# Short Term Alternatives for Therapy Services (STATS) Task Order

# Project Report

Prepared for:
**Centers for Medicare & Medicaid Services (CMS)**

Prepared by:

**Computer Sciences Corporation**
**Daniel E. Ciolek, M.S.**
**Wenke Hwang, PhD**
**Federal Sector – Civil Group**
**Federal Healthcare Organization**
**3217 Lord Baltimore Drive**
**Baltimore, MD 21244**

Contract Number: GS-23F-8029H
Task Order Number: HHSM-500-2008-00065C

## September 13, 2010

# STATS Project Report

## 1 – Project Purpose

The Short Term Alternatives for Therapy Services (STATS) project was issued by the Centers for Medicare and Medicaid Services (CMS) to develop short term alternatives to the annual per-beneficiary outpatient therapy caps, to conduct utilization analyses, and to develop a tool to permit the evaluation of the impact of payment policy changes on utilization in near real-time. In particular, additional study was requested by CMS to develop short term alternatives that encourage payment for services that are medically necessary.

On September 23, 2008, CMS awarded a two-year contract to Computer Sciences Corporation (CSC) to perform these professional services that build upon prior outpatient therapy studies conducted by CSC and others (see http://www.cms.gov/TherapyServices/SAR/ for CMS posted reports). During this project, CSC performed a variety of activities including; analysis of claims data, data systems, coverage and payment policy, clinical classification schema, and payment system models. In addition, CSC conducted extensive outreach to obtain feedback with outpatient therapy stakeholders, including; clinicians, business owners, researchers, medical reviewers, contractor medical directors, policy experts, and national organizations representing therapists and therapy provider settings/professional offices.

For this project, a number of specific activities were requested to be performed and a number of key deliverables were required to be submitted. Section 2 of this report provides a summary of the *Final Report on Short Term Alternatives* submitted on July 9, 2010. Section 3 provides key findings of the *CY 2008 Outpatient Therapy Utilization Report* submitted on June 4, 2010. Section 4 provides the status of CSC Developed MicroStrategy Outpatient Therapy Reports (MOTR). Section 5 provides recommendations for next steps for CMS to consider.

Text boxes throughout this report indicate the specific location of the source data/information the summaries were derived from. The separate Appendix provides a detailed list of all required project deliverables, due dates, and status (including filenames) of submitted files.

# 2 – Summary of Short Term Alternatives Report

This section provides a high level summary of the previously submitted July 9, 2010 STATS *Final Report on Short Term Alternatives (Short Term Alternatives)* and will highlight the three recommendations.

## *2.1 Short term alternatives background*

Medicare outpatient therapy services, which include physical therapy (PT), occupational therapy (OT), and speech-language pathology (SLP) services furnished in provider facility settings and in professional offices, are an integral and relatively low-cost part of the continuum of rehabilitation care and health care in general. In addition to being provided as stand-alone services, these services often are furnished as a conservative treatment alternative to more costly and higher risk interventions (e.g. surgery), and are often furnished after inpatient admissions, or after the conclusion of home health benefits, in order to complete the restoration of lost function.

The Medicare Physician Fee Schedule (MPFS) is used in claims to report outpatient therapy services. Provider facilities and professional offices receive payment for procedures billed. However, there is no current mechanism for clinicians to identify the therapy need, beneficiary function or outcome on the claim, which constrains the ability of CMS Medicare Administrative Contractors (MACs) to limit payments to those that are medically necessary.

The Balanced Budget Act of 1997 enacted financial limitations (caps) on outpatient PT and SLP services combined and outpatient OT services separately. The therapy caps limited the annual amount of outpatient therapy coverage a beneficiary could receive regardless of condition or need. The caps applied to all outpatient therapy settings except outpatient hospital. The initial implementation of the therapy caps in 1999 was problematic due to reports of significant reductions in beneficiary access to services, and in provider payments. As a result, various Congressional moratoria to enforcing the caps were implemented for most of 2000-2005. The Deficit Reduction Act of 2005 reinstated the therapy caps in 2006, but a new provision permitted providers to apply for exceptions to the caps "if the provision of such services is determined to be medically necessary." The exceptions process implemented by CMS was extended by subsequent legislation. However, the provision permitting an exceptions process expires at the end of 2010 unless Congress intervenes.

Several recent (CMS) contracted studies have demonstrated that while the number of beneficiaries receiving outpatient therapy services has increased at a rate of about 2.9 percent per-year from 1998 to 2008, Medicare expenditures have increased at a rate of about 10.1 percent per-year (fluctuating during capped and not capped years). While some of the increase can be attributed to inflationary fee schedule price increases, it is uncertain whether the remaining increases were due to necessary services or not.

In 2008, Medicare outpatient therapy expenditures totaled $4.8 billion for services furnished to 4.5 million beneficiaries, or $1,057 per-patient. This represented only 2.6 percent of the total Medicare Part B spending for that year.

The growth in outpatient therapy expenditures has surpassed the rate of growth of spending in other Medicare benefits and has been under scrutiny from organizations including the Medicare Payment Advisory Commission (MedPAC), the U.S. Government Accountability Office (GAO), and the Office of Inspector General (OIG) of the U.S. Department of Health and Human Services (DHHS). These organizations have conducted studies on outpatient therapy services and have provided recommendations for policy changes to better assure that Medicare only pays for medically necessary services.

In order to control the growth in outpatient therapy (and other) spending, CMS and its contractors have implemented a variety of different utilization edits in response to perceived overutilization or improper use of certain HCPCS codes. These edits include:

- CMS Medically Unlikely Edits (MUEs),
- CMS Deficit Reduction Act (DRA) edits,
- CMS Correct Coding Initiative (CCI) edits, and
- Local MAC medical necessity edits including; limits per-HCPCS, and HCPCS and ICD-9 crosswalk edits.

In the Proposed Rule for the 2011 Fee Schedule on July 13, 2010, CMS proposed additional Multiple Procedure Payment Reduction (MPPR) edits for therapy services.

The edits are implemented by CMS and contractor systems that review submitted procedure codes per-session and apply the various utilization edits. Those procedure codes that pass the edits are paid while those that do not are denied payment. The edits are applied without review of documentation or consideration of need or outcomes as such information is currently not available on claims.

When Congress extended the therapy cap exceptions process in the Tax Relief and Health Care Act of 2006, funding was provided for two CMS projects to develop alternative payment approaches for therapy services that are based on beneficiary needs, and that are more effective than the caps with exceptions process. In 2008, CMS awarded the Developing Outpatient Therapy Payment Alternatives (DOTPA) contract to Research Triangle Institute (RTI) to; collect a broad range of beneficiary data relevant to a beneficiary's need for outpatient therapy services, analyze the collected data in terms of predictive power and cost, and develop long-term payment alternative options. The DOTPA project is planned as a five-year study. Also in 2008, CMS awarded the two-year STATS project to; conduct follow-on utilization analysis, develop new systems capabilities to provide CMS with near real-time utilization trends, and to conduct research and confer with outpatient therapy stakeholders and subject matter experts to develop specific payment policy applications as an alternative to the current outpatient therapy caps that can be used in the short-term to limit payments to medically necessary outpatient therapy services.

The recommendations in the STATS *Short Term Alternatives* report completed the development of preliminary recommendations submitted in a draft report to CMS in June 2009 and reflect information as well as feedback received from CMS and stakeholder representatives since then. The options included in the recommendations represent concepts that have the general support of stakeholder workgroups, meet the project objectives, and are technically feasible within the time

constraints. Based on stakeholder feedback, we believe the recommendations represent those most likely to be acceptable to the broadest range of provider and beneficiary stakeholders.

We have concluded that, in the long-term, the most feasible payment model for outpatient therapy services will be one that is based on the episode of care. Provider payments should be influenced by underlying beneficiary characteristics, as Congress had requested. To assure appropriate payment for needed services, the outcomes resulting from provider interventions must be incorporated in payment models. A well-designed long-term payment policy will maintain the clinician's ability to use clinical judgment to provide medically necessary services.

However, clinicians will need to communicate standardized information using a function and/or outcomes reporting tool that could be used for quality and/or risk-adjustment payment policy purposes. The tool should align with the International Classification of Diseases, 10th revision (ICD-10) and International Classification of Function (ICF) systems to improve standardization of reporting and documentation. The transition to an episode-based payment policy will mean that many of the burdensome granular policies that serve to control utilization without regard to the patient's clinical presentation (e.g. edits) may (and should) be eliminated since the emphasis of payment policy will have shifted from managing procedures billed to the management of patient progress or outcomes. Efficiencies will be obtained for both clinical work and contractor review when the emphasis is on paying appropriately for objectively recorded outcomes.

The following short-term outpatient therapy payment policy options are recommended in the *Short Term Alternatives* report as the most promising concepts to revising the current therapy caps policy. These options can be developed and implemented within a 2-3 year time frame, and facilitate the transition towards a long-term episode payment model that is based upon beneficiary function and/or outcomes. Since they are focused on the short-term, none of the recommended options would require changes in statute, other than the extension for the outpatient therapy caps exceptions process. However, some options would require additional systems, Medicare manual, and provider education updates, as well as possible pilot study before a national rollout. These recommended options are not necessarily exclusive of each other but could be implemented concurrently while a long-term solution is developed.

Background details and alternative policy options development methodology are presented in Section1 and Section 2 of the *Short Term Alternatives* report.

## *2.2 Option #1 – Revise therapy caps exceptions process by requiring the reporting of new patient function-related Level II HCPCS codes and severity modifiers*

This option would modify the therapy cap exceptions process by introducing new nonpayable HCPCS codes to be submitted at episode onset and at periodic intervals that reflect current and prospective (treatment goal) function. The new codes would replace the KX modifier and would provide more clinically relevant information for medical review than the KX modifier does now.

These codes would be new codes, separate from the existing 76 outpatient therapy HCPCS procedure codes. The new codes would not change the reporting requirements for the existing codes. We are proposing that the new codes be submitted at episode onset and at periodic intervals. The intervals would be no longer than every 12 treatment sessions or 30 calendar days, whichever is less. Unlike the KX modifier which is submitted on outpatient therapy claim lines only when nearing or surpassing the therapy cap, the new codes would be submitted for all patient episodes and not only for those claims approaching or surpassing the therapy cap limits.

Details of the proposed policy option #1 are presented in Section 3 and Section 3.1 of the *Short Term Alternatives* report.

## *2.3 Option #2 – Enhance existing therapy caps exceptions process by applying edits when per-beneficiary expenditures reach a predetermined value*

The current automatic process for outpatient therapy cap exceptions, and the proposed revised exceptions process described in Option #1 above pay clinicians for an indefinite amount of services per-session or per-episode if the clinician attests on the claim, by using specified codes, that the services being billed for are medically necessary, and that supporting documentation is included the beneficiary's patient record. Recently, CMS has implemented national DRA edits to outpatient therapy evaluation codes and MUE edits to several outpatient therapy treatment intervention codes to limit the amount of units of each code to be billed per-date of service. There are no national edits that limit unusual per-episode or annual per-beneficiary utilization. Unless the Medicare contractor applies local claim medical necessity edits or conducts post-payment medical review, unusually high utilization that may not be necessary is difficult to identify and limit while exceptions are in use.

We are proposing that in the short-term, CMS consider;

- Option #2a. Refining the existing national MUE edits for outpatient therapy timed intervention HCPCS codes, and
- Option #2b. Implementing new national per-beneficiary per-year payment edits. These edits would be based upon existing utilization data. CMS would establish benchmark payment levels for these edits that would only affect a very small percentage of beneficiaries with extraordinary utilization patterns. Even with the exception process, once these high utilization outlier threshold levels were reached, additional services would be denied and clinicians would need to appeal these denials if they wished to challenge Medicare's nonpayment above the edit limits.

Details of the proposed policy option #2 are presented in Section 3 and Section 3.2 of the *Short Term Alternatives* report.

## *2.4 Option #3 - Introduce new outpatient therapy 'Evaluation/Assessment and Intervention' (E&I) codes to package groups of current therapy HCPCS codes into a single per-session payment*

This option would change how clinicians report and are paid for outpatient therapy services from payment per service to payment per therapy session. It lays the groundwork for the transition towards an episode-based payment model. Professionals would be required to submit new Level II HCPCS outpatient therapy E&I codes for each therapy session to replace all individual therapy procedure codes currently paid separately. Payment for the new outpatient therapy E&I codes would be based on the beneficiary characteristics reflected by a combination of the evaluation or assessment complexity and/or the intervention complexity for that particular session. Fewer codes will reduce the variation in per-session payments. We are proposing that twelve new Level II HCPCS codes would be sufficient to describe all outpatient therapy sessions, however, since the practice patterns of PT, OT, and SLP services differ, each discipline would require twelve unique codes so that appropriate pricing could be established for each discipline.

Details of the proposed policy option #3 are presented in Section 3 and Section 3.3 of the *Short Term Alternatives* report.

# 3 – Key Findings of the CY 2008 Outpatient Therapy Utilization Report

This section provides a high level summary of the results and conclusions presented in the previously submitted June 4, 2010 STATS *CY 2008 Outpatient Therapy Utilization Report* (*Utilization Report*) and will highlight the key findings. In addition, information presented in the August 30, 2010 *Utilization Report Addendum* submission per treatment date and estimated cap impact by county is also included.

## *3.1 Disclaimer*

Our efforts at maximizing the transparent disclosure of detailed outpatient therapy utilization pattern reports during the past ten years along with the complexity of outpatient therapy payment policy and claims data analysis, has resulted in the development of hundreds of detailed tables, charts and graphs that are each presented in a specific context. Unfortunately, we have observed that on occasion, special interest groups have taken raw table results out of context and have improperly cited our prior CMS analyses as 'proof' that one type of therapy or provider is more cost effective than another. In addition, other groups have improperly assumed that the KX modifier is to be used to identify expenditures beyond the therapy cap limits. We are concerned about the potential misuse of outpatient therapy utilization data and have determined that the following disclaimer statements are necessary to clearly indicate the limits of how the *Utilization Report* claims data analyses can be interpreted.

- **The STATS *CY 2008 Outpatient Therapy Utilization Report* (and prior similar reports) does not address the medical necessity of the services described and any differences in utilization patterns presented in the results do not, and should not, be used to imply that one therapy discipline, provider setting or professional specialty provides better outcomes or more cost effective care than another discipline, setting or specialty.**
    - The outpatient therapy utilization patterns and year-to-year trends described in this report are limited to administrative claims data available from submitted claims including beneficiary demographics, diagnosis, and outpatient therapy procedures furnished.
    - **Overutilization and abuse, if they exist, are not identifiable in these data. High volume and high cost do not necessarily equate to overutilization.** Differences in outpatient therapy utilization patterns can be influenced by various factors not available on claims data such as; payment policy changes, local coverage determinations, regional HCPCS price variations, geographic availability of Part A and Part B providers and professionals, degree of impairments to a beneficiary's body structures and functions, degree of a beneficiary's problems in activities and participation, a beneficiary's environmental barriers or facilitators, and other beneficiary personal factors.
    - Currently there are no standardized outpatient therapy functional measures or outcomes measures submitted with Medicare outpatient therapy claims which could help better determine the medical necessity of the services furnished. CMS is currently investigating the development of such an instrument through the Developing Outpatient Therapy Payment Alternatives (DOTPA) project.

- It is currently impractical to perform medical review on all outpatient therapy claims to determine medical necessity.
- Therapy cap benefit tracking is performed solely by the Medicare Common Working File (CWF) and only refers to the presence of the KX modifier at or after the moment the annual beneficiary cap limit has been surpassed. CMS has instructed clinicians to use the KX modifier liberally at or before the cap limit to attest that the services are medically necessary, and to avoid unnecessary payment denials. As such, presence of the KX modifier on a claim line does not always indicate services furnished beyond the cap limits, and should not be interpreted as such.
- Therefore, until additional clinically relevant information is available, the medical necessity of the services furnished in this utilization analysis is assumed by the fact the billed services were submitted, processed and paid, and that services furnished prior to or beyond the cap limits were attested to as being medically necessary by use of the KX procedure code modifier by providers and professionals.

Details of outpatient therapy payment policy applicable to CY 2008 and the data analysis methodology used in this project are presented in Sections 1 and 2 of the *Utilization Report*.

## *3.2 Outpatient therapy utilization in 2008 – Overall*

**4.5 million Medicare beneficiaries received outpatient physical therapy (PT), occupational therapy (OT), and speech-language pathology (SLP) services.**

- This represents 10.5 percent of 42.7 million beneficiaries enrolled in Part B at any time in CY 2008;
  - 4.0 million received outpatient PT services,
  - 973 thousand received outpatient OT services, and
  - 478 thousand received outpatient SLP services.
- This represents a 1.9 percent increase in beneficiaries receiving outpatient therapy services from calendar year (CY) 2006-2008, or a 5.4 percent increase from CY 2004-2008.

**Medicare contractors processed and paid for over 92 million claim lines on 7,649,807 outpatient therapy claims from provider settings and nearly 58 million claim lines on 20,139,632 outpatient therapy claims from professional offices.**

- The mean outpatient therapy paid amount was $398 per provider setting claim and $85 per professional office claim. Note: Provider setting claims are commonly submitted monthly while professional office claims are typically submitted on the date of service.

**Medicare paid $4.76 billion for outpatient therapy services.**

- This represents 2.6 percent of $183.3 billion in Part B expenditures and 1.0 percent of all Medicare Expenditures (Part A, Part B, and Part D combined).
  - $3.5 billion paid for PT services (73.5% of total),

    - $928 million paid for OT services (19.5% of total), and
    - $336 million paid for SLP services (7.1 % of total).
- This represents a two-year increase in total outpatient therapy payments from CY 2006-2008 of 16.9 percent (8.5% per year), but only a four-year increase in payments from CY 2004-2008 of 11.4 percent (2.9% per year).
    - PT payments increased 14.5 percent from CY 2006-2008 (7.3% per year) but only increased 8.3 percent from CY 2004-2008 (2.1% per year),
    - OT payments increased 25.5 percent from CY 2006-2008 (6.4% per year) but only increased 19.5 percent from CY 2004-2008 (4.9% per year), and
    - SLP payments increased 24.0 percent from CY 2006-2008 (12.0% per year) but only increased 22.2 percent from CY 2004-2008 (5.6% per year).
- The rate of growth in payments from CY 2006-2008 was primarily driven by increased service utilization per beneficiary, particularly for OT and SLP services, and from an increase in beneficiaries receiving outpatient therapy from more than one discipline.

**The resumption of outpatient therapy caps with the exceptions process reduced expenditures in CY 2006. However, by CY 2008 utilization had returned to slightly above CY 2004 levels.**

- The mean annual per-beneficiary payment amount for all three therapy disciplines combined in CY 2004 was $1,001. This declined to $921 in CY 2006, and then returned to above baseline at $1,057 in CY 2008.
    - For PT services the mean per-beneficiary payments were $864 in CY 2004, $788 in CY 2006 and $884 in CY 2008.
    - For OT services the mean per-beneficiary payments were $867 in CY 2004, $816 in CY 2006 and $953 in CY 2008.
    - For SLP services the mean per-beneficiary payments were $634 in CY 2004, $608 in CY 2006 and $702 in CY 2008.
- The only policy change from CY 2006-2008 related to the therapy cap exceptions process was the CY 2007 elimination of the 'Manual Process Exceptions' procedures which required pre-authorization from the contractor beyond the cap limits for conditions that did not meet published criteria for 'Automatic Process Exceptions'.

Details of the overall outpatient therapy utilization during 2008 are presented in Section 3.1 of the *Utilization Report*.

## *3.3 Outpatient therapy utilization in 2008 – Setting and specialty*

**Outpatient therapy services were furnished in five different provider facility settings and by four different professional office specialties.**

- Provider facility settings;
    - Hospital payments were $795 million (16.7% of total),
    - Skilled nursing facility (SNF) payments were $1.5 billion (32.3% of total),

    - Comprehensive outpatient therapy facility (CORF) payments were $162 million (3.4% of total),
    - Outpatient rehabilitation facility (ORF) payments were $554 million (11.7% of total), and
    - Home health agency (HHA) payments were $3 million (0.1% of total).
- Professional office specialties;
    - Individuals enrolled as physical therapists in private practice (PTPP) received payments of $1.4 billion (28.8% of total),
    - Individuals enrolled as occupational therapists in private practice (OTPP) received payments of $86 million (1.8% of total),
    - Individuals enrolled as physicians received payments of $255 million (5.4% of total), and
    - Individuals enrolled as non-physician practitioners (NPP) received payment of $3 million (0.1% of total).
- Individual SLPs were not permitted to enroll and bill Medicare in 2008. In 2009, a fifth outpatient therapy professional office specialty, speech-language pathologist in private practice (SLPP), was permitted by law.

**Outpatient therapy provider enrollment patterns continue to shift from traditional provider facility settings, which may employ multiple therapists and bill under a single provider number, towards professional office specialties, which bill under an individual's provider number. Payment patterns do not appear to be linked to enrollment patterns.**

- From CY 2006-2008 provider enrollment, provider setting payments and professional specialty payments shifted as follows;
    - Hospital providers declined 0.4 percent while payments declined 2.6 percent,
    - SNF providers increased 0.8 percent while payments increased 28.7 percent,
    - CORF providers decreased 26.0 percent while payments increased 32.3 percent,
    - ORF providers decreased 11.8 percent while payments increased 10.4 percent,
    - HHA providers decreased 12.6 percent while payments increased 16.1 percent,
    - PTPP professionals increased 12.3 percent while payments increased 26.9 percent,
    - OTPP professionals increased 15.6 percent while payments increased 23.1 percent,
    - Physician professionals decreased 8.6 percent while payments decreased 11.0 percent, and
    - NPP professionals decreased 5.5 percent while payments increased 91.7 percent.
- The primary discipline driver for the CY 2006-2008 payment reductions in the hospital setting and physician specialty was OT services. The primary discipline driver for payment increases in CORF and HHA settings and NPP specialty was OT services. The primary discipline driver for payment increases in ORF settings was SLP services, while OT was an important secondary driver. There was no primary discipline driver of SNF payment increases as PT, OT and SLP services increased relatively equally.
- We believe that the ongoing shift in outpatient therapy enrollment from provider facilities to professional offices is due to lower operating costs in professional offices.

- We suspect that much of the ongoing shift from individual physician and NPP specialty provider numbers to PTPP and OTPP billing for outpatient therapy services since CY 2004 reflects that more physician and NPP employee physical and occupational therapists are obtaining and billing through PTPP and OTPP provider numbers, while assigning benefits to the employer physician or NPP (e.g. splitting fees), as opposed to therapists leaving physician/NPP employers en masse to establish private offices. Prior to a CMS policy change in 2003, all service furnished in a physician or NPP office could only be billed under 'incident-to' provisions.

**Outpatient therapy service disciplines continue to be disproportionately furnished among the nine provider settings or professional specialties.**

- PT services are distributed primarily across five provider settings or professional office specialties. PTPP represented 39.2 percent of PT payments, followed by SNF (20.8%), hospital (18.0%), ORF (12.3%), and physician (6.8%). Other settings/specialties have negligible PT services.
- Over half of OT payments were to SNF (58.6%), followed by hospital (12.2%), ORF (11.6%), OTPP (9.2%), and CORF (7.0). Other settings/specialties have negligible OT services.
- Over three-quarters of SLP payments were to SNF (77.8%), followed by hospital (16.0%), and ORF (4.8%). Other settings/specialties have negligible SLP services.

Details of the outpatient therapy utilization by provider setting and professional specialty during 2008 are presented in Section 3.2 of the *Utilization Report*.

## *3.4 Outpatient therapy utilization in 2008 – Demographics*

**The age of outpatient therapy users is relatively stable and they tend to be older than the general Medicare population, particularly for OT and SLP users.**

- Most PT users were in the age 70-74 age group (18.6%) and the fewest were aged 90 or above (6.5%).
- Most OT users were in the 80-84 age group (17.1%) and the fewest in the 65-69 age group (11.6%).
- Most SLP users were in the 85-89 age group (19.1%) and the fewest in the 65-69 age group (8.4 percent).
- Annual per-beneficiary Medicare payments for PT, OT, and SLP services generally increase with age.

**The gender of outpatient therapy users is relatively stable and users are more likely to be female, regardless of therapy type.**

- While the ratio of females to males in the general Medicare population is 56.4 percent to 43.6 percent, the percentages of outpatient therapy users that are female are 64.9 percent for PT, 67.1 percent for OT, and 62.5 percent for SLP services.
- Annual per-beneficiary Medicare payments are similar for both genders.

**Medicare beneficiary use of outpatient therapy services continues to vary by state of residence and outpatient therapy service disciplines continue to be disproportionately furnished across states.**

- In general, more populous states had more therapy users,
- Some states have significantly higher proportions of enrolled beneficiaries receiving outpatient therapy services than others, and the mean annual per-beneficiary expenditures per outpatient therapy user also vary significantly between states,
    - The pattern was not similar for PT, OT, and SLP services,
    - State geographic size or Medicare beneficiary population does not appear to be a major factor in the observed variations,
- The significant variation in percentage of beneficiaries receiving outpatient therapy in each state, significant variation in mean annual per-beneficiary expenditures, and the variation in these patterns across the three therapy disciplines indicates regional differences in practice and/or accessibility of the three different outpatient therapy disciplines. This pattern is consistent with prior years.

Details of the outpatient therapy utilization by beneficiary age, gender, and state during 2008 are presented in Section 3.3 of the *Utilization Report*.

## *3.5 Outpatient therapy utilization in 2008 – HCPCS*

**HCPCS procedure use patterns vary by provider setting/professional specialty and by therapy discipline, and the patterns are consistent with prior years.**

- Fifteen Healthcare Common Procedure Coding System (HCPCS) codes account for 94 percent of all outpatient therapy claim lines and 95 percent of total payments.
- HCPCS code 97110 – *Therapeutic exercise* accounts for 33 percent of claim lines and 40 percent of all payments.
- Three HCPCS Codes (97110, 97140 – *Manual therapy*, and 97530 – *Therapeutic activities*) account for 54 percent of claim lines and 60 percent of payments.
- For PT services, HCPCS codes 97110, 97140, and 97530 account for 58 percent of claim lines and 68 percent of payments.
- For OT services, HCPCS codes 97110, 97530, and 97535 – *Self-care/home management training* account for 64 percent of claim lines and 72 percent of payments.
- For SLP services, HCPCS codes 92526 – *Swallowing treatment* and 92507 – *Speech treatment* account for 78 percent of claim lines and 77 percent of payments.

Details of the outpatient therapy utilization by HCPCS during 2008 are presented in Section 3.5 of the *Utilization Report*.

## *3.6 Outpatient therapy utilization in 2008 – Treatment day*

**HCPCS procedure use patterns and payments by treatment day vary by provider setting/professional specialty and by therapy discipline. SLP services, which are reported primarily with untimed per-session HCPCS codes, demonstrated the least variability in per treatment day HCPCS unit use and payment amounts.**

- There were 51.5 million outpatient PT treatment days. The mean per-day PT payment was $67.87; 88.3 percent of PT treatment days were billed with four or fewer HCPCS units, 58.7 percent with three or fewer units, 28.2 percent with two or fewer units, and 7.0 percent with only one unit. The number of HCPCS billed, and total payments per treatment day varied by treatment setting/specialty, with hospital at the low end and CORF notably at the high end.
- There were 13.1 million outpatient OT treatment days. The mean per-day OT payment was $70.82; 87.0 percent of OT treatment days were billed with four or fewer HCPCS units, 58.2 percent with three or fewer units, 32.1 percent with two or fewer units, and 9.4 percent with only one unit. The number of HCPCS billed, and total payments per treatment day varied by treatment setting/specialty, with hospital at the low end and CORF notably at the high end.
- There were 4.7 million outpatient SLP treatment days. The mean per-day SLP payment was $70.80; 99.4 percent of SLP treatment days were billed with four or fewer HCPCS units, 96.6 percent with three or fewer units, 92.3 percent with two or fewer units, and 78.3 percent with only one unit. The number of HCPCS billed, and total payments per treatment day varied very little by treatment setting/specialty, with the exception of CORF notably at the high end.

Details of the outpatient therapy HCPCS units and payment utilization by treatment day during 2008 are presented in the *Utilization Report Addendum*.

## *3.7 Outpatient therapy utilization in 2008 – Episode*

**The majority of outpatient therapy episodes continue to be represented by a limited number of principal claim diagnosis codes, and these ICD-9 codes remain relatively consistent over time.**

- There were 4.6 million outpatient PT episodes. The top 20 of 6,865 different International Classification of Diseases, 9th Revision (ICD-9) codes represent 55 percent of all PT episodes. The top 100 ICD-9 codes represent 80 percent of all PT episodes. Eighteen of the top 20 PT episode ICD-9 codes were identical to those reported in CY 2006.
- There were 1.1 million outpatient OT episodes. The top 20 of 5,851 different ICD-9 codes represent 41 percent of all OT episodes. The top 100 ICD-9 codes represent 71 percent of all OT episodes. Sixteen of the top 20 OT episode ICD-9 codes were identical to those reported in CY 2006.

- There were 534 thousand outpatient SLP episodes. The top 20 of 4,432 different ICD-9 codes represents 57 percent of all SLP episodes. The top 100 ICD-9 codes represent 83 percent of all SLP episodes. Fourteen of the top 20 SLP episode ICD-9 codes were identical to those reported in CY 2006.

**The resumption of outpatient therapy caps with the exceptions process reduced episode durations in CY 2006. However, by CY 2008 episodes had returned to durations similar to or slightly longer than CY 2004.**

- The mean PT episode treatment days in CY 2004 were 11.2 days. This declined to 10.4 days in CY 2006, and then returned to the baseline of 11.2 days in CY 2008.
    - The mean PT episode payment in CY 2004 was $748. This declined to $682 in CY 2006, and then returned to slightly above the baseline at $760 in CY 2008.
    - The mean PT episode payment standard deviation (SD) in CY 2004 was $1,047. This declined to $782 in CY 2006, and then returned to a below baseline amount of $971 in CY 2008.
- The mean OT episode treatment days in CY 2004 were 11.0 days. This declined to 10.5 days in CY 2006, and then returned to slightly above the baseline to 11.8 days in CY 2008.
    - The mean OT episode payment in CY 2004 was $777. This declined to $722 in CY 2006, and then returned to above the baseline at $833 in CY 2008.
    - The mean OT episode payment standard deviation (SD) in CY 2004 was $1,016. This declined to $858 in CY 2006, and then returned to an above the baseline amount of $1,041 in CY 2008.
- The mean SLP episode treatment days in CY 2004 were 7.5 days for both CY 2004 and CY 2006. This increased to 8.9 days in CY 2008.
    - The mean SLP episode payment in CY 2004 was $572. This declined to $548 in CY 2006, and then returned to above the baseline at $628 in CY 2008.
    - The mean SLP episode payment standard deviation (SD) in CY 2004 was $820. This declined to $718 in CY 2006, and then returned to an above the baseline amount of $853 in CY 2008.
- The only policy change from CY 2006-2008 related to the therapy cap exceptions process was the CY 2007 elimination of the 'Manual Process Exceptions' procedures which required pre-authorization from the contractor beyond the cap limits for conditions that did not meet published criteria for 'Automatic Process Exceptions'.

**The grouping of PT, OT, and SLP episode ICD-9 principal claim diagnoses into a reasonably small number of (discipline-specific body structure and function related) CSC Classification Groups has resulted in relatively stable utilization results over a span of multiple years. The statistical power of using existing administrative claims data within these CSC Classification Groups to predict outpatient therapy episode expenditures is better than most other published results for Medicare populations and has also remained relatively stable over time.**

- The strongest results obtained from four different regression models tested on CY 2008 data are from samples that exclude the top 1 percent cost beneficiary episodes; however

the results are only slightly better than the model that includes all episodes. The weakest regression results were for samples that excluded single-day episodes and those that excluded single day and top 1 percent cost episodes.
    - Adjusted R-Square for the 24 PT CSC Classification Groups sample that excludes top 1 percent cost episodes in CY 2008 was 11.2 percent, compared to 11.2 percent in CY 2006 and 13.1 percent in CY 2004.
    - Adjusted R-Square for the 22 OT CSC Classification Groups sample that excludes top 1 percent cost episodes in CY 2008 was 18.7 percent, compared to 17.2 percent in CY 2006 and 18.1 percent in CY 2004.
    - Adjusted R-Square for the 8 SLP CSC Classification Group sample that excludes top 1 percent cost episodes in CY 2008 was 24.2 percent, compared to 21.8 percent in CY 2006 and 21.8 percent in CY 2004.
- The predictive power for the PT, OT and SLP CSC Classification Groups samples that; 1) excludes top one percent cost episodes or 2) includes all episodes, are notably stronger than the published Medicare population R-Square value (of nearly nine percent) when using similar administrative claims data.
- The consistent outpatient therapy episode paid amount regression results over time using the CSC Classification Group model to aggregate similar episode ICD-9 diagnosis codes, and other data such as beneficiary age, gender, state, and provider setting/professional office where services are furnished, demonstrate that patient classification and existing administrative claims data could be an important component in the development of a long-term payment model. Further study could add results from functional measurement tools to these administrative data to improve the ability of the classification model to predict outpatient therapy expenditures, which would be necessary for the development of a long-term episode-based payment option.

Details of the outpatient therapy utilization by Episode during 2008 are presented in Section 3.6 of the *Utilization Report*.

## *3.8 Outpatient therapy utilization in 2008 – Estimated cap impact*

**The increased outpatient therapy utilization observed since CY 2006 has dramatically increased the number of beneficiaries who would have been impacted by full enforcement of the outpatient therapy caps in CY 2008 if the exceptions process were not permitted.**

- 641 thousand beneficiaries benefitted from the exceptions process and received services beyond the combined PT/SLP cap limits, representing 15.3 percent of all PT/SLP users. This is a 23.6 percent increase from the 518 thousand beneficiaries potentially impacted by a PT/SLP cap without exceptions in CY 2006.
- 185 thousand beneficiaries benefitted from the exceptions process and received services beyond the separate OT cap limits, representing 19.1 percent of all OT users. This is a 32.3 percent increase from the 140 thousand beneficiaries potentially impacted by an OT cap without exceptions in CY 2006.

- 693 thousand beneficiaries (15.4%) surpassed either the PT/SLP cap or the OT cap in CY 2008. Of these, 71.8 percent of beneficiaries that surpassed the OT cap also surpassed the PT/SLP cap and 20.1 percent of beneficiaries that surpassed the PT/SLP cap also surpassed the OT cap.

**The increased outpatient therapy utilization observed from CY 2006-2008 has dramatically increased the amount of provider/professional payment cuts that would have resulted from full enforcement of the outpatient therapy caps in CY 2008 if the exceptions process were not permitted.**

- The cap exceptions process permitted providers/professionals to receive $874 million in Medicare payments for PT/SLP services combined in CY 2008 for services furnished beyond the cap limits. This represents a 55.9 percent increase in the dollar impact of the PT/SLP cap on providers/professionals as compared to the CY 2006 impact of $560 million.
- The cap exceptions process permitted providers/professionals to receive $259 million in Medicare payments for OT services in CY 2008 for services furnished beyond the cap limits. This represents a 65.8 percent increase in the dollar impact of the OT cap on providers/professionals as compared to the CY 2006 impact of $156 million.
- Overall, beneficiaries benefitted significantly from the outpatient therapy cap exceptions process in CY 2008 and received $1.1 billion in PT/SLP and OT services above the established cap limits. If the caps were instead fully enforced, total provider/professional payments would have been 23.8 percent lower in CY 2008.

**Beneficiary gender continues to be a nominal factor in whether a beneficiary would be impacted by the outpatient therapy caps, regardless of therapy type.**

**Older beneficiaries continue to be more likely to be impacted by the outpatient therapy caps as they are more likely to surpass the cap threshold, and when they do, they require more costly services than younger beneficiaries.**

- The largest proportion of PT/SLP beneficiaries benefitting from the cap exceptions process were age 80-84 at 17.1 percent of all PT/SLP users while the smallest proportion was for beneficiaries under age 65 at only 10.0 percent. The age group most likely to have PT/SLP users benefitting from the cap exceptions process was beneficiaries aged 90 and above with 23.0 percent of these users surpassing the cap limits while the age group least likely to surpass the cap limits was those under age 65 at 11.3 percent.
- The largest proportion of OT beneficiaries benefitting from the cap exceptions process were age 85-89 at 19.5 percent of all OT users while the smallest proportion was for beneficiaries age 65-69 at only 8.9 percent. The age group most likely to have OT users benefitting from the cap exceptions process was beneficiaries age 85-89 with 22.2 percent of these users surpassing the cap limits while the age group least likely to surpass the cap limits was age 65-69 at 14.6 percent.

**There continues to be a wide disparity between states (and counties within the states) in the likelihood that a beneficiary will benefit from the cap exceptions process, and how much is paid above the cap limits with the exceptions process, and this pattern is not consistent among therapy types.**

- For the PT/SLP combined cap;
    - The five states with beneficiaries most likely to benefit from the exceptions process were; Florida (23.8%), New Jersey (22.7%), New York (22.3%), Louisiana (20.5%), and Delaware (20.0%).
    - The five states with beneficiaries least likely to need the exceptions process were; North Dakota (3.2%) Iowa (4.8%), Minnesota (5.0%), Oregon (5.1%), and Alaska (5.6%).
    - The net payments above the cap limits per beneficiary that benefitted from the cap exceptions process were highest in Texas ($1,983 above cap limit) and lowest in North Dakota ($757 above cap limit).
- For the OT separate cap;
    - The five states with beneficiaries most likely to benefit from the exceptions process were; Florida (39.3%), Louisiana (28.8%), Mississippi (26.5%), Texas (24.9%), and West Virginia (23.2%).
    - The five states with beneficiaries least likely to need the exceptions process were; North Dakota (3.1%) Iowa (3.6%), Alaska (4.6%), Oregon (5.0%), and Minnesota (6.2%).
    - The net payments above the cap limits per beneficiary that benefitted from the cap exceptions process were highest in Hawaii ($2,006 above cap limit) and lowest in Vermont ($689 above cap limit).
- Individual counties within states can skew the cap analysis results for the entire state. For example;
    - While Florida had the highest percent of therapy users surpassing the PT/SLP and OT caps (23.8% and 39.3% respectively), this was concentrated primarily in Miami-Dade County as 53.0 percent of PT/SLP users and 67.3 percent of OT users in this county surpassed the cap limits.

**The episode ICD-9 code plays a large role in indicating whether a beneficiary will benefit from the cap exceptions process. This pattern is consistent over time and across all three outpatient therapy disciplines.**

- For the PT/SLP combined cap, the top 20 principal claim diagnosis codes represents 50.0 percent of all PT/SLP users, 47.7 percent of all users over the PT/SLP cap limits, and 45.6 percent of net payments above the PT/SLP cap limits. Nine of the top ten most common ICD-9 codes in CY 2008 for PT/SLP users over the cap limits are identical to CY 2006 results.
    - Specific common diagnoses with the highest percentage of PT/SLP users benefitting from the cap exceptions process include, patellar tendinitis (48.4%), late effects of stroke-with cognitive deficits (39.5%), late effects of stroke-non-dominant side (37.4%), late effects of stroke-dominant side (36.5%), heart attack

(35.5%), osteoarthrosis-multiple sites, type II diabetes, late effects of stroke-unspecified, lack of coordination, and Parkinson's disease.

- For the OT combined cap, the top 20 principal claim diagnosis codes represent 31.3 percent of all OT users, 42.6 percent of all users over the OT cap limits, and 42.8 percent of net payments above the OT cap limits. Seven of the top ten most common ICD-9 codes in CY 2008 for OT users over the cap limits are identical to CY 2006 results.
    - Specific common diagnoses with the highest percentage of OT users benefitting from the cap exceptions process include, patellar tendinitis (79.2%), tenosynovitis of foot and ankle (76.7%), sprains and strains of lumbosacral joint/ligament (71.2), knee bursitis (69.9%), sprains and strains of hip and thigh (69.8%), sprains and strains of knee and leg, Synovitis and tenosynovitis-other, sprains and strains of ankle, thoracic or lumbosacral neuritis, and brachia neuritis or radiculitis.

**Beneficiaries are more likely to benefit from the cap exceptions process in some provider settings/professional offices than in others. Since hospital outpatient therapy services are not counted against the therapy cap limits, beneficiaries who are able to access hospital settings are least likely to require the exceptions process to receive necessary outpatient therapy services.**

- For beneficiaries who were able to access hospital settings, only 3 percent of PT/SLP users and 1 percent of OT users needed the cap exceptions process to complete their care in other settings
- For beneficiaries who were not able to access hospital settings, 19 percent of PT/SLP users and 25 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed SNF settings, 31 percent of PT/SLP users and 26 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed CORF settings, 46 percent of PT/SLP users and 66 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed ORF settings, 21 percent of PT/SLP users and 34 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed HHA settings, 14 percent of PT/SLP users and 11 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed PTPP specialties, 18 percent of PT/SLP users needed the cap exceptions process.
- For beneficiaries who accessed OTPP specialties, 14 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed physician specialties, 13 percent of PT/SLP users and 9 percent of OT users needed the cap exceptions process.
- For beneficiaries who accessed NPP specialties, 20 percent of PT/SLP users and 17 percent of OT users needed the cap exceptions process.

Details of the outpatient therapy utilization by estimated outpatient therapy cap impact during 2008 are presented in Section 4 of the *Utilization Report*. Additional information providing estimated outpatient therapy cap impact during CY 2008 by county of residence is presented in the *Utilization Report Addendum*.

## *3.9 Outpatient therapy utilization in 2008 – Implications*

The findings in the Utilization Report suggest that, until a long-term payment policy approach that can incorporate clinical information related to beneficiary function and outcomes is implemented, short-term policy changes to required claims data may be necessary to provide CMS with better information related to beneficiary function and intervention complexity. Such changes would improve confidence that medically necessary services are indeed being furnished and that the recent utilization increases are not an indicator of inappropriate use of Medicare Part B Trust Fund resources.

Details of the implications of the findings from the outpatient therapy utilization during 2008 are presented in Section 5 of the *Utilization Report*.

# 4 – Status of CSC Developed MicroStrategy Outpatient Therapy Reports (MOTR) Proof-of Concept

This section summarizes the CSC development of software that permits CMS officials to access a variety of outpatient therapy utilization reports and trend analyses (CY 2006-current) in near real-time using the MicroStrategy business intelligence (BI) desktop web tool from their desktop. This section references files included in the August 9, 2010 STATS MOTR reports deliverable.

## *4.1 History of STATS MOTR reports*

Traditional comprehensive outpatient therapy utilization analysis using National Claims History (NCH) data has required outside contracting and several months to over a year for CMS to obtain results. However, Congress and stakeholders have frequently asked CMS for timely information regarding the impact of policy changes (e.g. therapy caps and cap exceptions process) and to study the impact of various options. To address these needs CSC was tasked to develop software that would allow CMS staff to monitor the utilization of therapy services in near real-time.

As a business need, CMS personnel and administration require current and accurate information of Medicare utilization for a variety of purposes, including;

- Evaluating utilization and payment trends;
  - Annually, quarterly and monthly,
- Evaluating the impact of specific recent policy changes,
- Tracking key utilization indicators,
- Responding to Executive and Congressional inquiries regarding;
  - Specific benefit spending, and
  - Impact on beneficiaries,
- Conducting research, and
- Data gathering for pilot studies and demonstrations.

This information should be readily available to CMS personnel and administration on-demand from desktop with export capabilities including Microsoft EXCEL spreadsheets, and PDF copies of data table reports or MicroStrategy generated graphs.

> The history of the STATS MOTR reports development, including business need and solution are discussed in detail in Section 1 of the *STATS Microstrategy Outpatient Therapy Reports (MOTR) Users Guide V1.0*.

## *4.2 Process of developing STATS MOTR reports*

This task required CSC to develop a functioning process that would allow CMS to monitor the utilization of therapy services on at least a quarterly basis. This was a proof-of-concept task. The deliverable was to allow the examining and reporting of key utilization indicators using current claims data (rather than archived closed claims).

After consultation with members of the CMS Office of Information Systems (OIS), CSC determined that the best approach to satisfy this requirement was to leverage the outpatient

therapy claims data available through the recently developed CMS Integrated Data Repository (IDR) system of record. The IDR imports Medicare claims data on a weekly basis from the Medicare Common Working File (CWF) and stores this data on a Teradata enterprise data warehouse. The IDR can be organized to create custom data views where secure BI software can efficiently conduct analyses and generate reports for researchers and CMS personnel via a desktop web-based application.

For the STATS project, we determined that the commercial off-the-shelf (COTS) MicroStrategy BI tool was the best software application to generate outpatient therapy utilization reports in near real-time for two key reasons; 1) the MicroStrategy COTS application license is already being used by CMS and does not require proprietary customization for STATS MOTR report generation purposes, and 2) the MicroStrategy web application is user-friendly and end-user analysts and CMS personnel can be trained to log-on, generate reports, export reports, and generate a variety of report graphs and charts in less than 30 minutes.

During this contract, CSC worked closely with the STATS CMS Project Officer (Dorothy Shannon), CMS Subject Matter Expert Wilfried Gehne, CMS GTL for the Integrated Data Repository (IDR) (Julie Slater) and her team, and CMS GTL for MicroStrategy (Adam Driscoll) and his team to build programming that would generate reports. The reports were to produce information comparable to the tables created in the numerous prior outpatient therapy utilization reports generated by CSC and others over the past ten years using NCH data.

To date, CSC has successfully developed 62 MOTR reports within 6 report groups including:

- By therapy type (PT, OT, or SLP services)
- By therapy provider setting/professional specialty (hospital, SNF, CORF, ORF, HHA, PTPP, OTPP, SLPP, physician, and NPP)
- By beneficiary gender
- By beneficiary state
- By HCPCS code (Level 1 CPT and Level II HCPCS)
- By beneficiary year-to-date utilization range (these specific reports exclude outpatient hospital services permitting year-to-date therapy cap use estimation)

These reports can generate output tables within minutes or hours of the submission of report parameters. This is in contrast to the several months required to generate NCH derived utilization tables.

Examples of all available MOTR reports are presented in Section 2 of the *STATS Microstrategy Outpatient Therapy Reports (MOTR) Users Guide V1.0*.

## *4.3 Validation of STATS MOTR reports*

MOTR reports are not a sample, but represent 100% of outpatient therapy professional and provider claims data. The STATS MOTR reports development requirements were designed to replicate the analytic methodology CSC used to generate utilization tables similar in structure and content to those presented in the current STATS *Utilization Report* and the prior CMS contracted utilization reports during the past ten years. However, due to structural differences

between NCH flat-file and the IDR Teradata data warehouse views organization, modifications in analytic logic were required to maximize STATS MOTR report production performance.

To assure that the STATS MOTR reports results generated from the IDR were comparable to reports generated from NCH extracts we compared high level results from both CMS systems of record for CY 2006 and CY 2008. These years were selected because we had possession of NCH outpatient therapy claims data for these two years, and the IDR data warehouse contains all outpatient therapy claims data from CY 2006 to present.

Overall, we found a very good correlation of the outpatient therapy claim payment amounts when comparing NCH and IDR derived data tables. As Table 1 demonstrates, the overall paid dollar difference between the NCH and IDR derived tables for CY 2008 was only 1.7% and the differences by therapy type and claim type were nominal (range 0.8 - 2.8% difference). Similar nominal differences were also observed for paid amounts by demographic and HCPCS variables that were compared.

**Table 1. Comparison of Outpatient Therapy Utilization NCH vs. MOTR IDR CY 2008**

| CY 2008 Outpatient Therapy Claims | NCH Payment Results (Dec 2009 extract) | MOTR IDR Payment Results (July 2010 report) | Difference |
|---|---|---|---|
| **All Claims** | **$4,760,051,098** | **$4,839,925,083** | **1.7%** |
| **PT** | $3,496,865,018 | $3,547,841,770 | 1.5% |
| **OT** | $927,619,507 | $947,239,802 | 2.1% |
| **SLP** | $335,566,573 | $344,843,510 | 2.8% |
| **Provider Settings – All** | $3,046,110,735 | $3,116,587,614 | 2.3% |
| **Professional Offices - All** | $1,715,568,304 | $1,729,582,732 | 0.8% |

Nominal differences are expected when generating such reports. The NCH data analysis requires a static data extract and such analysis cannot address claims processed or adjusted since the extract was performed. In contrast, STATS MOTR reports are generated from the dynamic IDR production environment data warehouse and represent all claims processed within one week of the date the STATS MOTR report was run. Although we do not have a comparison data set for CY 2007, CY 2009, or CY 2010 year to date (YTD), the STATS MOTR trend analysis results are consistent over these periods and suggest that outpatient therapy payment results for STATS MOTR reports for any year are valid for use by CMS for high level trend analysis.

Slightly greater, but consistent differences in unique beneficiary counts are present, with STATS MOTR reports generating the higher results. Additional effort is necessary to identify and address the source of this consistent beneficiary count discrepancy before such STATS MOTR beneficiary count results could be considered for uses beyond general high level trend analysis.

In its present state, the STATS MOTR outpatient therapy payment results are clearly comparable to the historically derived results obtained through National Claims History (NCH) claims

analysis. However, MOTR results can be obtained within minutes or hours versus the months it takes to obtain similar results having contractors analyzing NCH data.

Therefore, existing and further developed MOTR reports should become the preferred method for CMS administration to monitor outpatient therapy utilization trends at various levels of detail, to analyze the impact of policy changes, to identify potential areas of program vulnerabilities, and to gather claims data for payment pilot/demonstration purposes. Due to the IDR infrastructure advantages, trend analysis of therapy utilization patterns across the continuum of care (e.g. inpatient, SNF, outpatient) could also be generated in an efficient manner. Finally, the claims analysis infrastructure of the MOTR reports could also be adapted to analyze utilization trends for other for Medicare benefits that have required monitoring for payment policy, quality, and program integrity purposes.

# 5 – Next Steps

As indicated earlier in this report, outpatient therapy services are an integral and relatively low-cost part of the continuum of rehabilitation care and health care in general. However, various studies have identified that there are vulnerabilities that need to be limited and efficiencies that need to be introduced in order to better assure that Medicare dollars are being spent wisely on necessary and effective outpatient therapy services. While the STATS project has identified several short term alternative payment policies for outpatient therapy services, and has developed tools for CMS to begin implementation of any or all of the policy recommendations in a transparent manner, CMS will need to consider which options to further develop or implement, and then will need to implement such options.

The recommended short-term approaches fall into three distinct categories described further in this section; enhance data analysis infrastructure, collect clinical information on claims, and reduce payment variability. By implementing these recommendations, CMS would lay the groundwork for the transition towards a long term episode-based payment model based upon beneficiary characteristics and outcomes of therapy interventions.

## *5.1 Enhance data analysis infrastructure*

For the past ten years, CMS has contracted a number of studies that have identified, in great detail, the strengths and limitations of using currently available administrative claims data for payment policy purposes. On the positive side, administrative claims data can be effectively used to identify utilization trends by therapy discipline, provider setting or professional specialty, demographic variables (such as age, gender and state), and HCPCS codes. During STATS we accessed the recently developed CMS Integrated Data Repository (IDR) system of records as the source to successfully develop reports programming that permits CMS officials to generate utilization and trend reports in near real-time at their desktop using 100% claims data. This is in contrast to the more costly and time intensive traditional methods of sampling or using extract files that may take months to generate results. Currently there are 62 different MicroStrategy Outpatient Therapy Reports (MOTR) available to CMS to answer many outpatient therapy utilization trend questions, and the infrastructure has been created to permit additional reports to be created to add detail not contained in the current programming.

**We believe that it is time for CMS to seriously consider the further development of reports using IDR data to analyze utilization trends in not only outpatient therapy services, but to leverage the reports' infrastructure to analyze utilization trends for other Medicare benefit categories in near real-time.**

**We believe that CMS should consider leveraging the capabilities of the IDR and the MOTR reports infrastructure to collect data for pilot studies or demonstrations that require the timely use of administrative claims data.**

## *5.2 Collect clinical information on claims*

The use of patient function and outcomes assessment tools by outpatient therapy clinicians has increased significantly over the past ten years with the rise in evidence-based practice. However, the lack of a universally applicable tool, and an absence of a mechanism for clinicians to submit

such potentially useful information has limited CMS to analyzing claim diagnosis information as a proxy for patient condition for payment policy and medical review purposes. Due to complexities in diagnosis reporting requirements between provider and professional claim types, administrative claims diagnosis information is an inconsistently reliable source of information. Accurate and predictable condition related data is essential to perform risk-adjustment analyses for payment system modeling. During STATS, and in prior studies, we created and analyzed separate classification groups for PT, OT, and SLP episodes. Our results demonstrated that clusters of outpatient therapy principal claim diagnoses representing similar musculoskeletal body regions or conditions can be used to create what we referred to as CSC classification groups to generate relatively good, but not great predictive power. In the meantime, the 5-year CMS DOTPA project is developing and testing an assessment/outcomes tool that may be universally applicable.

**We believe that CMS needs additional patient condition related information on claims in order to improve the usefulness of claims data for payment policy and medical review purposes. In the Short-term, this should be accomplished by requiring outpatient therapy clinicians to submit new patient function-related Level II HCPCS codes and severity modifiers at periodic intervals as described by Option 1 in the *Short Term Alternatives* report. Clinicians would be able to continue to use current assessment/outcomes tools which could be mapped to these new codes. The MOTR reports could be easily modified to collect and analyze this new claims information in near real-time. In the long-term, codes representing patient assessment/outcomes tool scores such as are currently being developed and studied under the DOTPA project, could serve this purpose.**

## *5.3 Reduce payment variability*

Over the past ten years of analyzing outpatient therapy utilization patterns we have observed that in general, the patterns of practice of outpatient PT, OT, and SLP services have not appeared to change dramatically. The disciplines, settings, specialties, demographic variables, and diagnoses or clinical groups that were higher or lower in cost previously, remain so today. In addition, the episode duration patterns have varied little. In general, the growth of outpatient therapy users has increased with the growth of the Medicare population.

The only exception to these general trends was when significant payment policy changes were implemented. For example, significant declines in beneficiaries served, episode durations and payments occurred in CY 1999 when all outpatient therapy settings (except hospital) were subject to the annual per-beneficiary outpatient therapy payment limitations (caps) and provider facilities transitioned from cost-based payment to the Medicare Physician Fee Schedule (MPFS). A much smaller reduction in episode durations and provider payments was again observed in CY 2006 when the caps were re-implemented, but with an exceptions process. Because these cost containment policies were implemented without regard to clinical need, specific and predictable patient populations were negatively impacted to a greater degree than others.

What has also not changed significantly over the past ten years is the variability of billing patterns and the unexplained prevalence of extreme utilization outliers. We believe that this has a number of contributing factors. First, outpatient therapy services are currently reported using a set of 76 different procedure codes that may be timed or untimed and that describe what the

clinician does to a patient without regard to complexity of patient need. It is notable that SLP services typically consistently present the least payment variation, which correlates with the fact that most HCPCS codes used for SLP services are untimed per-session codes. Second, Medicare contractors establish local coverage policies and edits regarding how HCPCS codes may be submitted, and these policies vary across contractors. Third, the therapy cap exceptions process relies solely upon the clinician attestation that the services are medically necessary. Finally, since outpatient therapy claims have relatively low dollar amounts compared to inpatient services, large durable medical equipment, and other services, these claims are less cost effective to perform manual review on. As a result, while the vast majority of outpatient therapy providers and professionals submit claims with normal and predictable variability, a very small percentage of claims and beneficiaries represent extreme utilization and warrant further attention to identify appropriate versus inappropriate billing. This is particularly true for the top one percent of outpatient therapy users whose utilization is typically five to ten times greater than the top users within the other ninety-nine percent.

**We believe that CMS needs to implement measures to reduce unwarranted variability in outpatient therapy payments. This can be accomplished in the short-term by the following approaches:**

- **To reduce the variability of payments per-session, CMS should seriously consider the introduction of new outpatient therapy 'Evaluation/Assessment and Intervention' HCPCS codes to package groups of current therapy HCPCS codes into a single per-session payment codes as described by Option #3 in the *Short Term Alternatives* report. This may require a pilot before national implementation.**
    - If CMS determines that per-session HCPCS codes should not be implemented, then an alternative approach to reduce variability of payments per session would be to consider refining the existing national MUE edits for outpatient therapy timed intervention HCPCS codes based upon utilization data trends as described by Option #2a in the *Short Term Alternatives* report.

- **To reduce the variability of annual payments per beneficiary, CMS should consider implementing new national per-beneficiary per-year payment edits as described by Option #2b in the Short *Term Alternatives* report.**

- **Since there is not a mechanism to clearly identify distinct outpatient therapy episodes that could be implemented in the short-term, we believe that per-episode payment edits or episode payment options should only be considered as a long-term option.**