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**JUN 20 2006**

Report Number: A-03-04-00023

Lee Dobkin, Chief Counsel  
University of Pennsylvania Health System  
133 South 36<sup>th</sup> Street, Suite 300  
Philadelphia, Pennsylvania 19104

Dear Mr. Dobkin:

Enclosed are two copies of the U.S. Department of Health and Human Services (HHS), Office of Inspector General final report entitled "Review of Medicare Claims for Air Ambulance Services Paid to the Hospital of the University of Pennsylvania." A copy of this report will be forwarded to the action official noted below for review and any action deemed necessary. Final determination as to actions taken on all matters reported will be made by the HHS action official named below. We request that you respond to the HHS action official within 30 days from the date of this letter. Your response should present any comments or additional information that you believe may have a bearing on the final determination.

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If you have any questions or comments about this report, please do not hesitate to call me or James Maiorano, Audit Manager at (215) 861-4476. Please refer to report number A-03-04-00023 in all correspondence.

Sincerely,

Stephen Virbitsky  
Regional Inspector General  
for Audit Services

Enclosures - as stated

Page 2 – Lee Dobkin, Chief Counsel

**Direct Reply to HHS Action Official:**

Nancy B. O'Connor,  
Regional Administrator  
Centers for Medicare & Medicaid Services  
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Department of Health and Human Services

**OFFICE OF  
INSPECTOR GENERAL**

**REVIEW OF MEDICARE CLAIMS  
FOR AIR AMBULANCE SERVICES  
PAID TO THE HOSPITAL OF THE  
UNIVERSITY OF PENNSYLVANIA**



Daniel R. Levinson  
Inspector General

June 2006  
A-03-04-00023

# *Office of Inspector General*

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## **OAS FINDINGS AND OPINIONS**

The designation of financial or management practices as questionable or a recommendation for the disallowance of costs incurred or claimed, as well as other conclusions and recommendations in this report, represent the findings and opinions of the HHS/OIG/OAS. Authorized officials of the HHS divisions will make final determination on these matters.



## **EXECUTIVE SUMMARY**

### **BACKGROUND**

#### **Medicare Air Ambulance Services**

Congress established Medicare under Title XVIII of the Social Security Act in 1965 to provide health insurance coverage to people 65 and over, the disabled, and people with end-stage renal disease. Medicare pays for air ambulance services through Medicare Part B. The Centers for Medicare & Medicaid Services (CMS) contracts with fiscal intermediaries (FIs) to pay air ambulance services to hospitals and suppliers under arrangements with hospitals, which are collectively termed providers.<sup>1</sup> Either a fixed wing (airplane) or rotary wing (helicopter) can provide air ambulance services when the patient's medical condition requires immediate and rapid transportation that ground ambulances cannot provide.

Medicare requires providers to:

- document medical necessity and appropriateness of billed services and document that it transported patients to the nearest hospital with appropriate facilities;
- include all supplies and services for the air ambulance transport in the air ambulance charge, calculate mileage using statute miles and only when the patient is on board, and use the proper fee payment amounts from the Provider Statistic and Reimbursement System (PS & R) when completing its Medicare cost report;
- submit claims first to primary payers when Medicare is the secondary payer and refund any Medicare payments for services paid by another primary payer (Medicare secondary payer overpayments); and
- transport patients to acute care hospitals for services, comply with State and local licensing requirements for emergency medical transportation, and furnish services in an aircraft equipped for medical emergencies and staffed by an emergency medical technician and at least one other person.

For calendar year (CY) 2002 Medicare paid the Hospital of the University of Pennsylvania (HUP) interim reimbursements totaling \$922,967<sup>2</sup> for 353 air ambulance claims. HUP provides air ambulance services using three helicopter bases in Pennsylvania: Montgomery County, Delaware County and Lehigh Valley Airport.

### **OBJECTIVE**

Our objective was to determine whether HUP claimed Medicare air ambulance services during CY 2002 in accordance with Medicare requirements.

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<sup>1</sup>Medicare also reimburses independent air ambulance suppliers (suppliers).

<sup>2</sup>The Medicare FIs pay providers during the fiscal year with interim reimbursement amounts. Upon settlement of a provider's cost report, the FI adjusts reimbursement to the final amount.

## **SUMMARY OF FINDINGS**

Contrary to Medicare billing requirements, HUP incorrectly billed Medicare for 83 of the 100 randomly sampled air ambulance claims during CY 2002. Specifically, HUP:

- did not provide sufficient documentation of medical necessity or reasonableness for Medicare mileage and/or transport by air ambulance for 76 claims, and
- billed Medicare inaccurately for 36 claims.<sup>3</sup>

HUP overcharged Medicare \$84,673 and received excess fees of \$31,139 on the 83 sampled claims. Projecting the overcharges and overpaid fees to the universe of 353 HUP CY 2002 air ambulance claims and determining the effect on HUP's cost report reimbursement, these resulted in overpayments totaling \$114,938.<sup>4</sup> HUP also billed Medicare as the primary payer, although it had not determined the primary payer on 57 of 100 sampled claims.

## **RECOMMENDATIONS**

We recommend that HUP:

- refund \$114,938 in air ambulance overpayments to the Medicare program;
- bill only for properly documented transports that meet Medicare requirements and bill for mileage only to the nearest appropriate facilities;
- discontinue charges for flying air ambulances when not transporting beneficiaries, bill accurate air mileage and report proper fee payment amounts from the PS & R; and
- determine primary payers on all Medicare claims and, if another payer exists, obtain payment from the other payer and refund the Medicare primary payment.

## **HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA COMMENTS**

By letter dated May 19, 2006, HUP officials generally disagreed with the reported findings and did not address the recommendations. HUP officials stated that the review was inconsistent with another OIG air ambulance review and lacked attention to medical judgment in that we did not obtain medical records from referring facilities.

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<sup>3</sup>Some claims have multiple errors. See Appendix B.

<sup>4</sup>Charges and fees are both components of the cost report reimbursement amount. We projected overcharges to the universe of CY 2002 HUP air ambulance claims at the 90 percent confidence level, which totaled \$215,605 and projected overpaid fees totaling \$68,947. The overcharges relate to Medicare reimbursement based upon lower of cost or cost limit. Medicare determines cost reimbursement based upon the provider cost to charge ratio. Using Medicare cost report software and HUP's cost report information we multiplied the cost to charge ratio by the projected overcharges and compared the result to the cost limit. We added the lower of the cost limit or the result to 20 percent of the projected fee overpayments to determine the overpaid reimbursement amount of \$114,938.

HUP officials also commented that they have not been provided with the opportunity to defend the physician judgments at the heart of issues in the report. HUP officials also objected to determining precise air mileage.

Regarding the claims we questioned for medical necessity/appropriateness, HUP officials included comments about referring facility diagnosis/decisions and treatments afforded these patients at transport destination facilities. Regarding the claims with insufficiently documented mileage, HUP officials stated that we did not determine the immediate availability of the appropriate specialist to treat patient illnesses/injuries at bypassed hospitals. HUP officials also commented that it followed Pennsylvania Department of Health policy for a 5-minute-transport-time/10-mile exception to transporting to the nearest appropriate facility.

HUP officials agreed that it should not have billed charges when patients were not on board the ambulance, but indicated we should state that the impact was extremely minimal. HUP officials also agreed that it measured and billed inaccurate mileage on two of four inaccurate mileage claims. Regarding inaccurate fees, HUP officials stated it used reasonable estimates of the fees and the Medicare FI would correct underpayments. HUP officials stated they determined the primary payer on 57 sampled claims. HUP's response is presented in its entirety in Appendix C.

## **OFFICE OF INSPECTOR GENERAL RESPONSE**

We consistently followed the Medicare Carrier/FI written local medical review policies that related to each air ambulance provider/supplier in our multistate review. While we agree that obtaining the referring facility medical records should be a part of the review, based upon the Medicare FI's local medical review policies, HUP should have provided these as part of the documentation required to support medical necessity. HUP officials stated that they had these medical records. Therefore, we requested HUP to submit them and they did not. Regarding the additional information HUP provided in its response on the questioned claims, HUP never submitted the medical records that support this information.

In contrast to HUP officials' comments, we determined that the appropriate specialist was available at each bypassed hospital for patient conditions listed in the flight records. Regarding HUP comments about Pennsylvania's Department of Health 10-mile allowance on transports beyond the nearest appropriate facilities, these requirements do not impact Medicare claims.

We could not segregate any one finding, therefore, we could not determine that the financial impact of transports without beneficiaries on board the ambulance was extremely minimal. Regarding inaccurate mileage, HUP should adjust mileage on all 4 claims. Regarding other inaccurate billing, we continue to recommend that HUP should report proper fees and determine the primary payers on all Medicare claims. In summary, we still conclude that HUP should refund \$114,938 to the Medicare FI.

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# INTRODUCTION

## BACKGROUND

### The Medicare Program

The Medicare program, established by Title XVIII of the Social Security Act in 1965, provides health insurance coverage to people age 65 and over, the disabled, and people with end-stage renal disease. Administered by Centers for Medicare & Medicaid Services (CMS) within the Department of Health and Human Services, the program consists of four parts, including Part B – Supplemental Medical Insurance. Part B covers a multitude of medical and other health services, including air ambulance services. Medicare fiscal intermediaries (FIs) process Part B claims for air ambulances associated with hospitals (providers).<sup>1</sup> Mutual of Omaha is the FI that processes Medicare claims for the Hospital of the University of Pennsylvania (HUP).

### Medicare Air Ambulance Services

Medicare considers air ambulance services medically necessary and reasonable if the use of any other method of transportation would endanger the patient's health. Air ambulance services also must be medically appropriate. That is, distances, ground transport time requirements, or unstable weather conditions for transportation by either basic or advanced life-support ground ambulance would pose a threat to the patient's survival or seriously endanger the patient's health. Medicare reimburses air ambulance providers for:

- transporting a Medicare patient one way and
- mileage while the patient is onboard.

### Medicare Billing Requirements for Air Ambulance Services

Medicare requires providers to:

- document medical necessity and appropriateness of billed services and document that it transported the patient to the nearest hospital with appropriate facilities;
- include all supplies and services for the air ambulance transport in the air ambulance charge, calculate mileage using statute miles and only when the patient is onboard, and use proper fee payment amounts from the Provider Statistic and Reimbursement System (PS & R) when completing its Medicare cost report;
- submit claims first to primary payers when Medicare is the secondary payer and refund any Medicare payments for services paid by another primary payer (Medicare secondary payer overpayments); and

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<sup>1</sup>Medicare also reimburses independent air ambulance suppliers (suppliers).

- transport patients to acute care hospitals for services, comply with State and local licensing requirements for emergency medical transportation, and furnish services in an aircraft equipped for medical emergencies and staffed by an emergency medical technician and at least one other person;

Medicare paid air ambulance providers using two methods during calendar year (CY) 2002 (1) the lower of cost or cost limit through March 31, 2002, and (2) a combination of 80 percent of the lower of cost or cost limit with 20 percent of the fee schedule amount after March 31, 2002.

### **The Hospital of the University of Pennsylvania Air Ambulance Service**

Since 1988, HUP has provided air ambulance services through its Penn Star program. HUP has three helicopter bases in Pennsylvania: Montgomery County, Delaware County and Lehigh Valley Airport.

### **OBJECTIVE, SCOPE AND METHODOLOGY**

#### **Objective**

Our objective was to determine whether HUP claimed Medicare air ambulance services during CY 2002 in accordance with Medicare requirements.

#### **Scope**

As part of an Office of Inspector General multistate review of air ambulance services, we selected the air ambulance provider with the highest amount of interim Medicare payments in Eastern Pennsylvania. For CY 2002 Medicare paid HUP interim reimbursements totaling \$922,967<sup>2</sup> for 353 air ambulance claims. We reviewed a random sample of 100 claims (a claim consisted of an air ambulance transport service and related air mileage) to determine whether HUP:

- claimed medically necessary and appropriate services and transported patients to the nearest hospital with appropriate facilities;
- included all air ambulance supplies and services, except mileage in the air ambulance charge, billed accurate mileage and accurately reported fees on the cost report;
- received Medicare secondary payer overpayments; and
- transported Medicare beneficiaries to acute care hospitals for services, and was licensed and properly equipped to bill Medicare air ambulance services.

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<sup>2</sup>The Medicare FIs pay providers during the fiscal year with interim reimbursement amounts. Upon settlement of a provider's cost report, the FI adjusts reimbursement to the final amount. The FI has not yet settled the HUP cost report for FY 2003, which encompasses the later part of 2002.

We limited our internal control review to obtaining an understanding of controls over the selection of destination hospitals and submission of claims to Medicare for air ambulance services.

We performed our review at HUP in Philadelphia, PA.

### **Methodology**

To accomplish our objectives, we:

- reviewed applicable Medicare billing requirements;
- reviewed HUP policies and procedures for air ambulance transports;
- reviewed sampled claims including medical records, charge support, patient account ledgers and other claim related information from HUP;
- verified the claimed mileage with a latitude/longitude travel distance website;
- reviewed listings of Eastern Pennsylvania, New Jersey and Delaware trauma center hospitals (collectively referred to as bypassed hospitals);
- interviewed officials at bypassed hospitals to determine if they could treat the sampled patients and had beds available for the sampled claim dates;
- interviewed HUP officials to obtain an understanding of the Medicare billing processes for air ambulance services;
- reviewed sample claims with Medical review staff from Mutual of Omaha; and
- used a variable unrestricted appraisal software program to project charges and fees to the universe of HUP CY 2002 Medicare air ambulance claims.

Our sampling information appears in Appendix A.

We performed our review in accordance with generally accepted government auditing standards.

### **FINDINGS AND RECOMMENDATIONS**

Contrary to Medicare requirements, HUP incorrectly billed Medicare for 83 of the 100 randomly sampled air ambulance claims during CY 2002. Specifically, HUP:

- did not provide sufficient documentation of medical necessity or reasonableness for Medicare mileage and/or transport by air ambulance for 76 claims, and

- billed Medicare inaccurately for 36 claims.<sup>3</sup>

HUP overcharged Medicare \$84,673 and received excess fees of \$31,139 for the 83 claims with one or more errors. Projecting the overcharges and overpaid fees to the universe of 353 HUP CY 2002 air ambulance claims and determining the effect on HUP's cost report reimbursement, these resulted in overpayments totaling \$114,938.<sup>4</sup>

We also noted that HUP billed Medicare as the primary payer, although it had not determined the primary payer on 57 claims. Medicare does not withhold payment solely because the provider did not determine the primary payer. We did not include any overpayment amounts for these claims and they were not included in the number of errors.

We determined that HUP properly equipped its aircraft and transported patients to acute care hospitals as claimed.

## **THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA DID NOT SUFFICIENTLY DOCUMENT MEDICAL NECESSITY FOR TRANSPORT AND/OR MILEAGE**

### **Documentation Did Not Support the Need for Air Ambulance Transports**

HUP billed Medicare charges totaling \$52,894 for 10 sampled claims without documentation of patient conditions that necessitated air ambulance transports. Federal Regulations (42 CFR § 410.40) state: "the beneficiary's condition must require both the ambulance transportation itself and the level of service provided...to be considered medically necessary." The Medicare Benefits Policy Manual (the Manual) states, "...neither the presence nor absence of a signed physician's order for an ambulance transport necessarily proves (or disproves) whether the transport was medically necessary." The manual also indicates that the provider must retain and submit documentation upon request to indicate the air ambulance service was reasonable and necessary to treat the beneficiary's life threatening condition.

For nine air ambulance claims, medical reviewers determined that documentation HUP submitted did not show that these patients had an emergency at the time of the transport that required air rather than ground ambulances. For one claim, HUP did not submit additional documentation as requested to support that the patient needed any transport.

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<sup>3</sup>Some claims had multiple errors. See Appendix B.

<sup>4</sup>Charges and fees are both components of the cost report reimbursement amount. We projected overcharges to the universe of CY 2002 HUP air ambulance claims at the 90 percent confidence level, which totaled \$215,605 and projected overpaid fees totaling \$68,947. The overcharges relate to Medicare reimbursement based upon lower of cost or cost limit. Medicare determines cost reimbursement based upon the provider cost to charge ratio. Using Medicare cost report software and HUP's cost report information, we multiplied the cost to charge ratio by the projected overcharges and compared the result to the cost limit. We added the lower of the cost limit or result to 20 percent of the projected fee overpayments to determine the overpaid reimbursement amount of \$114,938.

Therefore, HUP billed Medicare for nine air ambulance services when it should have billed Medicare for ground ambulance transports and billed Medicare for one unnecessary air ambulance service. HUP did not reduce air ambulance charges to ground ambulance charges when patients could be transported by ground ambulances and did not eliminate air ambulance charges when one patient required no transport.

**Documentation Insufficient To Support Claims for Mileage**

HUP billed Medicare charges of \$27,597 for 74 transports beyond the nearest appropriate facilities. Federal regulations (42 CFR § 410.40) state Medicare covers ambulance transports from: "...any point of origin to the nearest hospital...that is capable of furnishing the required level and type of care." The Manual states: "The fact that a more distant institution is better equipped, either qualitatively or quantitatively, to care for the patient does not warrant a finding that a closer institution does not have 'appropriate facilities'." Medicare pays the entire amount for mileage to the destination only when documentation shows it was the nearest one with appropriate facilities. In total, HUP billed Medicare for 745 additional miles beyond nearest hospital with appropriate facilities as shown on the table below.

**Bypassed Nearest Hospital With Appropriate Facilities**

| <b>Locations of Bypassed Nearest Hospital With Appropriate Facilities</b> | <b>Number Of Claims</b> | <b>Additional Mileage</b> |
|---|-------------------------|---------------------------|
| 1. Bethlehem, Pennsylvania  | 4                       | 182                       |
| 2. Allentown, Pennsylvania  | 14                      | 137                       |
| 3. Danville, Pennsylvania   | 2                       | 114                       |
| 4. Camden, New Jersey   | 28                      | 109                       |
| 5. New Brunswick, New Jersey  | 3                       | 54                        |
| 6. Philadelphia, Pennsylvania   | 11                      | 35                        |
| 7. Salisbury, Maryland  | 1                       | 34                        |
| 8. Langhorne, Pennsylvania  | 2                       | 31                        |
| 9. Christiana, Delaware   | 3                       | 27                        |
| 10. Philadelphia, Pennsylvania (North)                                    | 4                       | 12                        |
| 11. Chester, Pennsylvania   | 1                       | 7                         |
| 12. Philadelphia, Pennsylvania (North Central)                            | 1                       | 3                         |
| <b>Total</b>  | <b>74</b>               | <b>745</b>                |

HUP bypassed these hospitals with accredited trauma centers, helipads, and operating rooms fully staffed 24 hours per day and 365 days per year. Officials for hospitals bypassed by HUP, who also had bed availability records for the flight dates, indicated they had the required beds available. Of the 74 transports, 71 went to HUP or its affiliated hospitals.<sup>5</sup> HUP did not submit evidence that the destination was the nearest appropriate facility for any of the 74 claims as required by the Manual.

<sup>5</sup>HUP affiliates include Presbyterian Hospital and Pennsylvania Hospital, which along with HUP were part of the University of Pennsylvania Health System. Additionally, it includes Saint Luke’s Hospital in Bethlehem, Pennsylvania. University of Pennsylvania Health Systems contracted with Saint Luke’s for clinical collaboration and provided consulting services to enable Saint Luke’s to become a trauma center.

HUP officials stated that either physicians at the referring hospitals or emergency scene medics determined the destination on all transports. HUP billed Medicare for the mileage to the destination that the physicians or medics selected. HUP did not determine the nearest appropriate facility or reduce the mileage accordingly. As a result, HUP billed Medicare for mileage beyond the nearest appropriate facilities.

## **THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA BILLED INACCURATE CLAIMS TO MEDICARE**

### **Medicare Charges Billed When Beneficiary Not Onboard**

HUP submitted charges of \$2,684 on four claims for transports when the air ambulance did not carry a Medicare beneficiary. The Manual indicates that Medicare ambulance transports require the transport of a beneficiary and Medicare does not pay for transporting ambulance staff or other personnel when the beneficiary is not onboard the ambulance. HUP billed Medicare additional charges on these four claims for transporting its helicopter back to a HUP base after transporting beneficiaries to unaffiliated hospitals. HUP did not have policies to prohibit charging Medicare for transports when the beneficiary is not onboard.

### **Inaccurate Mileage and Incorrectly Reported Fees**

HUP inaccurately measured mileage on 4 claims resulting in 41 excess miles and overcharges of \$1,498. Federal Regulations (CFR 42 § 414.61) require providers/suppliers to measure mileage in statute miles, which are land miles. HUP also incorrectly reported fees on 29 claims. The Provider Reimbursement Manual requires ambulance providers to include fee schedule amounts from the PS & R. However, HUP did not use fee amounts from its PS & R for the period from April 1, 2002, through June 30, 2002, when completing its cost report. HUP officials also did not multiply service quantities billed by proper fee payment rates published by CMS. Instead, it used incorrect assumptions, causing under-reimbursement of \$707 in our sample.

## **THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA DID NOT SUPPORT MEDICARE AS PRIMARY PAYER**

HUP did not document that it tried to determine the primary payer on 57 of 100 sampled claims, however, we found evidence that it determined the primary payer on 43 claims. The Social Security Act, section 1862(b)(6)(A) requires that Medicare Part B should not pay entities for items or services furnished to patients unless the entity obtained information from these patients regarding other available insurance coverage. Federal Regulations (CFR 42 § 489.20 (g)) requires providers to bill other primary payers before billing Medicare. The Medicare Hospital Manual recommends asking the patient or the patient's representative specific questions termed the Medicare Secondary Payer (MSP) Questionnaire. HUP could not produce documentation of research to determine primary payers or MSP Questionnaires on 57 of 100 sampled claims. Medicare does not withhold payment solely because the provider did not perform this research or administer the MSP Questionnaire, therefore, we did not include any overpayment amounts for these claims and they were not included in the number of errors.

HUP officials stated that they researched and determined that Medicare was the primary payer on all of these claims and subsequently lost the documentation due to a computer problem. Additionally, we did not find evidence that another primary payer existed on any of the sampled claims paid by Medicare.

## **RECOMMENDATIONS**

We recommend that HUP:

- refund \$114,938 in air ambulance overpayments to the Medicare program;
- bill only for properly documented transports that meet Medicare requirements and bill for mileage only to the nearest appropriate facilities;
- discontinue charges for flying air ambulances when not transporting beneficiaries, bill accurate air mileage and report proper fee payment amounts from the PS & R; and
- determine primary payers on all Medicare claims and, if another payer exists, obtain payment from the other payer and refund the Medicare primary payment.

## **HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA COMMENTS**

By letter dated May 19, 2006, HUP officials generally disagreed with the reported findings and did not address our recommendations. HUP officials stated that the review was inconsistent with other OIG air ambulance reviews and lacked attention to medical judgment in that we did not obtain medical records from the referring facility. HUP officials also commented that it has not been provided with the opportunity to defend the physician judgments at the heart of issues in the report. HUP officials also objected to determining precise air mileage, stating all aircraft deviate from the straight-line plotted mileage. The precise mileage flown for each patient cannot be accurately identified or reported.

Regarding the claims we questioned for medical necessity/appropriateness, HUP officials included additional information about referring facility diagnosis/decisions and the treatments afforded these patients at the transport destination facilities. Included was information for two patients that HUP officials stated were sent to HUP partially because it had a renal transplant team available. This additional information was not included in documentation provided during the review. Regarding the insufficiently documented mileage claims, HUP officials stated that we did not determine the immediate availability of the appropriate specialist to treat each patient's illness/injury at the bypassed hospitals. HUP officials also commented that it followed the Pennsylvania Department of Health guidelines excepting requirements to transport to the nearest appropriate facility for destinations within 5-minutes-transport time, or 10-miles of the nearest appropriate facility.

On inaccurate claims, HUP officials agreed that it should not have billed charges when patients were not on board the ambulance, but indicated we should report that the impact was extremely minimal. HUP officials also agreed that it measured and billed inaccurate mileage on two of

four inaccurate mileage claims, we identified. Regarding inaccurate fees, HUP officials stated it used reasonable estimates of the fees and the FI would correct any underpayments. HUP officials stated they have determined the primary payer on the 57 sampled claims. HUP's response is presented in its entirety in Appendix C.

## **OFFICE OF INSPECTOR GENERAL RESPONSE**

In summary, we received no documentation to support comments HUP officials made regarding medical services and decisions. Therefore, we could not determine that the appropriate medical professionals provided these services or made these medical judgments. We still conclude that HUP should refund \$114,938 to the Medicare FI.

### **We Consistently Followed the Medicare Fiscal Intermediary Policies and Did Not Lack Attention To Medical Judgment**

We consistently followed the Medicare Carrier/FI written local medical review policies that related to each air ambulance provider/supplier in our multistate review. We agree with HUP about referring facility medical records, and we intended to review these. However, based upon the Medicare FI's local medical review policies, HUP should have provided these as part of the documentation required to support medical necessity. HUP officials also stated they had obtained this documentation for every transport. We requested HUP officials to provide this documentation for the air transports questioned for medical necessity/appropriateness. HUP never provided it.

To enable HUP to prove that the destinations were the nearest appropriate facilities, we requested HUP officials to document the required/provided services at the destination hospitals that could not be performed at the bypassed hospitals. Documentation of these required/provided services would generally demonstrate the judgment of the referring medical personnel. Considering HUP/HUP affiliates treated 96 of the 100 sampled patients, we saw no reason that HUP could not document the required/provided services on these claims. HUP's response to our documentation requests was HUP's opportunity to defend the physician judgments at the heart of issues in the report. However, HUP officials never provided any requested medical documentation, except flight records.

### **Appropriate Specialist Available**

We determined that the appropriate specialist was available at bypassed hospitals. Bypassed hospital emergency/trauma personnel stated they had the required specialist available to treat the patients at the specific time and day of the questioned transports.<sup>6</sup> Medical reviewers also verified those statements with information they had regarding services performed at each

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<sup>6</sup>We determined which specialists were required based on Medical reviewers' analysis of the HUP flight records. However, on two claims, Medical reviewers did not conclude that patients required the same specialists indicated in HUP's response. Specifically, on samples 52 and 86, medical reviewers did not consider the patients required renal transplant teams. This is because some patients with renal failure can be treated with dialysis and HUP's flight records did not mention the need for renal transplant teams. Therefore, HUP's documentation did not support that the destination was the nearest appropriate facility.

hospital during 2002. Therefore, we concluded that the bypassed hospitals could treat the patients in our sample.

### **Pennsylvania Department of Health Requirements and Inaccurate Mileage**

HUP official comments regarding the Pennsylvania's Department of Health's 10-mile exception on transports beyond the nearest appropriate facilities are incorrect. Pennsylvania Department of Health requirements do not impact Medicare claims. HUP officials referred to our calculation of mileage as "improper" because we measured air mileage precisely. However, we found mileage inaccuracies as large as 19 miles, to which HUP officials agreed. HUP officials also noted they are exploring solutions to improve accuracy. We based our mileage measurements on the shortest routes. HUP flight records did not note course deviations, air traffic control problems, busy airports, weather conditions, different approach paths, or any other reason the transport would not take the shortest routes. Therefore, Medicare should not pay for any of these inaccuracies.

### **Inaccurate Charges, Fees and MSP Procedures**

HUP officials stated that they discontinued charging Medicare for transports without a beneficiary on board. HUP eliminated these charges after our review. HUP also stated we should report that the impact was extremely minimal. Using statistical sampling, we determine total financial impact through a statistical projection. We included all findings in our projection.

Regarding inaccurate fees, despite using reasonable estimates, HUP could have averted underpayments because CMS published proper fees for this period. Regarding the 57 claims without MSP questionnaires, HUP response specified that it identified other payers on three sampled claims. However, these three sampled claims were not among the 57. Therefore, we could not determine that HUP performed the required MSP procedures on these 57 claims.

# **APPENDIXES**



SAMPLE ERRORS

| Sample Number | Insufficiently Documented Transports/Mileage |                         |  |  | Inaccurate Billing          |                    |                         |                          | Claims With Errors |
|---------------|--|-------------------------|--|--|-----------------------------|--------------------|-------------------------|--------------------------|--------------------|
|               | Medically Unnecessary                        | Medically Inappropriate | Transports Beyond Nearest Appropriate Hospital | Total Insufficiently Documented Transports/Mileage | Transports Without Patients | Inaccurate Mileage | Inaccurate Fee Estimate | Total Inaccurate Billing |                    |
| 1             |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 3             |  |                         | X  | X  |                             |                    | X                       | X                        | X                  |
| 4             |  | X                       |  | X  |                             |                    |                         |                          | X                  |
| 5             |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 6             |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 8             |  | X                       |  | X  |                             |                    |                         |                          | X                  |
| 10            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 11            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 12            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 13            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 14            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 16            |  |                         |  | X  |                             | X                  |                         |                          | X                  |
| 17            |  | X                       |  | X  |                             |                    |                         |                          | X                  |
| 18            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 19            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 20            |  |                         |  | X  |                             |                    |                         |                          | X                  |
| 21            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 22            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 23            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 25            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 26            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 28            |  |                         |  | X  |                             |                    |                         |                          | X                  |
| 29            |  | X                       |  | X  |                             |                    |                         |                          | X                  |
| 30            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 31            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 33            |  |                         |  | X  |                             |                    |                         |                          | X                  |
| 34            |  | X                       |  | X  |                             |                    |                         |                          | X                  |
| 36            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 37            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 38            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 39            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 40            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 41            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 42            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 44            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 45            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 46            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 47            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 48            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 49            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 50            |  |                         | X  | X  |                             |                    |                         |                          | X                  |
| 51            |  |                         | X  | X  |                             |                    |                         |                          | X                  |

SAMPLE ERRORS

| Sample Number | Insufficiently Documented Transports/Mileage |                         |  |  | Inaccurate Billing          |                    |                         |                          | Total Inaccurate Billing | Claims With Errors |
|---------------|--|-------------------------|--|--|-----------------------------|--------------------|-------------------------|--------------------------|--------------------------|--------------------|
|               | Medically Unnecessary                        | Medically Inappropriate | Transports Beyond Nearest Appropriate Hospital | Total Insufficiently Documented Transports/Mileage | Transports Without Patients | Inaccurate Mileage | Inaccurate Fee Estimate | Total Inaccurate Billing |                          |                    |
| 52            |  | X                       | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 53            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 54            |  |                         |  |  |                             | X                  |                         | X                        | X                        | X                  |
| 56            |  | X                       | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 57            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 59            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 60            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 61            |  |                         |  | X  |                             |                    |                         |                          |                          | X                  |
| 62            | X  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 63            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 64            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 66            |  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 67            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 68            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 69            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 70            |  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 71            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 72            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 74            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 75            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 79            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 80            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 81            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 83            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 84            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 85            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 86            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 87            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 88            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 89            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 90            |  |                         | X  | X  |                             |                    |                         | X                        | X                        | X                  |
| 91            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 92            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 93            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 94            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 95            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 96            |  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 97            |  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| 98            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 99            |  |                         | X  | X  |                             |                    |                         |                          |                          | X                  |
| 100           |  |                         | X  | X  |                             |                    | X                       | X                        | X                        | X                  |
| Totals        | 1  | 9                       | 74   | 76   | 4                           | 4                  | 29                      | 36                       | 83                       |                    |



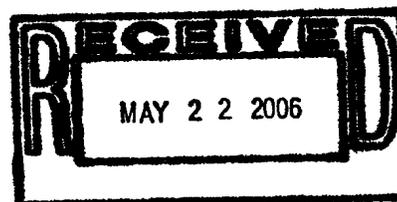
Robert F. Bacon, MHA  
Director and Billing Compliance Officer

Clinical Practices of the University of Pennsylvania  
Office of Billing Compliance and Review Services

May 19, 2006

**VIA FEDERAL EXPRESS**

Stephen Virbitsky  
Regional Inspector General for Audit Services  
U S Department of Health & Human Services  
Office of the Inspector General  
Public Ledger Building, Suite 316  
150 South Independence Mall West  
Philadelphia, PA 19106-3499



**Re:** Report Number A-03-04-00023

Dear Mr. Virbitsky:

I am writing in response to your draft report dated March 6, 2006.

The University of Pennsylvania Health System (UPHS) is strongly committed to compliance with all applicable regulations. We understand the Office of the Inspector General's (OIG) important role in ensuring compliance with billing regulations, and greatly appreciate the opportunity to respond to your draft report.

We believe that we provided medically necessary and appropriate services transporting the patients by air ambulance in accordance with the respective regulations. For the reasons set forth below, we must therefore respectfully disagree with the overwhelming number of findings noted within the draft report.

Our response will address each of the areas of the draft report as follows:

**Objective, Scope and Methodology**

**A. The Audit's Lack of Attention to Medical Judgment**

We had anticipated that the audit methodology employed by the OIG for its multi-state review of air ambulance services would be consistent. Our review of the OIG report titled "Review of Medicare Claims for Air Ambulance Services Paid to Native American Air Ambulance" dated July 2005, however, suggested a methodology significantly

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different from the audit conducted at the Hospital of the University of Pennsylvania (HUP).

The Native American audit report clearly stated that the OIG obtained and reviewed medical records from the sending and receiving hospital. Such an approach was clearly warranted, as the decision that a patient must be transferred by air ambulance to a specific hospital is typically made by the attending physician at the sending hospital, unless the transfer originated at the emergency scene.

We repeatedly requested that the OIG investigator similarly review the medical records of the sending physician and hospitals as part of our audit, in order to gain important background as to why the patient had to be transferred by air ambulance to a specific hospital. HUP was not alone in recognizing the importance of this additional medical documentation. The OIG investigator's Interim Review Results acknowledged that the government's own medical reviewers at Mutual of Omaha wanted to see the referring hospital records showing the patient's condition.

Congress has also clearly recognized that physician judgment is controlling as to when air ambulance transportation is reasonable and necessary.<sup>1</sup> However, with respect to the HUP audit, the investigator did not consider physician judgment. Specifically, the investigator did not review the medical records of the sending hospital, nor did he communicate with the attending physician from the sending hospital to determine the reason for selecting the designated facility. To our knowledge, review of medical records with respect to HUP was, unlike the OIG's other audit, limited to flight records.

This omission was compounded by the investigation's failure to provide HUP medical clinicians with any meaningful opportunity to interact with, and address medical issues or questions raised by, the Mutual of Omaha medical reviewers. On the contrary, these HUP physicians met only with OIG audit staff, who candidly admitted that they wholly lacked the medical background to evaluate the physicians' clinical explanations as to why certain patients required air transport to a particular hospital. In a very real sense, HUP has yet to be provided with a chance to defend the physician judgments at the very heart of this dispute.

Rather than interview transferring physicians, or provide clinically trained experts to engage with the HUP physicians, the investigator simply identified trauma centers and conducted rote interviews of "officials at neighboring hospitals" regarding bed availability for specific claim dates. For inter-facility (hospital-to-hospital) transfers, the mere presence of a trauma center in a neighboring hospital cannot, in and of itself, resolve the issue. Specifically, these patients required immediate attention by trained specialists such as interventional cardiologists, cardio-thoracic surgeons or renal transplant teams. The investigator failed to determine if such specialists were

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<sup>1</sup> Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA)

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immediately available to provide medically necessary and appropriate services to the patient at the time of the transfer.

In the course of this response, upon the basis of the records available to us, we have tried to overcome these deficiencies and provide the medical necessity and the physician judgments that form the very foundation for the air ambulance transfers at issue. We are confident the clinical information outlined below amply supports the air ambulance transfers.

#### B. The Audit's Improper Calculation of Mileage

We also have concerns regarding the determination of mileage. From the outset, it is extremely important to understand that helicopters do not include instrumentation (such as an odometer in a car) that would allow for precise mileage reporting. Providers must make reasonable estimates with respect to calculating and reporting mileage.

HUP utilizes an application known as AeroMed Software, which computes miles, based upon a straight-line calculation predicated upon identified coordinates. Therefore, the reported mileage reflects a straight-line calculation from the anticipated origination point and final destination. All aircraft deviate from the straight-line plotted mileage calculation due to minor course deviations resulting from cross winds, which alter the flight path (i.e. "drift") or purposeful course deviations due to air traffic control or other reasons such as avoiding a busy airport, weather conditions (i.e. thunderstorms), and/or different approach paths. These deviations are not taken into consideration for purposes of capturing and reporting loaded miles.

Clearly, the precise actual mileage flown for each patient cannot be accurately identified and/or reported. Therefore, we object to such findings as "over-flown by 1.63 miles" on the basis of travel distance websites, when such a degree of accuracy simply cannot be provided for calculation of actual flight mileage.

#### **Summary of Findings**

As previously noted, we respectfully disagree with the overwhelming number of findings noted within the draft report. We believe that we provided medically necessary and appropriate services transporting the patients by air ambulance in accordance with the respective regulations.

#### **Findings and Recommendations**

The following will address the specific findings as noted by the government:

**The Hospital Of The University Of Pennsylvania Did Not Sufficiently Document Medical Necessity For Transport And/Or Mileage**

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#### **A. Documentation Did Not Support The Need For Air Ambulance Transports**

##### **Statement of Non-Concurrence:**

We respectfully disagree and assert that documentation supports the need for air ambulance transport for all ten (10) patients cited. Specifically, the Medicare Benefit Policy Manual guidelines at 10.4.2 state in part that “Medical appropriateness is only established when the beneficiary’s condition is such that the time needed to transport a beneficiary by ground, or the instability of transportation by ground, poses a threat to the beneficiary’s survival or seriously endangers the beneficiary’s health.”

First, we respectfully disagree with the citation within the OIG report that HUP billed Medicare for one unnecessary transfer. This issue is related to a seriously ill and clinically complex patient (sample number 61) who was transferred to HUP at the request of the attending physician at Christiana Hospital.

The patient presented to Milford Hospital in Delaware with bleeding from the neck and was subsequently transferred to Christiana Hospital. An angiogram was performed at Christiana Hospital that showed no evidence of bleed but showed an area that could be consistent with tumor mass. Patient continued to have venous bleed/ooze from site of fistula and subsequently transferred to HUP for further management.

As noted in the Consultation Report from the thoracic surgeon at Christiana Care Health Services, this 69-year-old patient is status post total laryngectomy (complete removal of the larynx) for laryngocarcinoma (cancer of the larynx), permanent tracheostomy and multiple flap reconstructions. In addition, the patient had pharyngocutaneous fistula (an abnormal connection between the throat and the skin of the neck). The patient had also received hyperbaric oxygen therapy at HUP due to healing difficulties.

In addition to the laryngeal cancer, this clinically complex patient’s history is significant for the following conditions:

- Coronary Artery Disease;
- Cardiomyopathy (general diagnostic term designating primary myocardial disease);
- Congestive Heart Failure (a condition in which the heart’s pumping action is impaired);
- V-tach (ventricular tachycardia) with defibrillator implant (V-tach is an abnormally rapid ventricular rhythm usually above 150 beats per minute, generated within the ventricle. It is the most frequently encountered life-threatening arrhythmia. Its prompt recognition and acute treatment are often critical to preventing adverse clinical outcomes);
- Status post CABG (coronary artery bypass graft);

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- Insulin Dependant Diabetes; and,
- Osteomyelitis (inflammation of the bone, localized or generalized, due to infection).

The patient developed fistulas that eroded into patient's internal jugular vein causing bleeds on numerous occasions (7/8/02, 7/10/02, 7/12/02) post-operatively as a complication of the total laryngectomy and multiple flap reconstructions.

The treating physician at Christina Hospital rendered a clinical decision that this complex patient required air ambulance transfer to HUP. The patient was transferred to the surgical intensive care unit (SICU) at HUP. At the time of the transfer, HUP had board-certified nuclear medicine physicians, neuro-interventional radiologists, radiation therapists, medical oncologists, cardiologists and otolaryngologists available for the patient. In addition, Christiana Hospital did not have the specialized clinical services (i.e. hyperbaric oxygen chamber) required in the past for this patient.

To reiterate our prior discussion, physician judgment is controlling as to when air ambulance transportation is reasonable and necessary. To our knowledge, the investigator did not review the medical record of the sending hospital nor did he speak with the attending physicians from the sending hospital to determine why the patient required transfer from Christiana Hospital.

Our concerns are similar in regard to the nine other patients whose transfer by air ambulance was questioned. It was the clinical judgment of the treating physician or emergency personnel at the time the care was rendered that each of these beneficiaries had an emergency medical condition that required immediate air transport. We have derived clinical information for each patient from various sources, including but not limited to physician documentation in medical records from both the transferring facility and HUP, and flight record documentation. Details for the 9 patients and their corresponding urgent clinical conditions that necessitated the need for air ambulance transport are outlined below. At a minimum, no Final Report should be disseminated until these medical judgments can be shared directly with the medical reviewers on whom the OIG auditors are relying.

**Sample #90:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar helicopter to Presbyterian Medical Center (PMC). This life- saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>2</sup> This patient had a documented

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<sup>2</sup> Medicare Benefit Policy Manual (CMS Pub 100-2) Sections 10.4.2 - Medical Appropriateness and 10.4.3 - Time Needed for Ground Transport

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acute myocardial infarction complicated by an episode of ventricular tachycardia/ventricular fibrillation (life threatening abnormal irregular heart rhythm with very rapid uncoordinated fluttering contractions of the ventricles, lower chambers of the heart). Immediate transportation to PMC for emergent primary angioplasty, a cardiac intervention not performed at Rancocas Hospital, was in the best interest of the patient.

This 74-year-old patient presented to the Rancocas Hospital Emergency Department (ED) at approximately 09:45 am on May 13, 2002, with complaints of chest pain and severe shortness of breath. Patient had a history significant for congestive heart failure, chronic obstructive pulmonary disease, hypertension, and a previous myocardial infarction in March of 2002. In the ED at Rancocas Hospital, the patient was diagnosed with a myocardial infarction and admitted to the Cardiac Care Unit (CCU). Subsequent to the admission, the patient had an episode of spontaneous ventricular tachycardia/ventricular fibrillation and was successfully cardioverted. Patient was then transferred to PMC for further evaluation and treatment.

PMC had immediate availability of a staffed cardiac catheterization laboratory with interventional cardiologist and board certified cardiothoracic surgeons to treat this patient at the time of transfer.

The patient was admitted to the CCU upon arrival at PMC. Patient was treated with intravenous heparin, intravenous aggrastat, and continued on intravenous lidocaine and nitroglycerin. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate.

**Sample #52:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar to the Hospital of the University of Pennsylvania (HUP). This clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>3</sup> As documented in the medical records, the patient presented with a massive lower GI bleed and was a kidney transplant recipient with lab values indicating kidney failure. Therefore, the nearest appropriate facility capable of providing the type of care necessary for this patient's illness must include a renal transplant team. HUP provided immediate availability of multiple specialists needed to treat this clinically complex patient to include but not limited to interventional radiology, allergy/immunology, pulmonary, gastroenterology, rheumatology, and infectious disease in addition to the presence of a renal transplant team. All of these services, which were ultimately required by the patient, were available to the patient at the time of the transfer.

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<sup>3</sup> Ibid

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This 49-year-old patient presented to the Chester County Hospital Emergency Department (ED) on May 6, 2002, at approximately 9:26 pm with a massive lower GI bleed, resulting in 4-gram drop in the hemoglobin count. (The hemoglobin count is the most useful indicator of anemia. Hemoglobin circulates in the red cells and carries most of the oxygen in the blood. Anemia is defined as having less than the normal number of red blood cells or less hemoglobin than normal in the blood. A decrease on this magnitude is an indicator of internal bleeding). In addition, the patient was noted to be diaphoretic, pale, and passing bright red blood per rectum with clots. Patient had a past medical history of hypertension, Systemic Lupus Erythematosus (*SLE* is a chronic multisystemic inflammatory disease affecting connective tissue; marked by anemia, leucopenia, muscle and joint pains, fever, rash of a butterfly pattern around cheeks and forehead area; of unknown etiology) and end-stage renal disease (ESRD), which required a cadaveric renal transplant in 1997 (at HUP).

In the Emergency Department (ED) at Chester County Hospital, the patient was diagnosed with kidney failure and a lower GI bleed, with resultant hypovolemic shock (medical condition where there are abnormally low levels of blood plasma in the body and the body is unable to properly maintain blood pressure, cardiac output of blood, and normal amounts of fluid in the tissues). The patient was transfused with packed red blood cells (PRBC) and emergently transferred to HUP for further management.

In flight, the patient was maintained on oxygen and intravenous dopamine due to hypotension (low blood pressure). Upon arrival at HUP, the patient was admitted to the medical intensive care unit. The transfer of this patient via air ambulance was medically necessary, reasonable and appropriate.

**Sample #86:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar to the Hospital of the University of Pennsylvania (HUP). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>4</sup> This 51-year-old patient had a past medical history of end stage renal disease (ESRD) and underwent a renal transplant in 1999 at HUP. The patient presented to the Easton Hospital Emergency Department (ED) with sudden onset of numbness and weakness in right hand, stuttering of speech and difficulty writing for three days. Right facial droop was also noted. In addition, the patient was noted to have a temperature of 101.8°, of concern in a transplant patient that is immunosuppressed (lowered resistance to disease). Therefore, the nearest appropriate facility capable of providing the type of care necessary for this patient's illness must include a renal transplant team. HUP provided immediate availability of multiple specialists needed to treat this clinically complex patient to include neurologists, neurosurgeons, nuclear medicine physicians, ophthalmologists and transplant physicians.

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<sup>4</sup> Ibid

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A CT scan of the head was performed at Easton Hospital that revealed a subarachnoid hemorrhage (bleeding in the brain) and a decision was made to transfer the patient to HUP neurosurgery for further management. The presence of intracranial bleeding further complicated by the patient being status post kidney transplant necessitated the transfer of this patient via air ambulance to a hospital with a transplant program was medically necessary, reasonable, and appropriate.

**Sample #17:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar helicopter to Presbyterian Medical Center (PMC). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>5</sup> This patient had a documented acute inferoposterior myocardial infarction, which was treated with lytic therapy in the Emergency Department (ED) at Rancocas Hospital. Immediate transportation to PMC for emergent cardiac intervention was in the best interest of the patient.

This 82-year-old patient presented to the ED at Rancocas Hospital on November 15, 2002 at 8:30 am with severe central substernal chest pain. This clinically complex patient had a past medical history significant for hypertension and rectal cancer, which was treated previously with surgery, radiation and chemotherapy. In the Rancocas Hospital ED, the patient was diagnosed with an acute inferoposterior myocardial infarction and subsequently received TNKase (tenecteplase) intravenously. (TKNase is a thrombolytic agent administered for the treatment of acute myocardial infarction. All thrombolytics increase the risk of bleeding, including intracranial bleeding. In addition, there is an increased risk of stroke and/or bleeding in the brain in elderly patients.)

In flight, the patient was maintained on intravenous nitroglycerin and heparin. As noted in the PennStar flight record, the patient developed chest pain while being transported to the cardiac catheterization lab and a significant ST elevation was noted on the cardiac monitor. (It is important to note that the usual (but telling) criteria for clinical diagnosis of infarction is the typical, significant ST segment elevation seen in the EKG changes. Such changes (significant ST elevation) are sufficient to warrant use of thrombolytic drugs such as the TNKase (tenecteplase) that was infused intravenously to this patient.)

Upon arrival to PMC, the patient was emergently taken to the cardiac catheterization lab. PMC had immediate availability of a staffed cardiac catheterization laboratory with interventional cardiologist and board certified cardiothoracic surgeons to treat this patient at the time of transfer.

Diagnostic cardiac catheterization and coronary angiography was performed which revealed a 100% occlusion of the proximal right coronary (RCA) artery, 50-60%

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<sup>5</sup> Ibid

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occlusion of the left main (LM) artery, an 80% occlusion of the left anterior descending (LAD) artery, a 70%-80% occlusion of the left circumflex (CX) artery and an 80% occlusion of the obtuse marginal (OM) coronary artery. During the cardiac catheterization procedure, the patient had a cardiac arrest (the heart abruptly stopped beating) due to ventricular fibrillation (abnormal, irregular, very rapid uncoordinated fluttering movements of the ventricles, or lower heart chambers) requiring cardioversion (the emergent delivery of a direct current electrical shock to the heart muscle attempting to restore normal heart contractions). Following successful cardioversion, the total occlusion of the RCA was treated with a coronary angioplasty and stent placement. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate.

#### **Sample #56**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar helicopter to Presbyterian Medical Center (PMC). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>6</sup> With increasingly unstable angina (chest pain due to insufficient blood supply, and thereby oxygen delivery, to the heart), this patient had extremely high risk for progression to acute myocardial infarction with fatal or grievously morbid results. Immediate transfer to PMC for emergent cardiac intervention was clinically reasonable as well as medically necessary and appropriate. PMC had board certified cardiothoracic surgeons immediately available to treat this patient at the time of transfer.

This 83-year-old patient had a past medical history of hypothyroidism. The patient underwent diagnostic cardiac catheterization and coronary angiography at Tom's River Community Medical Center. The cardiac angiography (injecting radiographic contrast dye into the coronary arteries) revealed a 90% proximal left main (LM) coronary artery occlusion, 99% distal LM and proximal circumflex coronary artery occlusions, a 99% proximal left anterior descending (LAD) coronary artery occlusion, and a 70% right coronary artery (RCA) occlusion. The patient's overall left ventricular function was diminished with a documented ejection fraction of 35-40% (referring to the percentage of blood pumped out of a filled ventricle with each heartbeat; the ejection fraction measures the effectiveness at which the heart pumps blood, and a normal ejection fraction is 55% to 70%). This type of severe, triple vessel (LAD, RCA and circumflex) coronary artery disease warrants coronary bypass graft surgery, rather than angioplasty and stenting; similarly, severe left main coronary occlusion alone merits surgical intervention. The presence of both left main and triple vessel coronary disease represents an extremely high-risk patient requiring coronary artery bypass graft surgery.

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<sup>6</sup> Ibid

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The patient was emergently transferred directly from the cardiac catheterization lab at Tom's River Community Medical Center to PMC for progressive unstable angina, with documented severe coronary artery disease requiring surgical intervention. In fact, the patient was too unstable and at too great a risk of acute myocardial infarction to even transiently reside in the Cardiac Care Unit at Tom's River Community Medical Center. Therefore, the patient remained in the catheterization laboratory until the PennStar helicopter arrival.

In flight, the patient was maintained on IV heparin and vital signs were monitored.

The patient was admitted to the cardiac care unit and treated with aggressive medical therapy, including IV heparin, isosorbide and metoprolol. The use of beta-blockers, such as metoprolol, was limited due to the presence of a junctional cardiac rhythm: junctional cardiac rhythms occur when extensive cardiac disease (such as this patient's severe coronary artery disease) injures the heart's intrinsic conduction system, and electrical impulses cannot normally flow down from the sinoatrial node to the atrioventricular junction, and then further down into the heart's lower chambers, the ventricles. Junctional rhythms, originating in the atrioventricular junction, are much slower than normal cardiac rhythm, and therefore commonly produce low blood pressure (hypotension). Beta-blockers further slow the heart, and in a tenuous patient with a borderline heart rate and active coronary ischemia (such as this patient), can precipitate a fatal bradycardic arrest (slowing the heart to a standstill) or hypotension causing multi-organ system failure (stroke, renal failure, shock liver, or acute lung injury, among others). Therefore, despite their demonstrated efficacy in acute coronary syndromes such as unstable angina and acute myocardial infarction, further beta-blockers in this patient were contraindicated due to the junctional rhythm. The presence of a junctional rhythm also further explains the rationale for IABP (intra-aortic balloon pump) insertion if the angina progressed overnight: direct aortic counterpulsation by the IABP would improve coronary blood flow to the poorly perfused heart muscle and conduction system, as well as support the arterial blood pressure for perfusion of all the other vital organs. The patient underwent an off-pump CABG of three coronary arteries. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate, as a moment's delay could have been associated with a fatal outcome given this patient's extreme risk of acute myocardial infarction or cardiac arrest.

**Sample #34:**

The decision to transport this patient by helicopter to Temple University Hospital was made by the emergency response personnel on the scene and was based on the medical condition of the patient and the potential for serious life threatening event.

Ground medic reported that this 80-year-old patient has a past medical history of dementia. It could not be determined if the change in mental status was applicable to the fall as opposed to the patient's baseline. The patient lives alone, fell and was unable to

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get up. The patient was found in the bathtub and had not been seen for approximately 12 hours. PennStar received and responded to a call from Medic 313 for a fall victim in the Narberth borough. Patient was awake but confused and belligerent. The ground crew (Medic 313) reported that they were unable to obtain a blood pressure reading and after receiving 400 cc's of saline the patient continued to be hypotensive with a subsequent reading of 86/40.

Due the instability of blood pressure and change in mental status, the patient was transported by PennStar from Narberth Borough to the Temple University Hospital for further evaluation at the request of Medic 313. In flight, patient's vital signs were continuously monitored and the patient was treated with 100% oxygen and IVF at 100 cc an hour. It was the medical judgment of the ground crew (Medic 313) who determined clinical appropriateness that the fall victim at the scene be transported by air ambulance. From their medical expertise, they deducted that the beneficiary's condition was such that the time needed to transport the patient by ground, or the instability of the transportation by ground, posed a threat to the patient's survival or seriously endangered the patient's health. This is supported by both Medicare regulations<sup>7</sup> and the local coverage determination policy of the Mutual of Omaha Insurance Company.<sup>8</sup> The transport of this patient via air ambulance was medically necessary, reasonable, and appropriate.

**Sample #29:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar to the Hospital of the University of Pennsylvania (HUP). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>9</sup> The patient had a documented acute myocardial infarction and immediate transportation to HUP for emergent cardiac intervention was in the best interest of the patient. Cardiac monitoring and close observation were performed throughout the flight. Patient was taken emergently to the cardiac catheterization lab for diagnostic evaluation and possible intervention.

This 80-year-old patient presented to the Phoenixville Hospital Emergency Department (ED) on December 7, 2002, with complaints of back pain radiating to the bilateral upper extremities, and recurrent chest pain with EKG changes. Patient had a past medical history significant for hypertension. The patient was diagnosed with an acute anterior wall myocardial infarction.

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<sup>7</sup> Ibid

<sup>8</sup> Mutual of Omaha Insurance Company Local Coverage Decision – L2483 – Ambulance Services

<sup>9</sup> Medicare Benefit Policy Manual (CMS Pub 100-2) Sections 10.4.2 - Medical Appropriateness and 10.4.3 - Time Needed for Ground Transport

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HUP had immediate availability of a staffed cardiac catheterization laboratory with interventional cardiologist and board certified cardiothoracic surgeons to treat this patient at the time of transfer.

Upon arrival to HUP, the patient underwent an urgent diagnostic cardiac catheterization and coronary angiography that revealed a 90%-95% occlusion in the left anterior descending coronary (LAD) artery and 80% occlusion of the right coronary (RCA) artery. (A high-grade occlusion is typically defined as greater than 75% occlusion of the cardiac arteries. Such high-grade occlusion or stenosis can limit the supply of the oxygen and nutrients. If such an occlusion persists long enough (20 to 40 minutes), irreversible myocardial cell damage or cell death can occur which can precipitate to a myocardial infarction. Occlusions of this magnitude generally require coronary artery bypass grafting as a life saving measure).

The patient underwent coronary artery bypass grafting (CABG) of the blocked coronary arteries. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate.

**Sample #8:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill, unstable patient by PennStar helicopter to Presbyterian Medical Center (PMC). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>10</sup> This patient had a documented acute inferior lateral wall myocardial infarction (necrosis of the cells of an area of the heart muscle occurring as a result of oxygen deprivation, which in turn is caused by obstruction of the blood supply and is commonly referred to as a "heart attack") complicated by atrial fibrillation (abnormal heart rhythm that causes the atria, the upper chambers of the heart to contract rapidly and irregularly) with the potential for the development of life threatening complications en route. It is also important to note that the patient was unable to be treated with thrombolytic therapy (administration of a thrombolytic agent intravenously dissolves a blood clot in order to restore blood flow) while in the Emergency Department (ED) at Rancocas Hospital due to the additional finding of heme positive (presence of blood) stool. Immediate transportation to PMC for emergent primary angioplasty, a cardiac intervention not performed at Rancocas, was in the best interest of the patient. PMC had immediate availability of a staffed cardiac catheterization laboratory with interventional cardiologist and board certified cardiothoracic surgeons to treat this patient at the time of transfer.

This 68-year-old patient presented to the Rancocas Hospital ED at approximately 2:25 pm on December 16, 2002, with complaints of abdominal indigestion, diarrhea and discomfort in left arm. Patient had a history significant for diabetes mellitus, peripheral

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<sup>10</sup> Ibid

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vascular disease resulting in a right below the knee amputation, hypertension and hypercholesterolemia. In the ED at Rancocas Hospital, the patient was diagnosed with an acute inferior lateral wall myocardial infarction complicated by atrial fibrillation. Additionally, the patient was noted to have trace heme positive stool, therefore lytic therapy could not be administered as it is contraindicated due to the increased risk of bleeding.

The patient was transferred at 6:57 pm to PMC and on arrival was taken emergently to the cardiac catheterization lab for immediate diagnostic cardiac catheterization and coronary angiography. The patient was found to have a totally occluded right coronary artery (RCA) that required angioplasty and insertion of a stent. During this procedure, the patient also experienced periods of transient high-grade atrioventricular heart block (impairment of the electrical conduction system of the heart originating in the atrial or upper chambers of the heart).

The acute ischemic damage to the myocardium often leads to cardiogenic shock if appropriate intervention is not timely. In fact, the most common initiating event of cardiogenic shock is acute myocardial infarction. Moreover, Mutual of Omaha Insurance Company<sup>11</sup> lists cardiogenic shock in their policy as an advisory list of examples of cases in which air ambulance could be justified. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate.

**Sample #4:**

The treating physician at the sending hospital made the clinical decision to transport this critically ill patient by PennStar helicopter to Presbyterian Medical Center (PMC). This life-saving clinical decision, based upon the medical condition of the patient, is clearly supported by Medicare regulations.<sup>12</sup> This patient had a significant cardiac history and was diagnosed with a new acute myocardial infarction (heart attack) with the potential for the development of life threatening complications en route.

PMC had the necessary physicians and other relevant medical personnel available at the hospital at the time that the patient/beneficiary was being transported. Specifically, PMC had immediate availability of a staffed cardiac catheterization laboratory with interventional cardiologist and board certified cardiothoracic surgeons to treat this patient at the time of transfer.

The treating physician at Newcomb Hospital arranged the transfer to PMC on the morning of November 11, 2002, as this patient required further specialized evaluation to include cardiac catheterization, coronary angioplasty and potentially cardiothoracic

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<sup>11</sup> Mutual of Omaha Insurance Company Local Coverage Decision – L2483 – Ambulance Services

<sup>12</sup> Medicare Benefit Policy Manual (CMS Pub 100-2) Sections 10.4.2 - Medical Appropriateness and 10.4.3 - Time Needed for Ground Transport

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surgery. The transfer of the patient was requested and certified by this physician as documented on the 'Patient Transfer Form' on November 11, 2002, at 8:48 am.

This 73-year-old patient presented to the Emergency Department (ED) of Newcomb Hospital on November 10, 2002, at approximately 8:30 pm with a complaint of burning chest pain. Patient had a significant cardiac history having undergone mitral valve replacement (heart valve situated between the left atrium and left ventricle that permits blood to flow between the upper left chamber of the heart to the lower left chamber and throughout the body) in February 2002 and coronary artery bypass graft (CABG) surgery for coronary artery disease (CAD) in 1999. In addition, the patient's known CAD was treated most recently with coronary angioplasty and stent insertion. The patient's clinical condition was further complicated due to a history of heart failure, diabetes mellitus, hypertension, and hypercholesterolemia.

At Newcomb Hospital in the ED, the patient was noted to have EKG changes and an elevation in cardiac enzymes (cardiac enzymes are enzymes specific to the heart muscle and are released into the blood when the heart muscle is damaged). This is indicative of an acute myocardial infarction. While awaiting admission to the cardiac care unit (CCU), the patient had continued chest pain, which required increasing doses of nitroglycerin (a medication that is a vasodilator and is used medically to relieve certain types of pain, typically cardiac pain). Patient was transported to the CCU at approximately 02:20 am. The Cardiology admit note written at 7:54 am on 11/11/02 by the admitting physician documented a diagnosis of myocardial infarction (MI) with a plan for transfer to PMC for a cardiac intervention.

Upon arrival to PMC, the patient was admitted to the cardiac care unit. The laboratory reports from the transferring facility demonstrated that the patient's blood was anticoagulated. (Blood does not clot quickly, and therefore the risk to the patient is greater. The reason for the patient's anticoagulation status was the maintenance medication of Coumadin. Coumadin is administered to this patient due to a heart valve replacement to ensure that the valve functions properly.) Therefore, the attending cardiologist upon admission to PMC determined that once the patient's blood was no longer anticoagulated, it would be safe to perform a cardiac catheterization and possible intervention.

The acute ischemic (caused by inadequate blood supply) damage to the myocardium (heart muscle) often leads to cardiogenic shock (life threatening medical condition that is the result of the heart's inability to adequately pump blood to the body's tissues). Cardiogenic shock typically is triggered by a heart attack, and even with treatment, the mortality rate is high. Mutual of Omaha Insurance Company<sup>13</sup> lists cardiogenic shock in their policy as an advisory list of examples of cases in which air ambulance could be

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<sup>13</sup> Mutual of Omaha Insurance Company Local Coverage Decision – L2483 – Ambulance Services

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justified. The transfer of this patient via air ambulance was medically necessary, reasonable, and appropriate.

In summary, the decision to transfer all nine cases discussed above was made by the treating physician at the sending hospital or emergency medical personnel if the flight originated at the scene. The clinical documentation from the sending and receiving hospitals along with the corresponding flight records clearly supports the medical necessity and clinical appropriateness of the transfers to the designated facilities in conformity with the related Medicare regulations.

#### **B. Documentation Insufficient To Support Claims for Mileage**

##### **Statement of Non-Concurrence:**

We respectfully disagree with the findings including the interpretation of the related regulations regarding the nearest appropriate hospital. We have embedded below the pertinent portion from the Medicare Intermediary Manual.

“Appropriate Facility.--It is required that the beneficiary be transported to the nearest hospital with appropriate facilities for treatment. The term "appropriate facilities" refers to **units or components of a hospital that are capable of providing the required level and type of care for the patient's illness and that have available the type of physician or physician specialist needed to treat the beneficiary's condition** (*emphasis added*). In determining whether a particular hospital has appropriate facilities, take into account whether there are beds or a specialized treatment unit immediately available and whether the **necessary physicians and other relevant medical personnel are available in the hospital at the time the patient is being transported** (*emphasis added*). The fact that a more distant hospital is better equipped does not in and of itself warrant a finding that a closer hospital does not have appropriate facilities. Such a finding is warranted, however, if the beneficiary's condition requires a higher level of trauma care or other specialized service available only at the more distant hospital.”<sup>14</sup>

In all cases cited, it was the medical judgment of the treating physician, or other trained personnel, that the receiving facility was the closest appropriate facility to provide the necessary and specialized care, including clinical staffing, each patient's unique clinical condition required.

In our opinion, the investigator's interpretation of the regulations fails to consider the immediate availability of the specialist physician and/or trained team of medical personnel necessary to provide appropriate medically necessary care to the patient. Reliance was placed upon the fact that a neighboring hospital with a trauma center had

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<sup>14</sup> Medicare Intermediary Manual (CMS Pub 13), § 3114 paragraph C (11) (d)

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bed availability without consideration of the specific clinical needs of the patient/beneficiary such as interventional cardiologist or cardio-thoracic surgeons.

Indeed, the majority of the hospitals identified by the OIG in this sample as being the nearest appropriate facility, have transferred similar cases to HUP due to the clinical complexity and the specific needs of the patients. This further supports our position that HUP was the nearest clinically appropriate facility to administer to the patient's highly specialized needs at the time of the transfer.

Additionally, the Pennsylvania Department of Health Air Ambulance Licensure Policy Manual states in part ...**"A flight difference of less than five minutes shall not be germane to determining the closest facility"**<sup>15</sup>*(emphasis added)*... Therefore, hospitals in our immediate service area, including but not limited to Abington Memorial, Temple University, Albert Einstein Medical Center, Medical College of Pennsylvania, Cooper Medical Center and Thomas Jefferson University are well within the five-minute flight time requirement.

Lastly, according to the Pennsylvania Department of Health, Statewide Air Protocol-Trauma Patient Destination, for cases that started from pre-hospital setting (SH), the Ten-mile Exception applies. The Ten-mile exception states that **"Transport by air ambulance to a trauma center, other than the closest center, is permitted if the difference between the air transport distance to the other center and air transport distance to the closest center is 10 nautical miles or less"**<sup>16</sup> *(emphasis added)*...

As we previously discussed, actual flight miles cannot be accurately determined and reasonable estimates are made for purposes of billing. The investigator utilized latitude/longitude travel distance websites in determining mileage. This methodology resulted in variances that fall within the 10-mile radius and further exacerbates this matter. In fact, 59 of the claims cited as billed beyond the nearest facility were within a 10-mile radius of the receiving hospital, including 13 claims cited as over-coded attributable to 2 miles or less. As we previously discussed, the actual mileage flown for each patient cannot be accurately identified and/or reported due to issues such as flight deviations. Therefore, findings within 2 miles based upon the methodology used by the investigator is not reasonable when such a degree of accuracy cannot be taken into consideration for calculation of actual flight mileage.

The following case outlines selected from the audit sample illustrate our position that the receiving hospital was the nearest appropriate facility with the necessary physicians and other relevant medical personnel available in the hospital at the time the patients were transported to provide medically necessary care:

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<sup>15</sup> Pennsylvania Department of Health, Air Ambulance Licensure, Service License Policy Manual - Rotorcraft § III, paragraph G

<sup>16</sup> Pennsylvania Department of Health, Trauma Patient Destination/ Statewide Air Ambulance Transport Protocol

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#### **Sample #10**

The treating physician at the sending hospital made a clinical decision to transfer this critically ill, unstable patient to HUP. This life-saving clinical decision was based upon the unique medical condition of the patient and clearly supported by the medical record documentation. Specifically, the patient was a 72-year-old male who suffered a V-tach/V-Fib arrest (cardiac arrest with life threatening abnormal irregular heart rhythm with very rapid uncoordinated fluttering contractions of the ventricles, lower chambers of the heart) and was taken to Princeton Medical Center. Patient was resuscitated and intubated. Patient was found to be in pulmonary edema secondary to severe mitral valve insufficiency. Clinically, this critically ill patient could not be awakened without becoming extremely bradycardic (slow heart beat) which can precipitate into a fatal bradycardic arrest (slowing the heart to a standstill) or hypotension causing multi-organ system failure (stroke, renal failure, shock liver, or acute lung injury, among others). Patient transferred to HUP and arrives at the hospital at 6:14 p.m. Patient remained intubated and was taken emergently to the cardiac catheterization lab for diagnostic evaluation.

HUP clearly had a medical team available in the hospital to include interventional cardiologist and cardio-thoracic surgeons, if required at the time of the transfer, to meet the clinical needs of the patient consistent with the Medicare requirements.

#### **Sample #12**

The treating physician at the sending hospital made a clinical decision to transfer this critically ill, unstable patient to Graduate Hospital, a Tenet healthcare facility. This life-saving clinical decision was based upon the unique medical condition of the patient, and clearly supported by Medicare regulations.<sup>17</sup> The patient was a 70-year old male who presented to Palmerton Hospital Emergency Department with acute onset of vomiting bright red blood. He had a past medical history significant for a partial gastrectomy (40% of his stomach removed) in 1973 and had, as recently as 6 days prior to this date, been discharged from Palmerton Hospital following treatment for an acute myocardial infarction (heart attack).

Patient was noted to be hypotensive (60/30) with a hemoglobin of 9.5 and hematocrit of 27.0 (normal values for a male are between 12-18 and 42-64, respectively). He was taken to operating room at Palmerton Hospital for a gastroscopic procedure. However, surgeons at Palmerton were unable to cauterize the bleeding with a resultant drop in hemoglobin and hematocrit 5.1 and 15.0, respectively. This patient, with a massive

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<sup>17</sup> Medicare Benefit Policy Manual (CMS Pub 100-2) Sections 10.4.2 - Medical Appropriateness and 10.4.3 - Time Needed for Ground Transport

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gastrointestinal bleed, required specialized care that could not be provided at Palmerton Hospital, necessitating an immediate transfer.

The decision to transfer this patient to Graduate Hospital was based on the clinical condition of the patient. In addition, it is important to note that this patient was a Jehovah's Witness and as such has a strong religious conviction against receiving primary blood components and maintained a legal document not to receive whole blood. At the time of transfer, Graduate Hospital (with an established Center for Bloodless Medicine and Surgery since 1994) was clearly the most appropriate facility available to treat this patient. We are not aware of any other hospital in our immediate service area with a dedicated bloodless medicine program at the time of the transfer that could have met the clinical needs of the patient.

#### **Sample # 79**

The treating physician made a clinical decision to transfer this unstable patient to HUP. This clinical decision was based upon the unique medical condition of the patient and clearly documented within the medical record. Specifically, the patient was a 70-year old male who presented to Reading Hospital Emergency Department complaining of shortness of breath, chest pain, and weakness of his lower extremities. He was diagnosed at Reading Hospital with a Type A aortic dissection with mild perfusion to lower extremities. (A Type A ascending aortic dissection is a dissection that involves the aorta proximal to the origin of the left subclavian artery.) Type A dissections generally require surgical intervention. In addition, this patient was experiencing compromised blood flow to his lower extremities, necessitating immediate surgical intervention.

The patient was transferred on a Sunday evening and taken emergently to the operating room (in OR at 7:30 PM) where he underwent aortic dissection repair, aortic valve resuspension and aortic arch reconstruction. Aortic dissection tear reached into the aortic arch and required extensive complex reconstruction. HUP had a medical team available in the hospital to include cardio-thoracic surgeons at the time of the transfer to meet the clinical needs of the patient consistent with the Medicare requirements.<sup>18</sup>

In addition to the clinical condition of the patients noted above, which clearly represent a threat to the beneficiaries survival based upon the severity of the illness/injury necessitating immediate transfer to our facilities, we have inherent responsibilities pursuant to the Emergency Medical Transfer and Active Labor Act (EMTALA). Specifically, the air ambulance is operated by the hospital and therefore obligated to abide by EMTALA regulations which prohibit us from delaying treatment due to inquiring about patient insurance status.<sup>19</sup> Consequently, we have no knowledge as to the patients' insurance at the time of the transfer, and are certainly not aware if the patient is

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<sup>18</sup> Ibid

<sup>19</sup> 42 CFR § 489.24 Special responsibilities of Medicare hospitals in emergency cases

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covered under the Medicare program. Please note that an emergency medical condition is defined in part under EMTALA as the following:

“...(1) A medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain, psychiatric disturbances and/or symptoms of substance abuse) such that the absence of immediate medical attention could reasonably be expected to result in —

- (i) Placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy;
- (ii) Serious impairment to bodily functions; or
- (iii) Serious dysfunction of any bodily organ or part; or...”<sup>20</sup>

Clearly, all seven cases meet the definition of an emergency condition as defined by statute. Moreover, we are required by EMTALA as the recipient hospital to accept patients in our facilities that require the specialized capabilities to treat the patient as long as we have capacity.<sup>21</sup> Our facilities unequivocally had the capabilities and professional staff to accept all of the patients identified in the OIG audit.

### **The Hospital Of The University Of Pennsylvania Billed Inaccurate Claims To Medicare.**

#### **A. Medicare Charges Billed When Beneficiary Not Onboard**

##### **Statement:**

The finding regarding third leg charges identified by the OIG was attributable to only 4 cases out of the 100 claims reviewed within the sample population, and it is clear that the vast majority of HUP cases did not include such charges. We have changed our charge procedures and have established procedures that ensure these charges are no longer reported. However, the OIG draft should more clearly reflect the fact that financial impact related to these charges was extremely minimal, as they had no effect on the fee schedule upon which reimbursement is largely based.

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<sup>20</sup> 42 CFR § 489.24 Emergency Medical Condition

<sup>21</sup> 42 CFR § 489.24 - paragraph (3) (e)

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**B. Inaccurate Mileage and Incorrectly Reported Fees**

**Statement of Non-Concurrence:**

We respectfully disagree with the finding that HUP incorrectly reported four (4) claims resulting in 41 excess miles.

The investigator previously advised of three (3) cases allegedly reported with incorrect mileage calculations. We advised the investigator that we agreed with his findings with respect to sample numbers 40 and 70. However, we disagreed with his assessment of sample 54 and contend that the claim was correctly submitted with 36 loaded miles. This patient was flown from the scene in Monroe County to St. Luke's hospital following a snakebite. We provided the investigator with a copy of the record from AeroMed Software application showing loaded miles of 36 and total of 72 miles for the flight. It is our understanding based upon the Interim Review Results from the investigator that the fourth case (sample 16) was underbilled.

As previously discussed, the mileage calculation represents best estimates by the staff. We are currently exploring automated solutions to improve our accuracy of reporting.

**Statement of Non-Concurrence:**

We respectfully disagree with the finding that HUP incorrectly reported fee amounts on our cost report.

The Medicare Fiscal Intermediary (Mutual of Omaha) provides HUP with the Provider Statistical and Reimbursement System report (PS&R) each year to aid in the filing of the annual Medicare cost report. The PS&R provides summary information of Medicare claims paid for various inpatient and outpatient services. Each bill type (inpatient, outpatient, dialysis, ambulance, etc.) is segregated and summarized under a different report type. For example, inpatient hospital claims are summarized on report type "110"; Ambulance claims are summarized on report type "13Z". At the time of the cost report filing noted within the report, report type "13Z" was not provided to us by Mutual of Omaha (it should be noted that this occurred after the transition to the Outpatient Prospective Payment System when all Fiscal Intermediaries were experiencing problems with producing outpatient PS&R's, resulting in CMS extending filing deadlines for Medicare cost reports several times). Therefore, reasonable estimates were used for purposes of filing the report. It is important to note that these issues are finalized as part of the final audit process.

**The Hospital Of The University Of Pennsylvania Did Not Support Medicare As Primary Payer**

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We respectfully disagree with the findings as stated in the draft report.

The University of Pennsylvania Health System underwent significant computer conversions and software updates over the past several years for our professional and technical fee billing systems. Unfortunately, the electronically stored historical MSP information was inadvertently lost in course of the conversions.

Although we were unable to reproduce the MSP questionnaires, it is important to note that none of the cases were found to be improperly reported to the Medicare program with respect to coordination of benefit issues. In fact, three patients cases were specifically identified with potential coordination concerns and all 3 were properly billed as follows:

- Sample no. 84 - we determined that Blue Cross was primary on the basis of spousal coverage and submitted a claim accordingly.
- Samples 28 and 74 - we initially submitted claims to auto insurance carriers for as primary coverage for our services but were advised that all first party benefits were exhausted.

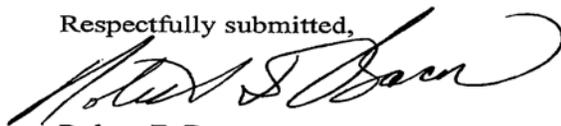
In all three cases, every effort was made to ensure proper coordination of benefits before submission of claims to the Medicare program as clearly demonstrated by our actions.

#### Conclusion

We appreciate the opportunity to respond to the draft audit report from the OIG. We believe the issues surrounding interpretation of flight regulations and coding conventions raised by your review are extremely significant, and merit further discussion. Please be assured that we are readily available to discuss these matters with the OIG. We respectfully request that the OIG reconsider 81 of the cases cited in their report and reverse unfavorable findings in the amount of \$114,938.

If you have any questions or require additional information, please do not hesitate to contact me.

Respectfully submitted,



Robert F. Bacon

Pc: Andrew DeVoe  
Lee Dobkin, Esq.  
James Maiorana