Dear Medicare Provider:

The Centers for Medicare & Medicaid Services (CMS) strives to protect the Medicare Trust Fund and effectively manage Medicare resources. In an effort to accomplish these goals, CMS has contracted with eGlobalTech, a professional services firm in Arlington, VA, to develop Comparative Billing Reports (CBRs). CBRs are designed to educate providers on their billing or referral patterns for selected topics through a comparison to other providers across their state and the nation. CBRs are for educational and comparison purposes. They are not indicative of overpayments being identified. No reply is necessary.

Attached is a CBR that reflects your billing or referral patterns compared to peer providers’ billing or referral patterns for the same services in your state and nationwide. Please note, we recognize that practice patterns can vary by region, subspecialty, and patient acuity levels, which are elements that are not evident in the claims data reviewed for the CBR report. We hope you find this CBR beneficial as an educational tool to assist you in identifying opportunities for improvement. If you have any questions regarding this CBR, or if you want to change the way you receive CBRs in the future, please contact the CBR Support Help Desk via:

- Calling the Toll Free Number, 1-800-771-4430;
- Sending an email to cbrsupport@eglobaltech.com;
- Visiting the website at http://www.cbrinfo.net

REMINDER: If you have changed your mailing address or contact information and have not notified the National Plan and Provider Enumeration System (NPPES) and/or CMS’ provider enrollment contractor via the internet or the appropriate Medicare enrollment application, please take time to review and update the system.

You can update your National Provider Identifier (NPI) contact information on NPPES at https://nppes.cms.hhs.gov/NPPES. If you have forgotten your User ID and/or password or need assistance, contact the NPI Enumerator at 1-800-465-3203 or email customerservice@npenumerator.com.

For more information regarding the Medicare enrollment process or to obtain a copy of the Medicare enrollment application for your provider type, refer to http://www.cms.gov/MedicareProviderSupEnroll.

We thank you for your cooperation and hope you find the attached report informative.

Sincerely,

Susan M. Goodrich
CBR Project Director
eGlobalTech

Enclosure
Comparative Billing Report (CBR): NPI 1111111111
Computed Tomography of the Abdomen & Pelvis for Referring Providers

Introduction

In 2009, the Centers for Medicare & Medicaid Services (CMS) began publicly reporting diagnostic imaging efficiency measures through its Hospital Outpatient Quality Reporting Program (Hospital OQR Program). One of the yearly measures reported involves the percentage of abdominal computed tomography (CT) studies performed without contrast followed by with contrast out of all abdominal studies. These measures indicate a great deal of variation among hospitals. In the United States, excluding its territories, the use of contrast material ranged from a high of 24.5 cases out of 100 in Louisiana to a low of 3.8 cases out of 100 in Maryland, based on data from July 1, 2012 through June 30, 2013. According to the national data, 10.5 CT studies of the abdomen were performed without contrast followed by with contrast out of every 100 studies performed. Individual hospital rates ranged from 0.1 to 96.4 cases out of 100. The numbers reported were based on outpatient services and the rates were not adjusted based on patient acuity levels nor was a significance test included.

According to the Agency for Healthcare Research and Quality (AHRQ), “The measure seeks to promote the use of studies that are considered reasonable for the use of a combined CT abdomen study, while avoiding potentially harmful effects of unnecessary radiation and contrast exposure.”

The CBR team performed data analysis for computed tomography similar to the analysis performed by the Hospital OQR Program. Our analyses indicate that out of nearly 5.5 million claims for CT of the abdomen (CPT® codes 74150, 74160 and 74170), CT of the pelvis (CPT® codes 72192, 72193 and 72194) and combined CT of the abdomen and pelvis (CPT® codes 74176, 74177 and 74178), combined studies of the abdomen and pelvis dominated billing with over 5 million studies. Based on the number of services, the CBR team selected all Part B providers who referred beneficiaries for a CT of the abdomen and pelvis that resulted in a claim for CPT® codes 74176, 74177 or 74178.

Table 1 provides a summary of your referrals of the CPT® codes included in this CBR. For the purposes of this CBR, only global services and services for the professional portion were included. Claims with a diagnosis of malignancy (ICD-9-CM codes 140 through 239) were excluded from the data.

Table 1: Summary of Your Referrals
January 1, 2014 - December 31, 2014

<table>
<thead>
<tr>
<th>CPT® Code</th>
<th>Abbreviated Description</th>
<th>Place of Service</th>
<th>Allowed Charges</th>
<th>Allowed Services</th>
<th>Beneficiary Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>74176</td>
<td>CT, abdomen and pelvis, w/o contrast</td>
<td>ER/Inpatient</td>
<td>$8,525.16</td>
<td>98</td>
<td>91</td>
</tr>
<tr>
<td>74176</td>
<td>CT, abdomen and pelvis, w/o contrast</td>
<td>Office/Other</td>
<td>$517.56</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>74177</td>
<td>CT, abdomen and pelvis, w/ contrast</td>
<td>ER/Inpatient</td>
<td>$3,172.85</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>74177</td>
<td>CT, abdomen and pelvis, w/ contrast</td>
<td>Office/Other</td>
<td>$90.11</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>74178</td>
<td>CT, abdomen and pelvis, w/ contrast followed by w/ contrast</td>
<td>ER/Inpatient</td>
<td>$1,396.83</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>74178</td>
<td>CT, abdomen and pelvis, w/ contrast followed by w/ contrast</td>
<td>Office/Other</td>
<td>$199.00</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$13,901.51</strong></td>
<td><strong>156</strong></td>
<td><strong>141</strong></td>
</tr>
</tbody>
</table>

Current Procedural Terminology® (CPT®) codes, descriptors, and all other data only are copyright 2013 American Medical Association. All rights reserved. Applicable FARS/DFARS apply.
Please note, the totals may not be equal to the sum of the rows. The number of beneficiaries is an unduplicated count for each row and the total. It is likely the same beneficiary has claims for more than one CPT® code or place of service and is counted only once in the total. The metrics reviewed in this report include:

- The percentage of beneficiaries with a previous CT of the abdomen and pelvis from any provider or in any place of service within 365 days
- The percentage of CTs of the abdomen and pelvis without contrast followed by with contrast out of all CTs of the abdomen and pelvis performed in the emergency room or inpatient hospital
- The percentage of CTs of the abdomen and pelvis without contrast followed by with contrast out of all CTs of the abdomen and pelvis performed in the office or any place of service (POS) other than the emergency room or inpatient hospital

Coverage and Documentation Overview

This portion of the CBR offers a broad look at the coverage and documentation requirements to ensure compliance with Medicare guidelines. The information provided does not supersede or alter the coverage and documentation policies as outlined in the Medicare Administrative Contractor (MAC) Local Coverage Determinations (LCDs) and Local Coverage Articles (LCAs). Please refer any specific questions you may have to the MAC for your region.

Basic Coverage Criteria

Title XVIII of the Social Security Act, 1862 (a)(1)(A) allows Medicare coverage and payment only for those services that are considered to be reasonable and necessary for the treatment of illness or injury or to improve the functioning of a malformed body member.

National Coverage Determination (NCD) 220.1, covering Computed Tomography, refers to CTs as “the primary diagnostic tool for many conditions and symptoms” because they can eliminate the need for other tests, are non-invasive, and do not require hospitalization.

Diagnostic examinations of the head and of other parts of the body performed by CT scanners are covered “if medical and scientific literature and opinion support the effective use of a scan for the condition,” and the scan is: 1) reasonable and necessary for the individual patient; and 2) performed on a model of CT equipment that meets criteria for approval, as outlined in the NCD.

Eight LCDs covering the jurisdictions of three MACs provide indications for coverage of CT of the abdomen and pelvis which include, but are not limited to, the following:

- Evaluation of abdominal or pelvic pain
- Evaluation of known or suspected abdominal or pelvic masses or fluid collections, primary or metastatic malignancies, abdominal or pelvic inflammatory processes, and abnormalities of abdominal or pelvic vascular structures
- Evaluation of abdominal or pelvic trauma
- Clarification of findings from other imaging studies or laboratory abnormalities
- Evaluation of known or suspected congenital abnormalities of abdominal or pelvic organs
- Guidance for interventional, diagnostic, or therapeutic procedures within the abdomen or pelvis
- Treatment planning for radiation therapy
Documentation requirements for CTs include a written or electronic request for the procedure. The request should include the medical necessity of the service provided including relevant medical history, diagnosis (if known), associated signs and symptoms, and results of pertinent diagnostic tests or procedures. Rendering providers must maintain copies of the ordering/referring physician’s order for the study. Documentation of the study requires a formal written interpretive report which includes the reason for the test, the name of the interpreting provider, and copies of all images acquired.

The Supplementary Appendices for the Medicare Fee-for-Service 2014 Improper Payments Report from the Comprehensive Error Rate Testing (CERT) contractor reported that the specialty of diagnostic radiology had an improper payment rate of 12.6 percent and the improper payment rate for advanced imaging was 13.2 percent. Over 93 percent of the improper payments were a result of insufficient documentation. Examples of insufficient documentation include:

- No record of the billed service
- No order or evidence of intent to order
- No physician’s signature on the order and no signature log or attestation
- No results of the diagnostic test

An OIG report published in 2011 titled, Medicare Payments for Diagnostic Radiology Services in Emergency Departments, determined that physician’s orders were not present in the medical record for 12 percent of CT and Magnetic Resonance Imaging (MRI) interpretation and report claims.

Referring physicians play an important part in reducing the Medicare Fee-for-Service improper payment rate. Chapter 15 of the Medicare Benefit Policy Manual covers ordering diagnostic tests and states, “while a physician order is not required to be signed, the physician must clearly document, in the medical record, his or her intent that the test be performed.” When information is requested by the MAC or CERT contractor, providers should include a signature log if the handwritten signature is illegible and pertinent medical records should be submitted to support unsigned orders. Electronic signatures should be submitted with the electronic record protocol or policy according to Medicare Learning Network (MLN®) article, Complying with Medical Record Documentation Requirements.

Method
This report is an analysis of Fee-for-Service Medicare Part B referring NPIs. The latest version of claims with allowed services for the CPT® codes listed in Table 1 with dates of service from January 1, 2014 to December 31, 2014 were extracted from the Integrated Data Repository (IDR) on April 28, 2015. The analyses are based on claims that were billed globally (without modifier 26 or modifier TC) or billed for the professional component only (with modifier 26). Additionally, claim lines with a claim line diagnosis of malignancy (ICD-9-CM codes 140 through 239) were excluded from the data.

This data revealed substantial variation in the billings based on POS. Therefore, all services performed in the emergency room (21) and inpatient hospital (23) were combined and described as ‘ER/Inpatient,’ as the billing practices with these codes were very similar yet different than all other places of service. All services provided in the office or any other POS, besides the ER or Inpatient, were combined and described as ‘Office/Other’ in the following analyses.
For the purpose of this CBR, ‘peer group’ is defined as other referring NPIs in your state or nation that meet the criteria described above. Your values, as the referring provider, are compared to your state (SC) and national peer groups using the chi-squared test at the alpha value of 0.05.

**Percentage of Beneficiaries with a Previous CT of the Abdomen and Pelvis**
The percentage of your beneficiaries with a previous CT of the abdomen and pelvis is calculated by first identifying all of the beneficiaries with an allowed service for one of the CPT® codes 74176, 74177, and 74178 by any provider or in any POS. If the beneficiary received the service within 365 days prior to the provider’s date of service, then this beneficiary is counted as having a previous CT. The percentage is then calculated as below:

\[
\left(\frac{\text{Total Number of Your Beneficiaries with a Previous CT}}{\text{Total Number of Your Beneficiaries}}\right) \times 100
\]

Your percentage is then compared to your state and the nation using a chi-squared test at the alpha value of 0.05.

**Percentage of CTs of the Abdomen and Pelvis Without Contrast Followed by With Contrast Performed in the ER or Inpatient Hospital**
The allowed services for CTs of the abdomen and pelvis without contrast followed by with contrast (CPT® code 74178) as a proportion of the total CTs of the abdomen and pelvis (CPT® codes 74176, 74177, and 74178) performed in the ER or inpatient hospital includes only those claim lines with a place of service of ‘21’ or ‘23.’ This percentage is calculated as below:

\[
\left(\frac{\text{CTs Without and With Contrast Performed in ER or Inpatient Hospital}}{\text{Total CTs Performed in ER or Inpatient Hospital}}\right) \times 100
\]

Your percentage is then compared to your state and the nation using a chi-squared test at the alpha value of 0.05.

**Percentage of CTs of the Abdomen and Pelvis Without Contrast Followed by With Contrast Performed in the Office or Other Place of Service**
The allowed services for CTs of the abdomen and pelvis without contrast followed by with contrast (CPT® code 74178) as a proportion of the total CTs of the abdomen and pelvis (CPT® codes 74176, 74177, and 74178) performed in the office or other POS includes only those claim lines without a place of service of ‘21’ or ‘23.’ This percentage is calculated as below:

\[
\left(\frac{\text{CTs Without and With Contrast Performed in Office or Other POS}}{\text{Total CTs Performed in Office or Other POS}}\right) \times 100
\]

Your percentage is then compared to your state and the nation using a chi-squared test at the alpha value of 0.05.
Comparison Outcomes

There are four possible outcomes for the comparisons between the provider and the peer groups:

- **Significantly Higher** - Provider’s value is higher than the peer value and the statistical test confirms a significance
- **Higher** - Provider’s value is higher than the peer value but the statistical test does not confirm a significance
- **Does Not Exceed** - Provider’s value is not higher than the peer value
- **N/A** - Provider does not have sufficient data for comparison

A provider’s value may be greater than the value of his/her peer group. The statistical test gives the provider the benefit of the doubt since significance is based on the total number of services and/or beneficiaries and the variability of those values.

Results

Table 2 provides a comparison of your percentage of beneficiaries with a previous CT of the abdomen and pelvis to that of your state and the nation.

**Table 2: Percentage of Beneficiaries with a Previous CT of the Abdomen and Pelvis**

<table>
<thead>
<tr>
<th>Type</th>
<th>Your Percentage of Beneficiaries</th>
<th>Your State’s Percentage of Beneficiaries</th>
<th>Comparison with Your State’s Percentage</th>
<th>National Percentage of Beneficiaries</th>
<th>Comparison with the National Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous CT</td>
<td>40%</td>
<td>31%</td>
<td>Significantly Higher</td>
<td>34%</td>
<td>Higher</td>
</tr>
</tbody>
</table>

A chi-square was used in this analysis, alpha=0.05.

Table 3 provides a comparison of your percentage of CTs of the abdomen and pelvis without contrast followed by with contrast performed in ER or inpatient hospital to that of your state and the nation.

**Table 3: Percentage of CTs of the Abdomen and Pelvis Without and With Contrast Performed in the ER or Inpatient Hospital**

<table>
<thead>
<tr>
<th>Type</th>
<th>Your Percentage of CTs Without and With Contrast</th>
<th>Your State’s Percentage of CTs Without and With Contrast</th>
<th>Comparison with Your State’s Percentage</th>
<th>National Percentage of CTs Without and With Contrast</th>
<th>Comparison with the National Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER/Inpatient</td>
<td>10%</td>
<td>4%</td>
<td>Significantly Higher</td>
<td>3%</td>
<td>Significantly Higher</td>
</tr>
</tbody>
</table>

A chi-square test was used in this analysis, alpha=0.05.

Table 4 provides a comparison of your percentage of CTs of the abdomen and pelvis without contrast followed by with contrast performed in the office or a POS other than ER or inpatient hospital.
Table 4: Percentage of CTs of the Abdomen and Pelvis Without and With Contrast Performed in the Office or a POS Other than ER or Inpatient Hospital
January 1, 2014 - December 31, 2014

<table>
<thead>
<tr>
<th>Type</th>
<th>Your Percentage of CTs Without and With Contrast</th>
<th>Your State’s Percentage of CTs Without and With Contrast</th>
<th>Comparison with Your State’s Percentage</th>
<th>National Percentage of CTs Without and With Contrast</th>
<th>Comparison with the National Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office/Other</td>
<td>22%</td>
<td>18%</td>
<td>Higher</td>
<td>23%</td>
<td>Does Not Exceed</td>
</tr>
</tbody>
</table>

A chi-square test was used in this analysis, alpha=0.05.

References & Resources

- National Coverage Determination (NCD) for Computed Tomography, 220.1
- Cahaba Government Benefit Administrators®: L30048
- First Coast Service Options, Inc.: L28806, L28813, L29119, L29137
- Palmetto GBA: L31596, L31597
- Medicare Learning Network®, *Complying With Medical Record Documentation Requirements*
- Office of Inspector General, *Medicare Payments for Diagnostic Radiology Services in Emergency Departments*
- Agency for Healthcare Research and Quality (AHRQ), National Quality Measures Clearinghouse, *Imaging efficiency: percentage of abdominal CT studies that are performed with and without contrast out of all abdominal CT studies performed*
- Centers for Medicare & Medicaid Services, Comprehensive Error Rate Testing (CERT), *The Supplementary Appendices for the Medicare Fee-for-Service 2014 Improper Payments Report*
- Medicare.gov, Hospital Compare: Use of Medical Imaging

The Next Steps
We encourage you to check with your MAC to ensure you meet Medicare standards for your jurisdiction. Please use the above references and resources as a guide.

You are invited to join us for the CBR201507 webinar on August 26, 2015 from 3:00 - 4:30 PM ET. Space is limited, so please register early. Register online at [www.cbrinfo.net/cbr201507-webinar.html](http://www.cbrinfo.net/cbr201507-webinar.html). If you are unable to attend, you may access a recording of the webinar five business days following the event at the website above.

If you have any questions or suggestions relating to this CBR, please contact the CBR Support Help Desk via email at CBRSupport@eglobaltech.com or via telephone at (800) 771-4430.