

**Physical, Occupational, and Speech Therapy
for Medicare Nursing Home Patients
Medical Necessity and Quality of Care Based on Treatment Diagnosis**

August 2001

OEI-09-99-00563

**Office of Inspector General
Office of Evaluation and Inspections
Region IX**



Memorandum

AUG 3 2001

Date

George F. Grob

From

Deputy Inspector General for
Evaluation and Inspections

Subject: *George Grob*
OIG Final Report: "Physical, Occupational, and Speech Therapy for Medicare Nursing Home Patients: Medical Necessity and Quality of Care Based on Treatment Diagnosis,"
OEI-09-99-00563

To

Jacquelyn Y. White
Acting Director, Office of Communications
and Operations Support
Centers for Medicare and Medicaid Services

Attached is our final report concerning the relationship between treatment diagnosis and the medical necessity and quality of Part B therapy services for Medicare nursing home patients. This information was requested by CMS staff during our discussions about our reports on medical necessity, cost, and document of these therapy services.

We found indications that the medical necessity of therapy varied by treatment diagnosis. Although we were not able to identify specific diagnoses that were associated consistently with higher rates of medically unnecessary therapy or poor quality of care, we believe that examining the relationships between treatment diagnosis and therapy in skilled nursing facilities is a promising approach. This data could be useful in guiding medical review and ensuring that all patients receive therapy that meets acceptable standards of care.

If you have any questions, please call me or have your staff contact Stuart Wright at (410) 786-3144.

Attachment

EXECUTIVE SUMMARY

PURPOSE

To examine the relationship between treatment diagnosis and the medical necessity and quality of Medicare Part B physical, occupational, and speech therapy for skilled nursing facility patients.

BACKGROUND

Medicare coverage guidelines state that therapy must be reasonable, necessary, specific, and effective treatment for the patient's condition. Therapy must be ordered by a physician or other qualified health care practitioner, require the skills of a qualified therapist, and be dictated by a written treatment plan. The treatment plan must include functional goals and a reasonable estimate of when patients will attain the goals.

The *Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999* requires the Centers for Medicare and Medicaid Services (formerly called known as the Health Care Financing Administration) to (1) recommend a process to assure the appropriate utilization of Medicare outpatient therapy; (2) establish an alternative payment policy based on diagnostic categories, functional status, and prior use of therapy; and (3) conduct focused medical reviews of therapy services, with emphasis on claims for services provided to residents of skilled nursing facilities. To meet the requirement of the law, the Centers for Medicare and Medicaid Services (CMS) staff requested our assistance.

Our national random sample consisted of 320 Medicare patients. We conducted on-site medical and financial reviews at 132 nursing homes, rehabilitation agencies, and hospital outpatient departments nationwide. Several teams of physical and occupational therapists and speech-language pathologists reviewed medical records for the sampled patients.

FINDINGS

By diagnosis, the proportion of therapy that was not medically necessary ranged from 4 percent to 26 percent

We found an overall difference in the receipt of medically unnecessary therapy by diagnosis. However, because of the relatively small number of episodes associated with each diagnosis, we were not able to state definitively which diagnoses would be more

likely to involve medically unnecessary therapy. Among sampled patients, the proportion of medically unnecessary units, when grouped in the 10 diagnostic categories, ranged from approximately 4 percent for orthopedic and back disorder patients to approximately 25 percent for stroke patients.

CONCLUSION

In our sample, we found indications that the medical necessity of therapy varied by treatment diagnosis. Although we were not able to identify specific diagnoses that were associated consistently with higher rates of medically unnecessary therapy or poor quality of care, we believe that examining the relationships between treatment diagnosis and therapy in skilled nursing facilities is a promising approach. Targeting those diagnoses that are most vulnerable may help to guide medical review and ensure that all patients receive therapy that meets acceptable standards of care.

AGENCY RESPONSE

We received comments on the three draft reports on therapy services from the CMS. Although this report does not contain any recommendations, CMS concurred with the recommendations offered in the two companion reports. The full text of the Agency's comments appears in appendix D.

TABLE OF CONTENTS

	PAGE
EXECUTIVE SUMMARY	1
INTRODUCTION	4
FINDINGS	9
Diagnosis and medical necessity	9
Diagnosis and appropriate therapy	12
CONCLUSION	14
APPENDICES	15
A: Diagnostic Categories	15
B: Number of Therapy Episodes by Diagnosis	20
C: Confidence Intervals for Selected Statistics	21
D: Agency Comments	27

INTRODUCTION

PURPOSE

To examine the relationship between treatment diagnosis and the medical necessity and quality of Medicare Part B physical, occupational, and speech¹ therapy for skilled nursing facility patients.

BACKGROUND

Medicare Coverage Guidelines for Part B Physical, Occupational, and Speech Therapy

Medicare guidelines state that all therapy must be reasonable, necessary, specific, and effective treatment for the patient's condition. Policies developed by the Centers for Medicare and Medicaid Services (formerly known as the Health Care Financing Administration or HCFA), the federal agency that administers the Medicare program, require that therapy (1) is ordered by a physician or other qualified health care practitioner, (2) requires the skills of a qualified therapist rather than nonskilled nursing home staff, (3) is provided either by or under the direct supervision of a certified therapist (as defined in State law), and (4) is dictated by a written treatment plan.

Medicare coverage also requires that the therapy meet the following conditions:²

- ▶ the written treatment plan includes specific and measurable treatment goals related to the patient's condition along with a reasonable time estimate of when those goals will be achieved;
- ▶ the treatment plan describes the specific therapeutic interventions that will be used to restore the patient's levels of function that has been lost or reduced by illness or injury;
- ▶ the amount, frequency, and duration of therapy must be reasonable and necessary for the patient's condition;
- ▶ therapy must be provided with the expectation, based on the assessment made by the therapist, physician, or non-physician staff member (nurse practitioner, physician assistant, or clinical nurse specialist) of the patient's restoration potential, that the

¹Throughout this report, we will refer to speech-language pathology as speech therapy.

²Health Care Financing Administration, *Skilled Nursing Facility Manual*, Sections 214, 230, 230.3(c), and 271.

- patient's condition will improve substantially in a reasonable and generally predictable period of time, or the therapy must be necessary for the establishment of a safe and effective maintenance program. Therapy only will be covered until the physician and/or therapist concludes that the patient is not going to improve; and
- ▶ the patient is seen by the physician or non-physician staff member at least every 30 days.

The Therapy Caps

Section 4541(c) of the *Balanced Budget Act of 1997* changed skilled nursing facility (SNF) reimbursement for physical, occupational, and speech therapy by setting an annual cap for Medicare Part B patients. Effective January 1, 1999, occupational therapy was limited to \$1,500 annually, while physical and speech therapy shared the same \$1,500 annual cap.

Section 221 of the *Medicare, Medicaid, and SCHIP³ Balanced Budget Refinement Act of 1999*, passed in November 1999, suspended the cap for 2 years effective January 1, 2000. Section 221(c)(2) of the legislation requires the Centers for Medicare and Medicaid Services (CMS) to (1) recommend a mechanism to assure the appropriate utilization of Medicare outpatient therapy and (2) establish an alternative payment policy based on diagnostic categories, functional status, and prior use of therapy.⁴

Focused Medical Review

The law also mandated that the Secretary conduct focused medical reviews of Part B therapy claims, with an emphasis on SNF claims in calendar years 2000 and 2001. In October 2000, CMS launched a Program Safeguard Contract for therapy to (1) analyze current national and local medical review policies; (2) conduct extensive literature review, analysis, and abstraction; (3) interview fiscal intermediaries and therapy providers; and (4) develop medical review protocol for the fiscal intermediaries.

Section 421 of the *Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000*, passed in November 2000, extended the moratorium on the therapy caps for another year, through calendar year 2002. The law also extended the requirement for focused review of SNF therapy claims until year 2003.

³State Children's Health Insurance Program.

⁴*The Social Security Act*, Section 1833(g) as amended.

Recent Office of Inspector General Work on Patient Diagnosis and SNF Therapy

The Office of Inspector General released a memorandum report in October 1999 concerning physical, occupational, and speech therapy provided to Medicare patients in skilled nursing facilities. This report examined estimated physical, occupational, and speech therapy reimbursement per SNF stay during calendar year 1998. The report also examined the relationship between therapy reimbursement and patient diagnosis before the transition from cost-based reimbursement to the Part B fee schedule. Members of the therapy community had expressed concerns that SNF patients who are hospitalized for strokes or hip fractures may require significantly more therapy than others. According to the report, preliminary analysis indicated that patients with these diagnoses were slightly more likely to receive at least \$1500 in occupational therapy or combined physical and speech therapy in calendar year 1998.

METHODOLOGY

Selection of Sampled SNF Part B Therapy Patients

From the Medicare Common Working File, we extracted all Part B physical, occupational, and speech therapy claims processed by Medicare fiscal intermediaries⁵ for services provided to nursing home patients. We identified beneficiaries as nursing home patients if (1) the nursing home submitted the therapy claims or (2) beneficiaries were identified as residents in the CMS minimum data set. These claims were submitted to fiscal intermediaries by nursing homes, rehabilitation agencies, and hospital outpatient departments for therapy initiated between January 1 and June 30, 1999. We limited the extract to the continental United States.

We used a multi-stage stratified cluster sampling approach to select 320 nursing home patients who received Part B therapy during the first 6 months of calendar year 1999.⁶ We reviewed 318 of 320 medical records. Two records were missing because the nursing home closed before our review, and the corporate owner could not retrieve the records from storage.

⁵Fiscal intermediaries are the insurance companies that pay Medicare claims for hospitals, skilled nursing facilities, and home health agencies.

⁶For more details on sample selection, refer to the Methodology section of our report, *Physical, Occupational, and Speech Therapy for Nursing Home Patients: Medical Necessity and Cost under the \$1500 Caps* (OEI-09-99-00560), July 2001.

On-Site Medical Review

Several teams of certified and/or licensed physical and occupational therapists and speech-language pathologists conducted on-site review of the medical records for the national random sample. Reviewers assessed the medical necessity, underutilization, overutilization, and quality of care of therapy provided in calendar year 1999.

Claims Analysis

We analyzed the Part B physical, occupational, and speech therapy claims submitted for the sampled patients. For each patient, we extracted claims that were submitted for therapy initiated between January 1 and June 30, 1999.

We analyzed the claims by individual therapy units and clusters of therapy units. An individual "unit" of physical, occupational, or speech therapy constitutes one 15-minute session of therapy. Clusters of therapy units were grouped into "episodes of therapy."⁷ An episode of therapy consists of a series of continuous therapy units tied to a physician order, specific diagnosis, treatment plan, and set of patient goals. An episode of therapy may last a few days or a few months.

Medical Necessity and Quality of Care

Using structured review instruments, medical reviewers determined the medical necessity and quality of therapy care received by SNF patients. Reviewers examined medical records and treatment logs to determine which of the therapy units provided to patients were either medically necessary or unnecessary. Within each episode of therapy, medical reviewers assessed the quality of care received by patients according to four criteria. Reviewers determined whether or not:

- ▶ therapy was provided when needed;
- ▶ therapy was provided with the appropriate frequency and duration;
- ▶ therapy was administered by providers with the appropriate skill level; and
- ▶ the patient reached treatment goals, defined as what the therapist or physician expects the patient to achieve as a result of therapy.⁸

Treatment Diagnosis

Medical reviewers examined patients' records to identify treatment diagnoses for each episode of therapy. Reviewers used information contained in physicians' therapy orders,

⁷Also referred to as "episodes of care."

⁸Health Care Financing Administration, *Medicare Intermediary Guidelines*, Section A3 3904C5 under Medical Review of Part B Intermediary Outpatient Bills.

notes written by physicians and nurses, and therapy evaluations to determine the primary diagnosis indicating the need for physical, occupational, or speech therapy. Patients who received therapy during more than one episode of care may have had a different primary treatment diagnosis for each episode.

We grouped primary treatment diagnoses into 1 of 11 diagnostic categories.⁹ Among others, the categories include “stroke,” “neurologic disorders,” and “hip fractures.” An eleventh category includes all other diagnoses that are not included in 1 of the 10 major categories. These categories were created to differentiate patients according to expected rehabilitation requirements. We conducted all analyses involving patient diagnosis using this classification system.

This report is one in a series of reports on physical, occupational, and speech therapy for Medicare SNF patients. The first report, *Physical, Occupational, and Speech Therapy for Medicare Nursing Home Patients: Medical Necessity and Cost under the \$1500 Therapy Caps* (OEI-09-99-00560), focuses on the medical necessity and cost of Medicare Part B therapy while the \$1500 annual caps were in place. A companion report, *Physical, Occupational, and Speech Therapy for Nursing Home Patients: Medical Record Documentation and Billing* (OEI-09-99-00562), details medical record documentation and Part B billing practices identified in our sample.

Our review was conducted in accordance with the *Quality Standards for Inspections* issued by the President’s Council on Integrity and Efficiency.

⁹See appendix A for a detailed description of the diagnostic classification system. This system was developed by the Rand research team that developed the Functional Related Groups classification system. See Joan L. Buchanan, J. David Rumpel & Helen Hoenig, *Outpatient Institutional Rehabilitation Services 1987-1990: Who provides them and how do they compare?* Supported by CMS.

FINDINGS

By diagnosis, the proportion of therapy that was not medically necessary ranged from 4 percent to 26 percent

Primary treatment diagnoses were identified and grouped according major diagnostic categories. During on-site SNF visits, medical reviewers identified patients' primary treatment diagnoses¹⁰ for each episode of therapy.¹¹ We then classified these treatment diagnoses into 11 diagnostic categories.¹²

Among others, the diagnostic categories include "stroke," "neurological disorders," and "hip fractures." An eleventh category includes all other diagnoses that are not included in any of the 10 major categories. Sampled patients who were in this category had diagnoses such as general debility, decreased functional mobility, and muscle wasting.

Among sampled patients, approximately 52 percent of their therapy episodes fell into the "neurological disorders" category.¹³ This category includes such primary treatment diagnoses as dysphagia, abnormality of gait, and Parkinson's Disease. With the exception of the "musculoskeletal" (11.4 percent) and the "other" (13.6 percent) categories, each of the remaining categories accounted for less than 10 percent of the therapy episodes in our sample. The categories of "back" and "cardiovascular" were the least common, with only 2.4 percent each.

In approximately 40 percent of the therapy episodes, a secondary diagnosis contributed to the patients' need for therapy. For example, some patients received therapy related to a stroke or a musculoskeletal or cardiovascular disorder even when this condition was not their primary treatment diagnosis. While stroke was the primary treatment diagnosis in approximately 7.1 percent of episodes, patients received some therapy related to a stroke approximately 11.5 percent of the time. Similarly, a musculoskeletal disorder contributed

¹⁰Diagnosis or treatment diagnosis refers to patients' primary treatment diagnosis for a particular episode of therapy.

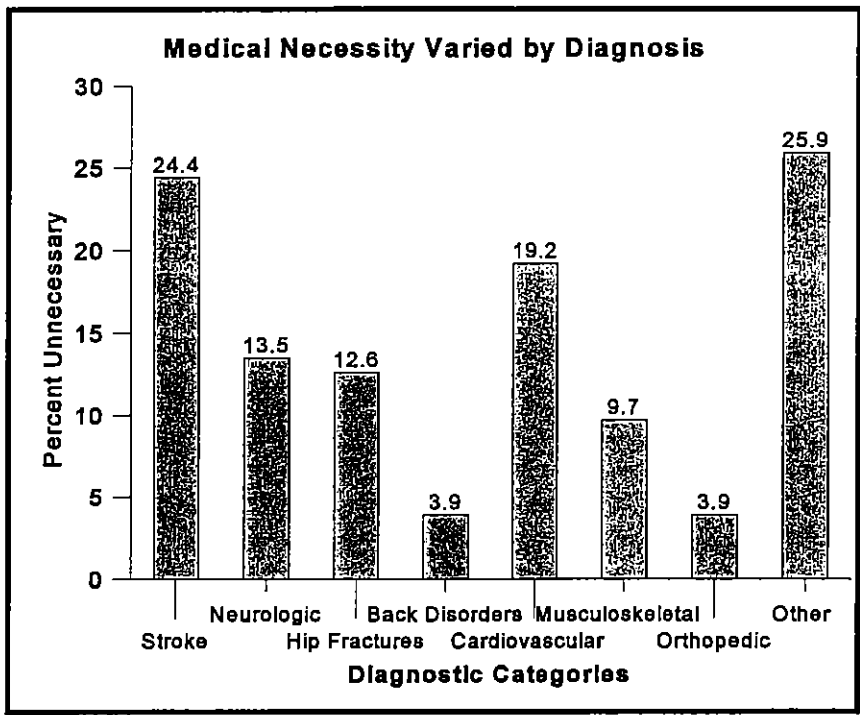
¹¹An episode of therapy or episode of care consists of a series of continuous therapy units tied to a physician order, specific diagnosis, treatment plan, and set of patient goals.

¹²See appendix A for a detailed description of the diagnostic classification system. We excluded diagnoses that comprised less than 2 percent of all therapy episodes from our analyses. These diagnoses include spinal cord injury (1.7 percent), amputation and deformities (0 percent), and rehabilitation (0 percent).

¹³Appendix B lists the number of therapy episodes for sampled patients by diagnosis.

to patients' need for therapy in approximately 21.9 percent of all episodes although it was patients' primary diagnosis only 11.4 percent of the time.

We identified a relationship between diagnosis and medical necessity;¹⁴ however, because of the relatively small number of episodes associated with each diagnosis, we were not able to state definitively which diagnoses would be more likely to involve medically unnecessary therapy. As noted in the following chart, the proportion of medically unnecessary units, when grouped in the 10 diagnostic categories, ranged from approximately 3.9 percent for orthopedic¹⁵ and back disorder patients to approximately 24.4 percent for stroke patients.



Source: Office of Evaluation and Inspections, 2001

¹⁴This is based on a chi-square test for differences among diagnostic categories in the percent of units medically unnecessary. The difference was significant at the 95 percent confidence level (p-value = 0.027).

¹⁵An orthopedic diagnosis includes bone fractures (other than hip), joint replacement, and dislocations.

Stroke patients frequently received unnecessary therapy

Stroke patients often received therapy that was not medically necessary. Medical reviewers found that stroke patients received medically unnecessary therapy for several reasons:

- ▶ Some stroke patients simply received too much therapy. They received therapy more frequently than was required in the same day or in the course of a week. One patient repeatedly received more than four physical therapy units each day. According to medical reviewers, this was unnecessary and excessive.
- ▶ In other situations, stroke patients did not require the skilled care that therapists provided. For example, following an initial evaluation one patient received an additional 32 units of therapy from a speech therapist over the course of 2 weeks. Medical reviewers indicated that this patient needed care only from the SNF staff.
- ▶ Therapists often failed to adjust stroke patients' treatment plans even when they no longer benefitted from additional therapy. For example, one stroke patient received 2 weeks of medically necessary physical therapy. He continued to receive therapy according to his original plan of care for another 4 months, despite the fact that he received no objective re-evaluations and showed no significant progress during this time.

Approximately 26 percent of therapy units billed for patients in the catchall diagnostic category labeled "other" were medically unnecessary

According to medical reviewers, patients in the "other" category received unnecessary therapy for reasons similar to stroke patients:

- ▶ Some patients received more therapy than they needed. Two patients received too much physical therapy in a given day, whereas another patient received too much physical therapy for her particular treatment goals. One patient with decreased functional ability received 64 units of unnecessary physical therapy, almost twice the number of necessary units that this patient received.
- ▶ Other patients received therapy that was inappropriate for their treatment goals or progress rate. One patient received occupational therapy that was not sufficiently planned. As a result, this patient was not able to progress towards stated treatment goals.

Across all diagnoses, the majority of patients benefitted from appropriate therapy without exceeding the caps

Regardless of diagnosis, the majority of patients reached their goals

Medicare coverage guidelines require that therapy is provided with the expectation that the patient's condition will improve substantially in a reasonable period of time. To meet this requirement, therapists, physicians, or non-physician staff members (nurse practitioners, physician assistants, or clinical nurse specialists) conduct an assessment to determine what improvements can be expected as a result of therapy. Based on the assessment, a written treatment plan is developed which is incorporated in the patient's record. This plan must include specific and measurable treatment goals related to the patient's condition and an estimate of when the goals will be achieved.

During SNF visits, medical reviewers examined treatment plans for each episode of therapy to determine whether or not patients reached their treatment goals. Reviewers found that the majority of patients achieved their treatment goals by the end of their therapy episodes. In our sample, the proportion of episodes in which patients reached treatment goals ranged from approximately 90 percent for orthopedic patients to approximately 57 percent for stroke patients.¹⁶

The duration and frequency of therapy was appropriate for most patients regardless of diagnosis

According to medical reviewers, patients received therapy for the length of time that was appropriate for their medical condition and treatment goals. On average, patients required no additional therapy by the end of approximately 82 percent of therapy episodes. The proportion of episodes in which patients required no additional therapy ranged from 99 percent for back patients to 75 percent for orthopedic patients.¹⁷

Although patients received enough therapy in most episodes, medical reviewers identified some episodes in which patients did not. In some cases, it was a matter of frequency rather than duration. For example, one patient received occupational therapy three times a week although, according to medical reviewers, he should have received therapy five times a week (with a 2 week rest) until all treatment goals were met.

¹⁶Among episodes in which medical reviewers were able to determine whether or not patients reached their goals.

¹⁷Among episodes in which medical reviewers were able to determine whether or not patients required additional therapy.

In other episodes, therapists prematurely discontinued therapy. They terminated therapy, sometimes without providing a clear reason in patient records, even though it continued to benefit patients' functional performance.

Few patients of any diagnosis exceeded the \$1500 therapy caps

Regardless of diagnosis, patients rarely reached or exceeded the therapy caps during the first 6 months of 1999. As noted in the report *Physical, Occupational, and Speech Therapy for Nursing Home Patients: Medical Necessity and Cost under the \$1500 Therapy Caps* (OEI-09-99-00560), approximately 0.5 percent of all patients reached or exceeded the \$1500 occupational therapy cap, and approximately 1.7 percent of all patients reached or exceeded the shared \$1500 physical and speech therapy cap. Similarly, within individual diagnostic categories, relatively few patients reached or exceeded either of the therapy caps. As noted in the following table, within each diagnostic category fewer than 6 percent of patients reached the occupational therapy cap and fewer than 7 percent of patients reached the shared physical and speech therapy cap.

FEW PATIENTS EXCEEDED THE THERAPY CAPS¹⁸

Diagnosis	Percent Who Reached or Exceeded the Therapy Cap	
	Occupational	Shared Physical and Speech
Stroke	1.7	3.4
Neurologic	0.5	1.6
Hip Fracture	1.5	6.5
Back	5.8	0
Cardiovascular	1.3	0
Musculoskeletal	0	1.5
Orthopedic	0.8	0.8
Other	0.8	5.4

Source: Office of Evaluation and Inspections, 2001

¹⁸Due to the small number of individuals in our sample who reached the therapy caps, we were not able to perform the chi-square test to identify differences in the likelihood of reaching the cap by diagnosis. Based on the confidence intervals in appendix C, it does not appear that these differences are statistically significant.

CONCLUSION

Although we found evidence that medical necessity varied by diagnosis, we were not able to identify specific diagnoses that were associated consistently with higher rates of medically unnecessary therapy or poor quality of therapy care. Targeting specific diagnoses for focused medical review could be a cost-effective way of identifying therapy that is not medically necessary or does not meet acceptable standards of care. By isolating those diagnoses that are most vulnerable, CMS could ensure that medical review resources are reserved for situations that are most likely to yield results.

AGENCY RESPONSE

We received comments on the three draft reports on therapy services from CMS. Although this report does not contain any recommendations, the Agency concurred with the recommendations offered in the two companion reports. The full text of the Agency's comments appears in appendix D.

Diagnostic Categories¹⁹

Stroke

342	Hemiplegia
430	Subarachnoid hemorrhage
431	Intracerebral hemorrhage
432	Intracranial hemorrhage
433	Occlusion and stenosis of precerebral arteries
434	Occlusion of cerebral arteries
436	Acute, but ill-defined, cerebrovascular disease
437	Other and ill-defined cerebrovascular disease
438	Late effects of cerebrovascular disease
784.3	Aphasia

Spinal Cord Injury

(A)	<i>Fractures and injury without fracture</i>
806	Fracture of vertebral column with spinal cord injury
907.2	Late effect of spinal cord injury
952	Spinal cord injury without evidence of spinal bone injury
(B)	<i>Nontraumatic and other spinal cord damage</i>
192.2-192.3	Malignant neoplasm of spinal cord and meninges
225.3-225.4	Benign neoplasm of spinal cord and meninges
324.1	Intraspinal abscess
335	Anterior horn cell disease
336	Other diseases of spinal cord
344	Other paralytic syndromes
741	Spina bifida

Neurologic Disorders

(A)	<i>Fractures and concussions</i>
800	Fracture of vault of skull
801	Fracture of base of skull
803	Other and unqualified skull fractures
804	Multiple fractures involving skull or face
850	Concussion
851	Cerebral laceration and contusion
852	Subarachnoid, subdural or extradural hemorrhage following injury
853	Other and unspecified Intracranial hemorrhage following injury
854	Intracranial injury of other and unspecified nature
905.0	Late effect of fracture of skull and face bones
907.0	Late effect of Intracranial injury without skull fracture

¹⁹Table modified from Debra A. Dayoff & Victoria Barghout, *Comprehensive outpatient rehabilitation facilities data analysis*, December 1999, Supported by CMS

Neurologic Disorders (continued)

(B)	<i>Nontraumatic and other brain damage</i>
191	Malignant neoplasm of brain
192.1	Malignant neoplasm of cerebral meninges
198.3-198.4	Secondary malignant neoplasm of brain and meninges
225.0-225.2	Benign neoplasm of brain, cranial nerves, and meninges
237.5-237.6	Neoplasm of uncertain behavior in the brain and meninges
239.6	Neoplasm of unspecified behavior in the brain
310.2	Postconcussion syndrome
997.0	Central nervous system complications (anoxic brain damage)
045	Acute poliomyelitis
053	Herpes zoster
138	Late effects of acute poliomyelitis
290-294	Organic psychotic conditions
310	Specific nonpsychotic mental disorders due to organic brain damage
315	Specific delays
316	Psychic factors associated with diseases classified elsewhere
317-319	Mental retardation
320-323	Meningitis, encephalitis, myelitis, encephalomyelitis
324.0	Intracranial abscess
324.9	Extradural or subdural abscess
325	Phlebitis and thrombophlebitis of Intracranial venous sinuses
326	Late effects of Intracranial abscess
330-331	Cerebral degenerations
332	Parkinson's disease
333	Other extra pyramidal disease and abnormal movement disorders
334	Spinocerebellar disease
337	Disorders of the autonomic nervous system
340	Multiple sclerosis
341	Other demyelinating diseases of the central nervous system
343	Infantile cerebral palsy
345	Epilepsy
346	Migraine
348	Anoxic brain damage and other conditions of the brain
349	Other and unspecified disorders of nervous system
350	Trigeminal nerve disorders
351	Facial nerve disorders
352	Disorders of the cranial nerves
353	Nerve root and plexus disorders
354	Mononeuritis of upper limb and mononeuritis multiplex
355	Mononeuritis of lower limb
356	Heredity and idiopathic peripheral neuropathy
357	Inflammatory and toxic neuropathy
358	Myoneural disorders
359	Muscular dystrophies and other myopathies
386	Vertiginous syndromes and other disorders of vestibular system
742	Other congenital anomalies of nervous system

Neurologic Disorders (continued)

- 780-788 General and specific body systems
- 907.3-907.9 Late effect of injuries to the nervous system
- 950-957 Injury to nerves and spinal cord
- V45.2 Presence of cerebrospinal fluid drainage device

Hip Fractures

- 808 Fracture of pelvis
- 820 Fracture of neck of femur
- 821 Fracture of other, unspecified part of femur
- 905.3 Late effect of fracture of neck of femur

Back Disorders

- 720 Ankylosing spondylitis
- 721 Spondylosis and allied disorders
- 722 Intervertebral disc disorders
- 723 Other disorders of cervical region
- 724 Other disorders of back
- 733.0 Osteoporosis
- 733.1 Pathological fracture
- 737 Curvature of spine
- 805 Fracture of vertebral column without spinal cord injury
- 839 Other, multiple and ill-defined dislocations
- 846 Sprains and strains of sacroiliac region
- 847 Sprains and strains of other and unspecified part of back
- 905.1 Late effect of fracture of spine and trunk

Amputation and Deformities**(A) Traumatic amputation**

- 896 Traumatic amputation of foot (partial)
- 897 Traumatic amputation of leg(s) (partial)

(B) Acquired deformities

- 736.3 Acquired deformities of hip
- 736.6-736.9 Acquired deformities of lower limbs
- 738.3-738.6 Other acquired deformities
- 754 Certain congenital musculoskeletal deformities
- 755.3 Reduction deformities of lower limb
- 755.6 Other anomalies of lower limb
- 905.9 Late effect of traumatic amputation
- 997.6 Late amputation stump complication
- V52.1 Fitting and adjustment of artificial leg

Cardiovascular Disorders

- (A) *Circulatory disorders***
 402 Hypertensive heart disease
 410 Acute myocardial infarction
 412 Old myocardial infarction
 413 Angina pectoris
 414 Other forms of chronic ischemic disease
 415.0 Acute cor pulmonale
 416 Chronic pulmonary heart disease
 420-429 Other forms of heart disease
 442.81 Aneurysm of artery of neck
 785 Symptoms involving cardiovascular system

- (B) *Pulmonary disorders***
 415.1 Pulmonary embolism and infarction
 490-496 Chronic obstructive pulmonary disease
 500-508 Pneumoconioses and lung diseases from external agents
 518 Other diseases of lung
 786 Symptoms involving respiratory system and other chest symptoms
 799.1 Respiratory failure

Rehabilitation

- (A) *Therapy for unspecified agents***
 V57.1 Other physical therapy
 V57.2 Occupational therapy and vocation rehabilitation
 V57.3 Speech therapy
 V57.8 Other specified rehabilitation procedure
 V57.9 Unspecified rehabilitation procedure

Musculoskeletal and soft tissues

- (A) *Arthritis***
 714 Rheumatoid arthritis and other inflammatory polyarthropathies
 715 Osteoarthritis and allied disorders
 716 Other and unspecified arthropathies
 717 Internal derangement of knee
 718 Other derangement of joint
 719 Other and unspecified disorder of joints
 274 Gout

- (B) *Burns***
 941 Burn of face, head and neck
 942 Burn of trunk
 943-944 Burn of upper limbs, wrists, and hands
 945 Burn of lower limbs
 946 Burns of multiple specified sites
 948 Burns classified according to extent of body surface involved
 949 Burn, unspecified

Musculoskeletal and soft tissues (continued)

(C)	<i>Soft tissues</i>
451	Phlebitis and thrombophlebitis
454	Varicose veins of lower extremities
680-709	Diseases of the skin and subcutaneous tissue
710-739	Diseases of the musculoskeletal system and connective tissue
840-848	Sprains and strains of joints and adjacent muscles
880-887	Open wound of upper limb
890-897	Open wound of lower limb
900-904	Injury to blood vessels
905	Late effect of musculoskeletal and connective tissue injuries
912-919	Superficial injuries
920-924	Contusion with intact skin surface
925-929	Crushing injury
930-934	Effects of foreign body entering through orifice
959.2	Injury to shoulder and upper arm
959.7	Injury to knee, leg, ankle and foot
V53.7	Orthopedic devices

Orthopedic

V43.6	Joint replacement
V54	Other orthopedic aftercare
802	Fracture of face bones
805	Fracture of vertebral column without mention of spinal cord injury
807	Fracture of ribs, sternum, larynx and trachea
809	Ill-defined fractures of bones of trunk
810-819	Fracture of upper limb
823	Fracture of tibia and fibula
824	Fracture of ankle
825	Fracture of one or more tarsal and metatarsal bones
826	Fracture of one or more phalanges of foot
827	Other, multiple and ill-defined fractures of lower limb
828	Multiple fractures involving both lower limbs, lower with upper limb and lower limbs with ribs and sternum
829	Fracture of unspecified bones
830-839	Dislocation

Other

All codes not elsewhere specified

Number of Therapy Episodes by Diagnosis

The following table shows the number of therapy episodes for sampled patients by primary treatment diagnosis.

Primary Treatment Diagnosis	Number of Episodes
Stroke	46
Spinal Cord Injury	2
Neurologic disorder	255
Hip fracture	31
Back disorder	14
Amputation and deformity	0
Cardiovascular disorder	18
Rehabilitation	0
Musculoskeletal and soft tissues	74
Orthopedic disorder	32
“Other”	90
Reviewer could not determine diagnosis	47
TOTAL²⁰	609

²⁰The total number of episodes is greater than the number of sampled patients because patients may have received therapy during more than one episode

Confidence Intervals for Selected Statistics

The following tables show the point estimates and 95 percent confidence intervals for selected statistics, in the order that they appear in the report. These calculations account for all levels of clustering and stratification as described in the methodology.

Statistic	Point Estimate	95 Percent Confidence Interval
Of therapy episodes, ²¹ percent in which primary treatment diagnosis was stroke	7.1%	3.1% - 11.1%
Of therapy episodes, percent in which primary treatment diagnosis was spinal cord injury	1.7%	0% - 3.9%
Of therapy episodes, percent in which primary treatment diagnosis was neurologic disorder	52.0%	38.8% - 65.2%
Of therapy episodes, percent in which primary treatment diagnosis was hip fracture	5.1%	0% - 10.2%
Of therapy episodes, percent in which primary treatment diagnosis was back disorder	2.4%	0% - 4.9%
Of therapy episodes, percent in which primary treatment diagnosis was amputation and deformity	0%	N/A*
Of therapy episodes, percent in which primary treatment diagnosis was cardiovascular disorder	2.4%	0.1%-4.7%
Of therapy episodes, percent in which primary treatment diagnosis was rehabilitation	0%	N/A*
Of therapy episodes, percent in which primary treatment diagnosis was musculoskeletal and soft tissues	11.4%	6.1%-16.7%
Of therapy episodes, percent in which primary treatment diagnosis was orthopedic disorder	4.3%	1.0%-7.6%
Of therapy episodes, percent in which primary treatment diagnosis was "other"	13.6%	8.1% - 19.2%

* Could not be calculated because there were no patients with this primary diagnosis in our sample.

²¹Among episodes in which medical reviewers identified a primary treatment diagnosis.

APPENDIX C

Statistic	Point Estimate	95 Percent Confidence Interval
Of January - June 1999 therapy units for stroke patients, percent that were not medically necessary	24.4%	5.2% - 43.6%
Of January - June 1999 therapy units for neurologic patients, percent that were not medically necessary	13.5%	6.1% - 20.8%
Of January - June 1999 therapy units for hip fracture patients, percent that were not medically necessary	12.6%	0% - 26.1%
Of January - June 1999 therapy units for back patients, percent that were not medically necessary	3.9%	0% - 10.4%
Of January - June 1999 therapy units for cardiovascular patients, percent that were not medically necessary	19.2%	0% - 43.4%
Of January - June 1999 therapy units for musculoskeletal and soft tissues patients, percent that were not medically necessary	9.7%	2.0% - 17.0%
Of January - June 1999 therapy units for orthopedic patients, percent that were not medically necessary	3.9%	1.1% - 6.6%
Of January - June 1999 therapy units for patients in "other" category, percent that were not medically necessary	25.9%	6.5% - 45.2%

APPENDIX C

Statistic	Point Estimate	95 Percent Confidence Interval
Of stroke episodes, ²² percent in which patient reached treatment goals	56.7 %	23.1% -90.4%
Of neurologic episodes, percent in which patient reached treatment goals	67.8%	59.3% - 76.4%
Of hip fracture episodes, percent in patient reached treatment goals	62.4%	44.9% - 80.0%
Of back episodes, percent in which patient reached treatment goals	64.2%	15.5% - 100%
Of cardiovascular episodes, percent in which patient reached treatment goals	67.5%	26.4% - 100%
Of musculoskeletal episodes, percent in which patient reached treatment goals	79.1%	65.2% - 93.0%
Of orthopedic episodes, percent in which patient reached treatment goals	89.5%	74.0% - 100%
Of "other" episodes, percent in which patient reached treatment goals	76.1%	60.7% - 91.5%

²²Among episodes in which medical reviewers were able to determine whether or not patients reached their goals.

APPENDIX C

Statistic	Point Estimate	95 Percent Confidence Interval
Of stroke episodes, ²³ percent in which patient required no additional therapy	85.0%	60.0% - 100%
Of neurologic episodes, percent in which patient required no additional therapy	89.7%	80.7% - 98.7%
Of hip fracture episodes, percent in which patient required no additional therapy	80.7%	57.2% - 100%
Of back episodes, percent in which patient required no additional therapy	98.8%	95.7% - 100%
Of cardiovascular episodes, percent in which patient required no additional therapy	94.8%	83.8% - 100%
Of musculoskeletal episodes, percent in which patient required no additional therapy	97.3%	94.4% - 100%
Of orthopedic episodes, percent in which patient required no additional therapy	74.7%	52.2% - 97.2%
Of "other" episodes, percent in which patient required no additional therapy	78.1%	55.6% - 100%

²³ Among episodes in which medical reviewers were able to determine whether or not patients required additional therapy.

APPENDIX C

Statistic	Point Estimate	95 Percent Confidence Interval
Of stroke patients, percent who reached the occupational cap during the review period	1.7%	0% - 11.9%
Of neurologic patients, percent who reached the occupational cap during the review period	0.5%	0% - 1.3%
Of hip fracture patients, percent who reached the occupational cap during the review period	1.5%	0% - 4.2%
Of back patients, percent who reached the occupational cap during the review period	5.8%	0% - 20.0%
Of cardiovascular patients, percent who reached the occupational cap during the review period	1.3%	0% - 3.4%
Of musculoskeletal patients, percent who reached the occupational cap during the review period	0%	NA*
Of orthopedic patients, percent who reached the occupational cap during the review period	0.8%	0% - 2.1%
Of "other" patients, percent who reached the occupational cap during the review period	0.8%	0% - 2.4%

* Could not be calculated because none of the sampled patients with this primary diagnosis reached the cap.

APPENDIX C

Statistic	Point Estimate	95 Percent Confidence Interval
Of stroke patients, percent who reached the combined cap during the review period	3.4%	0% - 8.1%
Of neurologic patients, percent who reached the combined cap during the review period	1.6%	0% - 3.6%
Of hip fracture patients, percent who reached the combined cap during the review period	6.5%	2.1% - 10.9%
Of back patients, percent who reached the combined cap during the review period	0%	NA*
Of cardiovascular patients, percent who reached the combined cap during the review period	0%	NA*
Of musculoskeletal patients, percent who reached the combined cap during the review period	1.5%	0% - 4.3%
Of orthopedic patients, percent who reached the combined cap during the review period	0.8%	0% - 2.1%
Of "other" patients, percent who reached the combined cap during the review period	5.4%	0% - 12.0%

* Could not be calculated because none of the sampled patients with this primary diagnosis reached the cap.

Agency Comments



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care Financing Administration

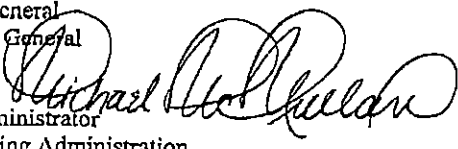
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Deputy Administrator
Washington, D.C. 20201

2001 JUN 20 AM 11:58

DATE: JUN 13 2001 OFFICE OF INSPECTOR GENERAL

TO: Michael F. Mangano
Acting Inspector General
Office of Inspector General

FROM: Michael McMullan 
Acting Deputy Administrator
Health Care Financing Administration

SUBJECT: Office of Inspector General (OIG) Draft Reports: *Physical, Occupational, and Speech Therapy for Medicare Nursing Home Patients: Medical Necessity and Cost Under the \$1,500 Therapy Caps*, (OEI-09-99-00560); *Medical Record and Documentation and Billing*, (OEI-09-99-00562); and *Medical Necessity and Quality of Care Based on Treatment Diagnosis*, (OEI-09-99-00563)

Thank you for the opportunity to review the above-referenced draft reports. The Health Care Financing Administration's (HCFA) main focus is to ensure health care security for all of our beneficiaries. These three companion reports have provided us with information that will allow us to protect and improve beneficiary health and satisfaction with outpatient rehabilitation services.

Following a thorough review, OIG found that less than 2 percent of Medicare beneficiaries reached either of the \$1,500 therapy caps and that 86 percent of all Medicare Part B therapy was medically necessary. The OIG also found that the providers' medical documentation and billing techniques were not up to HCFA's standards and that efforts should be made to address these issues. We concur with OIG findings and will continue to work with the fiscal intermediaries (FIs), nursing home staff, and national therapy associations to make sure our beneficiaries receive the quality care they deserve.

The OIG has issued the following recommendations:

OIG Recommendation

HCFA should encourage FIs to continue educating nursing homes on Medicare Part B billing.

HCFA Response

We concur. The HCFA will continue to encourage FIs to educate nursing homes on Part B billing. The Therapy Review Program (TRP) mentioned in this report is tasked with providing educational materials and activities. We believe that providers of services

Page 2 – Michael F. Mangano

as well as administrators of nursing homes should be provided with information that facilitates appropriate claims billing.

OIG Recommendation

HCFA should instruct FIs to conduct focused medical review in order to identify and collect Medicare Part B therapy overpayments.

HCFA Response

We concur. The HCFA highly recommends focused medical review. The FIs were instructed to conduct focused medical review whenever their analysis suggests egregious overutilization of services. Furthermore, progressive correction action ensures both education and monitoring. The TRP will provide medical review of a statistically significant number of skilled nursing facility (SNF) Part B service claims for the years 1998, 1999, and 2000.

OIG Recommendation

HCFA should consider options when developing a new reimbursement system for Medicare Part B therapy such as: (1) reimbursement based on an episode of therapy; and (2) prior authorization for therapy that exceeds a separate monetary cap for each type of therapy.

HCFA Response

We concur. As required by statute, HCFA will be considering alternative payment systems for therapy services. Information collected by TRP from data analyses, medical review, and a variety of information-gathering activities will be analyzed by HCFA in the reports that Congress requested in the Balanced Budget Reconciliation Act of 1999.

OIG Recommendation

HCFA should continue working collaboratively with the national therapy associations to ensure that they provide accurate and comprehensive information to their members on proper documentation of therapy in medical records.

HCFA Response

We concur. The HCFA plans to continue working collaboratively with the national therapy associations to encourage provision of accurate and comprehensive information to their members on documentation of therapy services. The TRP has developed working relationships with the relevant associations resulting in a valuable exchange of information.

OIG Recommendation

HCFA should instruct FIs to provide regular workshops to nursing homes and their staff on Medicare requirements for record documentation and retention with an emphasis on the proper documentation of physician's orders in patient records.

Page 3 – Michael F. Mangano

HCEA Response

We concur. Nursing home staff will be encouraged to learn and use appropriate documentation and retention, including documentation of physician's orders.

Attachment

