

**Part B Therapy Services under Medicare in 1998-2000:
Impact of Extending Fee Schedule Payments and Coverage Limits**

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Executive Summary

The Medicare benefits package covers physical, speech, and occupational therapy under both Part A and Part B. Payment for therapy furnished under Part A is built into the existing payment systems for inpatient acute and specialty hospital care, skilled nursing facility (SNF) care, and home health services. Payment for therapy furnished under Part B is based on Medicare's physician fee schedule, and applies to therapy furnished typically on an ambulatory basis, such as in physician offices and hospital outpatient departments (OPDs), or by independent therapists and rehabilitation agencies. SNFs also are a common setting for Part B therapy. SNFs can furnish this therapy to inpatients who do not meet Medicare's Part A SNF criteria (such as the prerequisite hospital stay), and to other individuals on an outpatient basis.

Part B therapy coverage and payment policy

Part B therapy furnished by physician practices and independent therapists has been paid under the physician fee schedule since 1992. Through 1998, Part B therapy payments to facilities were based on their costs as submitted to Medicare. Therapy furnished by independent therapists has been subject to annual, per beneficiary coverage limits for over 20 years (since 1974).

Starting in 1999, the Balanced Budget Act of 1997 (BBA) required that all Part B therapy be furnished under the same coverage and payment rules that had governed independent therapists for several years. First, the law replaced facility providers' cost-based payments with fee schedule payments. Second, the law raised the existing annual beneficiary coverage limits for physical/speech therapy and occupational therapy from \$900 each to \$1,500 each. And, the coverage limits were extended to apply to therapy furnished by facility providers and physician practices as well as by independent therapists. To avail Medicare coverage for patients needing substantially more than \$1,500 of either therapy, such services furnished by hospitals were exempt from the limits. In 1999, the limits were applied to facility-based therapy on a beneficiary per provider basis (rather than on an annual beneficiary basis), because of management information systems limitations. Congress later placed moratoriums on the limits for 2000 through 2002.

Purpose of report

To better understand Part B therapy services, patients, and providers, the Centers for Medicare and Medicaid Services (CMS), formerly the Health Care Financing Administration (HCFA) contracted with The Urban Institute to conduct a series of studies. This particular report primarily is intended to describe Part B therapy users by site of care and patient characteristics, evaluate their changing average payments and utilization between 1998 and 2000, and explore the distribution of payments relative to coverage limit amounts.

Findings

Part B therapy expenditures. Nominal aggregate Part B therapy expenditures fell dramatically (33.5%) from \$2.2 billion in 1998 to \$1.4 billion in 1999. That drop resulted from a corresponding 32.3% decrease in per patient annual payments (from \$709 to \$480). By 2000, aggregate payments climbed back about 40 percent, to over \$2.0 billion. Most of that increase was due to a 33.8% increase in per patient spending (from \$480 to \$642).

Figure 1 shows that average annual payments per Part B therapy patient were compressed in 1999 across settings, with expenditures declining among patients at three types of settings and increasing among those at other settings. A narrower payment distribution across settings is evident in 2000 as well, though less than in 1999. Specifically, average annual Part B therapy expenditures of patients at SNFs, rehabilitation agencies, and CORFs fell from over \$1,300 in 1998 to about \$550 in 1999, and increased to roughly \$800 in 2000. Annual expenditures of those using two or more types of settings for Part B therapy are similar. At three remaining settings—hospital OPDs, physician practices, and independent practices—average annual payments of Part B therapy patients increased in both 1999 and 2000, but remain much lower than average payments at SNFs, rehabilitation agencies, and CORFs.

Patient Volume. While aggregate and average (or per patient) expenditures changed substantially between 1998-2000, overall Part B therapy patient volume remained close to 3.0 million annually. The number of patients using these services fell slightly (1.8%) in 1999 and increased 4.8% in 2000.

As seen in Figure 2, patient volume increased at hospital OPDs, SNFs (inpatient), and independent therapy practices, while volume at other settings fell somewhat.¹ Despite the range of Medicare provider types that may furnish Part B therapy, each year about 90% of all Part B therapy patients use only one general provider type, or setting. Figure 3 illustrates the distributions of patients and expenditures across settings in 2000. The hospital OPD is the

¹ The aggregate volume increase at independent practices is particularly high (19% per year). Some industry representatives say, anecdotally, that some rehabilitation agencies are recertifying as independent practices. While it is beyond our scope to track prior provider status and recertification activities, it may be worth noting that the certification process for independent practices was substantially simplified in 1999 (*Federal Register*, November 2, 1998)—but was unchanged for facility providers of Part B therapy.

largest setting, accounting for one-third of patient volume. Only 10% of patients use two or more setting types (and most of these use two settings). The use of a single type of setting by Part B therapy patients does not mask a pattern of multiple unique provider use—each year over 90% of patients also use only one unique provider. These patterns are evident even among patients with higher than average annual therapy payments.

While one would not presume that expenditure and patient volume distributions should equal each other (because case-mix is not controlled across settings in this figure), the distributions of expenditures and volume nevertheless are much more similar to each other in 1999 and in 2000, after implementation of the fee schedule across all Part B therapy settings, than in 1998.

Patients exceeding \$1,200 therapy thresholds. Although coverage limits were not in place every year, we simulated the thresholds for each year of data and analyzed the subset of patients exceeding them.² We simulated beneficiary annual limits (as originally mandated by the BBA), and beneficiary per unique provider limits (as required for some settings in 1999). Among all Part B therapy patients, we found that 13% exceeded \$1,200 of annual PT/SLP or \$1,200 of annual OT in 1998; 5% exceeded either one or both of the annual thresholds in 1999; and 12% did so in 2000.

As seen in Figure 4, hospital OPD patients comprised a much larger share of the subset of patients exceeding annual thresholds in 1999-2000 than in 1998. No independent practice patients exceeded thresholds in 1998-1999. In 2000, under the coverage limit moratorium, independent practice patients comprised about 10% of the subset. Given our finding that the vast majority of Part B therapy patients use one unique provider each year, the subset of patients exceeding annual thresholds did not shift across settings as much as one would expect in 1999, when coverage limits were required across all but hospital settings. This suggests that the coverage limits were not fully implemented in 1999. Analyses of payments at the beneficiary per provider level revealed very similar findings.

In Figure 5, the subset of patients exceeding annual thresholds is shown in terms of the shares these patients represent of all the patients treated at given settings. In 2000, for example, hospital OPD patients exceeding one or both thresholds reflect only 6.3% of all hospital OPD Part B therapy patients in that year. The three-year trends are very similar at five of the settings: SNF (inpatient and outpatient), rehabilitation agency, CORF, and those treated at two or more settings.

Figure 6 highlights the distribution of total annual PT/SLP payments of the subset of patients exceeding that threshold. Payments at each distribution are the lowest by substantial amounts in 1999, and rise some in 2000. In that year, one-half of this patient subset had

² Thresholds were simulated at \$1,200, which equals the Medicare program's 80% payment responsibility toward the \$1,500 total limits.

PT/SLP payments between \$1,200 and \$1,700. The top 10% of the subset had more than \$3,300 PT/SLP payments. While a smaller share of Part B therapy patients use OT (roughly 25%), the payment distribution of OT users is fairly similar to that of PT/SLP users.

Conclusions. While the findings related to patients' annual and per provider expenditure distributions from this study suggest that coverage limits were not fully enforced in 1999, both per patient Part B therapy payments and shares of patients exceeding annual-level and provider-level thresholds were lowest in that year. Perhaps a combination of coverage limit enforcement and self-limiting activities by providers (with the presumption of enforcement) contributed to this trend. Nevertheless, decompositions of payments among the settings that incurred changes in both payment and coverage policy (that is, the non-hospital facilities), suggest that the new payment policy had the greater effect on average payment declines over the two years.

Introduction

The Medicare benefits package covers physical, speech, and occupational therapy under both Part A and Part B of the program. Payment for therapy furnished under Part A is built into the various payment systems for inpatient acute and specialty hospital care, skilled nursing facility (SNF) care, and home health services. Payment for therapy furnished under Part B is based on Medicare's physician fee schedule, and applies to therapy provided typically in ambulatory settings, such as in physician practices and hospital outpatient departments (HOPDs), or by independent therapists and rehabilitation agencies. SNFs also are a common setting for Part B therapy—they furnish Part B therapy typically to residents (or inpatients) who do not meet Medicare's Part A SNF criteria (such as the hospital stay prerequisite or the skilled care criteria). Some SNFs also provide Part B therapy to individuals on an outpatient or ambulatory basis.

Effective in 1999, the Balanced Budget Act of 1997 (BBA) placed all Part B therapy providers under the same payment rules that had governed independent therapists for several years, and expanded the coverage limits under which independent therapists had operated to other providers as well.

To help assess impacts of the expanded application of the coverage limits and the move of facility providers to fee schedule payments, Congress required the Secretary to analyze Part B therapy furnished in 1998 through 2000. The Centers for Medicare and Medicaid Services (CMS), formerly the Health Care Financing Administration, contracted with The Urban Institute to study Part B therapy and provide CMS with a series of reports. The first report (Maxwell and Baseggio, 2000) included a detailed review of Medicare Part B therapy coverage policies, payment policies, and providers. Available volume and expenditure trends relative to other Medicare service expenditure trends also were presented. The crux of that report was a discussion of shorter-term and longer-term policy alternatives to the \$1,500 coverage limits.³

This report presents findings from our study of Part B therapy expenditures and utilization in 1998 through 2000. For background, this report briefly reviews the recent changes in Part B therapy payment and coverage policies. In the findings section, Medicare's utilization and expenditures for Part B therapy are presented, by year and setting. Patient

³ *Outpatient Therapy Under Medicare: Background and Policy Options*. Maxwell S and Baseggio C. Report to the Health Care Financing Administration, under no. 500-95-0055, September 2000.

payments also are analyzed relative to the BBA thresholds. Key findings and their interpretations and implications are then discussed.

Recent changes in coverage and payment policy

Part B therapy furnished in physician practices, by physical therapists in independent practice (PTIPs), and by occupational therapists in independent practices (OTIPs) has been paid on a service-specific basis using Medicare's physician fee schedule since 1992. Effective January 1999, the BBA replaced facility providers' prior payment method— which was based on Medicare-reported, revenue center-specific costs— with the fee schedule. "Facility" settings include, for example, hospital outpatient departments, SNFs, rehabilitation agencies, and comprehensive outpatient rehabilitation facilities or CORFs. As an interim savings measure, the BBA reduced payments in 1998 for hospital services (including Part B therapy) by 5.8%,⁴ and reduced payments in 1998 for Part B therapy furnished in other facilities by 10%.⁵

Since 1974, Medicare has limited its annual coverage of therapy furnished by PTIPs and OTIPs. In the few years prior to the BBA, the annual limits were \$900 per beneficiary for PT and SLP services (combined), and \$900 per beneficiary for OT. Coinsurance requirements apply to the limits, meaning that the Medicare program paid 80% (up to \$720), and beneficiaries were responsible for 20% (up to \$180). Beneficiaries were liable for any therapy furnished by PTIPs and OTIPs beyond the covered amount. Effective in 1999, the BBA extended these limits to all non-hospital providers of Part B therapy, and raised them to \$1,500 each.⁶ Because of the management information system difficulties associated with implementing the coverage limits, CMS implemented them for physicians and facilities on a provider-specific basis. Providers were responsible for tracking their patients' payments.⁷ Further, if a beneficiary exhausted coverage at one rehabilitation agency, CORF, or physician office she could obtain additional coverage by using any other specific provider (in addition to obtaining unlimited coverage at a hospital OPD). Despite the per-provider implementation, SNFs could not use multiple therapy providers as a means to furnish multiple "sets" of Part B therapy coverage to their patients. The consolidated billing requirements enacted by the BBA in conjunction the SNF PPS explicitly exclude the use of multiple billers for therapy services

⁴ Each year since 1990, hospital operating cost payments were reduced by 5.8 percent; capital cost payments were reduced by 10 percent.

⁵ Balanced Budget Act of 1997 (PubLNo 105-33, Act Sec 4541).

⁶ Conversations with Congressional committee staff indicate that hospitals were exempted from the coverage limits to help ensure access for patients who need more than \$1,500 of services.

⁷ Health Care Financing Administration, "*Prospective Payment System for Outpatient Rehabilitation Services and Application of Financial Limitation*," Program Memorandum AB-98-68, October 1998.

in the SNF setting. In the same vein, SNFs can not contract with hospitals to furnish unlimited Part B therapy to their patients.⁸

PTIPs and OTIPs continued to operate under per-beneficiary limits in 1999. This was possible because their services already had been subject to coverage limits for several years, and thus the systems necessary to track their services already were in place.

During 1999 and 2000, stakeholders and patient advocates lobbied for a repeal of the coverage limits, arguing that the limits were too stringent for patients served by SNFs and that the provider-specific implementation of the limits could disrupt continuity of care for patients served by non-hospital providers.⁹ Congress considered alternatives to the coverage limits, but ultimately placed a moratorium on the caps during 2000 and 2001. Congress later extended the moratorium through 2002.¹⁰

Data and Methods

The primary data for this study consist of Part B therapy claims, which reside in CMS's outpatient and physician/supplier claims files. CMS's annual 5% beneficiary samples for 1998, 1999, and 2000 were used. To estimate Medicare's national utilization and spending, the 5% utilization counts and aggregate expenditure data were multiplied by 20. The outpatient file includes claims (or bills) for Part B therapy furnished by facilities—hospitals, SNFs, home health agencies, CORFs, rehabilitation agencies, public and private clinics, public health agencies, and hospices. The physician/supplier file includes claims for Part B therapy furnished by professional practices— PTIPs, OTIPs, and physicians or individuals furnishing therapy incident to physician services. The claims contain information on a patient's diagnoses and procedures, other service utilization (such as laboratory tests), charges by major revenue center (including type of therapy), final-action interim payments, and beginning and ending dates of the claim.

Beneficiary socio-demographic characteristics (including age, sex, race, Medicaid status, and state of residence) were identified from CMS's denominator file. Facility characteristics were identified using data from the On-line Survey and Certification System (OSCAR).

⁸ Health Care Financing Administration, "Consolidated Billing for Skilled Nursing Facilities," Program Memorandum AB-98-18, April 1998.

⁹ For example, see McGinley L., "Medicare caps for therapies spark protests," *Wall Street Journal*, April 26, 1999, pg. B1+.

¹⁰ The Balanced Budget Refinement Act of 1999 (PubLNo 106-113 Act Sec 221) placed a moratorium on the limits during 2000 and 2001. The Consolidated Appropriations Act of 2000 (PubLNo 106-554 Act Sec 421) extended the moratorium through 2002.

Extracting Part B therapy services

Facilities. We extracted facility-based Part B therapy claims by first identifying facility types for which Part B therapy is reimbursable.¹¹ On the claims, these facilities are identified as: hospitals (inpatient and outpatient departments); SNFs (inpatient and outpatient departments); home health agencies (to non-homebound patients or outpatients); CORFs; ambulatory surgical centers or ASCs, and "outpatient rehabilitation facilities". To limit confusion in terms, in this study we refer to "outpatient rehabilitation facilities" as rehabilitation agencies. Although a few other provider types (such as public health agencies) are included in the outpatient rehabilitation facility group, our analyses of OSCAR data indicate that rehabilitation agencies comprise almost 95% of the group. Regarding hospital Part B therapy claims, we identify whether the facility is an acute hospital or freestanding rehabilitation hospital, and whether the acute hospital has a distinct-part inpatient rehabilitation unit.

We then identified therapy services within the extract of facility claims. In 1998, Part B therapy claims from facilities could be identified consistently only by general type of therapy (PT, SLP, and OT) as recorded in the set of revenue center codes. After 1998, coding of specific therapy services using the HCFA Common Procedure Coding System or HCPCS also is required (to allow for reimbursement using the physician fee schedule). For comparability across the three study years, however, we extracted facility-based therapy each year using PT, SLP, and OT revenue fields.

Initially, we attempted to group individual HCPCS codes present in the 1999-2000 claims by type of therapy (PT, SLP, or OT). We did not do so, however, after finding an extensive overlap of HCPCS codes across PT, SLP, and OT revenue centers.

Private therapy practices and physician practices. Claims for Part B therapy furnished by private therapy practices and physician practices were extracted from the physician/supplier claim files. In the claim service type field, services furnished by private therapy practices are coded as PTIP services or OTIP services. We later combined PTIP and OTIP services into a single group (labeled in the Findings section as "independent practice" services) because exploratory analyses (not shown) indicated that the sample of Part B therapy patients treated by OTIPs is insufficient in size for making statistical comparisons. Less than 1% of all Part B therapy patients are treated by OTIPs.

Initial analyses of the service type field indicated that therapy HCPCS codes on physician claims are coded largely as "medical", "diagnostic", or "surgical" services. CMS further requires physician claims to include a modifier indicating that a therapy service is performed under a PT, SLP, or OT treatment plan. However, our initial analyses indicated

¹¹ Health Care Financing Administration, "Consolidation of Program Memorandums for Outpatient Rehabilitation Therapy Services," Program Memorandum AB-00-39, May 2000.

that these modifiers largely were not used. (In 1999, less than 6% of therapy HCPCSs on physician practice claims included the modifier.) The absent modifiers seem problematic regarding a subset of therapy services that also are simply common medical services. For example, in the hospital OPD setting CMS requires documentation of a therapy treatment plan when a set of wound debridement, casting, and strapping services are coded as therapy.¹² In attempts to avoid misidentifying common medical services on physician claims as therapy, we excluded this same subset of codes when found in physician practice claims. Lacking the treatment plan modifiers, we also could not further categorize therapy on physician claims as PT, SLP, or OT.

Patients using two or more Part B therapy settings. Exploratory analyses indicated that about 90% of patients obtain Part B therapy from only one type of setting (eg, hospital OPD, SNF inpatient, or PTIP) over the course of a year. We would expect that patients using multiple settings might have higher than average Part B therapy payments. For example, use of multiple settings might reflect patients with lower functional levels and longer therapy episodes, or it might reflect patients with multiple but separate episodes of illness. For most of our analyses, we categorize patients using two or more types of settings as "multiple setting" patients.

Therapy payments. Although charge information is available by type of therapy (PT, SLP, and OT) on facility-based claims, payment information represents final-action interim payments for *all* allowed services listed on a claim. To estimate exclusively Part B therapy payments on facility claims, we calculated the ratio of therapy claim charges to total claim charges, and applied that ratio to the claim payment field. While this step is critical to isolate and estimate therapy payments for multi-service facilities (such as hospitals and SNFs), for consistency we applied this ratio across other facility-based claims as well.

Payment information is available at the HCPCS level on physician/supplier claims. However, because therapy HCPCS cannot be definitively aggregated to type of therapy (PT, SLP, or OT), we analyzed physician/supplier therapy payments by setting— PTIP, OTIP, and physician practice.

Claim edits. We deleted claims for patients residing outside of the United States, with end-stage renal disease, or enrolled in managed care. We also deleted claims with negative payments. These screens removed in total less than 2% of therapy claims. We truncated revenue center charges at the 1st percentile and 99th percentile, at the claim level. Similarly, we truncated payment for therapy HCPCS codes before aggregating the data to the level of the PTIP, OTIP, and physician practice setting. Analyses of payments before and after truncation indicate that the step brought in extreme outliers, but it did not significantly alter means and standard deviations of payment variables.

¹² HCFA, May 2000.

Grouping Part B therapy patients by diagnostic condition

To analyze Part B therapy patients in a more clinically meaningful manner, we mapped patients into 11 mutually exclusive groups of conditions and injuries, using the principal diagnosis code identified on a patient's first Part B therapy claim. We refined a grouping algorithm developed by rehabilitation researchers to differentiate patients according to their expected level of outpatient rehabilitation resource need.¹³ The categories of grouped diagnoses are:

- spinal cord (includes fracture/injury and nontraumatic spinal damage);
- neurologic (includes fracture/concussion and nontraumatic brain damage);
- hip fracture;
- back (includes fracture, sprain, and other back disorders);
- orthopedic surgery (includes joint replacement and fracture other than spinal, skull, hip and back fracture);
- stroke;
- cardiovascular (includes circulatory and pulmonary disorders);
- musculoskeletal (includes arthritis, burn, and soft tissue injury/disease);
- amputation and deformities (includes traumatic amputation and acquired deformities);
- unspecified rehabilitation (includes cases where a therapy procedure code, or a "V code", is listed as the principal diagnosis code); and
- all other diagnoses.

Although patients are assigned to only one condition group, exploratory analyses (not shown) reveal that 13% of patients have principal diagnoses that otherwise would result in multiple condition assignments. In this subset, 90% indicate the presence of two conditions; the balance have three conditions.

¹³ Buchanan J, Rumpel D, and Hoenig H. "Charges for Outpatient Rehabilitation: Growth and Differences in Provider Types," *Archives of Physical Medicine and Rehabilitation* 77:320(8): April 1996.

Findings

This section presents key findings from analyses on 1998-2000 Part B therapy claims. The tables identify Part B therapy patient characteristics and payments by setting, and provide information on those patients who exceed \$1,200 of program payments for PT/SLP or \$1,200 for OT (the threshold amounts equal Medicare's 80% liability of the \$1,500 coverage limits enacted by the BBA).

Part B therapy settings

Table 1 shows the total number and percentages of Part B therapy patients in 2000 by setting, and these patients' characteristics by setting. (See Appendix for corresponding 1998-1999 tables. Changes in patient characteristics by year were small). In total, over 3.1 million beneficiaries used Part B therapy in 2000. The most frequently used setting is the hospital OPD. Acute hospitals without a rehabilitation specialty unit (labeled as "acute/no unit") treat 31.3% of Part B therapy patients. The outpatient departments of freestanding rehabilitation hospitals treat another 2.2% of Part B therapy patients. After acute hospital OPDs, the next largest settings, in terms of patient volume, are physician practices and SNF inpatient, at 14.5% and 12.6% of patients, respectively.

SNFs treat another 3.6% of Part B therapy patients on an outpatient basis. To further understand the nature of the SNF outpatient therapy market, we used claims and OSCAR data to identify SNFs that furnish outpatient therapy. We then conducted internet research on the names of providers that submitted relatively high shares of SNF outpatient therapy claims. A review of the search findings (which yielded information from sources such as provider web sites and community newspaper articles) indicated that some SNFs market outpatient therapy services to their own inpatients (for use after discharge) and to other individuals in the community. In particular, it appears that some SNFs market outpatient therapy to individuals in organized residential arrangements, including assisted living facilities and continuing care complexes. Often such SNFs are on the campus of these complexes.¹⁴

¹⁴ An example of the search findings on a provider with SNF outpatient therapy claims in our data sample: "[name deleted] and Nautilus HPS Launch Program to Enhance Lives of Seniors Through Functional Independence," Business Editors, Health/Medical Writers, (BW HealthWire), Nov. 21, 2000. "[name deleted] today announced a partnership with Nautilus Human Performance Systems (HPS) to provide strength training to elderly patients in select locations nationwide. Through a new program called "Freedom through Functionality," which is based on breakthrough new research, [name deleted] and Nautilus will offer exercise programs designed to enhance functional independence and improve quality of life for seniors..... [Name deleted] will offer the "Freedom through Functionality" program as a four-tier program: inpatient, outpatient, wellness and restorative. Inpatient will offer the program to nursing facility residents as part of their rehabilitative program and outpatient will offer programs to seniors living outside the facility. The wellness program will offer the facility as a fitness center catering to the special concerns of the local senior population, and the restorative aspect of the program will address seniors who have completed a physical therapy program in-house and who want to continue to increase their strength...."

As seen on Table 1, roughly equal shares of patients are treated by rehabilitation agencies and independent therapy practices (11.4% and 10.9%, respectively). CORFs are few in number (about 500 were certified in 2000), and treated 1.7% of Part B therapy patients in that year. HHA outpatients, ASC patients, and hospital inpatients combined comprise less than 1% of Part B therapy patients. In 2000, 10.8% of Part B therapy patients received therapy from multiple settings, or two or more types of settings.

Patient characteristics

Examining on Table 1 the demographic characteristics of all patients who received Part B therapy shows that 11.6% of Part B therapy patients are younger than 65 years old; the largest age brackets represented are the 65-74 and 75-84 age groups (34.7% and 35.3%, respectively). Two-thirds of Part B therapy patients are female, and about 88% are white. About one-quarter is enrolled in Medicaid at some point during the year. Compared to the total population of Part B therapy patients, SNF patients (both inpatient and outpatient) are significantly older— about one-half of SNF patients are over 85, compared to 18.3% overall. Hospital OPDs have slightly younger Part B therapy patients, compared to the overall average. Relative to the total Part B therapy population, SNFs tend to have a higher than average share of dual-eligible patients (those enrolled in Medicare and Medicaid), while independent practice therapists have a slightly lower share of dual-eligible patients.

Individuals receive Part B therapy for a range of conditions and injuries. Almost one-third of patients in our sample have a principal diagnosis code on their first Medicare Part B therapy claim related to musculoskeletal/soft tissue conditions; 19.3% of patients have a principal diagnosis indicating a back disorder; and 15.3% are in the neurologic group. About one-quarter of patients fall under five other condition groups: unspecified rehabilitation, ortho-surgical, stroke, cardiovascular, hip fracture, amputation/deformity, and spinal cord. Almost 10% have diagnoses not included in any of the above conditions (labeled here as "all other diagnoses").

Compared to all Part B therapy patients, hospital OPDs have three times as many patients for whom the facilities code "unspecified rehabilitation" (28.2% versus 9.9% of patients overall).¹⁵ SNFs appear to serve a patient base with different and a broader range of conditions. Almost twice as many SNF patients are in the "other diagnoses" group (almost 20% for SNF patients versus 9.8% overall). SNF patients appear to have more clinically complex conditions coded, as illustrated by their shares of patients in the neurologic, stroke, and cardiovascular groups. The data also indicate that SNF inpatients and outpatients have very similar distributions of conditions. Three settings— rehabilitation agencies, independent practices, and physician practices— treat higher than average shares of patients with diagnoses related to musculoskeletal/soft tissue injuries and back disorders.

¹⁵ It is difficult to interpret the condition of those patients whose principal diagnosis is listed simply as "rehabilitation". Our later episode analyses will further examine the diagnoses of therapy patients.

Geographic distribution

Table 2 shows the geographic distribution of Part B therapy utilization and expenditures in 2000. (See appendix for 1998-1999 tables). Nationally, the Part B therapy patient annual utilization rate is 804 patients per 10,000 beneficiaries. CMS regions with the highest high utilization rates include Denver (960), Kansas City (940), and Chicago (896). The former two regions are home to small shares of Medicare beneficiaries (2.8% and 5.2%, respectively), and thus do not influence the national utilization rate substantially. Looking across states rather than regions, Florida has a relatively high therapy utilization rate and share of the nation's beneficiaries (914 and 7.2%, respectively). Five less populated states have utilization rates substantially higher than 1,000: New Hampshire (1,094), Vermont (1,131), North Dakota (1,127), Wyoming (1,134), and Iowa (1,112).¹⁶ Payments per therapy patient averaged \$624 in 2000, resulting in an estimated \$2.0 billion in aggregate Medicare spending. Per patient payments are markedly higher in three states: Texas (\$1,019), Louisiana (\$984), and Florida (\$866).

Changes in expenditures and utilization, 1998-2000

The remaining tables present data from 1998-2000, and illustrate changes in payments and utilization that occurred during this period of policy change. Table 3 shows Part B therapy aggregate payments, average or per patient annual payments, and patient volume by setting and by year. In 1999, aggregate Part B therapy expenditures fell dramatically (33.5%), from \$2.2 billion in 1998 to \$1.4 billion. That drop resulted from a corresponding 32.3% decrease in per patient payments (from \$709 to \$480). Patient volume declined very slightly (1.8%). By 2000, aggregate payments climbed back up about 40 percent, to over \$2.0 billion, placing spending almost at 1998 levels. Most of that increase is due to a 33.8% increase in per patient spending (from \$480 to \$642). Patient volume increased 4.8% in 2000.

In 1999, marked declines in aggregate spending, per patient spending, and volume are seen across three main settings: SNF outpatient, rehabilitation agencies, and CORFs, as well as patients treated in multiple settings. Per patient payments at these settings ranged from about \$1,000 to \$1,500 in 1998, and fell by roughly one-half in 1999. Volume across these settings fell by about 10% to 50%. While aggregate and per patient payments for SNF inpatients also fell by roughly one-half in 1999, their patient volume increased in that year (by 12%). In 2000, per patient payments in these settings (SNFs, rehabilitation agencies, CORFs, and multiple settings) increased by roughly one-half, placing payments between 1998 and 1999 levels. Patient volume also rose in these settings in 2000, particularly among SNF

¹⁶ Part B therapy utilization rates also were compared across years. The national average utilization rate increased about 5% in 2000, from 768 patients per 10,000 beneficiaries in 1999 to 804 in 2000. Utilization rates actually declined (by roughly 4%) in two states: Kansas (from 925 in 1999 to 882 in 2000) and Nebraska (from 1,049 in 1999 to 1,009 in 2000).

outpatients (13.3% increase), and among patients seeking therapy at multiple settings (20.3% increase).

In both 1999 and 2000, the other main Part B therapy settings— hospital OPDs, physician practices, and independent practices— generally experienced increases in aggregate spending, per patient spending, and patient volume. In particular, independent practices incurred large increases in both per patient spending and volume across each year (roughly 30% annual increases in per patient spending and 20% annual increases in volume). By contrast, hospital OPDs and physician practices experienced large increases in per patient spending in 1999 (about 40% at each setting), but much smaller increases in 2000 spending. Volume increased less than 4% annually at hospital OPDs and physician practices, and actually declined by about 6% in physician practices in 2000. Despite the significant increases in per patient payments generally witnessed in 1999 and 2000 in hospital OPDs, physician practices, and independent practices, their per patient payments remain the lowest across all the settings. In 2000, per patient payments in these settings were \$335 (physician office), \$607 (independent practice), and \$432 (hospital OPD).

Of all the settings, only SNFs, rehabilitation agencies, and CORFs incurred changes in both payment method and coverage policy between 1998-1999. From Table 3, we can decompose the change in these settings' expenditures to identify a rough approximation of the relative effects of the fee schedule and coverage limits. This decomposition is only a maximum estimate of the effects, because it does not control for other factors that may affect expenditures. These settings' expenditure declines between 1999-2000 best isolates change associated with the coverage policy. Their expenditure declines between 1998-1999 captures "total" change, including the switch to fee schedule payments and coverage limits. Among SNF inpatients, up to 38% of their "total" decline in per patient payments is associated with the coverage limits: $((\$838 \text{ in } 1999) - (\$554 \text{ in } 2000)) / ((\$1,299 \text{ in } 1998) - (\$554 \text{ in } 1999)) = .381$. Among SNF outpatients, the comparable share of change in per patient payments associated with coverage limits is up to 30%. Maximum estimates of change attributable to the coverage policy are higher among rehabilitation agencies (up to 47%) and CORFs (up to 51%).¹⁷ Conversely, the fee schedule appears to have had a greater effect on payments to SNFs, but its affect on payments to rehabilitation agencies and CORFs appears to be roughly equivalent to the effect of coverage limits.¹⁸

Table 4 illustrates the distribution of aggregate payments and patient volume across settings. In terms of patient volume, hospital OPDs consistently have been the largest setting, treating about one-third of Part B therapy patients annually. Four settings each treat

¹⁷ Decomposing the change in constant dollars rather than nominal dollars lowers the shares attributable to the coverage limits by 1 to 3 percentage points, depending on the deflation method used.

¹⁸ Approximations of maximum shares of total change that can be attributed to the fee schedule at these settings can be calculated by dividing the overall 1998-2000 change by the 1998-1999 change. The values are the reciprocals of the values resulting from the coverage limit estimations.

approximately 10% of the annual patient volume: SNF inpatients, rehabilitation agencies, independent practices, and physician practices. About 10% of patients each year also receive therapy at multiple settings. While the volume distribution by setting is stable over the three-year period, the distribution of aggregate payments has shifted. In 1998, SNF inpatients and outpatients combined accounted for about one-third of Medicare's Part B therapy payments, while hospital OPDs accounted for about 13%. The pattern nearly reversed in 1999, and in 2000 hospital OPDs and SNFs each account for over one-fifth of aggregate spending.

Table 5 identifies aggregate payments to facility-based settings by type of therapy—PT, OT, and S/LP. In 2000, PT accounted for 70% of Part B therapy payments to facility-based settings.¹⁹ PT comprises 80% of payments to hospital OPDs, over 70% of payments to CORFs, and roughly 55% of payments to SNF inpatients and outpatients. Among hospital OPD and CORF patients, the distribution of expenditures by therapy type is stable over the three year period. In contrast, between 1998 and 2000 the distribution shifted toward PT expenditures by about 10 percentage points among SNF inpatients, SNF outpatients, rehabilitation agency patients, and those using multiple settings. At SNFs, for example, PT spending increased from about 45% to 55% of SNF therapy payments. At rehabilitation agencies PT spending increased from 75% to 84% of payments. Among SNF and multiple setting patients, the distribution shifted mainly from SLP, while the distribution shifted from both OT and SLP among rehabilitation agency patients.

Table 6 presents per patient payments by type of therapy, for each facility-based setting and year.²⁰ In 1999, PT payments per PT users decreased across facilities an average of roughly 30%, while SLP payments per SLP users and OT payments per OT users each fell more than 50%. In 2000, though, roughly similar increases occurred across therapy types (between 30% and 35% increases). In hospital OPDs, average payments across the therapy types increased by roughly similar levels (approximately 35% in 1999 and about 11% in 2000). In SNFs (both inpatient and outpatient), PT payments per PT users decreased less in 1999 and increased more in 2000, relative to SLP and OT payments per SLP and OT users.

Because the BBA applied coverage limits to PT and SLP combined, the table also shows the average combined PT and SLP payments of those patients who use both types of therapy. The payment amounts and percent changes seen in the data regarding combined PT and SLP users are quite similar to the PT data. These data similarities reflect the higher utilization of PT services relative to SLP services, even among the combination users.

Table 7 illustrates total Part B therapy payments per patient, by diagnostic condition, setting, and year. In 1998, total therapy payments per patient ranged four-fold across

¹⁹ Independent practices and physician practices are not included on the table because type of therapy cannot be identified clearly at these settings. However, if one presumes that these settings furnish mainly PT, then PT would account for 75% of payments across all settings in 2000.

²⁰ Independent practices and physician practices are not included on the table because type of therapy cannot be identified clearly at these settings.

conditions, from \$367 (unspecified rehabilitation) to \$1,489 (stroke). The range narrowed considerably in 1999 (to less than two-fold), from \$422 (other conditions) to \$809 (stroke). In 2000, the range increased somewhat (to a factor of 2.4) from \$486 (other conditions) to \$1,140 (stroke). Examining the data by condition and by setting across the three study years reveals that most condition/setting combinations mirror the aggregate expenditure trends—payments by condition to SNFs, rehabilitation agencies, and CORFs generally dropped by more than one-half in 1999, and increased by roughly one-half in 2000. Payments by condition to hospital OPDs, physician practices, and independent practices increased each year, but remain substantially lower than payments to other settings.

Looking at the most costly condition across settings, average annual stroke patient payments are highest at CORFs and the "multiple settings" category (almost \$2,000 per stroke patient in 2000). Stroke patient payments are nearly equivalent among SNF inpatients and SNF outpatients (roughly \$1,000 in 2000). Stroke patients comprise only 10% of SNF patients and 4% of patients at hospital OPDs, rehabilitation agencies, CORFs and those treated in multiple settings (as seen on Table 1). The most prevalent diagnoses among Part B therapy patients, musculoskeletal and back conditions, are among the least costly (about \$600 per patient in 2000).

Patients exceeding \$1,200 therapy thresholds, 1998-2000

During the three-year period, Part B therapy coverage limits applied in 1998 to independent therapy practice (PTIP and OTIP) services only, and in 1999 to all non-hospital Part B therapy. We simulated coverage limits for each of the three years, in two ways. The annual model simulates limits as intended by the BBA. That is, for a given therapy group (PT/SLP or OT) and a given year, Medicare reimburses up to \$1,200 per beneficiary. The provider model simulates limits for facility-based settings as implemented for those settings in 1999. That is, for a given therapy group and a given year, Medicare reimburses *each unique facility-based provider* up to \$1,200 per beneficiary.²¹

The annual model is discussed first, and is presented on Tables 8 through 10. Although hospital-based Part B therapy was exempt from the limits, we simulated limits on these services as well, in order to more fully characterize the subset of higher-cost Part B therapy patients. Thus the annual model illustrates an upper-bound analysis, indicating the utmost impact of limits implemented on a per beneficiary basis. In 1998, 12.9% of all Part B therapy patients exceeded \$1,200 of annual Medicare program payments for either PT and SLP combined, or for OT. This share dropped to 5.4% in 1999, and returned to almost 12% in 2000 (Table 8). If one excludes hospital-based patients from the number exceeding the

²¹ In establishing the coverage limits, the BBA stipulated nominal (non-inflation adjusted) limits for 1999 through 2002. Inflation adjustment, using the Medicare Economic Index, was not to be applied to the limits until 2003. Therefore, we applied nominal, or non-adjusted thresholds, in our simulations.

annual thresholds, then the shares of Part B therapy patients exceeding the thresholds fall to 11.8% in 1998, 3.6% in 1999, and 9.7% in 2000 (not shown).

As seen on Table 8, at the highest volume setting (hospital OPDs) and at physician practices, the percent of patients exceeding thresholds per setting remained low, but increased from about 3% per setting in 1998 to 6% per setting in both 1999 and 2000. Within each of the other main facility settings (SNF inpatient, SNF outpatient, and rehabilitation agencies), between 20% and 30% of patients per setting exceeded thresholds in 1998. These shares dropped to about 5% per setting in 1999, and rose to about 15% per setting in 2000. The consistently highest shares of patients exceeding thresholds per setting are those treated in CORFs and in multiple settings. Within each of these two categories, the share dropped from roughly 30% in 1998 to 13% in 1999, and rose to about 27% in 2000. No individuals using only independent practices exceeded thresholds in 1998 and 1999. In 2000, during the coverage limit moratorium, the share of patients exceeding \$1,200 jumped to almost 12%.

Table 9 presents only the subset of patients exceeding the annual thresholds, and the subset is distributed across settings. For example, in 1998 the one-third of CORF patients exceeding either \$1,200 of PT and SLP combined or \$1,200 of OT (as shown on Table 8) comprised 6.0% of the total subset of patients exceeding thresholds that year. In 1999, the year coverage limits actually were in effect across all settings except HOPDs, over 30% of patients exceeding the threshold amounts were treated at HOPDs. During the three-year period, patients treated in multiple settings consistently comprised one-quarter of the total subset of patients exceeding thresholds. During this time, only independent practices experienced an increase each year in their share of the total subset of patients exceeding thresholds (from none to almost 11% by 2000).

Table 10 presents the distribution of total therapy payments of the subset of patients exceeding the annual thresholds. The first row indicates, for example, that in 1998 the bottom quartile of patients in facility-based settings who exceeded the combined PT and SLP annual threshold did so by less than roughly \$300 ($\$1,522 - \$1,200 = \322). The top quartile of this patient group exceeded the annual threshold in that year by more than roughly \$2000 ($\$3,097 - \$1,200 = \$1,897$).

An examination of these data across years indicates that the distribution, or spread, of payments is narrowest in 1999—the year the fee schedule was implemented and coverage limits were required. Looking across the therapy threshold groups, the distribution or spread of payments is fairly similar. For example, most of the ratios of 75th percentile payments to 25th percentile payments are close to 2.0. In addition, the actual dollar amounts at the 75th percentile distribution and below vary minimally across three of the threshold groups—facility patients exceeding the PT and SLP threshold; facility patients exceeding the OT threshold; and independent practice patients exceeding \$1,200 therapy in that setting. Deviating most from these patterns are the physician practice data. The spread of payments

from this setting is largest, and the actual dollar amounts at the 90th and 95th percentiles are much greater at this setting.

To simulate the second, "provider" model, the patient subset is comprised of each beneficiary/facility-based provider combination, rather than simply each beneficiary (as in the annual model). In each year, 93% of patients using facility-based providers use only one unique provider. This share is even larger among the subset of patients exceeding the annual thresholds.

The results from the second, or provider, model are extremely similar to the annual model. Table 11 compares the distribution of patients across facility-based settings exceeding thresholds using the annual model and provider model. The key finding from this table is that the distribution did not shift almost entirely to the hospital setting during 1999, when regulations required that payments be limited at the provider level for those patients using non-hospital facilities. Although our findings indicate that average annual Part B therapy payments declined dramatically in 1999 across these settings, this table suggests that coverage limits nevertheless were not fully enforced across non-hospital facilities in 1999.

We then analyzed the distribution of provider payments of patients using facility-based settings who exceed one or both thresholds at the provider level. Table 12 presents total PT/SLP payments per provider of those patients exceeding the PT/SLP provider threshold. Overall, the payment distributions resulting from the provider-level simulations are extremely similar to the payment distributions resulting from the annual model. This similarity is not surprising, given that the vast majority of patients each year use only one unique provider (and thus the models are roughly equivalent). However, the similarity of payment distributions between the annual and provider models in 1999 is another indication that the coverage limits were not fully enforced at non-hospital facilities in 1999.

Discussion

Starting in 1999, the Balanced Budget Act of 1997 (BBA) replaced facility providers' cost-based payments for Part B therapy with payments based on the physician fee schedule. Independent therapy practices and physician practices had been paid using the fee schedule since 1992. Two annual beneficiary coverage limits for services of independent therapy practices had existed since 1974. The BBA raised these limits for PT/SLP (combined) and for OT from \$900 (their limit in 1998) to \$1,500. The BBA required that the limits apply to therapy furnished in non-hospital facility settings and by physician practices as well as by independent therapy practices. In 1999, CMS required that coverage limits for facility-based Part B therapy be applied on a per provider basis, rather than on a per beneficiary basis. CMS issued this more generous regulation because of the difficulties inherent in quickly establishing for fiscal intermediaries and their providers a system that tracks, in real time, beneficiaries' running total of annual PT/SLP and OT payments. Congress later placed moratoriums on the limits for 2000 through 2002.

To examine expenditure and utilization patterns occurring before these payment and coverage policy changes (1998), during the first year of these policy changes (1999) and during the first year of the coverage limit moratorium (2000), we extracted claims of Part B therapy users during this period from CMS's 5% annual samples of standard analytic files. Several interesting findings emerged from the analyses.

First, over 90% of Part B therapy patients use only one setting for therapy. Further, a slightly higher share use only one specific provider. This indicates that some patients using multiple settings remain within a specific provider system. (For example, patients using SNF inpatient and outpatient services typically use the same nursing facility). Overall, roughly one-third of Part B therapy patients use hospital OPDs. Each of several other settings account for between 10% to 15% of patients: SNFs, rehabilitation agencies, independent practices, and physician practices. Over one-half of patients at most settings have a principal diagnosis related to a back problem or a musculoskeletal/soft tissue problem. Among SNF patients, this share is roughly one-fifth.

Additionally, between 1998-2000 Part B therapy patient volume increased at an average annual rate of 1.4%. Some volume shift (or at least some case-mix shift) across settings would be expected in 1999, when only hospitals were exempt from coverage limits. Between 1998-2000, patient volume increased at three main settings (hospital OPD, SNF inpatient, and independent practice); volume at other settings fell somewhat. Increases to independent practices are particularly high (19% per year). Some industry representatives say, anecdotally, that some rehabilitation agencies are recertifying as independent practices. While it is beyond our scope to track prior provider status and recertification activities, it may be worth noting that the state survey and certification process for independent practices was relaxed in 1999 (and remained unchanged for facility providers of Part B therapy).²²

Nominal, aggregate Medicare Part B therapy payments fell from \$2.2 billion in 1998 to \$1.4 billion in 1999, and rose to \$2.0 billion in 2000. We found that total Part B therapy payments per user declined substantially in 1999 (from \$709 to \$480), but rose substantially in 2000 (to \$642). Annual payments per user were compressed in 1999 across settings, with expenditures declining among the higher payment settings (the non-hospital facilities) and expenditures increasing among other, lower payment, settings. A narrower per patient payment distribution is evident in 2000 as well, although less than in 1999. By 2000, per patient payments at non-hospital facilities averaged roughly \$800, while per patient payments at hospital OPDs and physician practices averaged about \$430 and \$330, respectively. A

²² Recertification activities appear to have occurred in the past for this provider type. The rate of newly certified independent practices billing Medicare declined in the early 1990s, during the period when fee schedule payments were implemented. Industry representatives have commented that because of this payment policy change, some independent practices recertified during that period as rehabilitation agencies (Maxwell and Baseggio, 2000).

simple decomposition of the per patient payment decline among non-hospital facilities in 1998-2000 suggests that up to roughly 2/3 of these settings' per patient declines may be attributable to the fee schedule, and 1/3 attributable to coverage limits. The effect appears to vary by setting. This decomposition does not take into account any other factors that may have affected per patient payments in the non-hospital facilities. It does, however, indicate relative magnitudes of effects of the two policies.

Finally, this study analyzed the subset of patients exceeding \$1,200 payment thresholds, the patient distribution across settings, and their payments. Looking first at the annual payments of all Part B therapy patients, we found that 13% exceeded \$1,200 of annual PT/SLP or \$1,200 of annual OT in 1998; 5% exceeded this amount(s) in 1999; and 12% exceeded this amount(s) in 2000. Among patients treated only at independent practices, none exceeded their 1998 annual limits or their 1999 annual limits. Indeed, independent therapy practices had been operating under annual beneficiary coverage limits, as monitored by Medicare carriers, for over 20 years. In 2000, during the coverage limit moratorium, almost 12% of patients treated only at independent practices exceeded the threshold amounts. Among other settings in 1999, limits were set at the beneficiary/provider level, rather than the beneficiary/annual level. However, it appears that the provider-level coverage limits were not fully enforced at the settings subject to them. Specifically, a substantial share of SNF, rehabilitation agency, and CORF patients exceeded provider-level limits in 1999. One-half exceeded them by about \$150 or less; the top 10% of such patients exceeded them by over \$800. Nonetheless, as noted earlier, per patient payments at these settings were substantially lower in 1999 than in 1998 or 2000. It appears that in 1999, coverage limits at these settings were partially followed, perhaps through a combination of monitoring by intermediaries and self-monitoring by providers.

This study primarily is intended to describe Part B therapy users by site of care and patient characteristics, and to evaluate their changing average payments and utilization between 1998 and 2000. Preliminary multivariate analyses (not shown) suggest that type of setting and setting/year interactions influence the level of average annual payments and the likelihood of exceeding threshold amounts substantially more than available patient characteristics (principal diagnosis, age, sex, race, and dual eligibility) influence these outcomes. These early findings may point to limitations in the set of variables used in this study to characterize patients and providers, and suggests areas for further research.

Appendix: List of Additional Tables

Table A-1	Part B therapy patient characteristics, by setting, 1998
Table A-2	Part B therapy patient characteristics, by setting, 1999
Table A-3	Part B therapy utilization and expenditures, by state, 1998
Table A-4	Part B therapy utilization and expenditures, by state, 1999

