at two sites. It will also compare actual Medicare payments with an estimate of what payments would have been had a pay-for-performance system been in place at the two sites. It will also identify the types of patients whose care needs were poorly estimated by its predictive model. A final report on this project should be available mid-2006.

The strengths of this tool are its large database, risk-adjusted predictive model, and reporting features. However, the tool has not been used to assess patients with complex medical and neurological care needs and its ability to accurately assess them warrants careful examination. Because it relies on patients' self-reported assessment information, using patient proxies for patients with significant cognitive and communication impairments would need to be explored. In addition, the tool has not been used across a variety of outpatient therapy settings and its ease of use will need to be confirmed.

The Activity Measure for Post-Acute Care

The AM–PAC was developed to assess patients across post-acute settings, in both institutional providers (skilled nursing facilities, inpatient rehabilitation facilities, and long-term care hospitals), and noninstitutional settings (home health care and outpatient clinics).[17] The tool uses a broad conceptual framework to assess a patient's ability to perform three types of activities: physical, personal and instrumental, and applied cognitive.[18] Though generally a self-report tool, limited research found that it was reliable using proxy reporting (Andres et al. 2003).

Though its database is small, the tool has been tested on patients with complex medical, neurological, and orthopedic conditions (Coster et al. 2006, Siebens et al. 2005). As such, it can be used to assess a wide range of Medicare patients, including those with chronic conditions and comorbidities and the 15 percent of Medicare therapy users who are nursing home residents. However, its measurement accuracy for patients with significant cognitive and communications impairments needs to be established. For example, the current set of questions may not adequately assess patients with extensive swallowing difficulties.

Computer adaptive technology: An overview

Computer adaptive technology and item response theory are increasingly used to assess the health outcomes of patients because of their considerable advantages over traditional survey methods (Jette and Haley 2005). This measurement strategy tailors the questions asked of each patient based on the patient's response to an initial question and answers to subsequent questions. Using an item bank of many questions, skip patterns adjust the length of the assessment until a desired level of accuracy in estimating a patient's functional status is achieved. Relying on data gathered about other similar patients, an accurate estimate can be made after answering a small number of questions.

Generally, patients are given the survey to complete themselves during the evaluation or visit. An initial question for every patient might be how hard it is to go up or down 10 stairs. Subsequent questions would then ask how hard it is to do other activities, with each question triggered by the patient's response to the preceding question. If going down stairs was hard, a patient might be asked about how easy it is to get out of a car. If descending the stairs was relatively easy to do, the patient might be asked about performing more difficult tasks, such as walking around the block. Because every question in the item data bank is calibrated on the same scale, each patient can answer a different set of questions but the functional abilities across patients can still be compared.

There are four advantages to this type of instrument. First, patients across a wide spectrum of settings, abilities, and clinical conditions can be tested without the survey becoming excessively long. Typically, a patient is assessed using about 10 questions, making it more efficient than other surveys.[19] Second, the tool is accurate over a broader range of patients than many of the generic or disease- or impairment-specific tools. Third, the outcomes also can be compared because a single tool is used to assess a wide range of patients. Last, an assessment tool is relatively easy to update using computer adaptive technology and item response theory. Questions can be changed over time while maintaining comparability between older and newer versions of the survey. ■

As it is a relatively recent development, the tool does not currently tie resource use to functional improvement. HealthSouth and Kaiser Permanente of Northern California recently decided to implement the AM–PAC to evaluate patient outcomes across their settings, including outpatient rehabilitation clinics. The initial 20-site pilot study with HealthSouth was successful and they are expanding its use to another 190 clinics. Kaiser is piloting the tool in a clinic specializing in stroke, traumatic brain injury, and neurological patients. If successful, it will consider using it in other post-acute settings and outpatient clinics.

Outpatient Physical Therapy Improvement in Movement Assessment Log

The OPTIMAL self-report instrument was designed by APTA to document the outcomes of physical therapy treatments furnished primarily to patients with musculoskeletal conditions in outpatient settings.[20] It assesses a patient's ability and confidence to perform 21 mobility actions such as standing, walking, bending, and climbing stairs (Guccione et al. 2005).

This tool could provide useful outcomes information about beneficiaries receiving PT in outpatient settings. This traditional tool represents a possible alternative to the more complex computer adaptive technology and item response theory methods. However, the feasibility of extending this tool beyond PT services needs to be explored. Further work needs to be done to establish its ability to assess patients with a wide range of conditions, including those with significant impairments. As with other self-report tools, the use and comparability of patient proxies with patient responses needs to be examined. The use of the tool across the full spectrum of outpatient therapy settings would also need to be examined.

National Outcomes Measurement System

NOMS was developed in the late 1990s by the American Speech-Language Hearing Association to measure the functional status of patients with substantial speech, cognitive, or communication impairments. In reviewing other tools, the association found that existing tools did not fully capture patients' speech and communication abilities. Beneficiaries receiving SLP services—such as patients recovering from a stroke with comprehension and speech difficulties or patients with apraxia of speech— typically have speech, communication, and cognitive impairments. For many of them, a self-report tool is clinically inappropriate or will gather information that is not reliable.

The tool scores patients on up to 15 functional communication measures—such as memory, spoken language comprehension, spoken language expression, and swallowing—that are selected based on the patient's disorder. The tool is currently used by over 1,400 speech-language pathologists who are trained and tested on administering the assessment. This training is likely to increase the tool's reliability across assessors. The tool includes a reporting feature that compares a provider's outcomes and resource use for individual clinical groups, such as stroke or Parkinson's disease, to national benchmarks.

By design, this tool assesses patients who need to use SLP services. In selecting this tool, CMS would need to consider a second tool that would be used to assess patients with primarily PT and OT care needs.

Uses for the risk factor and functional status information

Data gathered on a beneficiary's risk factors and functional status would be helpful in several ways. First, the information could be used to develop a classification system that sorts patients into groups with similar resource needs. Such groupings are required to develop accurate risk-adjustment methodologies that allow valid comparisons of the care needs, service use, and outcomes across patients. Some of the experts with whom we spoke thought that the risk factors for each type of therapy might be different and that separate risk-adjustment methodologies should be explored.

Once adequate risk-adjustment methods have been established, CMS could use the comparative information to develop benchmarks for treating older patients. While actual practices would represent a reasonable starting point for developing guidelines, they should be replaced with evidence-based guidelines tailored to the elderly if they become available. Benchmarks could be used to modify the payment process and identify beneficiaries with exceptional care needs that would be considered separately. Unique provider numbers for every therapist and speech-language pathologist could be used to hold individual providers accountable for their resource use and outcomes. Such accountability will become especially important if CMS links payment to outcomes.

From the provider's perspective, data-generated benchmarks could be used to predict a patient's likely resource needs and outcomes based on the experiences of similar patients. While a patient is under a provider's care, continued comparisons to benchmarks would direct treatment so that the best outcomes possible are achieved. Ideally, benchmarks and examination of outcomes would identify when treatments should continue and when they are no longer effective.

Service use by patient grouping could also be used to revise the therapy caps and the exceptions process. The exceptions process exempts a wide range of patients, partly because the information about patients' care needs is limited. Better data would allow this process to more accurately identify beneficiaries with exceptional care needs. In addition, data about care needs could be used to vary the therapy caps by patient condition.

Once risk-adjustment methods and patient groupings have been established, CMS can predict the care needs of different types of patients. Then, it could consider alternative payment systems that include incentives for providers to be efficient and achieve good patient outcomes.

Next steps for CMS

Medicare needs to have a payment system for therapy services that encourages providers to be mindful of the services used while achieving good patient outcomes. Before CMS considers changing Medicare's method of paying for therapy services, however, it needs more information about therapy users and their outcomes. This will require CMS to design patient assessment tools that gather risk factor information and outcomes measures. CMS also needs to develop accurate risk-adjustment methods that can help make valid patient comparisons.

With accurate ways to group patients with similar therapy needs, CMS could establish practice guidelines, profile providers' practice patterns, and, in the near term, refine the therapy caps and exceptions process. Ultimately, this information would shape a new payment design.

Selecting an outcomes measurement tool

CMS needs to select the measurement tools that are best suited to assess patients receiving therapy and SLP services. This may involve selecting more than one tool given the wide range in patient conditions receiving these services. Only the NOMS system is able to assess patients with severe speech and cognitive impairments, yet it is not appropriate for assessing most patients receiving PT and OT. Conversely, the tools developed to assess PT patients may not be able to assess all SLP patients, even with the use of patient proxies. While the selection of multiple tools may result in more accurate patient information, it will limit the comparability across patients.

In evaluating each tool, CMS needs to consider the range of patients it can accurately assess and how this range compares to the diversity of patients who receive therapy and SLP services. If necessary, it will also have to evaluate whether the tool could be expanded to accurately assess a broader range of patients. The tool must be accessible to patients with limited manual dexterity and able to assess patients with significant cognitive and communication impairments. The use of patient proxies may expand a tool's range, but CMS will need to examine the comparability of assessments gathered from self-report tools, clinicians, and other patient proxies. CMS will need to consider any systematic differences in the assessments gathered using various methods and, if necessary, what techniques are available to make the assessments comparable.

An additional factor to consider is the number of assessments that have already been completed using each tool. A large database of assessments, particularly if it reflects a wide variation across patients, will facilitate CMS's development of an accurate risk-adjustment methodology. The tools also vary in their current reporting features. For example, the AM–PAC currently does not link a patient's resource use to functional improvements—though presumably it could with time—whereas the Patient Inquiry® does.

Another aspect to consider is whether the tool is in the public domain. The use of a privately held tool may not be affordable or negotiable. To avoid problems with copyright, CMS will want to fully explore this issue.

CMS also may want to select a tool that it can use across other post-acute settings. In a congressionally mandated demonstration of post-acute care, the Secretary is required to gather patient assessment information across post-acute settings using a standard patient assessment tool.[21] A tool such as the AM–PAC could be used across post-acute care and outpatient settings, allowing CMS to compare the functional status of beneficiaries across the post-acute care continuum. This would avoid the current "silos" of patient assessment information, whereby the data from three assessment tools used in post-acute settings can not be compared or combined.[22] Comparability is particularly important for patients who are hospitalized prior to receiving outpatient therapy, such as those recovering from strokes or fractures and dislocations of the hip and knee. For many of these patients, outpatient therapy is part of their post-acute care. The GAO recommended that the Department of Health and Human Services expedite development of a process for assessing patients' care needs for outpatient therapy services by ensuring that these services were considered in its efforts to standardize existing patient assessment instruments (GAO 2005).

Conducting pilot studies

One way for CMS to test its selection of one or more patient assessment tools and gather data quickly would be to conduct concurrent pilot studies that compare different methods of gathering risk-adjustment and outcomes data. Each study would test the feasibility of a different assessment instrument using a representative mix of outpatient therapy settings and patients. By including a wide range of providers and different tools, the studies could test the feasibility and practical aspects of alternative information-gathering tools from a broad mix of beneficiaries and settings. Before the start of a pilot study, CMS may want to determine if an existing tool could be expanded to assess a broader range of patients than its current design. If so, the study could also test newly added assessment questions.

Each pilot study should include an evaluation of the limitations of the tool, including:

- the accuracy across the range of patients who receive PT, OT, and SLP services;
- the feasibility of using the tool in a variety of settings;

- the ease of use by patients with differing impairments (if a self-report tool); and
- the likelihood of success—and the costs associated—with large-scale use.

It is likely that each tool will be appropriate for specific types of patients and not others. CMS should also think about if, and how, any of the tools could be combined and used in a way to minimize the burden on providers.

At the end of the pilot studies, CMS would be able to evaluate which tools work for which types of patients and settings and consider the feasibility of computer adaptive technology and item response theory versus more a traditional data-gathering method. After selecting the assessment tool or tools, CMS would make any necessary refinements to the way the data are collected before rolling out the data collection method to all therapy providers.

Designing a new payment system

When more complete information about therapy users is available, CMS can consider how to reform the payment system to get value for program purchasing. Two broad options include a payment based on episodes or patient outcomes.

An episode-based payment would pay a provider for a series of therapy or SLP services associated with treating a patient from evaluation through the end of treatment. The payment amounts would vary, depending on the predicted resource use of patients with similar care needs. Episodes for simple impairments would have lower payments than episodes for complex cases. Payment protections would need to be developed for unusual circumstances or outlier cases. Paying on the basis of a larger bundle of services discourages therapists from furnishing services of marginal value. Outcomes measures would be needed to ensure that providers do not stint on care.

An incentive payment system would pay providers based on patient outcomes and resource use. CMS could take data from the pilot study to develop benchmarks for patient outcomes measures and resource use. These benchmarks could then form the basis of an incentive payment system.

In both payment approaches, adequate risk-adjustment methods are essential to making providers neutral toward the types of patients they treat. If the groupings used to establish payments include patients with sufficiently different care needs, providers will be reluctant to treat patients with above-average care needs. Additionally, without adequate risk adjustment, paying for functional gains may compromise access for patients who are slower to improve or have less rehabilitation potential (Stineman 2005).

In addition to encouraging providers to furnish only those services that improve a patient's outcomes, the payment system should hold providers more accountable. Whether the service provision is of relatively short duration or part of a long recovery process, the design of a payment system for therapy services should be consistent with the overarching goal of making providers accountable for the care delivered. And, in the longer term, it needs to look across all service provision, regardless of setting.

Monitoring the exceptions process

While these data collection and other design activities are underway, CMS needs to make sure that its exceptions process is used for medically necessary care. To minimize the resources required to conduct these reviews, CMS could start with analyses to identify aberrant practice patterns. For example, CMS might examine the percent of beneficiaries treated by providers who have requested and received automatic and manual exceptions and compare the request and approval patterns across providers. Unusual patterns could trigger requests for additional information. CMS has indicated that it will examine billing trends for aberrant practices to ensure that providers use the exceptions process for only those beneficiaries with exceptional care needs. Such monitoring is critical to ensure the exceptions process is being used as intended: to provide only medically necessary services to those beneficiaries with extensive care needs. ■

Endnotes

1 Services billed under a therapist's provider number are included in the "therapists in private practice" categories. Services furnished incident to physician services are included in the "physician services" category.

2 Nursing homes furnish therapy services to long-stay residents and the services are paid for under Part B. Therapy services furnished to skilled nursing facility patients are paid for in the daily rates of the prospective payment system and are not part of outpatient therapy services. These facilities also provide outpatient services to beneficiaries who live in the community.

3 Outpatient rehabilitation facilities offer a range of therapy services in a clinic-like setting. CORFs differ from other therapy providers in two ways: 1) they must offer psychological or social services and the services of a physician who specializes in rehabilitation medicine, and 2) they are authorized to provide and be paid separately for nontherapy ancillary services (e.g., respiratory therapy and drugs that can not be self administered) when medically necessary. A very small share of outpatient therapy services are provided by ambulatory surgery centers and home health agencies.

4 A fuller description of the history and impact of the therapy caps can be found at http://www.medpac.gov/publications/other_reports/Dec05_Medicare_Basics_OPT.pdf.

5 Medicare will also cover therapy services furnished by physician assistants, nurse practitioners, and clinical nurse specialists if the state in which they practice permits them to furnish therapy services. When therapy services are provided incident to a physician, the staff member furnishing the service must meet the requirements for therapists (with the exception of licensure).

6 In 2004, CMS clarified the qualifications for personnel furnishing therapy services in physicians' and therapists' offices (CMS 2004).

7 As required by the Congress, CMS has adjusted the limits each year for inflation using the Medicare Economic Index.

8 Interviews with representatives from CMS, the American Physical Therapy Association, and the American Occupational Therapy Association confirmed these factors.

9 Generally, physicians require the therapists to assign their Medicare payments to the physician practices and then the practices pay the therapists' salaries.

10 The Stark II law allows physicians to provide most "designated health services" (including physical therapy) in their own offices (called the "in-office ancillary exception"). Depending on their structure, such arrangements are legal. Some states restrict or prohibit the ownership or investment in physical therapy services by physicians. Proponents of the exception argue that it allows physicians to control the quality of care and enhances patient convenience.

11 An episode lasted as long as care was provided without a 60-day break.

12 These spending amounts were adjusted for differences in local prices using the geographic practice indices.

13 For example, randomized clinical trials are rated as the best evidence and unpublished data are rated as the weakest.

14 The randomized clinical trials often exclude patients with comorbidities because treatments are likely to appear less effective than if only healthier and younger patients are included (Iezonni 2003). Some observers argue that clinical trials are too resource intensive to expect all practices to be guided by them. Instead, targeted trials could be combined with carefully recorded and analyzed clinical practices to establish best practices (Kane 1997).

15 For example, patients with stroke and Parkinson's disease were shown to not be accurately measured using the Short Form–36 (O'Mahoney et al. 1998, Hobson and Meara 1997). Generic health status measures were shown to have biases when used to assess patients with disabilities (Anderson and Meyers 2000, Kersten et al. 1999).

16 The FOTO website lists numerous journal articles published using its tool, including those validating it. This bibliography is found at http://www.fotoinc.com/research_papers.htm.

17 The three domains (physical and movement activities, personal and instrumental activities, and applied cognitive activities) of the AM–PAC have been validated (Coster et al. 2004a, Coster et al. 2004b, Haley et al. 2006, Haley et al. 2004a).

18 The tool is based on the domains of daily activities outlined by the World Health Organization's International Classification of Functioning, Disability, and Health. This classification considers a patient's health condition (including physical and cognitive functioning), activities and participation, and the contextual factors (including physical, social, and attitudinal environments) that shape a patient's experience (Üstün et al. 2003).

19 For example, the computer adaptive technology and item response theory were found to be 70 percent more efficient than the lower extremity functional scale in assessing patients with hip, knee, foot, or ankle impairments (Hart et al. 2005). A 10-question version of the AM–PAC produced accurate and consistent measures of functional status (Haley et al. 2004b).

20 The tool focuses on assessing the "activities and participation" domain of the International Classification of Functioning, Disability, and Health.

21 The Deficit Reduction Act of 2005 requires the Secretary to implement a three-year demonstration by January 1, 2008, to assess the costs and patient outcomes across different post-acute settings. It requires that hospitalized patients be evaluated at discharge to determine the most appropriate post-acute placement and that the patients be assessed at the end of their post-acute care. The same assessment tool must be used by acute care hospitals at a patient's discharge and by post-acute settings.

22 CMS requires skilled nursing facilities to use the Minimum Data Set, home health care agencies to use the Outcomes and Assessment Information Set, and inpatient rehabilitation facilities (IRFs) to use the IRF–Patient Assessment Instrument. Because the time frames, definitions, and scales differ across the tools, information from the assessments can not be compared across settings (Jette and Haley 2005, MedPAC 2005, Iezonni and Greenberg 2003)

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