

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**MEDICARE COMPLIANCE REVIEW OF
VANDERBILT UNIVERSITY MEDICAL
CENTER FOR 2013 AND 2014**

*Inquiries about this report may be addressed to the Office of Public Affairs at
Public.Affairs@oig.hhs.gov.*



Brian P. Ritchie
Assistant Inspector General
for Audit Services

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Office of Inspector General

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EXECUTIVE SUMMARY

Vanderbilt University Medical Center did not fully comply with Medicare requirements for billing inpatient and outpatient services, resulting in overpayments of at least \$1.14 million over nearly 2 years.

WHY WE DID THIS REVIEW

This review is part of a series of hospital compliance reviews. Using computer matching, data mining, and other data analysis techniques, we identified hospital claims that were at risk for noncompliance with Medicare billing requirements. For calendar year 2013, Medicare paid hospitals \$156 billion, which represents 45 percent of all fee-for-service payments; therefore, the Office of Inspector General must provide continual and adequate oversight of Medicare payments to hospitals.

The objective of this review was to determine whether Vanderbilt University Medical Center (the Hospital), complied with Medicare requirements for billing inpatient and outpatient services on selected types of claims.

BACKGROUND

The Centers for Medicare & Medicaid Services (CMS) pays inpatient hospital costs at predetermined rates for patient discharges. The rates vary according to the diagnosis-related-group (DRG) to which a beneficiary's stay is assigned and the severity level of the patient's diagnosis. The DRG payment is, with certain exceptions, intended to be payment in full to the hospital for all inpatient costs associated with the beneficiary's stay. CMS pays for hospital outpatient services on a rate-per-service basis that varies according to the assigned ambulatory payment classification.

The Hospital is a not-for-profit, acute-care facility located in Nashville, Tennessee. It is composed of three acute-care facilities: Vanderbilt University Hospital, Vanderbilt Psychiatric Hospital, and Monroe Carell Jr. Children's Hospital at Vanderbilt. According to CMS's National Claims History data, Medicare paid the Hospital approximately \$449 million for 20,098 inpatient services and 348,102 outpatient services from January 1, 2013, through August 31, 2014.

Our audit covered \$30,013,286 in Medicare payments to the Hospital for 1,959 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 245 paid claims with payments totaling \$4,851,994. These 245 claims had payment dates in the period January 1, 2013, through August 31, 2014 (audit period), and consisted of 120 inpatient and 125 outpatient claims.

WHAT WE FOUND

The Hospital complied with Medicare billing requirements for 172 of the 245 inpatient and outpatient claims that we reviewed. However, the Hospital did not fully comply with Medicare billing requirements for the remaining 73 claims, resulting in net overpayments of \$304,981 for

the audit period. Specifically, 34 inpatient claims had billing errors resulting in overpayments of \$220,793, and 39 outpatient claims had billing errors resulting in overpayments of \$84,188. These errors occurred primarily because the Hospital did not have adequate controls to prevent the incorrect billing of Medicare claims within the selected risk areas that contained errors.

On the basis of our sample results, we estimated that the Hospital received overpayments of at least \$1,145,338 for the audit period. During the course of our audit, the Hospital reprocessed 30 claims with overpayments of \$133,914 that we verified as correctly reprocessed. Accordingly, we have reduced the recommended refund by this amount.

WHAT WE RECOMMEND

We recommend that the Hospital:

- refund to the Medicare program \$1,011,424 (\$1,145,338 minus \$133,914) in estimated overpayments on claims incorrectly billed for the audit period and
- strengthen controls to ensure full compliance with Medicare requirements.

VANDERBILT UNIVERSITY MEDICAL CENTER COMMENTS AND OUR RESPONSE

In written comments on our draft report, the Hospital did not specifically address our recommendations. However, the Hospital agreed with the report findings for 68 of the 73 claim errors but disputed 3 inpatient and 2 outpatient claim errors. The Hospital indicated that it either has reprocessed or was working with its Medicare Administrative Contractor (MAC) on reprocessing affected claims to correct the 68 claims with coding errors that we identified. The Hospital listed specific policy and procedure actions that it has taken to address the control issues that caused the errors to occur.

After reviewing the Hospital's comments, we maintain that all of our findings and the associated recommendations are correct. We obtained an independent medical review to determine whether the three inpatient and two outpatient claims disputed by the Hospital met Medicare coding and billing requirements. On the basis of these determinations, we continue to assert that the five claims disputed by the Hospital contain coding errors that resulted in overpayment to the Hospital.

TABLE OF CONTENTS

INTRODUCTION	1
Why We Did This Review.....	1
Objective	1
Background.....	1
The Medicare Program	1
Hospital Inpatient Prospective Payment System	1
Hospital Outpatient Prospective Payment System.....	1
Hospital Claims at Risk for Incorrect Billing	2
Medicare Requirements for Hospital Claims and Payments	2
Vanderbilt University Medical Center.....	2
How We Conducted This Review.....	3
FINDINGS	3
Billing Errors Associated With Inpatient Claims	4
Incorrectly Billed Diagnosis-Related-Group Codes	4
Manufacturer Credits for Replaced Medical Devices Not Obtained or Reported.....	4
Incorrectly Billed as Inpatient or Without a Valid Physician Order	5
Incorrectly Billed Discharge Status Code	6
Billing Errors Associated With Outpatient Claims.....	6
Manufacturer Credits for Replaced Medical Devices Not Reported.....	7
Incorrectly Billed Healthcare Common Procedure Coding System Codes	8
Insufficiently Documented Evaluation and Management Services	8
Overall Estimate of Overpayments.....	8
RECOMMENDATIONS	8
VANDERBILT UNIVERSITY MEDICAL CENTER COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE	9
Vanderbilt University Medical Center Comments	9
Office of Inspector General Response	9
APPENDIXES	
A: Audit Scope and Methodology.....	10
B: Sample Design and Methodology.....	12

C: Sample Results and Estimates15

D: Results of Review by Risk Area.....16

E: Vanderbilt University Medical Center Comments17

INTRODUCTION

WHY WE DID THIS REVIEW

This review is part of a series of hospital compliance reviews. Using computer matching, data mining, and other data analysis techniques, we identified hospital claims that were at risk for noncompliance with Medicare billing requirements. For calendar year 2013, Medicare paid hospitals \$156 billion, which represents 45 percent of all fee-for-service payments; therefore, the Office of Inspector General (OIG) must provide continual and adequate oversight of Medicare payments to hospitals.

OBJECTIVE

Our objective was to determine whether Vanderbilt University Medical Center (the Hospital) complied with Medicare requirements for billing inpatient and outpatient services on selected types of claims.

BACKGROUND

The Medicare Program

Medicare Part A provides inpatient hospital insurance benefits and coverage of extended care services for patients after hospital discharge, and Medicare Part B provides supplementary medical insurance for medical and other health services, including coverage of hospital outpatient services. The Centers for Medicare & Medicaid Services (CMS) administers the Medicare program. CMS contracts with Medicare contractors to, among other things, process and pay claims submitted by hospitals.

Hospital Inpatient Prospective Payment System

Under the inpatient prospective payment system (IPPS), CMS pays hospital costs at predetermined rates for patient discharges. The rates vary according to the diagnosis-related-group (DRG) to which a beneficiary's stay is assigned and the severity level of the patient's diagnosis. The DRG payment is, with certain exceptions, intended to be payment in full to the hospital for all inpatient costs associated with the beneficiary's stay.

Hospital Outpatient Prospective Payment System

CMS implemented an outpatient prospective payment system (OPPS), which is effective for services furnished on or after August 1, 2000, for hospital outpatient services. Under the OPPS, Medicare pays for hospital outpatient services on a rate-per-service basis that varies according to the assigned ambulatory payment classification (APC). CMS uses Healthcare Common Procedure Coding System (HCPCS) codes and descriptors to identify and group the services

within each APC group.¹ All services and items within an APC group are comparable clinically and require comparable resources.

Hospital Claims at Risk for Incorrect Billing

Our previous work at other hospitals identified these types of claims at risk for noncompliance:

- inpatient and outpatient manufacturer credits for replaced medical devices,
- inpatient claims billed with high-severity-level DRG codes,
- inpatient claims paid in excess of charges,
- outpatient claims billed with evaluation and management services, and
- outpatient claims with payments greater than \$25,000.

For the purposes of this report, we refer to these areas at risk for incorrect billing as “risk areas.” We reviewed these risk areas as part of this review.

Medicare Requirements for Hospital Claims and Payments

Medicare payments may not be made for items or services that “are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member” (the Social Security Act (the Act), § 1862(a)(1)(A)). In addition, the Act precludes payment to any provider of services or other person without information necessary to determine the amount due the provider (§ 1833(e)).

Federal regulations state that the provider must furnish to the Medicare contractor sufficient information to determine whether payment is due and the amount of the payment (42 CFR § 424.5(a)(6)).

The *Medicare Claims Processing Manual* (the Manual) requires providers to complete claims accurately so that Medicare contractors may process them correctly and promptly (Pub. No. 100-04, chapter 1, § 80.3.2.2). The Manual states that providers must use HCPCS codes for most outpatient services (chapter 23, § 20.3).

Vanderbilt University Medical Center

The Hospital is a not-for-profit acute-care facility located in Nashville, Tennessee. It is composed of three acute-care facilities: Vanderbilt University Hospital, Vanderbilt Psychiatric Hospital, and Monroe Carell Jr. Children’s Hospital at Vanderbilt. For purposes of Medicare billing, the Hospital submits to Medicare for reimbursement using one unique provider identification for all three acute-care facilities. According to CMS’s National Claims History

¹ HCPCS codes are used throughout the health care industry to standardize coding for medical procedures, services, products, and supplies.

data, Medicare paid the Hospital approximately \$449 million for 20,098 inpatient services and 348,102 outpatient services from January 1, 2013, through August 31, 2014 (audit period).

HOW WE CONDUCTED THIS REVIEW

Our audit covered \$30,013,286 in Medicare payments to the Hospital for 1,959 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 245 paid claims with payments totaling \$4,851,994. These 245 claims had payment dates in our audit period and consisted of 120 inpatient and 125 outpatient claims.

We focused our review on the risk areas identified as a result of prior OIG reviews at other hospitals. We evaluated compliance with selected billing requirements and subjected 86 claims to medical review to determine whether the services were medically necessary and correctly coded. This report focuses on selected risk areas and does not represent an overall assessment of all claims submitted by the Hospital for Medicare reimbursement.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

See Appendix A for the details of our audit scope and methodology.

FINDINGS

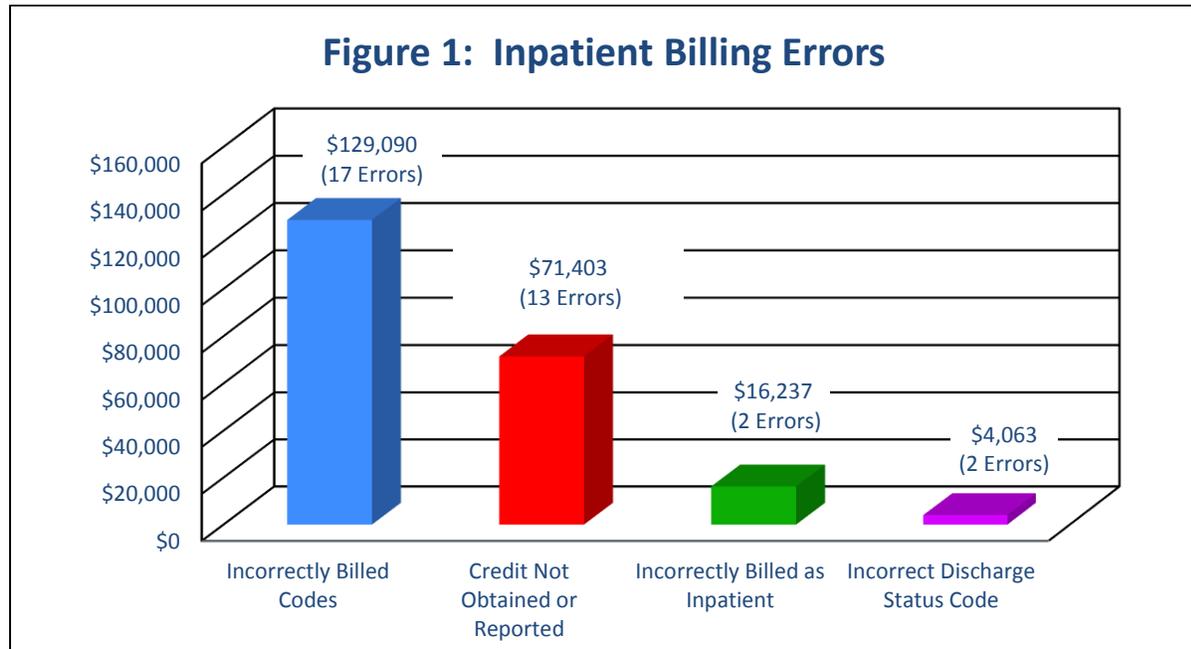
The Hospital complied with Medicare billing requirements for 172 of the 245 inpatient and outpatient claims that we reviewed. However, the Hospital did not fully comply with Medicare billing requirements for the remaining 73 claims, resulting in net overpayments of \$304,981 for the audit period. Specifically, 34 inpatient claims had billing errors resulting in overpayments of \$220,793, and 39 outpatient claims had billing errors resulting in overpayments of \$84,188. These errors occurred primarily because the Hospital did not have adequate controls to prevent the incorrect billing of Medicare claims within the selected risk areas that contained errors.

On the basis of our sample results, we estimated that the Hospital received overpayments of at least \$1,145,338 for the audit period. During the course of our audit, the Hospital reprocessed 30 claims with overpayments of \$133,914 that we verified as correctly reprocessed. Accordingly, we have reduced the recommended refund by this amount.

See Appendix B for our sample design and methodology, Appendix C for our sample results and estimates, and Appendix D for the results of our review by risk area.

BILLING ERRORS ASSOCIATED WITH INPATIENT CLAIMS

The Hospital incorrectly billed Medicare for 34 of the 120 inpatient claims that we reviewed. These errors resulted in overpayments of \$220,793 as shown in Figure 1.



Incorrectly Billed Diagnosis-Related-Group Codes

Medicare payments may not be made for items or services that “are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member” (the Act, § 1862(a)(1)(A)). The Manual requires providers to complete claims accurately so that Medicare contractors may process them correctly and promptly (chapter 1, § 80.3.2.2).

For 17 of the 120 inpatient claims, the Hospital billed Medicare for incorrect DRG codes. For example, the Hospital submitted a claim with principal diagnosis Code 414.01 (Coronary Artery Disease (CAD)), but the patient’s chest pain was not attributed to CAD, and Code 786.59 (Chest Pain) should have been used instead. The Hospital stated that human error caused the use of these incorrect DRG codes. As a result of these incorrect DRG codes, the Hospital received net overpayments of \$129,090.

Manufacturer Credits for Replaced Medical Devices Not Obtained or Reported

The CMS *Provider Reimbursement Manual* states:

Implicit in the intention that actual costs be paid to the extent they are reasonable is the expectation that the provider seeks to minimize its costs and that its actual costs do not exceed what a prudent and cost conscious buyer pays for a given item

or service. If costs are determined to exceed the level that such buyers incur, in the absence of clear evidence that the higher costs were unavoidable, the excess costs are not reimbursable under the program (Pub. No. 15, part I, § 2102.1).²

Federal regulations require reductions in the IPPS payments for the replacement of an implanted device if (1) the device is replaced without cost to the provider, (2) the provider receives full credit for the cost of a device, or (3) the provider receives a credit equal to 50 percent or more of the cost of the device (42 CFR § 412.89). Federal regulations require all payments to providers of services must be based on the reasonable cost of services (42 CFR § 413.9). The Manual states that to bill correctly for a replacement device that was provided with a credit or no cost, the hospital must code its Medicare claims with a combination of condition code 49 or 50 along with value code “FD” (chapter 3, § 100.8).

For 13 of the 120 inpatient claims, the Hospital incorrectly billed Medicare for medical devices that were under warranty.

- For two claims, the Hospital did not obtain the credit for a replaced medical device for which a credit was available under the terms of the manufacturer’s warranty.
- For eleven claims, the Hospital received a reportable credit from a manufacturer for a replaced device but did not adjust its inpatient claim with the proper condition and value code to reduce payment as required.

The Hospital stated that these errors occurred because some departments did not consistently notify Patient Accounting of the receipt of a device credit or no-cost replacement device, and it did not have procedures to review for possible credits or to reconcile vendor invoices to ensure appropriate application of the credit to the claim. As a result, the Hospital received overpayments of \$71,403.

Incorrectly Billed as Inpatient or Without a Valid Physician Order

Medicare payments may not be made for items or services that “are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member” (the Act, § 1862(a)(1)(A)). A payment for services furnished to an individual may be made only to providers of services that are eligible and only if, “with respect to inpatient hospital services ... which are furnished over a period of time, a physician certifies that such services are required to be given on an inpatient basis for such individual’s medical treatment...” (the Act, § 1814(a)(3)). Federal regulations state that Medicare Part A pays for inpatient hospital

² Section 2103 further defines prudent buyer principles and says that Medicare providers are expected to pursue free replacements or reduced charges under warranties. Section 2103(C)(4) provides the following example: “Provider B purchases cardiac pacemakers or their components for use in replacing malfunctioning or obsolete equipment, without asking the supplier/manufacturer for full or partial credits available under the terms of the warranty covering the replaced equipment. The credits or payments that could have been obtained must be reflected as a reduction of the cost of the equipment supplied.”

services only if a physician certifies and recertifies, among other things, the reasons for continued hospitalization (42 CFR § 424.13(a)). Section 1815(a) of the Act precludes payment to any provider without information necessary to determine the amount due the provider.

For 1 of the 120 inpatient claims, the Hospital billed Medicare for a beneficiary whose level of care and services provided should have been billed as outpatient or outpatient with observation services.

For 1 of the 120 inpatient claims, the Hospital incorrectly billed for inpatient services when the medical records indicate the patient was not admitted.

The Hospital stated that these overpayments occurred because the patient bill was inadvertently processed prior to resolving discrepancies between the billing system and the physician orders. As a result, the Hospital received overpayments of \$16,237.

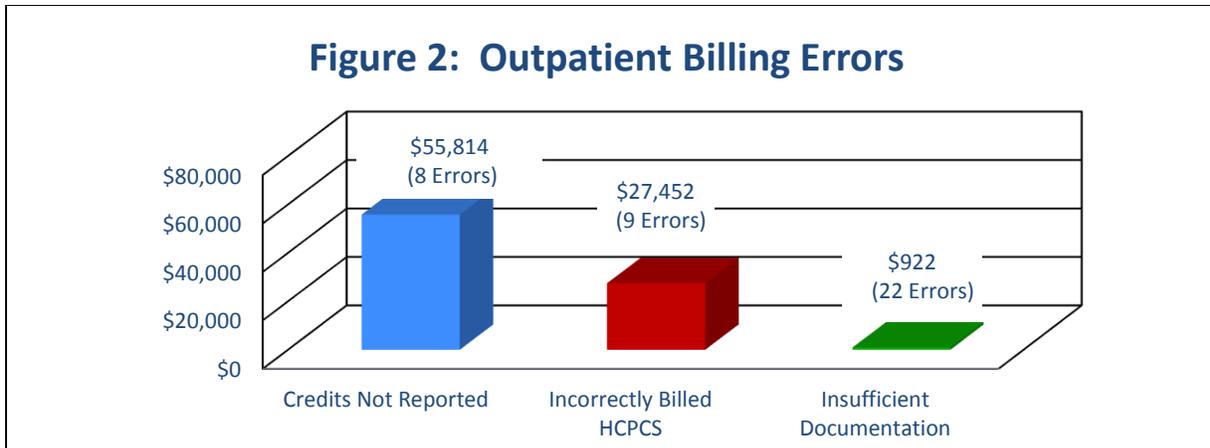
Incorrectly Billed Discharge Status Code

Federal regulations (42 CFR § 412.4(c) and (f)) state that a discharge of a hospital inpatient is considered to be a transfer when the patient's discharge is assigned to one of the qualifying DRGs and the discharge is to a home under a written plan of care for the provision of home health services from a home health agency and those services begin within 3 days after the date of discharge. A hospital that transfers an inpatient under the above circumstance is paid a graduated per diem rate for each day of the patient's stay in that hospital, not to exceed the full DRG payment that would have been paid if the patient had been discharged to another setting.

For 2 of 120 inpatient claims, the Hospital billed Medicare for a patient discharge that should have been billed as a transfer. For these claims, the Hospital should have coded the discharge status as a transfer to home under a written plan of care for the provision of home health services. However, the Hospital incorrectly coded the discharge status as to home, thus the Hospital should have received the per diem payment instead of the full DRG payment. The Hospital stated that these errors occurred because of conflicting information in the medical record regarding the patient's discharge status. As a result, the Hospital received an overpayment of \$4,063.

BILLING ERRORS ASSOCIATED WITH OUTPATIENT CLAIMS

The Hospital incorrectly billed Medicare for 39 of the 125 outpatient claims that we reviewed. These errors resulted in overpayments of \$84,188 as shown in Figure 2.



Manufacturer Credits for Replaced Medical Devices Not Reported

Federal regulations require a reduction in the OPPS payment for the replacement of an implanted device if: (1) the device is replaced without cost to the provider or the beneficiary, (2) the provider receives full credit for the cost of the replaced device, or (3) the provider receives partial credit equal to or greater than 50 percent of the cost of the replacement device (42 CFR § 419.45). For services furnished on or after January 1, 2007, CMS requires the provider to report the modifier “FB” and reduced charges on a claim that includes a procedure code for the insertion of a replacement device if the provider incurs no cost or receives full credit for the replaced device. If the provider receives a replacement device without cost from the manufacturer, the provider must report a charge of no more than \$1 for the device. When a hospital receives a partial credit of 50 percent or more of the cost of a new replacement device, the hospital must add modifier “FC” to the procedure code that reports the service provided to replace the device.³

Specific procedure codes reported with value code “FD” reduce the Medicare payment by the amount of the device credit. For services furnished on or after January 1, 2014, the Manual states that, when a hospital furnishes a replacement device received without cost or with a credit of 50 percent or more of the cost of a replacement because of a warranty, recall, or field action, the hospital must report the amount of the device credit in the amount portion for value code “FD” and report either condition code 49 or 50.

For 8 of the 125 outpatient claims, the Hospital incorrectly billed Medicare for medical devices that were under warranty.

- For seven claims, the Hospital received full credit for replaced devices but did not report the “FB” modifier and reduced charges on its claims or report value code “FD” indicating that it received a full warranty.

³ CMS provides guidance on how a provider should report no-cost and reduced-cost devices under the OPPS (CMS Transmittal 1103, dated November 3, 2006, and the Manual, chapter 4, § 61.3).

- For one claim, the Hospital received a partial credit of 50 percent or more for the replaced device but did not add the “FC” modifier indicating a partial warranty was received.

The Hospital stated that these errors occurred because some departments did not consistently notify Patient Accounting of the receipt of a device credit or no-cost replacement device, and it did not have procedures to review for possible credits or reconcile vendor invoices to ensure appropriate application of the credit to the claim. As a result, the Hospital received overpayments of \$55,814.

Incorrectly Billed Healthcare Common Procedure Coding System Codes

The Act precludes payment to any provider without information necessary to determine the amount due the provider (§ 1833(e)). The Manual states, “In order to be processed correctly and promptly, a bill must be completed accurately” (chapter 1, § 80.3.2.2).

For 9 of the 125 outpatient claims, the Hospital submitted the claims to Medicare with incorrect codes that were not supported by the medical records, or, for 1 claim, had omitted a HCPCS code that could have been billed. The Hospital stated that human error caused of the use of these incorrect codes. As a result of these incorrect codes, the Hospital received net overpayments of \$27,452.

Insufficiently Documented Evaluation and Management Services

The Act precludes payment to any provider without information necessary to determine the amount due the provider (§ 1833(e)).

For 22 of the 125 outpatient claims, the Hospital incorrectly billed Medicare for evaluation and management services that were insufficiently documented in the medical records. The Hospital indicated that human error caused these instances of insufficient documentation. As a result of these errors, the Hospital received overpayments of \$922.

OVERALL ESTIMATE OF OVERPAYMENTS

On the basis of our sample results, we estimated that the Hospital received overpayments of at least \$1,145,338 for the audit period. During the course of our audit, the Hospital reprocessed 30 claims with overpayments of \$133,914 that we verified as correctly reprocessed. Accordingly, we have reduced the recommended refund by this amount.⁴

RECOMMENDATIONS

We recommend that the Hospital:

- refund to the Medicare program \$1,011,424 (\$1,145,338 minus \$133,914) in estimated

⁴ The Hospital reprocessed 1 inpatient and 6 outpatient claims during our fieldwork that we did not accept.

overpayments on claims incorrectly billed for the audit period and

- strengthen controls to ensure full compliance with Medicare requirements.

VANDERBILT UNIVERSITY MEDICAL CENTER COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

Vanderbilt University Medical Center Comments

In written comments on our draft report, the Hospital did not specifically address our recommendations. However, the Hospital agreed with the report findings for 68 of the 73 claim errors but disputed 3 inpatient (sample numbers 65, 101, and 105) and 2 outpatient (sample numbers 146 and 149) claim errors. The Hospital indicated that it either has reprocessed or was working with its Medicare Administrative Contractor (MAC) on reprocessing affected claims to correct the 68 claims with coding errors that we identified. The Hospital listed specific policy and procedure actions that it has taken to address the control issues that caused the errors to occur. The Hospital's comments are included in their entirety as Appendix E.

Office of Inspector General Response

After reviewing the Hospital's comments, we maintain that all of our findings and the associated recommendations are correct. We obtained an independent medical review to determine whether the three inpatient and two outpatient claims disputed by the Hospital met Medicare coding and billing requirements. The independent medical reviewer or the MAC examined all of the medical records and documents that the Hospital submitted and carefully considered this information to determine whether the Hospital billed the inpatient and outpatient claims according to Medicare requirements. On the basis of these determinations, we continue to assert that the five claims disputed by the Hospital contain coding errors that resulted in overpayment to the Hospital.

APPENDIX A: AUDIT SCOPE AND METHODOLOGY

SCOPE

Our audit covered \$30,013,286 in Medicare payments to the Hospital for 1,959 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 245 claims with payments totaling \$4,851,994. These 245 claims were paid from January 1, 2013, through August 31, 2014 (audit period), and consisted of 120 inpatient and 125 outpatient claims.

We focused our review on the risk areas identified as a result of prior OIG reviews at other hospitals. We evaluated compliance with selected billing requirements and subjected 86 claims to medical review to determine whether the services were medically necessary and coded correctly.

We limited our review of the Hospital's internal controls to those applicable to the inpatient and outpatient areas of review because our objective did not require an understanding of all internal controls over the submission and processing of claims. We established reasonable assurance of the authenticity and accuracy of the data obtained from the National Claims History file, but we did not assess the completeness of the file.

This report focuses on selected risk areas and does not represent an overall assessment of all claims submitted by the Hospital for Medicare reimbursement.

We conducted our fieldwork from March 2015 through February 2016.

METHODOLOGY

To accomplish our objective, we:

- reviewed applicable Federal laws, regulations, and guidance;
- extracted the Hospital's inpatient and outpatient paid claims data from CMS's National Claims History File for the audit period;
- obtained information on known credits for replaced cardiac medical devices from the device manufacturers for the audit period;
- used computer matching, data mining, and other data analysis techniques to identify claims potentially at risk for noncompliance with selected Medicare billing requirements;
- selected a stratified random sample of 245 claims totaling \$4,851,994 (Appendix B) for detailed review;
- reviewed available data from CMS's Common Working File for the sampled claims to determine whether the claims had been cancelled or adjusted;

- reviewed the itemized bills and medical record documentation provided by the Hospital to support the sampled claims;
- requested that the Hospital conduct its own review of the sampled claims to determine whether the services were billed correctly;
- reviewed the Hospital's procedures for classifying hospital stays (outpatient, observation, or inpatient admission), case management, coding, and Medicare claim submission;
- used CMS's Medicare contractor medical review staff to determine whether 56 sampled claims met coding and medical requirements;
- used an independent contractor to determine whether 30 sampled claims met coding and medical requirements;
- discussed the incorrectly billed claims with Hospital personnel to determine the underlying causes of noncompliance with Medicare requirements;
- calculated the correct payments for those claims requiring adjustments;
- used the results of the sample to estimate the Medicare overpayments to the Hospital (Appendix C); and
- discussed the results of the review with Hospital officials.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

APPENDIX B: SAMPLE DESIGN AND METHODOLOGY

POPULATION

The population was inpatient and outpatient claims paid to the Hospital from January 1, 2013, through August 31, 2014, for services provided to Medicare beneficiaries.

SAMPLING FRAME

Inpatient Claims

According to CMS's National Claims History data, Medicare paid the Hospital approximately \$228 million for 12,632 inpatient claims, in 21 high-risk areas, during January 1, 2013 through August 31, 2014, for services provided to beneficiaries.

From these 21 risk areas, we selected 3 consisting of 5,817 claims totaling \$118,695,194 for further refinement. We performed data filtering and analysis of the claims within each of the three high-risk areas. The specific filtering and analysis steps performed varied depending on the risk area, but included such procedures as removing:

- claims with certain patient discharge status codes and diagnosis codes;
- paid claims less than \$3,000;
- claims duplicated within individual risk areas by assigning each inpatient claim that appeared in multiple risk areas to just one category on the basis of the following hierarchy:
 - inpatient manufacturer credits for replaced medical devices,
 - inpatient claims billed with high-severity-level DRG codes, and
 - inpatient claims paid in excess of charges, and
- claims under review by the Recovery Audit Contractor as of January 26, 2015.

This data filtering resulted in a sampling frame of 1,475 unique Medicare claims totaling \$19,462,422.

Outpatient Claims

According to CMS's National Claims History data, Medicare paid the Hospital approximately \$48 million for 27,744 outpatient claims in 28 high-risk areas from January 1, 2013, through August 31, 2014, for services provided to beneficiaries.

From these 28 risk areas, we selected for further refinement claims from 3 high-risk areas consisting of 12,783 claims totaling \$44,287,147. The high-risk areas were:

- outpatient manufacturer credits for replaced devices,
- outpatient claims billed with evaluation and management services, and
- outpatient claims paid in excess of \$25,000.

We performed data filtering and analysis of the claims within each of the three high-risk areas. The specific filtering and analysis steps performed varied depending on the risk area, but included such procedures as removing:

- claims with certain revenue codes;
- \$0 paid claims;
- claims duplicated within individual risk areas by assigning each outpatient claim that appeared in multiple risk areas to just one category on the basis of the following hierarchy:
 - outpatient manufacturer credits for replaced medical devices,
 - outpatient evaluation and management services, and
 - outpatient claims paid in excess of \$25,000; and
- claims under review by the Recovery Audit Contractor as of January 26, 2015.

This data filtering resulted in a sample frame of 484 unique Medicare claims totaling \$10,550,864.

SAMPLE UNIT

The sample unit was a Medicare paid claim.

SAMPLE DESIGN

We used a stratified random sample. We divided the sampling frame into 8 strata on the basis of risk area and evenly split two risk areas on the basis of dollar value. The split risk areas were: Inpatient Claims Billed With High-Severity-Level DRG Codes (low and high), and Outpatient Claims With Payments Greater Than \$25,000 (low and high).

SAMPLE SIZE

We selected 245 claims for review as shown in Table 1.

Table 1 - Stratum, Risk Area, Frame, and Sample Detail

Stratum	Risk Area	Frame Size	Value of Frame	Sample Size
1	Inpatient Manufacturer Credits for Replaced Medical Devices	20	\$ 769,043	20
2	Inpatient Claims Billed With High-Severity-Level DRG Codes (low dollars)	549	3,956,149	30
3	Inpatient Claims Billed With High-Severity-Level DRG Codes (high dollars)	549	9,638,614	30
4	Inpatient Claims Paid in Excess of Charges	357	5,098,616	40
5	Outpatient Manufacturer Credits for Replaced Medical Devices	25	432,786	25
6	Outpatient Claims Billed With Evaluation and Management Services	149	19,453	30
7	Outpatient Claims With Payments Greater Than \$25,000 (low dollars)	155	4,270,125	30
8	Outpatient Claims With Payments Greater Than \$25,000 (high dollars)	155	5,828,500	40
	Total	1,959	\$30,013,286	245

SOURCE OF RANDOM NUMBERS

We generated the random numbers using the Office of Inspector General, Office of Audit Services (OIG/OAS) statistical software.

METHOD FOR SELECTING SAMPLE UNITS

We consecutively numbered the claims within strata 2, 3, 4, 6, 7, and 8. After generating the random numbers for strata 2, 3, 4, 6, 7 and 8, we selected the corresponding claims in each stratum. We selected all claims in strata 1 and 5.

ESTIMATION METHODOLOGY

We used the OIG/OAS statistical software to estimate the total amount of Medicare overpayments paid to the Hospital during the audit period.

APPENDIX C: SAMPLE RESULTS AND ESTIMATES

Table 2 - Sample Results

Stratum	Frame Size (Claims)	Value of Frame	Sample Size	Value of Sample	Number of Incorrectly Billed Claims in Sample	Value of Overpayments in Sample
1	20	\$769,043	20	\$769,043	13	\$71,403
2	549	3,956,149	30	209,001	5	8,757
3	549	9,638,614	30	432,962	4	20,979
4	357	5,098,616	40	652,042	12	119,654
5	25	432,786	25	432,786	8	55,814
6	149	19,453	30	4,504	22	922
7	155	4,270,125	30	819,628	1	(1,548)
8	155	5,828,500	40	1,532,028	8	29,000
Totals	1,959	\$30,013,286	245	\$4,851,994	73	\$304,981

ESTIMATES

Table 3: Estimated Value of Overpayments for the Audit Period
Limits Calculated for a 90-Percent Confidence Interval

Point Estimate	\$1,848,262
Lower limit	\$1,145,338
Upper limit	\$2,551,186

APPENDIX D: RESULTS OF REVIEW BY RISK AREA

Table 3 - Sample Results by Risk Area

Risk Area	Selected Claims	Value of Selected Claims	Claims With Over-payments	Value of Over-payments
Inpatient				
Manufacturer Credits for Replaced Medical Devices	20	\$769,043	13	\$71,403
Claims Billed With High-Severity-Level DRG Codes (low)	30	209,001	5	8,757
Claims Billed With High-Severity-Level DRG Codes (high)	30	432,962	4	20,979
Claims Paid in Excess of Charges	40	652,042	12	119,654
Inpatient Totals	120	\$2,063,048	34	\$220,793
Outpatient				
Manufacturer Credits for Replaced Medical Devices	25	\$432,786	8	\$55,814
Claims Billed With Evaluation and Management Services	30	4,504	22	922
Claims with Payments Greater Than \$25,000 (low)	30	819,628	1	(1,548)
Claims with Payments Greater Than \$25,000 (high)	40	1,532,028	8	29,000
Outpatient Totals	125	\$2,788,946	39	\$84,188
Inpatient and Outpatient Totals	245	\$4,851,994	73	\$304,981

Notice: The table above illustrates the results of our review by risk area. In it, we have organized inpatient and outpatient claims by the risk areas we reviewed. However, we have organized this report's findings by the types of billing errors we found at the Hospital. Because we have organized the information differently, the information in the individual risk areas in this table does not match precisely with this report's findings.

**APPENDIX E: VANDERBILT UNIVERSITY MEDICAL CENTER
COMMENTS**



Vanderbilt University Medical Center
Office of Healthcare Compliance

April 15, 2016

Ms. Lori S. Pilcher
Regional Inspector General for Audit Services
Department of Health and Human Services
Office of Inspector General
Office of Audit Services, Region IV
61 Forsyth Street SW, Suite 3T41
Atlanta, GA 30303

Re: Draft Report titled *Medicare Compliance Review of Vanderbilt University Medical Center for 2013 and 2014*, Report Number A-04-15-08042

Dear Ms. Pilcher:

Vanderbilt University, by and through its Vanderbilt University Medical Center ("VUMC")¹ has received the U.S. Department of Health and Human Services, Office of Inspector General's ("OIG") draft report entitled *Medicare Compliance Review of Vanderbilt University Medical Center for 2013 and 2014*, Report Number: A-04-15-08042 ("Report"), and appreciates the opportunity to submit responses to the OIG's proposed findings. VUMC is committed to complying with all federal laws, regulations and rules, and to maintaining a robust compliance program regarding VUMC's clinical, coding and billing functions.

VUMC's responses to the Report's proposed findings and recommendations are as follows. Please note that VUMC agrees with the Report's proposed findings unless specifically stated otherwise below.

BILLING ERRORS ASSOCIATED WITH INPATIENT CLAIMS

Incorrectly Billed Diagnosis-Related-Group Codes

The Report states that 17 of the 120 inpatient claims billed by VUMC used the incorrect diagnosis-related-group ("DRG") code. VUMC disagrees with the Report's findings that Sample Numbers 65, 101 and 105 were billed incorrectly, and has submitted documentation to OIG demonstrating support for the billed DRG codes.

¹ Please note that "VUMC" as used in this response refers to all of the clinical healthcare operations that are currently part of Vanderbilt University ("VU"). However, a transaction involving the sale of substantially all such assets (but not VU's educational institution assets) to a newly formed and separate 501(c)(3) entity – Vanderbilt University Medical Center – is currently slated to close in the near future. Following the transaction, Vanderbilt University Medical Center will continue to operate all of the healthcare operations formerly owned and operated by VU.



Vanderbilt University Medical Center Office of Healthcare Compliance

Regarding the remaining findings, VUMC has implemented the following measures to further improve upon its processes and procedures:

- VUMC's DRG Coding Department will increase its resources by:
 - Recruiting a manager to oversee VUMC's internal auditing team. A coding consultant has been engaged to provide oversight to this function until the manager position is filled;
 - Recruiting two additional auditors, in addition to the six currently employed by VUMC; and
 - Hiring a full-time coding trainer.
- In addition to the post-bill audits VUMC currently conducts, pre-bill audits are being implemented with the goal of identifying errors before they are billed.
- VUMC has implemented an Annual Coding Audit Plan, focusing on issues identified internally and in the OIG Work Plan.

Furthermore, the errors identified in the Report have been discussed with VUMC's coding team, and additional training has been provided on the topics at issue.

Manufacturer Credits for Replaced Medical Devices Not Obtained or Reported

The Report states that 13 of the 120 inpatient claims billed by VUMC incorrectly billed Medicare for medical devices that were under warranty.

Regarding these findings, VUMC has implemented the following measures to further improve upon its processes and procedures:

- VUMC has implemented a *Device Credit Reporting* Policy to ensure proper reporting of vendor warranty, recall or other credits received for explanted devices. Under this policy:
 - Supply Chain staff monitor manufacturer and FDA Trackable Explanted Devices recall and warranty activity to identify applicable recalls and warranties. Supply Chain communicates this information to the VUMC Procedure Areas.
 - Supply Chain generates a monthly summary report of device credits received from the manufacturer and sends to the Revenue Cycle Department.
 - For each procedure (i) performed on Medicare patients, and (ii) included on the CMS-published list of those subject to device credit reporting and potential pass-through refund, the explant will be tracked and reported by the VUMC Procedure Area to the Revenue Cycle Department for centralized logging and monitoring.
 - The Revenue Cycle Department reconciles the list of procedures performed with the list of device credits received on a monthly basis and makes the necessary billing adjustments.

Training on the *Device Credit Reporting* Policy is also being developed and is being provided to relevant clinical and billing departments.



Vanderbilt University Medical Center
Office of Healthcare Compliance

Incorrectly Billed as Inpatient or Without a Valid Physician Order

The Report states that 1 of the 120 inpatient claims billed by VUMC should have been billed as outpatient or outpatient with observation services based on the level of care and services provided, and that 1 of the 120 inpatient claims billed by VUMC was billed incorrectly as the medical records indicate that the patient was never admitted.

Regarding these findings, VUMC has implemented the following measures to further improve upon its processes and procedures:

- VUMC's billing software identifies and holds any inpatient claims that contain only room and bed charges.
- Such claims are reviewed by the billing staff before any additional action is taken.

VUMC has also provided additional training to the coding staff regarding confirmation of the patient's admission status per the physician order and to physicians reinforcing the patient admission process.

Incorrectly Billed Discharge Status Code

The Report states that 2 of the 120 inpatient claims billed by VUMC incorrectly billed Medicare for a patient discharge that should have been billed as a transfer.

Regarding these findings, VUMC has implemented the following measures to further improve upon its processes and procedures:

- VUMC has updated its internal policies and procedures to require coders to independently verify each patient's discharge status.

Training regarding the new requirement and how to verify a patient's discharge status has also been provided to VUMC's coding team.

BILLING ERRORS ASSOCIATED WITH OUTPATIENT CLAIMS

Manufacturer Credits for Replaced Medical Devices Not Reported

The Report states that 8 of the 125 outpatient claims billed by VUMC incorrectly billed Medicare for medical devices that were under warranty.

Regarding these findings, VUMC has implemented the following measures to further improve upon its processes and procedures:



Vanderbilt University Medical Center Office of Healthcare Compliance

- VUMC has implemented a *Device Credit Reporting* Policy to ensure proper reporting of vendor warranty, recall or other credits received for explanted devices. Under this policy:
 - Supply Chain staff monitor manufacturer and FDA Trackable Explanted Devices recall and warranty activity to identify applicable recalls and warranties. Supply Chain communicates this information to the VUMC Procedure Areas.
 - Supply Chain generates a monthly summary report of device credits received from the manufacturer and sends to the Revenue Cycle Department.
 - For each procedure (i) performed on Medicare patients, and (ii) included on the CMS-published list of those subject to device credit reporting and potential pass-through refund, the explant will be tracked and reported by the VUMC Procedure Area to the Revenue Cycle Department for centralized logging and monitoring.
 - The Revenue Cycle Department reconciles the list of procedures performed with the list device credits received on a monthly basis and makes the necessary billing adjustments.

Training on the *Device Credit Reporting* Policy is being developed and is being provided to relevant clinical and billing departments.

Incorrectly Billed Healthcare Common Procedure Coding System Codes

The Report states that 9 of the 125 outpatient claims billed by VUMC either used incorrect Healthcare Common Procedure Coding System ("HCPCS") codes or omitted a HCPCS code that could have been billed.

Regarding these findings, VUMC has implemented the following measures to further improve upon its processes and procedures:

- In 2015 VUMC's professional coding team hired six additional full-time internal auditors to focus on outpatient coding accuracy.

Additional training has been provided to VUMC's coding team on the topics identified by the Report.

Insufficiently Documented Evaluation and Management Services

The Report states that 22 of the 125 outpatient claims billed by VUMC incorrectly billed Medicare for evaluation and management ("E/M") services that were insufficiently documented in the medical records. VUMC disagrees with the findings that Sample Numbers 146 and 149 were billed incorrectly. The Medicare Claims Processing Manual, Chapter 12, Section 30.6.6(B) states that an E/M service may be billed on the same day as a significant procedure if the E/M service is "a significant, separately identifiable E/M service that is above and beyond the usual pre- and post-operative work of the procedure." For Sample Numbers 146 and 149, VUMC has submitted documentation to OIG demonstrating that significant, separately identifiable E/M services were provided.



Vanderbilt University Medical Center
Office of Healthcare Compliance

Regarding the remaining findings, VUMC has adopted a conservative approach of no longer reviewing outpatient operative procedures for separate E/M services.

Regarding the errors identified by the Report for which VUMC agrees, VUMC has either re-processed or is working with our Medicare Administrative Contractor on re-processing affected claims in accordance with the findings of the Report in order to refund the estimated overpayments to the government.

VUMC would like to thank the OIG again for the opportunity to respond to proposed findings of the Report, and for its assistance working with VUMC to complete this review. If you have any additional questions regarding VUMC's responses to the draft Report, or if you need any additional information, please contact me at (615) 343-1584 or james.s.mathis@vanderbilt.edu.

Best Regards,

James S. Mathis, JD, CHC, CHP
Chief Compliance Officer
Vanderbilt University