Comparative Billing Report

March 14, 2016

CBR #: CBR201604
Topic: Non-invasive Vascular Studies
NPI #: 1111111111
Fax #: (888)555-5555

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Dear Medicare Provider:

The Centers for Medicare & Medicaid Services (CMS) strives to protect the Medicare Trust Fund and effectively manage Medicare resources. To support these goals, CMS has contracted with eGlobalTech, a professional services firm headquartered in Arlington, VA, to develop Comparative Billing Reports (CBRs). CBRs provide comparative data on how an individual health care provider's billing and payment patterns for selected topics compare to his/her peers. The CBRs give providers an opportunity to compare themselves to their peers, check their records against data in CMS' files, and review Medicare guidelines to ensure compliance. CBRs are for educational and comparison purposes and do not indicate the identification of overpayments. Please note, no reply is necessary.

Attached is a CBR that reflects your billing or referral patterns compared to peer providers' patterns for the same services in your state and nationwide. 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. 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.

- Toll Free Number: 1-800-771-4430
- Email: cbrsupport@eglobaltech.com
- Website: **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 in 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@npienumerator.com.

We hope you find the attached report informative.

Sincerely,

Susan M Goodrich

Susan M. Goodrich
CBR Project Director
eGlobalTech

Enclosure

Comparative Billing Report (CBR): NPI 1111111111
Non-invasive Vascular Studies

Introduction

CBR201604 focuses on rendering providers of all specialties, excluding radiologists, who submitted claims for non-invasive vascular studies using Current Procedural Terminology (CPT®) codes 93880, 93882, 93925, 93926, 93970 and 93971. The measures for this report include:

- Average services per beneficiary for a one-year period
- Percentage of consecutive services (billed within 24 hours of another service)

CPT® categories, codes, and descriptions included in this CBR and your utilization of these codes are shown in the table below:

Table 1: Summary of Your Utilization
October 1, 2014 - September 30, 2015

CPT®	Description	Allowed Charges	Allowed Services	Consecutive Services	Beneficiary Count
93880	Duplex scan of extracranial arteries, complete/bilateral	$117,336.72	1,637	311	1,623
93882	Duplex scan of extracranial arteries, unilateral/limited	$0.00	0	0	0
93925	Duplex scan of lower extremity arteries, complete/bilateral	$102,592.23	492	93	484
93926	Duplex scan of lower extremity arteries, unilateral/limited	$0.00	0	0	0
93970	Duplex scan of extremity veins, complete/bilateral	$65,060.58	352	67	350
93971	Duplex scan of extremity veins, unilateral/limited	$137.30	1	1	1
Total		**$285,126.83**	**2,482**	**472**	**2,090**

An investigation by the Office of Inspector General (OIG) found large variations in billing patterns for ultrasound services, with 20 high-use counties accounting for 16 percent of Part B expenditures on ultrasounds in spite of having only six percent of Medicare beneficiaries residing in those counties. In its July 2009 report titled, "Medicare Part B Billing for Ultrasound," the OIG indicated that twice as many beneficiaries received ultrasound services in high-use counties when compared to the rest of the country, and the ratio of ultrasound providers to beneficiaries in those counties was three times higher than the rest of the nation.

According to *The Supplementary Appendices for the Medicare Fee-for-Service 2014 Improper Payments Report*, the Comprehensive Error Rate Testing (CERT) contractor found error rates of 16 percent for the Berenson-Eggers Type of Service (BETOS) category of I3F (Echography/ultrasonography other), which includes CPT® codes 93925, 93926, 93970 and 93971. One hundred percent of the errors were due to insufficient documentation. The projected improper payments for that category total more than $105 million. BETOS category I3D (Echography/ultrasonography carotid arteries), which includes CPT® codes 93880 and 93882, had an error rate of 22 percent with projected improper payments of greater than $46 million.

In 2014, National Government Services (NGS) began a service-specific prepayment review of the CPT®codes included in this CBR after identifying a large volume of claims being billed for both arterial and venous studies on the same day. NGS found a large number of claims lacked clinical information to support the services billed. Reasons cited for denials or reductions included:

- Minimal documentation without specific location or description of sign, symptom or severity (e.g., edema, pain, stenosis or claudication)
- Documentation of a provisional diagnosis instead of a specific clinical indication (e.g., R/O DVT, R/O reflux)
- Documentation of unilateral medical necessity for a bilateral service
- The rendering physician on the claim form was not the physician who performed the service per the submitted documentation
- Failure to submit documentation for the CPT®codes billed
- No response to the request for medical documentation
- Incomplete or missing beneficiary identification
- Missing or illegible provider signatures

The CPT®codes in this CBR describe three distinct types of services:

- Duplex scans of extracranial arteries
- Duplex scans of lower extremity arteries or arterial bypass grafts
- Duplex scans of extremity veins, including responses to compression and other maneuvers

According to the *CPT® 2014/2015 Professional Edition Manuals*, duplex scan "describes an ultrasonic scanning procedure for characterizing the pattern and direction of blood flow in arteries or veins with the production of real-time images integrating B-mode two-dimensional vascular structure, Doppler spectral analysis and color flow Doppler imaging."

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 National Coverage Determinations (NCDs), 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 [Section 1862(a)(1)(A)] excludes expenses incurred for items or services which are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member. Routine screening tests, in the absence of signs and symptoms, are non-covered by Medicare.

Most MACs have at least one LCD covering the CPT®codes in this CBR. While First Coast Service Options, Noridian Healthcare Solutions and Wisconsin Physicians Service Insurance Corporation have individual LCDs for each of the three types of services, CGS Administrators and NGS cover all three types of services in one LCD.

The indications and covered diagnoses for these procedures cover a wide range of conditions; however, some limitations can be found in most of the active LCDs researched for this CBR.

For this CBR, the LCDs follow the *CPT® Manual* instructions for non-invasive vascular diagnostic studies. According to the manual, the use of devices which "do not produce hard copy output, or that produces a record that does not permit analysis of bidirectional vascular flow, is considered to be part of the physical examination of the vascular system and is not separately reported."

NGS LCD L33627 states the following regarding general indications: "Non-invasive vascular studies are considered medically necessary if the ordering physician has reasonable expectation that their outcomes will potentially impact the clinical management of the patient. Services are deemed medically necessary when the following conditions are met:

- Significant signs/symptoms of arterial or venous disease are present;
- The information is necessary for appropriate medical and/or surgical management; and/or
- The test is not redundant of other diagnostic procedures that must be performed."

Several LCDs, including CGS LCD L34045, covering duplex scans of lower extremity arteries state: "A routine history and physical examination, which includes ankle/brachial indices (ABIs), can readily document the presence or absence of ischemic disease in the majority of cases. It is not medically necessary to proceed beyond the physical examination for minor signs and symptoms such as hair loss, absence of a single pulse, relative coolness of a foot, shiny thin skin, or lack of toenail growth unless related signs and symptoms are present which are severe enough to require possible invasive intervention."

Several LCDs also provide guidance regarding simultaneous arterial and venous studies stating, "The performance of simultaneous arterial and venous studies during the same encounter should be rare. Documentation should be available to support the medical necessity for both studies."

Most determinations include information about credentialing and accreditation standards stating, "The accuracy of non-invasive vascular diagnostic studies depends on the knowledge, skill, and experience of the technologist and interpreter. Consequently, the physician performing and/or interpreting the study must be capable of demonstrating documented training and experience and maintain any applicable documentation." Several determinations state: "All non-invasive vascular studies must be (1) performed by a qualified physician, or (2) performed under the direct supervision of a qualified physician by a technologist who has demonstrated minimum entry level competency by being credentialed in vascular technology, and/or (3) performed in a laboratory accredited in vascular technology."

Some testing methods are non-covered by Medicare. Noridian Healthcare Solutions LCD L34221 states: "The following are not acceptable methods for reimbursement: Thermography, mechanical oscillometry, inductance plethysmography, capacitance plethysmography, photoelectric plethysmography, pulse-delay oculoplethysmography, carotid phonoangiography and other forms of bruit analysis are included in the reimbursement for the office visit. Also, periorbital photoplethysmography and light reflection rheography are not covered services because of the lack of documentation in the current literature for reasonableness and necessity."

Providers should familiarize themselves with the LCDs covering the jurisdictions where they practice to have a complete understanding of all Medicare requirements for non-invasive vascular studies.

Methods

This report is an analysis of Medicare Part B claims with allowed services for the CPT®codes listed in Table 1 with dates of service from October 1, 2014 to September 30, 2015 and includes only those claims where the rendering NPI specialty is not denoted as diagnostic radiology (30). Furthermore, only services that were billed globally (neither modifier 26 or TC on the claim) or billed with the professional component (modifier 26 on the claim) were included in the analysis. This was done to assure services were not counted twice in the analysis. This analysis was based on the latest version of claims available from the Integrated Data Repository (IDR), as of January 19, 2016. Your percentages and averages denoted in Table 2 and Table 3 are calculated from the data supplied from your utilization of the CPT®codes in Table 1 using the formulas below. Your values are compared to your state (NY) and national values, using either the chi-squared or t-test at the alpha value of 0.05.

Average Allowed Services per Beneficiary

The average services per beneficiary for you, your state, and the nation are calculated as follows:

$$\left(\frac{\textbf{Total Allowed Services}}{\textbf{Total Number of Beneficiaries}}\right)$$

Percentage of Consecutive Services

The percentage of consecutive services was calculated by first flagging any service provided within 24 hours of another service. For example, if a provider renders a service for CPT®93880 for a specific beneficiary and then bills a service for CPT®93926 on the next day for the same beneficiary, then both services would be flagged.

$$\left(\frac{\textbf{Total Number of Consecutive Services}}{\textbf{Total Number Services}}\right)\textbf{x}100$$

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 either the statistical test does not confirm a significance or there is insufficient data for comparison
- **Does Not Exceed** - Provider's value is not higher than the peer value
- **N/A** - Provider does not have data for comparison

The statistical test (chi-square or t-test) used in each analysis can be identified from the following tables. These tests give the provider the benefit of the doubt since significance is based on the total number of services and/or beneficiaries, as well as the variability of those values.

Results

Table 2 provides a statistical analysis of the average allowed services per beneficiary and compares those results with others in your state and the nation.

Table 2: Average Allowed Services per Beneficiary
October 1, 2014 - September 30, 2015

	Your Average Allowed Services per Beneficiary	Your State's Average Allowed Services per Beneficiary	Comparison with Your State's Average	National Average Allowed Services per Beneficiary	Comparison with the National Average
Services	1.19	1.22	Does Not Exceed	1.23	Does Not Exceed

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

Table 3 provides a statistical analysis of the percentage of consecutive services. Your percentage is then compared to that of your state and the nation.

Table 3: Percentage of Consecutive Services
October 1, 2014 - September 30, 2015

	Your Percentage of Consecutive Services	Your State's Percentage of Consecutive Services	Comparison with Your State's Percentage	National Percentage of Consecutive Services	Comparison with the National Percentage
Consecutive Services	19%	4%	Significantly Higher	11%	Significantly Higher

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

References & Resources

The coverage and documentation guidelines for non-invasive vascular studies are listed below. Please follow the guidelines pertinent to your region. Links to all references and resources can be accessed at http://www.cbrinfo.net/cbr201604-recommended-links.html.

Table 4: LCDs & LCAs

Medicare Administrative Contractor (MAC)	Active 10/01/15	Retired 09/30/15
Cahaba Government Benefit Administrators, LLC	L34267	L30040
CGS Administrators, LLC	L34045	L31841
First Coast Service Options, Inc.	L33667, L33693, L33695	L28829, L28936, L28937, A93925, A93965, A93880
National Government Services, Inc.	L33627, A52859	L27355, A47394
Noridian Healthcare Solutions, LLC	L34219, L34221, L34229	L33477, L33478, L33479
Novitas Solutions, Inc.	L35397, L35451, A52992	L34711, L34714, A47800
Wisconsin Physicians Service Insurance Corporation	L35751, L35753, L35761, Associated Document: Billing and Coding Guidelines	N/A

National Coverage Determinations (NCDs):

- Plethysmography (NCD 20.14)
- non-invasive Tests of Carotid Function (NCD 20.17)
- Thermography (NCD 220.11)

Office of Inspector General:

- Medicare Part B Billing for Ultrasound, July 2009, OEI-01-08-00100

Social Security Administration:

- Title XVIII of the Social Security Act - Section 1862 (a)(1)(A)

Centers for Medicare & Medicaid Services:

- The Supplementary Appendices for the Medicare Fee-for-Service 2014 Improper Payments Report

The Next Steps

We encourage you to check with your MAC to ensure you are meeting the Medicare standards for your jurisdiction. Please use the aforementioned references and resources as a guide.

You are invited to join us for the CBR201604 webinar on April 13, 2016 from 3:00 - 4:30 PM ET. Space is limited, so please register early. Register online at http://www.cbrinfo.net/cbr201604-webinar.html.

If you are unable to attend, you may access a recording of the CBR201604 webinar five business days following the event at http://www.cbrinfo.net/cbr201604-webinar.html.

For detailed links to information listed in the references and resources section, visit http://www.cbrinfo.net/cbr201604-recommended-links.html.

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

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