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**FROM:** Stuart Wright /S/  
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**SUBJECT:** Memorandum Report: *Medicare Part B Services During Non-Part A Nursing Home Stays: Enteral Nutrition Therapy*, OEI-06-07-00090

This memorandum report presents the results of a medical record review to determine the extent to which Medicare Part B allowed inappropriate payments for enteral nutrition therapy (ENT) claims during non-Part A<sup>1</sup> nursing home<sup>2</sup> stays in 2006. We used resident assessment data from the Minimum Data Set (MDS) to identify all nursing home stays nationwide during 2006 and contracted with physicians specializing in gastroenterology and professional coders to conduct medical record reviews for a sample of Part B ENT claims.

We found that 21 percent of these ENT service claims were inappropriate (5 percent) or inadequately documented (16 percent). These errors resulted in an estimated \$39 million in inappropriate Part B payments among the \$284 million allowed for all ENT claims during non-Part A nursing home stays in 2006. Claims for pumps and pump supply kits represented 70 percent of the inadequately documented sampled services.

We also found that 13 percent of the allowed ENT claims associated with pumps were questionable. Although these claims met Medicare contractor payment and coverage guidelines,<sup>3</sup> the residents' medical records did not document a medical condition (e.g., diabetes, risk of aspiration, or fluctuating glucose levels) that justified the need for the more expensive pump delivery method over the gravity method, which could provide for a slow rate. Currently, Medicare contractor payment and coverage guidelines do not require the documentation of a

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<sup>1</sup> Nursing home stays not paid by Medicare Part A (Part A) constitute non-Part A stays. Part A covers posthospital skilled nursing facility (SNF) care to eligible beneficiaries for up to 100 days in SNFs during which Part A will pay for ENT services as part of the nursing home's daily rate. After the 100 days or if the beneficiary does not qualify for a Part A stay, Medicare Part B (Part B) may provide coverage for ENT services. Non-Part A stays occur in Medicare-certified SNFs, Medicaid-certified nursing facilities (NF), and dually certified SNF/NFs.

<sup>2</sup> For purposes of this evaluation, the term "nursing home" is generic for any nursing home regardless of primary payer (e.g., Medicare, Medicaid, or private resources).

<sup>3</sup> Medicare contractor payment and coverage guidelines allow payment for pump delivery methods based on the need for a slow delivery rate of less than 100 millimeters per hour.

medical condition specifically justifying pump use over the gravity method when a slow rate of administration is indicated.

## **BACKGROUND**

The ENT services involve the provision of liquid nutrients directly to the digestive tract of a patient by threading a feeding tube through the nose or through an incision in the small intestine or stomach. Enteral nutrients, supplies, and equipment are assigned procedure codes from the Healthcare Common Procedure Coding System (HCPCS).<sup>4</sup> Of the \$284 million that Medicare Part B allowed for ENT services during non-Part A stays in 2006 (more than 1.4 million claims), nearly half of the allowed amount was for nutrients (\$142 million) and the remaining half was for enteral supplies and equipment (\$142 million).

*Enteral nutrients.* A wide range of enteral nutrients exists to meet various health care needs, including special formulas for patients with pulmonary or metabolic diseases. Two HCPCS codes, B4150 and B4154, accounted for nearly 83 percent of the allowed charges (\$118 million of \$142 million). HCPCS code B4150 represents the most frequently used nutrient and accounted for 37 percent of the allowed charges; HCPCS code B4154 covers a more expensive class of nutrients for patients with special metabolic needs (e.g., diabetes) and accounted for nearly 46 percent of the allowed charges. Enteral nutrients are billed and reimbursed by “units,” defined by Medicare as 100 calories.<sup>5</sup> For example, if a patient is prescribed 2,000 calories of enteral nutrients per day, Medicare reimbursement is based on 20 units of nutrients per day (2,000 ÷ 100).

*Enteral supplies and equipment.* Enteral supplies and equipment are used to administer the required nutrients. Excluding any additional supplies, patients can receive enteral nutrients using three primary feeding supply kits: (1) a syringe (the least expensive kit at \$6.12 per day), (2) gravity (\$8.00 per day), or (3) a pump (the most expensive kit and most frequently used method at \$11.66 per day). Taken together, the cost for 2,000 calories of the most frequently utilized standard enteral nutrient (B4150 at \$0.67 per unit) and delivery method per day would be \$19.52 for the syringe delivery method, \$21.40 for the gravity method, and \$25.06 for the pump delivery method.

Medicare Part B covers ENT under Medicare’s prosthetic device benefit during non-Part A stays in SNFs, NFs, and dually certified SNF/NFs. The prosthetic device benefit includes therapy required because of an absent or malfunctioning body part that normally permits food to reach the digestive tract. In these instances, Medicare Part B considers the service “reasonable and necessary” and covers claims for the enteral nutrients,<sup>6</sup> along with the supplies, and equipment necessary for

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<sup>4</sup> Centers for Medicare & Medicaid Services (CMS), *Medicare Claims Processing Manual*, Pub. No. 100-04, ch. 7, § 20. All CMS manuals referenced in this report can be accessed at <http://www.cms.gov/Manuals/IOM/list.asp?intNumPerPage=all&submit=Go>.

<sup>5</sup> CMS, *Medicare Claims Processing Manual*, ch. 20, § 100.2.2.2.

<sup>6</sup> Section 1842(s) of the Social Security Act authorized a fee schedule for many services, such as ENT associated nutrients, equipment, and supplies, that durable medical equipment (DME) Medicare Administrative Contractors (MAC) use to reimburse ENT claims.

administration (i.e., infusion pumps, intravenous (IV) poles, feeding supply kits, and tubing). Although not covered as durable medical equipment (DME), ENT equipment meets the definition of DME<sup>7</sup> and reimbursement rules relating to DME continue to apply to such items.<sup>8</sup>

CMS's payment contractors must ensure that ENT claims qualify as medically "reasonable and necessary." To partially ensure this, Medicare-enrolled suppliers had to submit, with the initial claim, a Certificate of Medical Necessity (CMN) containing a clinical attestation by the treating physician as to the medical necessity of the enteral nutrients, supplies, and equipment.<sup>9</sup> From October 1 through December 31, 2006, CMNs were replaced by a DME Information Form (DIF), which does not contain the treating physician's clinical documentation as to medical necessity.<sup>10</sup> During the transition period, MACs could accept either a CMN or a DIF. In addition to the DIF, suppliers and other providers must ensure sufficient documentation in a patient's medical records to provide medical justification for the use of equipment.<sup>11</sup>

### **Mandate for Office of Inspector General To Monitor Part B Payments**

With the repeal of the Balanced Budget Act of 1997's (BBA)<sup>12</sup> consolidated billing provisions for non-Part A stays,<sup>13</sup> section 313(d) of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA)<sup>14</sup> directed the Office of Inspector General (OIG) to conduct monitoring of Medicare Part B payments during non-Part A stays to ensure that there are no excessive services provided.<sup>15</sup> As part of this monitoring, OIG recently completed evaluations of DME use<sup>16</sup> and enteral nutrient pricing.<sup>17</sup> Two ongoing evaluations include a medical record review of mental health services claims and an overview of Part B services during non-Part A nursing home stays.

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<sup>7</sup> CMS defines DME as equipment that can withstand repeated use, serves primarily a medical purpose, is not generally useful to a person in the absence of an illness, and is appropriate for use in a resident's home. Medicare Part B does not cover DME in a nursing home that primarily provides a skilled level of care or rehabilitation (nearly all certified nursing homes meet this level of care). However, Part B, under the prosthetic device benefit, covers ENT equipment and associated supplies that would not otherwise be covered as DME. For example, in non-Part A nursing home stays, Medicare Part B paid for IV poles used for enteral feeding, but would not have paid for their use in a nursing home for other purposes.

<sup>8</sup> CMS, *Medicare Claims Processing Manual*, Pub. No. 100-04, ch. 20, § 160.1.

<sup>9</sup> CMS, *Medicare Claims Processing Manual*, Pub. No. 100-04, ch. 20, § 100.2.2.

<sup>10</sup> CMS, CMS Manual System, Transmittal 167, Change Request 4296 (Oct. 27, 2006).

<sup>11</sup> CMS, *Medicare Program Integrity Manual*, Pub. No. 100-08, ch. 5, § 5.7.

<sup>12</sup> P.L. 105-33.

<sup>13</sup> Section 4432 of the BBA established a prospective payment system for Part A stays and required nursing homes to arrange for and consolidate into a single Medicare bill the Part B services that a resident needs during his or her nursing home stay.

<sup>14</sup> P.L. 106-554.

<sup>15</sup> Section 313 of the BIPA maintained consolidated billing for Part A stays and therapy services (regardless of Part A coverage), but repealed consolidated billing requirements for non-Part A stays. Therefore, claims for beneficiaries during non-Part A stays continue to be individually submitted by suppliers and providers, except for therapy services.

<sup>16</sup> OIG, *Part B Services During Non-Part A Nursing Home Stays: Durable Medical Equipment* (OEI-06-07-00100), July 2009.

<sup>17</sup> OIG, *Medicare Part B Services During Non-Part A Nursing Home Stays: Enteral Nutrient Pricing* (OEI-06-07-00590), January 2010.

## **Related Work**

OIG has issued a number of reports on ENT services provided to Medicare beneficiaries. These prior evaluations reported:<sup>18</sup>

- excessive Medicare payments for enteral nutrients when compared to the actual cost of their purchase, and the need for payment restructuring, particularly as related to ENT supplies and equipment;
- that enteral nutrients should be redefined as “food” for Medicare payment purposes and thus, should not be billed to Part B but included in a nursing home’s daily rate; and
- that 20 percent of beneficiaries in 1995 either did not meet coverage guidelines or had insufficient or conflicting documentation in their medical records that raised questions about the appropriateness of the claim.

Recommendations from these studies to address the identified concerns about excessive Medicare payments included consolidated billing, competitive bidding for enteral nutrition products, and application of CMS’s authority to use inherent reasonableness in pricing ENT. CMS agreed that Medicare reimbursement for ENT was excessive and that there was a need for payment restructuring. However, CMS noted that any payment restructuring and related definitional changes would require changes in legislation. CMS also agreed with the recommendation relating to consolidated billing. Past OIG reviews supported CMS’s seeking changes in legislation to exclude enteral nutrients, supplies, and equipment from Part B reimbursement for residents in nursing homes primarily engaged in providing skilled care or rehabilitation. Such legislation would seek to treat the provision of ENT as room and board costs and thereby include it in the facility’s daily room rate. CMS further agreed with the need to apply its authority to establish a process for competitive bidding for enteral nutrition products and inherent reasonableness.

## **Payment Errors Identified and Reviewed by CMS**

In 2002, CMS established the Comprehensive Error Rate Testing (CERT) program to review approximately 100,000 randomly selected claims for payment accuracy. The CERT reviews result in annually published reports by CMS, and identify the degree to which sampled claims complied with Medicare coverage, coding, and billing regulations.

According to the 2006 CERT report, enteral nutrition claims had an error rate of 1.7 percent and a projected improper payment amount of \$9 million. Most of these errors (59.4 percent) were attributed to lack of documentation and 40 percent were coding errors. Less than 1 percent of the error rate was attributed to medically unnecessary services.<sup>19</sup> However, these CERT results are not

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<sup>18</sup> OIG, *Coverage of Enteral Nutritional Therapy: Medicare and Other Payers* (OEI-03-94-00020), May 1995; *Enteral Nutrient Payments in Nursing Homes* (OEI-06-92-00861), March 1996; *Payments for Enteral Nutrition: Medicare and Other Payers* (OEI-03-94-00021), May 1996; *Medicare Payments for Enteral Nutrition Therapy Equipment and Supplies in Nursing Homes* (OEI-06-92-00866), May 1997; *Enteral Nutrition Therapy: Medical Necessity* (OEI-03-94-00022), June 1997; *Medicare Payments for Enteral Nutrition* (OEI-03-02-00700), March 2004; and *Medicare Part B Services During Non-Part A Nursing Home Stays: Enteral Nutrient Pricing* (OEI-06-07-00590), January 2010.

<sup>19</sup> CMS, *Long Report – Improper Medicare Fee-For-Service Payments Report*, November 2006.

comparable with our study's results because of the methodological differences between the two reviews. For example, the CERT focuses on a random sample of all claims submitted to Medicare's fee-for-service program, whereas this review focused solely on a random sample of Part B ENT claims submitted during non-Part A nursing home stays.

## **METHODOLOGY**

### **Scope**

For this study, we identified all Part B ENT claims associated with beneficiaries during non-Part A nursing home stays in 2006. We conducted a medical necessity, documentation, and coding review of a stratified random sample of ENT claims, which included nutrients; supplies (e.g., tubing); and equipment (e.g., pumps).

### **Identification of ENT Claims During Non-Part A Nursing Home Stays**

We utilized several databases obtained from CMS to identify Part B payments allowed for ENT claims during non-Part A nursing home stays. These databases included the MDS, the Online Survey Certification and Reporting system (OSCAR), the Enrollment Database (EDB), and the National Claims History (NCH).

*Minimum Data Set.* The MDS is a core set of screening, clinical, and functional status elements, including common definitions and coding categories, which forms the foundation of the comprehensive assessment for all residents of long-term care facilities certified to participate in Medicare or Medicaid.<sup>20</sup> It includes information about each resident's health, physical functioning, mental status, and general well-being, as well as nursing home admission and discharge dates. Each nursing home reports these individual assessments electronically to the State upon admission and updates them at least quarterly.<sup>21</sup> The States subsequently transmit the MDS data to CMS. We used the MDS (version 2.0) to identify all assessed nursing home residents in 2006 and their Social Security numbers (SSN), related nursing homes, and nursing home stay dates. To determine resident stay dates between January 1 and December 31, 2006, we extracted all nursing home admission and discharge dates for each resident. We used assessment dates as proxies for missing admission or discharge dates according to the following assumptions:

- *Missing Admission Date.* If the resident was in the nursing home on January 1, 2006 (determined from subsequent assessments that the nursing homes conducted), we used the date of the first assessment conducted in 2005 as the admission date.
- *Missing Discharge Date.* We defined the date of the last assessment (received through March 2007) as the discharge date.

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<sup>20</sup> CMS, *Resident Assessment Instrument Version 2.0 Manual*, December 2002, ch. 1, p. 4.

<sup>21</sup> More assessments are required for stays paid under the Part A SNF benefit.

*Online Survey Certification and Reporting system.* The OSCAR database contains nursing home facility demographic information as well as survey results from nursing home certification and complaint surveys. To obtain information about the nursing home (e.g., facility name, address, number of beds, and SNF, NF or dual SNF/NF certification), we linked the MDS facility identification numbers with the facility numbers maintained in OSCAR.

*Enrollment Database.* The EDB includes beneficiary-level data (e.g., name, SSN, and Medicare Health Insurance Claim Number (HICN)). Using this database, we matched SSNs contained in the MDS file to SSNs in the EDB to identify Medicare beneficiaries and their associated HICNs. We excluded beneficiaries having no matching SSN from further analysis.

*National Claims History.* The NCH is a data reporting system that includes both Part A and Part B claims. We used the NCH to identify ENT claims allowed by Part B during non-Part A nursing home stays. To identify ENT claims associated with Medicare beneficiaries with nursing home stays (identified earlier), we first matched their HICNs to claims with ENT services HCPCS codes. This match identified ENT claims allowed for Medicare beneficiaries during all nursing home stays. To identify claims only during non-Part A stays, we then removed all claims for Part A paid stays<sup>22</sup> and inpatient hospital stays by matching the stay dates from the MDS to the SNF and inpatient hospital claims in the NCH. The resulting dataset comprised all ENT claims for which billing was allowed under Part B during non-Part A nursing home stays in 2006. See Appendix A for a list of ENT HCPCS codes used in this report.

### **Sample Design**

From the dataset of ENT claims (enteral nutrients, supplies, and equipment) for beneficiaries in non-Part A nursing home stays during 2006, we selected two samples. First, we randomly selected 30 ENT claims for a sample used to pretest the medical review process (i.e., protocols). Following the pretest, we identified a larger sample for the evaluation's medical review. For the medical review sample, we divided the population into two strata based on the allowed amount for each service. The first stratum contained ENT claims with allowed charges of \$340 or less, and the second stratum contained ENT claims with allowed charges of more than \$340. We randomly selected 175 claims from each stratum. The resulting sample of 350 claims represented 342 providers, 206 suppliers, 347 beneficiaries, and 337 nursing homes. For these 350 claims, Medicare allowed \$97,072.

Prior to conducting the medical reviews, we identified three claims for which reviews could not be completed. One claim was removed because of an ongoing investigation. The other two claims were removed because the facility and provider records showed no record of ENT services and no Medicare billings. The final sample of 347 claims was comprised of 135 nutrient services (39 percent), 148 supply services (43 percent), and 64 equipment services (18 percent). See Appendix A for the final distribution of the sample by strata.

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<sup>22</sup> OIG routinely conducts audits related to the issue of inappropriate Part B payments occurring during Part A stays. As such, we excluded all Part A stays from our review.

## Medical Review

To conduct a medical review of the sample of Part B ENT claims, we obtained supplier contact information from DME MACs. We also obtained medical records and documentation extending from 6 months prior to the date of the sampled claim(s) to 1 month following the date from the nursing homes, suppliers, and providers associated with the claims as well as any DIF or CMN relating to ENT services between 2005 and 2007. When a provider did not respond to our initial request for documentation, we sent up to two followup request letters and conducted followup telephone calls for more information. See Appendix B for a list of medical documents requested from nursing homes, suppliers, and providers.

*Identifying inappropriately allowed, inadequately documented, and medically unnecessary ENT claims.* We contracted with gastroenterologists and professional coders to review medical records for beneficiaries associated with the sampled claims. The gastroenterologists determined adequacy of documentation (e.g., whether services were documented or had sufficient documentation), medical necessity of services, whether the services were rendered, the appropriateness of the methods of administration, the appropriateness of special formulas, and the adequacy of documented caloric intake. The coders determined the accuracy of billed codes, including whether the HCPCS code on the claim for the service was upcoded, or downcoded.<sup>23</sup>

We calculated Medicare-allowed claim amounts for inappropriate, medically unnecessary, and inadequately documented services. Some of the sampled claims were inappropriate for more than one of these reasons. However, in calculating the total Medicare-allowed claims paid in error, we adjusted for overlapping errors by counting claims with multiple errors only once.

## Standards

This study was conducted in accordance with the *Quality Standards for Inspections* approved by the Council of Inspectors General on Integrity and Efficiency.

## RESULTS

### **Twenty-one Percent of ENT Claims Allowed by Medicare Part B During Non-Part A Nursing Home Stays in 2006 Were Inappropriate or Inadequately Documented**

Based on the medical review, we estimate that the Medicare program allowed claims totaling \$39 million for ENT services during non-Part A nursing homes stays in 2006 that were inappropriate or inadequately documented services. (See Table 1.)

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<sup>23</sup> Upcoding is a practice in which a provider bills for a service using a higher reimbursement procedure code than warranted by the procedure actually performed, resulting in a higher payment by Medicare. Downcoding is a practice in which the billing procedure code is changed to a lower reimbursement procedure code than was actually performed, resulting in a lower payment by Medicare.

**Table 1. Medicare Part B-Allowed Claims for Inappropriate and Inadequately Documented ENT Services During Non-Part A Nursing Home Stays in 2006**

Type of Error	Sample Claims		Projected	
	Number of Claims	Inappropriately Allowed Amount	Percentage of Claims	Inappropriately Allowed Amount
Inappropriate ENT Services	13	\$2,502	4.9	-\$1,542,228
Inadequately Documented ENT Services	57	\$14,179	16.3	\$40,843,794
<b>Total Errors</b>	<b>69*</b>		<b>21.2</b>	<b>\$39,067,966*</b>

\*One claim was both inappropriate and inadequately documented, resulting in the projection total for 69 instead of 70 services. As a result, the overlapping amount of \$233,599 is not included in the results total.  
 Source: OIG medical review of Part B ENT services provided to beneficiaries during non-Part A nursing home stays in 2006.

*Five percent of ENT services were inappropriate.* Thirteen of the sampled claims represented services that the medical reviewers determined inappropriate. Of these, eight claims reflected inappropriate levels of care for the resident and warranted higher payments. These included the need for an upgraded method of administration (e.g., using the pump method instead of the syringe or gravity methods) and a claim that was downcoded inappropriately, resulting in a lower payment than should have been billed. Conversely, 5 of the 13 sampled claims were nonrendered or upcoded inappropriately, thus warranting lower or no payments. See Appendix C for related confidence intervals.

When considering the cost difference between what Medicare allowed for these claims (\$10.8 million) and what we estimate Medicare should have allowed had the appropriate service been provided and billed, Medicare underpaid \$1.5 million.<sup>24</sup>

*Sixteen percent of ENT claims were inadequately documented.* We estimate that Medicare allowed \$40.8 million for inadequately documented ENT claims. For a claim to be considered inadequately documented, the medical records lacked either a CMN or DIF, or sufficient documentation to determine:

- whether ENT was medically necessary, when a CMN or DIF was not available;
- whether the billed service was rendered;
- accuracy of coding; or
- whether a more expensive delivery system or special nutrient was medically necessary.

Services for pump and pump supply kits represented 70 percent of the inadequately documented sampled claims (and an estimated 11 percent of all ENT claims). We estimate that Medicare allowed \$29.3 million for inadequately documented pump and pump supply kit claims. For 40 of

<sup>24</sup> Because the 95-percent confidence interval for the difference includes \$0.00, we cannot determine whether Medicare overpaid or underpaid for these inappropriate ENT services, although our point estimate shows a \$1.5 million underpayment.

the 160 sampled pump and pump supply kit claims (25 percent), reviewers could not verify that the pump method of administration was utilized. Most medical records provided by the nursing homes contained the number of nutrient milliliters delivered during specified time intervals but failed to indicate that a pump was used to administer the nutrients.

**Although Satisfying Medicare Contractor Payment and Coverage Guidelines, 13 Percent of All ENT Claims Were Questionable Because the Pump Delivery Method Was Utilized Where a Less Expensive Delivery Method Was Available**

If a rate of administration less than 100 milliliters of enteral formula per hour is written on the CMN or DIF, Medicare contractors consider the pump medically necessary.<sup>25</sup> Yet, both the pump delivery method and the gravity delivery method provide for a slow delivery rate of enteral nutrients. Each of the 52 questionable pump and pump supply kit claims (estimated 13 percent of all claims) met Medicare contractor payment and coverage guidelines allowing payment based on a slow delivery rate of less than 100 milliliter per hour. However, the medical reviewers found no evidence in the medical records of a medical condition (e.g., diabetes, risk of aspiration, or fluctuating glucose levels) warranting the use of the pump delivery system or a reason why the gravity method would not suffice for slow administration rates of less than 100 milliliters of enteral formula per hour.<sup>26</sup> We estimate that use of the pump delivery method represented \$42.7 million in allowed payments. See Appendix C for related confidence intervals.

**CONCLUSION**

This evaluation is consistent with prior OIG reports that have highlighted payment concerns related to ENT claims paid by Medicare Part B during nursing home stays. In response to recommendations included in those reports, CMS commented that it planned to pursue a number of actions, such as evaluating the reasonableness of payment for enteral pumps and pursuing research of broader payment restructuring through capitation, competitive bidding, and bundling of ENT services. While CMS has implemented consolidated billing for Part A stays and pursued competitive bidding, unconsolidated Part B claims during non-Part A stays continue to be vulnerable to inappropriate payments, primarily for lack of documentation. Further, the current Medicare contractor payment and coverage guidelines for the use of the pump delivery method do not require documentation for a condition that necessitates only a pump and not the gravity method. Consequently, nursing homes can continue to use the more expensive pump delivery method when the less expensive gravity delivery method is available.

This report is being issued directly in final form because it contains no recommendations. If you have comments or questions about this report, please provide them within 60 days. Please refer to report number OEI-06-07-00090 in all correspondence.

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<sup>25</sup> Providers may utilize pump delivery when enteral patients experience complications associated with syringe or gravity method of administration. Conditions often requiring the pump delivery method include unsatisfactory gravity feeding due to aspiration, diabetes, diarrhea, dumping syndrome, or fluctuating glucose levels.

<sup>26</sup> Seventeen of these services were also inadequately documented.

**APPENDIX A**

**Table A-1: Healthcare Common Procedure Coding System Enteral Nutrition Therapy Codes – Sample Distribution**

Enteral Nutrition Therapy (ENT) Healthcare Common Procedure Coding System (HCPCS) Codes	First Stratum (≤ \$340)		Second Stratum (> \$340)		Sample Total	
	Percentage of Stratum (n)	Percentage Allowed	Percentage of Stratum (n)	Percentage Allowed	Percentage of Sample (n)	Percentage Allowed
<b>Nutrients</b>						
B4150—Nutritionally complete with intact nutrients	19.5% (34)	29.0% (\$6,542)	11.6% (20)	10.6% (\$7,694)	15.6% (54)	15.0% (\$14,236)
B4152—Nutritionally complete, calorically dense, with intact nutrients	6.9% (12)	11.3% (\$2,558)	1.2% (2)	1.2% (\$878)	4.0% (14)	3.6% (\$3,436)
B41—Nutritionally complete, hydrolyzed proteins (amino acids and peptide chain)	0.0% (0)	0.0% (\$0)	1.7% (3)	3.3% (\$2,428)	0.9% (3)	2.6% (\$2,428)
B4154—Nutritionally complete, for special metabolic needs	6.9% (12)	8.3% (\$1,880)	26.0% (45)	34.1% (\$24,800)	16.4% (57)	28.0% (\$26,680)
B4155—Nutritionally incomplete/modular nutrients, includes specific nutrients	4.0% (7)	1.1% (\$244)	0.0% (0)	0.0% (\$0)	2.0% (7)	0.3% (\$244)
<b>Total Enteral Nutrients</b>	<b>37.4% (65)</b>	<b>49.7% (\$11,224)</b>	<b>40.5% (70)</b>	<b>49.3% (\$35,800)</b>	<b>38.9% (135)</b>	<b>49.4% (\$47,024)</b>
<b>Supplies</b>						
B4034—Syringe feeding supply kit, per day	5.2% (9)	5.9% (\$1,325)	0.0% (0)	0.0% (\$0)	2.6% (9)	1.4% (\$1,325)
B4035—Infusion pump feeding supply kit, per day	16.1% (28)	20.5% (\$4,627)	59.5% (103)	50.7% (\$36,838)	37.8% (131)	43.6% (\$41,465)
B4036—Gravity feeding supply kit, per day	2.3% (4)	4.3% (\$976)	0.0% (0)	0.0% (\$0)	1.2% (4)	1.0% (\$976)
B4086—Gastrostomy/jejunostomy tube	2.3% (4)	0.6% (\$142)	0.0% (0)	0.0% (\$0)	1.2% (4)	0.2% (\$142)
<b>Total Enteral Supplies</b>	<b>25.9% (45)</b>	<b>31.3% (\$7,070)</b>	<b>59.5% (103)</b>	<b>50.7% (\$36,838)</b>	<b>42.7% (148)</b>	<b>46.1% (\$43,908)</b>
<b>Equipment</b>						
B9002—Infusion pump with alarm	16.7% (29)	15.0% (\$3,385)	0.0% (0)	0.0% (\$0)	8.4% (29)	3.6% (\$3,385)
E0776—Intravenous pole (must have a payment modifier attached indicating use for enteral nutrients)	20.1% (35)	3.9% (\$883)	0.0% (0)	0.0% (\$0)	10.1% (35)	0.9% (\$883)
<b>Total Enteral Equipment</b>	<b>36.8% (64)</b>	<b>18.9% (\$4,268)</b>	<b>0.0% (0)</b>	<b>0.0% (\$0)</b>	<b>18.4% (64)</b>	<b>4.5% (\$4,268)</b>
<b>ENT SAMPLE TOTAL</b>	<b>50.1% (174)</b>	<b>23.7% (\$22,562)</b>	<b>49.9% (173)</b>	<b>76.3% (\$72,638)</b>	<b>100% (347)</b>	<b>100% (\$95,200)</b>

Note: HCPCS codes B4035 (infusion pump kit) and B9002 (infusion pump) together represent 46.2 percent of sample and 47.2 percent of the allowed amount. HCPCS code B4154 (special nutrient) represented 16.4 percent of sample and 28.0 percent of the allowed amount.  
 Source: Office of Inspector General's sample of 347 Part B ENT claims during non-Part A nursing home stays during 2006.

**APPENDIX B**

**Table B-1: Medical Record Documents Requested From Nursing Homes, Suppliers, and Providers**

<b>ALL</b> Certificate of Medical Necessity forms [CMS-853] during 2005 through 2007 pertaining to enteral nutrition therapy (ENT)
<b>ALL</b> Durable Medical Equipment Information Forms [CMS-10126] during 2006 through 2007 pertaining to ENT
<p>The following documents for period of 6 months prior to identified service to 1 month following service:</p> <ul style="list-style-type: none"> <li>Physician orders to include telephone and verbal orders</li> <li>Physician progress notes</li> <li>Gastrointestinal endoscopy procedure notes (including gastrostomy, jejunostomy)</li> <li>Gastroenterology office or ambulatory surgery notes</li> <li>History &amp; Physical notes</li> <li>Swallowing studies</li> <li>Daily medication administration record</li> <li>Intake &amp; output records</li> <li>Nurse progress notes</li> <li>Daily dietetic/ENT records</li> <li>Flow sheets documenting enteral nutrition administration</li> <li>Other progress notes</li> <li>Discharge summaries for any inpatient stays during 2006</li> <li>Any other information concerning medical necessity/administration of enteral nutrition</li> </ul>

Source: Office of Inspector General's evaluation of 347 Part B ENT claims for non-Part A nursing home stays during 2006.

## APPENDIX C

## Confidence Intervals for Selected Estimates

Table C-1: Inappropriate and Inadequately Documented Enteral Nutrition Therapy Claims During Non-Part A Nursing Home Stays in 2006\*

Statistic	N	Estimate	95-Percent Confidence Interval
<b>Total allowed amount for inappropriate services</b>	<b>13</b>	<b>\$10,820,269</b>	<b>\$4,290,981–\$17,349,557</b>
<b>Of all claims, percentage that were inappropriate</b>	13	4.9%	2.8–8.3%
Quality-of-care issues	7	2.9%	1.4–6.0%
Nonrendered service	1	0.2%	0–1.1%
Miscoded claims	5	1.8%	0.7–4.4%
Upcoded	4	1.4%	0.5–3.9%
Downcoded	1	0.4%	0.1–2.9%
<b>Amount Medicare should have allowed for inappropriate claims</b>	13	\$12,362,498	\$4,083,228–\$20,641,768
<b>Improperly allowed amount for inappropriate claims (total allowed amount minus amount that should have been allowed)</b>	<b>13</b>	<b>-\$1,542,228</b>	<b>-\$5,303,772–\$2,219,315</b>
<b>Improperly allowed amount for inadequately documented claims</b>	<b>57</b>	<b>\$40,843,794</b>	<b>\$29,304,063–\$52,383,526</b>
<b>Of all claims, percentage that were inadequately documented</b>	57	16.3%	12.5–21.0%
Improperly allowed amount for inadequately documented pump claims	40	\$29,276,858	\$19,493,371–\$39,060,345
Of all claims, percentage that were inadequately documented pump claims	40	11.3%	8.1–15.4%
Improperly allowed amount for inadequately documented (other than inadequately documented pump claims)	17	\$11,566,936	\$4,841,686–\$18,292,187
Of all claims, percentage that were inadequately documented (other than inadequately documented pump claims)	17	5.0%	3.0–8.3%
<b>Overlapping amount (improperly allowed amount for claims that were both inappropriate and inadequately documented)</b>	<b>1</b>	<b>\$233,599</b>	<b>**</b>
<b>Overlapping percentage (of all claims, percent that were both inappropriate and inadequately documented)</b>	1	0.2%	0–1.1%
<b>Improperly allowed amount for all inappropriate or inadequately documented claims</b>	<b>69</b>	<b>\$39,067,966</b>	<b>\$26,899,737–\$51,236,196</b>
<b>Of all claims, percentage that were inappropriate or inadequately documented</b>	69	21.0%	16.6–26.1%

\*Sample size=347; N=number in sample.

\*\*Because there was only one claim in the sample, we could not calculate a 95-percent confidence interval for the (overlapping) inappropriately allowed amount.

Source: Office of Inspector General's sample analysis and projections of 347 Part B enteral nutrition therapy (ENT) claims for non-Part A nursing home stays during 2006.

**Table C-2: Medically Unnecessary Pump Use\***

<b>Statistic</b>	<b>N</b>	<b>Estimate</b>	<b>95-Percent Confidence Interval</b>
Amount for unjustified pump use	52	\$42,702,684	\$31,092,192–\$54,313,177
Percentage of claims with unjustified pump use	52	13.0%	9.7–17.1%

\*Sample size=347; N=number in sample

Source: Office of Inspector General's sample analysis and projections of 347 Part B ENT claims for non-Part A nursing home stays during 2006.