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Skilled Nursing Facility Therapy Services Under Part B of Medicare (OEI-09-99-00490)

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Based on our recent discussions and requests from your staff, we have completed some data runs and analysis relevant to the Part B therapy caps that were mandated by the Balanced Budget Act of 1997.

We downloaded all of the Calendar Year 1998 Medicare skilled nursing facility (SNF) claims data for Part B bills for therapy rendered to nursing home residents. Although this is the year prior to the implementation of the therapy caps, we thought it would be valuable to see how the caps would have affected SNF patients had they been in effect during 1998.

During 1998, Medicare was billed \$1.92 billion in Part B therapy charges by SNFs who provided therapy with their own staff or under arrangement with therapy providers for 629,155 SNF patients -- \$870 million for physical therapy; \$658 million for occupational therapy; and \$393 million for speech therapy.

In order to determine the effect of the various caps, we assumed an average cost-to-charge reimbursement ratio of .6. We based this assumption on cost-to-charge ratios that we had collected for 22 of the SNFs that were in the national sample for our recently-completed therapy inspection.

## **RESULTS**

**Current Therapy Caps.** Based on our average cost-to-charge ratio assumption, we have prepared attached tables and charts (Chart 1 through Chart 4) which show that between 70.9 and 77.6 percent of all beneficiaries in each category would not have exceeded any of the therapy caps and between 22.4 and 29.1 percent would have exceeded the caps had they been in place in 1998. These percentages do not include any adjustment for improper billings.

**Other Possible Caps.** We have heard from several sources of interest in combining the current caps for physical/speech therapy and occupational therapy into a single cap. In order to see how a single cap would affect SNF patients, we prepared the attached charts and tables

(Chart 5 and Chart 6) which show that approximately 35 percent of SNF Part B patients would exceed the current \$1500 cap if it applied to all therapy services. If the combined cap were \$3,000 then 17.1 percent would exceed it. The attached tables and graphs make it possible to quickly compute how many SNF patients would exceed caps established at other levels.

**SNF Types.** We analyzed the data to determine if the type of SNF affected the percentage of patients who would exceed the cap. We found that patients in proprietary, free-standing, or chain-owned SNFs would be more likely to exceed the cap than patients in nonprofit, independently-owned, or hospital-based SNFs (Chart 7).

**By Diagnosis.** Concern has been expressed that SNF patients who are hospitalized for strokes or hip fractures may require significantly more therapy than others. Therefore, we examined patients with these two diagnoses and found that approximately one-third of them would have exceeded the current cap. This is several percentage points more than the universe of patients when all diagnoses are considered together (Chart 8).

## **ASSUMPTIONS AND LIMITATIONS**

As we have noted, our results are based on modeling of 1998 data, the year prior to implementation of the caps. In order to perform the modeling we had to make several other assumptions. A key assumption, mentioned above, was our need to calculate an average cost-to-charge ratio based on information that was readily available. We are in the process of ascertaining specific cost-to-charge ratios for each SNF that billed for Part B therapy in 1998, and will further refine our data based on the specific per facility ratios.

Furthermore, our analysis is based on charges per facility and does not reflect the possibility that a patient may have, in rare instances, resided in different SNFs during 1998. Our results roughly approximate a cost per individual, per episode or per year.

Another significant assumption is that all the services that were charged were medically necessary. In a recently completed inspection, we found that 13 percent of physical and occupational therapy in SNFs was improperly billed because the services were not medically necessary and/or therapy was provided by staff who did not have the appropriate skill for the patient's medical condition.

Our data does not include any therapy that was provided by therapy providers under agreement with a SNF and billed directly to a fiscal intermediary. We do not know the extent of these claims, but assume that they are a relatively rare occurrence since we did not find any in our recent field work. Also, our data does not include any services to SNF patients by therapists in independent practice who would bill the Medicare carrier and would have been subjected to a \$900 limit which was in effect for their services in 1998.

### **ADDITIONAL WORK**

We believe that there is a lot more information that can be gleaned from a careful analysis of the 1998 claims data, and we are continuing our analysis. For example, we are planning to analyze the data to determine, among other things, how various diagnoses affect the cap, how the cap affects individual SNFs, the effect of geographic location, demographic characteristics of patients who exceed the cap, and how the first quarter of 1999 compares with the first quarter of 1998.

We are also beginning a study to determine the impact of the cap on access to medically necessary physical, occupational, and speech therapy provided to Medicare Part B patients in SNFs. This study will focus on SNF patients who received therapy from January 1, 1999 through September 30, 1999. We anticipate the study will be completed during the Spring of 2000.

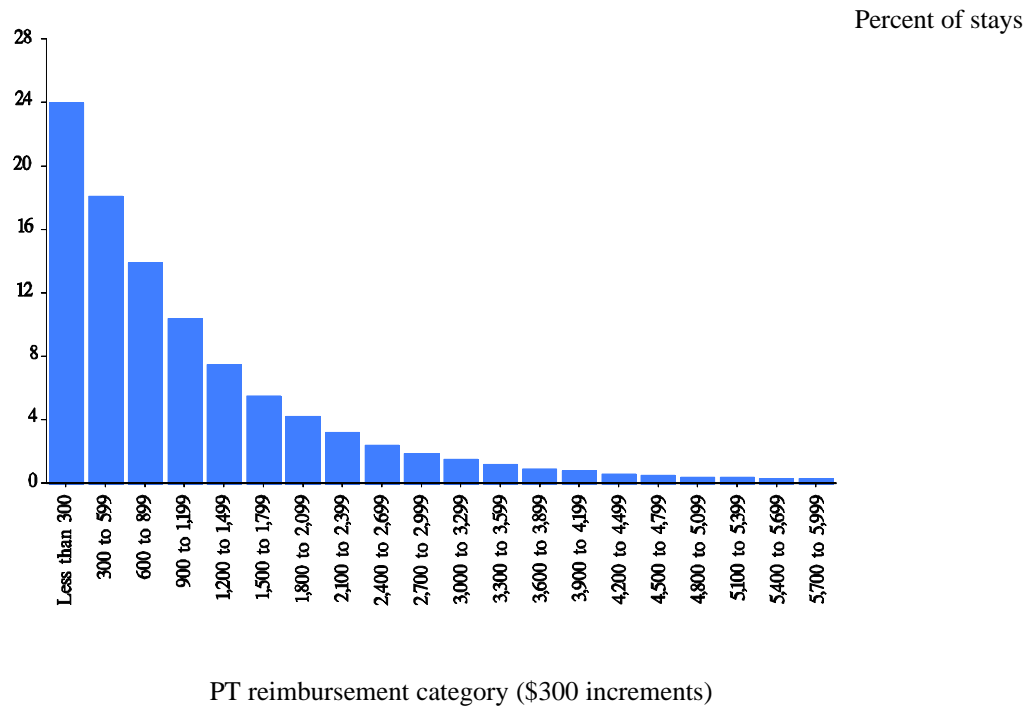
As we complete any additional analysis, we will discuss our assumptions and data analysis options with you and other Departmental staff as well as other interested parties. We hope we can provide you with the most meaningful and thorough independent data analysis possible.

We hope that you find the attached data helpful. Please call me at (202) 619-0480, if you have any questions or comments.

Attachments

**CHART 1**  
**ESTIMATED\* PHYSICAL THERAPY REIMBURSEMENT PER SNF STAY**

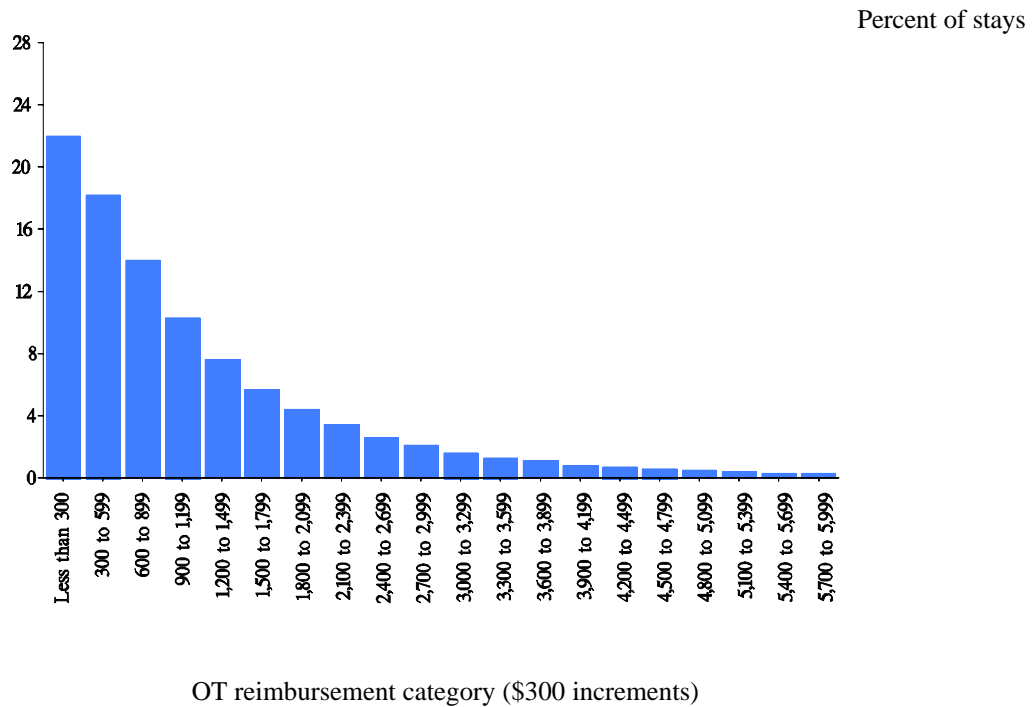
Physical therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	309,509	73.9%
\$1,500 to \$1,799	23,028	5.5%
\$1,800 to \$2,099	17,653	4.2%
\$2,100 to \$2,399	13,350	3.2%
\$2,400 to \$2,699	10,156	2.4%
\$2,700 to \$2,999	7,859	1.9%
\$3,000 to \$3,299	6,292	1.5%
\$3,300 to \$3,599	4,899	1.2%
\$3,600 to \$3,899	3,937	0.9%
\$3,900 to \$4,199	3,199	0.8%
\$4,200 to \$4,499	2,670	0.6%
\$4,500 to \$4,799	2,122	0.5%
\$4,800 to \$5,099	1,843	0.4%
\$5,100 to \$5,399	1,574	0.4%
\$5,400 to \$5,699	1,299	0.3%
\$5,700 to \$5,999	1,084	0.3%
\$6,000 or more	8,336	2.0%
<b>TOTAL</b>	<b>418,810</b>	<b>100.0%</b>



\*Based on a cost-to-charge ratio of .6

**CHART 2**  
**ESTIMATED\* OCCUPATIONAL THERAPY REIMBURSEMENT PER SNF STAY**

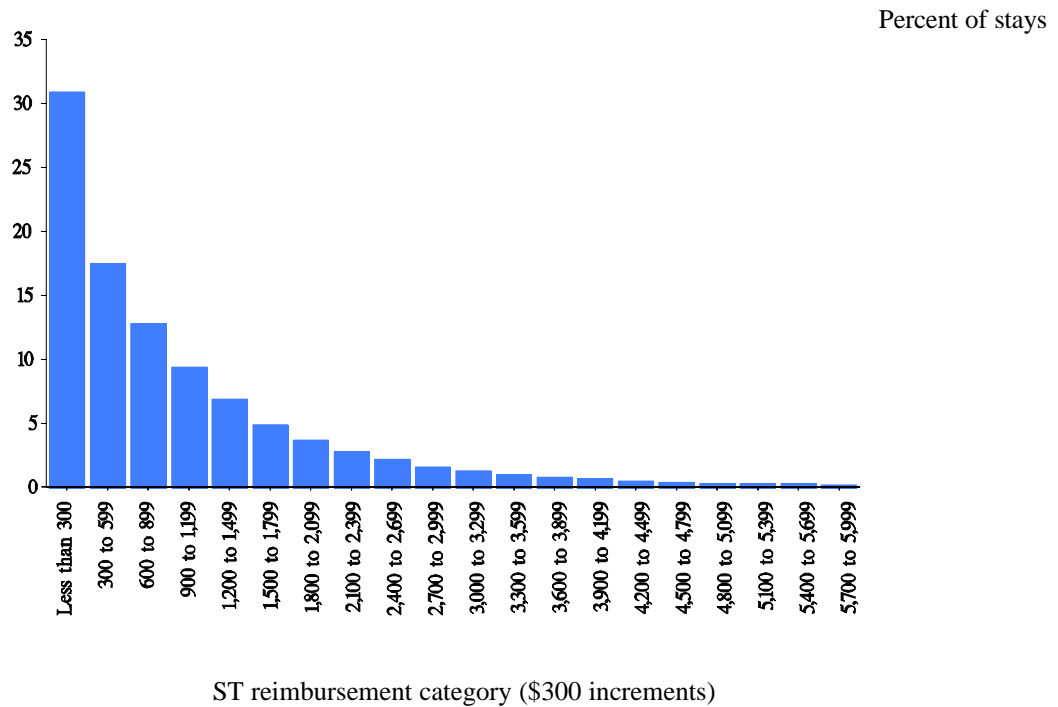
Occupational therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	224,198	72.3%
\$1,500 to \$1,799	17,571	5.7%
\$1,800 to \$2,099	13,677	4.4%
\$2,100 to \$2,399	10,526	3.4%
\$2,400 to \$2,699	8,218	2.6%
\$2,700 to \$2,999	6,549	2.1%
\$3,000 to \$3,299	5,099	1.6%
\$3,300 to \$3,599	4,054	1.3%
\$3,600 to \$3,899	3,393	1.1%
\$3,900 to \$4,199	2,632	0.8%
\$4,200 to \$4,499	2,201	0.7%
\$4,500 to \$4,799	1,823	0.6%
\$4,800 to \$5,099	1,490	0.5%
\$5,100 to \$5,399	1,298	0.4%
\$5,400 to \$5,699	1,085	0.3%
\$5,700 to \$5,999	886	0.3%
\$6,000 or more	5,566	1.8%
<b>TOTAL</b>	<b>310,266</b>	<b>100.0%</b>



\*Based on a cost-to-charge ratio of .6

**CHART 3  
ESTIMATED\* SPEECH THERAPY REIMBURSEMENT PER SNF STAY**

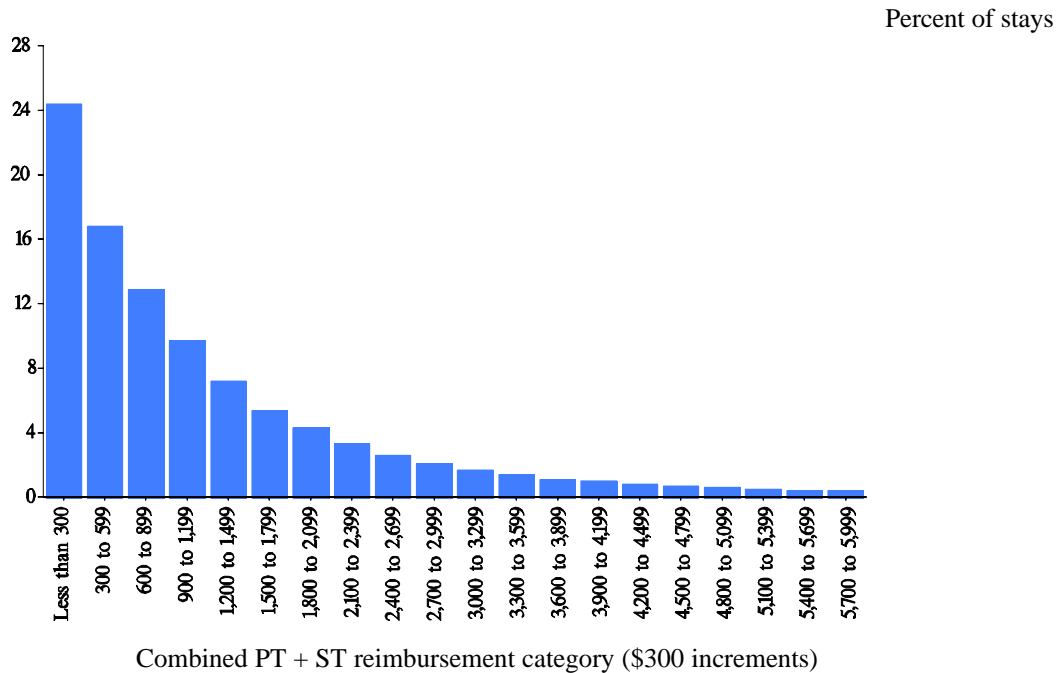
Speech therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	170,497	77.6%
\$1,500 to \$1,799	10,771	4.9%
\$1,800 to \$2,099	8,178	3.7%
\$2,100 to \$2,399	6,155	2.8%
\$2,400 to \$2,699	4,848	2.2%
\$2,700 to \$2,999	3,583	1.6%
\$3,000 to \$3,299	2,819	1.3%
\$3,300 to \$3,599	2,230	1.0%
\$3,600 to \$3,899	1,805	0.8%
\$3,900 to \$4,199	1,463	0.7%
\$4,200 to \$4,499	1,141	0.5%
\$4,500 to \$4,799	982	0.4%
\$4,800 to \$5,099	766	0.3%
\$5,100 to \$5,399	609	0.3%
\$5,400 to \$5,699	558	0.3%
\$5,700 to \$5,999	476	0.2%
\$6,000 or more	2,933	1.3%
<b>TOTAL</b>	<b>219,814</b>	<b>100.0%</b>



\*Based on a cost-to-charge ratio of .6

**CHART 4**  
**ESTIMATED\* COMBINED PHYSICAL AND SPEECH THERAPY**  
**REIMBURSEMENT PER SNF STAY**

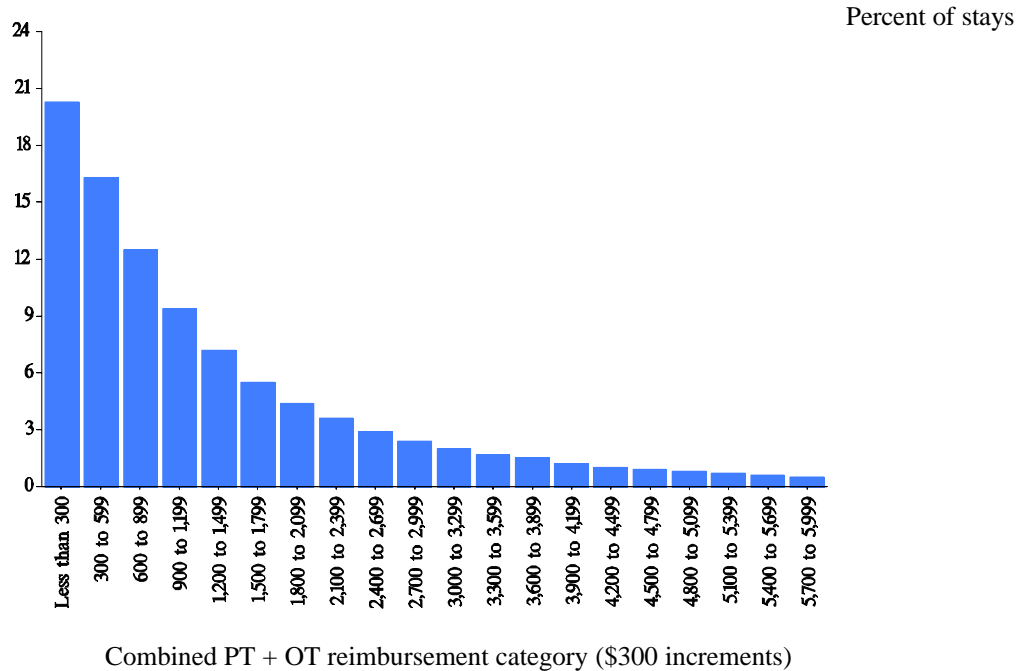
Physical + speech therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	386,885	70.9%
\$1,500 to \$1,799	29,325	5.4%
\$1,800 to \$2,099	23,258	4.3%
\$2,100 to \$2,399	18,023	3.3%
\$2,400 to \$2,699	14,131	2.6%
\$2,700 to \$2,999	11,354	2.1%
\$3,000 to \$3,299	9,298	1.7%
\$3,300 to \$3,599	7,474	1.4%
\$3,600 to \$3,899	6,203	1.1%
\$3,900 to \$4,199	5,197	1.0%
\$4,200 to \$4,499	4,445	0.8%
\$4,500 to \$4,799	3,674	0.7%
\$4,800 to \$5,099	3,174	0.6%
\$5,100 to \$5,399	2,686	0.5%
\$5,400 to \$5,699	2,363	0.4%
\$5,700 to \$5,999	1,999	0.4%
\$6,000 or more	15,908	2.9%
<b>TOTAL</b>	<b>545,397</b>	<b>100.0%</b>



\*Based on a cost-to-charge ratio of .6

**CHART 5**  
**ESTIMATED\* COMBINED PHYSICAL AND OCCUPATIONAL THERAPY**  
**REIMBURSEMENT PER SNF STAY**

Physical + occupational therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	359,122	65.7%
\$1,500 to \$1,799	29,874	5.5%
\$1,800 to \$2,099	24,111	4.4%
\$2,100 to \$2,399	19,464	3.6%
\$2,400 to \$2,699	15,970	2.9%
\$2,700 to \$2,999	13,057	2.4%
\$3,000 to \$3,299	11,082	2.0%
\$3,300 to \$3,599	9,190	1.7%
\$3,600 to \$3,899	7,977	1.5%
\$3,900 to \$4,199	6,642	1.2%
\$4,200 to \$4,499	5,695	1.0%
\$4,500 to \$4,799	4,937	0.9%
\$4,800 to \$5,099	4,366	0.8%
\$5,100 to \$5,399	3,745	0.7%
\$5,400 to \$5,699	3,335	0.6%
\$5,700 to \$5,999	2,945	0.5%
\$6,000 or more	25,323	4.6%
<b>TOTAL</b>	<b>546,835</b>	<b>100.0%</b>

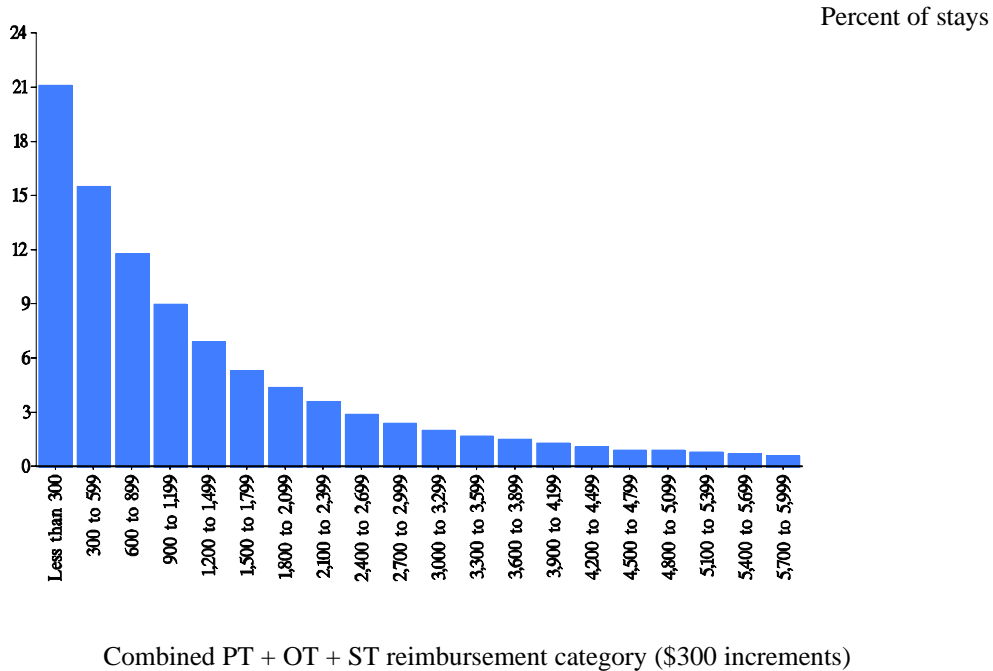


\*Based on a cost-to-charge ratio of .6



**CHART 6**  
**ESTIMATED\* COMBINED PHYSICAL, OCCUPATIONAL, AND SPEECH**  
**THERAPY REIMBURSEMENT PER SNF STAY**

Physical + occupational + speech therapy reimbursement	Number of stays	Percent of stays
Less than \$1,500	412,756	64.3%
\$1,500 to \$1,799	34,200	5.3%
\$1,800 to \$2,099	27,962	4.4%
\$2,100 to \$2,399	22,786	3.6%
\$2,400 to \$2,699	18,807	2.9%
\$2,700 to \$2,999	15,468	2.4%
\$3,000 to \$3,299	13,134	2.0%
\$3,300 to \$3,599	11,098	1.7%
\$3,600 to \$3,899	9,662	1.5%
\$3,900 to \$4,199	8,157	1.3%
\$4,200 to \$4,499	7,212	1.1%
\$4,500 to \$4,799	6,067	0.9%
\$4,800 to \$5,099	5,463	0.9%
\$5,100 to \$5,399	4,829	0.8%
\$5,400 to \$5,699	4,279	0.7%
\$5,700 to \$5,999	3,849	0.6%
\$6,000 or more	36,128	5.6%
<b>TOTAL</b>	<b>641,857</b>	<b>100.0%</b>



\*Based on a cost-to-charge ratio of .6

**CHART 7  
EFFECT OF THERAPY CAP BY FACILITY CATEGORIES**

Type of therapy	For each category, percent of stays in which estimated part B therapy reimbursement reached \$1,500					
	SNF status		SNF type of ownership		SNF affiliation	
	For-profit	Not-for-profit	Part of multi-facility chain	Independently owned	Free-standing	Hospital-based
Physical	28.9%	19.5%	29.1%	21.4%	26.3%	15.6%
Occupational	30.5%	20.8%	30.4%	23.4%	28.1%	10.4%
Speech	24.5%	16.8%	24.8%	18.5%	22.7%	9.2%
Physical + speech	32.0%	22.0%	32.3%	24.0%	29.4%	16.0%

**CHART 8  
EFFECT OF THERAPY CAP FOR STROKE AND HIP FRACTURE DIAGNOSES <sup>1</sup>**

Type of therapy	For beneficiaries with selected diagnosis, percent of stays in which estimated part B therapy reimbursement reached \$1,500		
	Stroke	Hip fracture	All diagnoses
Physical	32.4%	32.3%	26.1%
Occupational	32.8%	29.8%	27.7%
Speech	29.5%	21.8%	22.4%
Physical + speech	38.2%	34.6%	29.1%

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<sup>1</sup>For the “stroke” category, we included all beneficiaries whose SNF claim included an ICD-9 diagnosis code beginning with 430, 431, 432, 433, 434, or 438. For “hip fracture,” we used ICD-9 diagnoses beginning with 820.