

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**MEDICARE COMPLIANCE REVIEW OF
DUKE UNIVERSITY HOSPITAL FOR THE
PERIOD JANUARY 1, 2011, THROUGH
SEPTEMBER 30, 2012**

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Office of Inspector General

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EXECUTIVE SUMMARY

Duke University Hospital did not fully comply with Medicare requirements for billing inpatient and outpatient services, resulting in estimated overpayments of at least \$626,133 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 (CY) 2012, Medicare paid hospitals \$148 billion, which represents 43 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 Duke University Hospital (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 924-bed acute care facility located in Durham, North Carolina. According to CMS's National Claims History data, Medicare paid the Hospital approximately \$584 million for 22,101 inpatient and 492,063 outpatient claims for services provided to beneficiaries during January 1, 2011, through September 30, 2012 (audit period).

Our audit covered \$26,303,124 in Medicare payments to the Hospital for 2,905 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 251 claims with payments totaling \$3,296,435. These 251 claims had dates of service in our audit period and consisted of 119 inpatient and 132 outpatient claims.

WHAT WE FOUND

The Hospital complied with Medicare billing requirements for 179 of the 251 inpatient and outpatient claims we reviewed. However, the Hospital did not fully comply with Medicare billing requirements for the remaining 72 claims, resulting in net overpayments of \$262,884 for the audit period. Specifically, 26 inpatient claims had billing errors resulting in net overpayments of \$218,294, and 46 outpatient claims had billing errors resulting in overpayments

of \$44,590. 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 \$626,133 for the audit period.

WHAT WE RECOMMEND

We recommend that the Hospital:

- refund to the Medicare contractor \$626,133 in estimated overpayments for the audit period for claims that it incorrectly billed and
- strengthen controls to ensure full compliance with Medicare requirements.

DUKE UNIVERSITY HOSPITAL COMMENTS AND OUR RESPONSE

In written comments on our draft report, the Hospital concurred with our findings and recommendations with one exception. For one claim, the Hospital disagreed with our finding that it submitted the claim to Medicare with an incorrect DRG code.

In addition, the Hospital described the actions it had taken to strengthen its controls to ensure full compliance with Medicare requirements.

After reviewing the Hospital's comments, we maintain that the Hospital billed the disputed claim incorrectly. We acknowledge the Hospital's efforts to strengthen its compliance with Medicare requirements.

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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 (CY) 2012, Medicare paid hospitals \$148 billion, which represents 43 percent of all fee-for-service payments; therefore, the Office of Inspector General must provide continual and adequate oversight of Medicare payments to hospitals.

OBJECTIVE

Our objective was to determine whether Duke University Hospital (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.

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

Hospital Claims at Risk for Incorrect Billing

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

- inpatient short stays,
- inpatient claims paid in excess of charges,
- inpatient and outpatient manufacturer credits for replaced medical devices,
- inpatient claims billed with high-severity-level DRG codes,
- outpatient claims with payments greater than \$25,000,
- outpatient claims billed with evaluation and management (E&M) services,
- outpatient claims billed for Doxorubicin Hydrochloride, and
- outpatient claims billed for Lupron injections.

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

Duke University Hospital

The Hospital is a 924-bed acute care facility located in Durham, North Carolina. According to CMS’s National Claims History (NCH) data, Medicare paid the Hospital approximately

\$584 million for 22,101 inpatient and 492,063 outpatient claims for services provided to beneficiaries during January 1, 2011, through September 30, 2012 (audit period).

HOW WE CONDUCTED THIS REVIEW

Our audit covered \$26,303,124 in Medicare payments to the Hospital for 2,905 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 251 claims with payments totaling \$3,296,435. These 251 claims had dates of service in our audit period and consisted of 119 inpatient and 132 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 65 claims to medical review and coding review to determine whether the services were medically necessary and properly 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 scope and methodology.

FINDINGS

The Hospital complied with Medicare billing requirements for 179 of the 251 inpatient and outpatient claims we reviewed. However, the Hospital did not fully comply with Medicare billing requirements for the remaining 72 claims, resulting in net overpayments of \$262,884 for the audit period. Specifically, 26 inpatient claims had billing errors resulting in net overpayments of \$218,294, and 46 outpatient claims had billing errors resulting in overpayments of \$44,590. 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 \$626,133 for the audit period. See Appendix B for sample design and methodology, Appendix C for sample results and estimates, and Appendix D for the results of review by risk area.

BILLING ERRORS ASSOCIATED WITH INPATIENT CLAIMS

The Hospital incorrectly billed Medicare for 26 of the 119 inpatient claims that we reviewed. These errors resulted in net overpayments of \$218,294. One claim contained more than one type of error.²

Incorrectly Billed as Inpatient

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)).

For 8 of the 119 inpatient claims, the Hospital incorrectly billed Medicare Part A for beneficiary stays that should have been billed as outpatient or outpatient with observation services. The Hospital said that one of these errors occurred because of miscommunication between the case-management staff and the billing department. The case-management staff had identified the claim as not being medically necessary for inpatient but the billing staff did not bill the claim correctly. The Hospital said that it has begun using electronic communication between the case-management and billing departments, which should help prevent such errors. The Hospital said that the other errors occurred because of the interpretations of medical data by the physicians admitting the patients.

As a result of these errors, the Hospital received overpayments of \$109,736.³

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)). In addition, the Manual states: “In order to be processed correctly and promptly, a bill must be completed accurately” (chapter 1, § 80.3.2.2).

For 15 of the 119 inpatient claims, the Hospital submitted claims to Medicare with incorrect DRG codes. For example, the Hospital submitted a claim with a secondary diagnosis of universal ulcerative colitis. However, the medical records did not support the coding of this diagnosis. By including this secondary diagnosis, the Hospital increased the weight of the DRG, which resulted in an overpayment. In another example, the Hospital submitted a claim with a principal diagnosis code of hypertensive chronic kidney disease for a beneficiary admitted to the

² For randomly sampled claims that contained more than one type of error, the total claim overpayment was used for error estimation. We did not estimate errors on the same claim twice.

³ The Hospital may be able to bill Medicare Part B for all services (except for services that specifically require an outpatient status) that would have been reasonable and necessary had the beneficiary been treated as a hospital outpatient rather than admitted as an inpatient. We were unable to determine the effect that billing Medicare Part B would have on the overpayment amount because these services had not been billed and adjudicated by the Medicare contractor prior to the issuance of this report.

Hospital with a diagnosis of hyperkalemia,⁴ which resulted from the patient's not properly getting necessary dialysis treatments. The Hospital treated the patient with dialysis. Coding guidance directs using hyperkalemia as the principal diagnosis in this circumstance. By including hypertensive chronic kidney disease as the principal diagnosis, the Hospital increased the weight of the DRG, which resulted in another overpayment.

These errors occurred because of the Hospital coders' interpretation of the medical records or their application of coding rules.

As a result of these errors, the Hospital received net overpayments of \$94,454.

Incorrect Discharge Status

Federal regulations 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 home under a home health agency's written plan of care for home health services that begin within 3 days after the date of discharge (42 CFR § 412.4(c)). 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 (42 CFR § 412.4(f)).

For 2 of the 119 inpatient claims, the Hospital incorrectly billed Medicare for patient discharges that should have been billed as transfers. Specifically, the Hospital coded the discharge status as to home instead of to home health. Thus, the Hospital received the full DRG payment instead of the graduated per diem payment it would have received if it had correctly coded the patient's discharge status. The Hospital stated that these errors occurred because of individual coders' mistakes.

As a result of these errors, the Hospital received overpayments of \$9,104.

Manufacturer Credits for Replaced Medical Devices Not Reported

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). The Manual states that, to bill correctly for a replacement device that was provided with a credit, a 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 2 of the 119 inpatient claims, the Hospital received reportable medical device credits from a manufacturer for replaced devices but did not adjust its inpatient claims with the proper condition and value codes to reduce payment as required.

⁴ Hyperkalemia is an abnormally elevated level of potassium in the blood. It is usually caused by kidney dysfunction.

For one of the claims, the Hospital did not report the credit due to a misinterpretation of CMS guidelines. Hospital staff calculated the percentage of the credit to the cost of the device incorrectly by including the cost of all devices replaced during a procedure instead of including only the cost of the individual device associated with the credit received. As a result, the staff incorrectly calculated a percentage less than 50 percent, and, therefore, the Hospital did not report the credit. The Hospital said it had subsequently taken steps to educate staff on the correct interpretation of CMS's guidelines.

For the other claim, the Hospital did not report the credit because of a step in the billing process in which a staff member removed the proper condition and value codes that would have reduced the payment. The Hospital stated that the removal was inadvertent and blamed inconsistent monitoring of the claims-submission process.

As a result of these errors, the Hospital received overpayments of \$5,000.

BILLING ERRORS ASSOCIATED WITH OUTPATIENT CLAIMS

The Hospital incorrectly billed Medicare for 46 of the 132 outpatient claims that we reviewed. These errors resulted in overpayments of \$44,590. Three claims contained more than one type of error. (See footnote 2.)

Manufacturer Credits for Replaced Medical Devices Not Reported or Obtained

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). The CMS *Provider Reimbursement Manual* (PRM) reinforces these requirements in additional detail (Pub. No. 15-1).⁵

CMS guidance in Transmittal 1103, dated November 3, 2006, and the Manual, chapter 4, section 61.3, explain how a provider should report no-cost and reduced-cost devices under the OPSS. 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.

⁵ The PRM 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" (part I, § 2102.1). Section 2103 further defines prudent buyer principles and states 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."

For 2 of the 132 outpatient claims, the Hospital incorrectly billed Medicare for medical devices that were under warranty.

For one claim, the Hospital did not obtain a credit for a replaced medical device for which a credit was available under the terms of the manufacturer's warranty. The Hospital stated that the error occurred because of misinformation from the manufacturer and that accurate information from the manufacturer was crucial to the credit process. The Hospital said it had subsequently taken steps to improve communication with the manufacturer by establishing communications with its warranty office rather than by relying on its sales representatives.

For the other claim, the Hospital received a reportable credit from a manufacturer for a replaced device, but did not report the credit. The Hospital said that it did not report the credit because it misinterpreted CMS guidelines. Hospital staff incorrectly calculated the percentage of the credit to the cost of the device by including the cost of all devices replaced during a procedure instead of including only the cost of the individual device associated with the credit received. As a result, the staff incorrectly calculated a percentage less than 50 percent, and, therefore, the Hospital did not report the credit. The Hospital said it had subsequently taken steps to educate staff on the correct interpretation of CMS's guidelines.

As a result of these errors, the Hospital received overpayments of \$42,470.

Incorrectly Billed Evaluation and Management Services

The Act precludes payment to any provider of services or other person without information necessary to determine the amount due the provider (§ 1833 (e)). The Manual states that a Medicare contractor pays for an E&M service that is significant, separately identifiable, and above and beyond the usual preoperative and postoperative work of a procedure (chapter 12, § 30.6.6(B)). In addition, the Manual specifically states that E&M HCPCS code 99211 should not be paid with a nonchemotherapy drug infusion HCPCS code or a chemotherapy administration HCPCS code (chapter 12, § 30.5(F)).

For 36 of the 132 outpatient claims, the Hospital incorrectly billed Medicare for E&M services. For these claims, the E&M services were not significant, separately identifiable, and above and beyond the usual preoperative and postoperative work of the procedure. For example, for 25 of the 36 claims, the Hospital staff incorrectly billed the E&M services with HCPCS code 99211 for encounters that involved a nonchemotherapy drug infusion (HCPCS code 96365) or a chemotherapy administration (HCPCS code 96413).

The Hospital said the errors occurred because staff members did not always identify encounters as "procedure only" (i.e., the E&M service is not a significant, separately identifiable service).

As a result of these errors, the Hospital received overpayments of \$1,620.

Incorrect Healthcare Common Procedure Coding System Codes

The Act precludes payment to any provider of services or other person without information necessary to determine the amount due the provider (§ 1833(e)). In addition, the Manual states: "In order to be processed correctly and promptly, a bill must be completed accurately" (chapter 1, § 80.3.2.2).

For 11 of 132 outpatient claims, the Hospital submitted claims to Medicare with incorrect HCPCS codes. These incorrect codes occurred because, in some cases, Hospital staff did not follow its Medicare contractor's guidance or, in other cases, human error caused claims to be coded incorrectly.

For 8 of the 11 errors, the Hospital billed a chemotherapy administration HCPCS code for administration of a certain drug, but, according to billing guidance issued by the Hospital's Medicare contractor, it should have billed a nonchemotherapy drug infusion HCPCS code. Even though the Medicare contractor issued the billing guidance after the effective date and after the dates of service for the claims in question, the Hospital should have filed corrected claims for all claims that were subject to the guidance.

For 3 of the 11 errors, the Hospital billed a higher-level E&M HCPCS code than was supported by the medical records. The Hospital billed these higher-level codes because of human error when coding the claims for billing purposes.

As a result of these errors, the Hospital received overpayments of \$500.

OVERALL ESTIMATE OF OVERPAYMENTS

Based on our sample results, we estimated that the Hospital received overpayments of at least \$626,133 for the audit period.

RECOMMENDATIONS

We recommend that the Hospital:

- refund to the Medicare contractor \$626,133 in estimated overpayments for the audit period for claims that it incorrectly billed and
- strengthen controls to ensure full compliance with Medicare requirements.

DUKE UNIVERSITY HOSPITAL COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

In written comments on our draft report, the Hospital concurred with our findings and recommendations with one exception. For one claim, the Hospital disagreed with our finding that it submitted the claim to Medicare with an incorrect DRG code.

In Addition, the Hospital described the actions it had taken to strengthen its controls to ensure full compliance with Medicare requirements.

As we indicated in Appendix A, during our audit, we used a CMS Medicare contractor's medical review staff and coders to determine whether certain claims in our sample, including the claim in question, were properly coded. The contractor examined all of the medical records and documentation submitted for this claim and determined that it was not submitted with the correct DRG code. On the basis of the contractor's conclusion, we maintain that the Hospital billed the disputed claim incorrectly.

We acknowledge the Hospital's efforts to strengthen its compliance with Medicare requirements.

The Hospital's comments are included in their entirety as Appendix E.

APPENDIX A: AUDIT SCOPE AND METHODOLOGY

SCOPE

Our audit covered \$26,303,124 in Medicare payments to the Hospital for 2,905 claims that were potentially at risk for billing errors. We selected for review a stratified random sample of 251 claims with payments totaling \$3,296,435. These 251 claims consisted of 119 inpatient and 132 outpatient claims and had dates of service from January 1, 2011, through September 30, 2012 (audit period).

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 65 claims to medical review and coding review to determine whether the services were medically necessary and properly coded.

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 NCH 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 at the Hospital from April 2013 through September 2013.

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 NCH 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 analysis techniques to identify claims potentially at risk for noncompliance with selected Medicare billing requirements;
- selected a stratified random sample of 251 claims (119 inpatient and 132 outpatient) totaling \$3,296,435 for detailed review (Appendix B);
- 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 assigning DRG, HCPCS and admission status codes for Medicare claims;
- discussed the incorrectly billed claims with Hospital personnel to determine the underlying causes of noncompliance with Medicare requirements;
- used a CMS Medicare contractor's medical review staff and coders to determine whether 65 claims met medical necessity requirements and were properly coded;
- calculated the correct payments for those claims requiring adjustments;
- used the results of the sample review to calculate the estimated Medicare overpayment to the Hospital (Appendix C); and
- discussed the results of our 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 contained inpatient and outpatient claims paid to the Hospital for services provided to Medicare beneficiaries during the audit period.

SAMPLING FRAME

According to CMS's NCH data, Medicare paid the Hospital \$583,605,859 for 22,101 inpatient and 492,063 outpatient claims for services provided to beneficiaries during the audit period.

We obtained a database of claims from the NCH data totaling \$417,766,466 for 11,565 inpatient and 163,608 outpatient claims in 27 risk areas. From these 27 areas, we selected 9 consisting of 98,535 claims totaling \$254,900,928, for further review.

We then removed the following:

- \$0 paid claims,
- claims under review by the Recovery Audit Contractor, and
- claims duplicated within individual risk areas.

For inpatient claims, we assigned each claim that appeared in multiple risk areas to just one area based on the following hierarchy: Manufacturer Credits for Replaced Medical Devices, Claims Billed With High-Severity-Level DRG Codes, Claims Paid in Excess of Charges, and Short Stays. For outpatient claims, we used the following hierarchy: Manufacturer Credits for Replaced Medical Devices, Claims With Payments Greater Than \$25,000, Claims Billed for Lupron Injections, Claims Billed With Evaluation and Management (E&M) Services, and Claims Billed for Doxorubicin Hydrochloride. This resulted in a sampling frame of 2,905 unique Medicare claims in 9 risk areas totaling \$26,303,124.

Risk Area	Number of Claims	Amount of Payments
1. Inpatient Manufacturer Credits for Replaced Medical Devices	9	\$221,671
2. Inpatient Claims Billed With High-Severity-Level DRG Codes	1,244	15,909,155
3. Inpatient Claims Paid in Excess of Charges	79	2,135,778
4. Inpatient Short Stays	152	1,677,894
5. Outpatient Manufacturer Credits for Replaced Medical Devices	7	112,817
6. Outpatient Claims With Payments Greater Than \$25,000	155	5,191,611
7. Outpatient Claims Billed for Lupron Injections	90	364,840
8. Outpatient Claims Billed With E&M Services	1,034	218,332
9. Outpatient Claims Billed for Doxorubicin Hydrochloride	135	471,026
Total	2,905	\$26,303,124

SAMPLE UNIT

The sample unit was a Medicare paid claim.

SAMPLE DESIGN

We used a stratified sample. We stratified the sampling frame into nine strata based on the risk area. All claims were unduplicated, appearing in only one area and only once in the entire sampling frame.

SAMPLE SIZE

We randomly selected 251 claims for review as follows:

Stratum	Risk Area	Claims in Sampling Frame	Claims in Sample
1	Inpatient Manufacturer Credits for Replaced Medical Devices	9	9
2	Inpatient Claims Billed With High-Severity-Level DRG Codes	1,244	50
3	Inpatient Claims Paid in Excess of Charges	79	30
4	Inpatient Short Stays	152	30
5	Outpatient Manufacturer Credits for Replaced Medical Devices	7	7
6	Outpatient Claims With Payments Greater Than \$25,000	155	35
7	Outpatient Claims Billed for Lupron Injections	90	30
8	Outpatient Claims Billed With E&M Services	1,034	30
9	Outpatient Claims Billed for Doxorubicin Hydrochloride	135	30
	Total	2,905	251

SOURCE OF RANDOM NUMBERS

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

METHOD FOR SELECTING SAMPLE UNITS

We consecutively numbered the claims within strata 2, 3, 4, 6, 7, 8, and 9. After generating the random numbers for strata 2, 3, 4, 6, 7, 8, and 9, 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 in our sampling frame for the Hospital during the audit period.

APPENDIX C: SAMPLE RESULTS AND ESTIMATES

SAMPLE RESULTS

Stratum	Frame Size (Claims)	Value of Frame	Sample Size	Total Value of Sample	Number of Incorrectly Billed Claims in Sample	Value of Overpayments in Sample
1	9	\$221,671	9	\$221,671	4	\$45,313
2	1,244	15,909,155	50	524,374	6	18,619
3	79	2,135,778	30	775,228	6	69,800
4	152	1,677,894	30	291,815	10	84,562
5	7	112,817	7	112,817	2	42,470
6	155	5,191,611	35	1,138,458	24	1,179
7	90	364,840	30	124,245	0	0
8	1,034	218,332	30	4,699	11	623
9	135	471,026	30	103,128	9	318
Total	2,905	\$26,303,124	251	\$3,296,435	72	\$262,884

ESTIMATES

Estimates of Overpayments for the Audit Period
Limits Calculated for a 90-Percent Confidence Interval

Point Estimate	\$1,191,431
Lower limit	\$626,133
Upper limit	\$1,756,729

APPENDIX D: RESULTS OF REVIEW BY RISK AREA

Risk Area	Selected Claims	Value of Selected Claims	Claims With Underpayments/Overpayments	Value of Net Overpayments
Inpatient				
Short Stays	30	\$291,815	10	\$84,562
Claims Paid in Excess of Charges	30	775,228	6	69,800
Manufacturer Credits for Replaced Medical Devices	9	221,671	4	45,313
Claims Billed With High-Severity-Level DRG Codes	50	524,374	6	18,619
Inpatient Totals	119	\$1,813,088	26	\$218,294
Outpatient				
Manufacturer Credits for Replaced Medical Devices	7	\$112,817	2	\$42,470
Claims With Payments Greater Than \$25,000	35	1,138,458	24	1,179
Claims Billed With E&M Services	30	4,699	11	623
Claims Billed for Doxorubicin Hydrochloride	30	103,128	9	318
Claims Billed for Lupron Injections	30	124,245	0	0
Outpatient Totals	132	\$1,483,347	46	\$44,590
Inpatient and Outpatient Totals	251	\$3,296,435	72	\$262,884

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: DUKE UNIVERSITY HOSPITAL COMMENTS



DUKE UNIVERSITY HEALTH SYSTEM
Compliance Office

March 31, 2014

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 entitled *Medicare Compliance Review of Duke University Hospital for the Period January 1, 2011 through September 30, 2012*
Report Number: A-04-13-04012

Dear Ms. Pilcher:

Duke University Hospital (DUH) appreciates the opportunity to review and comment on the OIG's Draft Report entitled *Medicare Compliance Review of Duke University Hospital for the Period January 1, 2011 through September 30, 2012*, Report Number: A-04-13-04012 (Report). DUH is highly committed to ensuring that it complies with all federal healthcare program rules and directives. As part of that commitment, DUH has implemented and operates a sophisticated compliance program covering DUH's clinical and billing activities. DUH continues to improve its internal controls and to perform proactive reviews to prevent billing errors.

DUH's responses to the OIG's findings and recommendations detailed in the Report are provided in this letter. Except as stated in responses to the finding of *Incorrectly Billed Diagnosis-Related Group Codes* under Inpatient Claims section, DUH concurs with the findings of the Report and the recommendation to refund Palmetto GBA the estimated overpayments described in the Report.

DUH Responses:

BILLING ERRORS ASSOCIATED WITH INPATIENT CLAIMS

Incorrectly Billed as Inpatient

The Report found that DUH incorrectly billed 8 of the 119 inpatient claims to Medicare Part A that should have been billed as outpatient or outpatient with observation services.

With respect to this finding, DUH has taken the following actions:

1. *DUH has established a utilization management (UM) review process to facilitate the determination of the appropriate patient status based upon the patient's severity of illness*

and needed intensity of services. UM staff use electronic InterQual to review and assess appropriate patient status. In addition, DUH increased UM staff to permit Emergency Department and Saturday coverage.

- 2. DUH has established a bill hold to permit pre-bill submission review by a nurse medical chart auditor, which will include a screening review of 0-2 day Medicare inpatient admissions to determine appropriate patient status and claim type prior to submission of the claim.*
- 3. DUH has engaged Executive Health Resources to perform secondary reviews of admissions and provide peer to peer documentation education to providers.*
- 4. DUH UM staff are to perform ongoing training in collaboration with physician advisors to accurately document patient status at admission.*
- 5. DUH initiated an electronic workflow process between UM and revenue management staff to improve tracking of change requests to reduce errors.*
- 6. DUH has implemented the FY 2014 IPPS Rule "2 Midnight Presumption" as an Inpatient Admission criterion with documentation supporting medical necessity.*

Incorrectly Billed Diagnosis-Related Group Codes

The Report found that DUH submitted 15 of the 119 inpatient claims to Medicare with incorrect DRG codes. We disagree with the OIG finding that sample 83 was incorrectly coded. DUH correctly identified ICD-9 Code 996.84 (complications of transplanted organ, lung) as the principal diagnosis. See MPIM, Chapter 6, Section 6.5.3 and the AHA Coding Clinic. Pre-existing conditions and medical conditions that develop after the transplant are coded as complications of the transplanted organ, when they affect the function of that organ.

With respect to this finding, DUH has taken the following actions:

- 1. Health Information Management (HIM) Coding Department is structured to include compliance specialists to provide guidance, training and oversight to the inpatient coders. The compliance specialists focus on quality and accuracy of coding, response to coders' questions and review of physician queries.*
- 2. The compliance specialists are supported by HIM clinical documentation analysts who are registered nurses to assist in the interpretation of clinical documentation, assist with physician queries, and provide education to coders, compliance specialists and physicians.*
- 3. HIM Coding Department performs monthly quality reviews of coders' accuracy and training, and ongoing coding education.*
- 4. DUH is making improvements to its Clinical Documentation Improvement (CDI) Program, which is designed to improve clinical documentation education for providers. DUHS has hired a new CDI Director and Physician Advisor and is hiring additional CDI nurses. These nurses concurrently review clinical documentation and address physician queries to clarify documentation with the providers.*

Incorrect Discharge Status

The Report found that DUH incorrectly billed 2 of 119 inpatient claims to Medicare for patient discharges that should have been billed as transfers.

With respect to this finding, DUH has taken the following actions:

1. *HIM Coding Management will continue to provide training to coders.*
2. *Case Management will provide discharge disposition notes to permit accurate discharge status coding.*
3. *HIM Coding Management will provide monthly quality reviews of coders' assignment of codes.*

Manufacturer Credits for Replaced Medical Devices Not Reported

The Report found that DUH received reportable medical device credits from a manufacturer for replaced devices for 2 of the 119 inpatient claims, but did not adjust its inpatient claims with the proper condition and value codes to reduce payment as required.

With respect to this finding, DUH has taken the following actions:

1. *DUH has updated policies and procedures for clinical department staff and materials staff associated with devices and revenue management staff assigned to device billing. Additional training has been provided regarding verification of receipt of manufacturer's warranty information for devices and coding and claims processing of credit device adjustments.*
2. *The revenue management staff assigned to device billing will be responsible for notifying the appropriate staff of any changes to the current year DRGs and APCs to which the No Cost/Full Credit and Partial Credit Device Adjustment Policy will apply.*
3. *Instruction has been provided to clinical department staff regarding completion of the internal standardized form that identifies costs and applied credits, and forwarding of the form to the revenue management staff to complete the appropriate claims processing and charge corrections.*
4. *Instruction has been provided to clinical staff regarding coordination with the relevant manufacturer to obtain current manufacturer warranty information to ensure compliance with each manufacturer's credit policies.*
5. *Revenue management staff will perform quality review of paid claims to verify accuracy of codes and submitted claim.*

BILLING ERRORS ASSOCIATED WITH OUTPATIENT CLAIMS

Manufacturer Credits for Replaced Medical Devices Not Reported or Obtained

The Report found that DUH incorrectly billed Medicare for 2 of the 132 outpatient claims for medical devices that were under warranty.

With respect to this finding, please see the above response regarding Inpatient Claims for *Manufacturer Credits for Replaced Medical Devices Not Reported*

Incorrectly Billed Evaluation and Management Services

The Report found that DUH incorrectly billed Medicare for 36 of the 132 outpatient claims for Evaluation and Management Services in which the services were not separately identifiable,

and above and beyond the usual preoperative and postoperative work associated with the procedure.

With respect to this finding, DUH has taken the following actions:

1. *A billing edit has been implemented to prevent submission of a claim with HCPCS code level of service with nonchemotherapy or chemotherapy administration HCPCS code.*
2. *Ancillary staff will receive continued training related to circumstances in which it is appropriate to bill procedure and Evaluation and Management code during the same encounter, as well as when to bill a procedure code only.*

Incorrect Healthcare Common Procedure Coding System Codes

The Report found that DUH submitted 11 of 132 outpatient claims to Medicare with incorrect HCPCS codes.

With respect to this finding, DUH has taken the following actions:

1. *Based on timing of contractor's guidance, revenue management staff will review paid claims and file corrected claims as appropriate.*
2. *Coding staff will receive continued coding training.*
3. *Comprehensive Charge Description Master (CDM) review was performed in 2012 to review accuracy of procedural codes. Review and updating of the CDM occurs annually.*

We would like to thank the OIG audit staff who conducted the compliance review of DUH for their openness, collegiality and willingness to work with the DUH Compliance staff. If you have any additional questions or need additional information regarding DUH's responses, please contact Colleen Shannon at (919) 668-2573 or colleen.shannon@duke.edu.

Sincerely,

/Colleen M. Shannon/

Colleen M. Shannon
Chief Compliance & Privacy Officer
Duke University Health System

cc: Victor J. Dzau, M.D., President and Chief Executive Officer
Mark D. Gustafson, Deputy General Counsel for Health Affairs