

July 13, 2010

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Executive Director
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8201

***Subject: Medical Group Research Billing Process Review
Audit Project 2010-25***

The final audit report for *Medical Group Research Billing Process Review*, Audit Report 2010-25, is attached. We would like to thank all members of the department for their cooperation and assistance during the audit.

Because we were able to reach agreement regarding corrective actions to be taken in response to the audit recommendations, a formal response to the report is not requested.

The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the corrective actions. At that time, we may need to perform additional audit procedures to validate that actions have been taken prior to closing the audit findings.

UC wide policy requires that all draft audit reports, both printed (copied on tan paper for ease of identification) and electronic, be destroyed after the final report is issued. Because draft reports can contain sensitive information, please either return these documents to AMAS personnel, or destroy them, at the conclusion of the audit exit conference. AMAS also requests that draft reports not be photocopied or otherwise redistributed.

Stephanie Burke
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Attachment

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AUDIT & MANAGEMENT ADVISORY SERVICES



University of California
San Diego

**Medical Group Research Billing Process Review
July 2010**

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Project Number: 2010-25

***Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25***

Table of Contents

I.	Background.....	1
II.	Audit Objective, Scope, and Procedures.....	3
III.	Sample Set Selection.....	4
IV.	Conclusion	4
V.	Observations and Management Corrective Actions	5
	A. Research Billing Errors.....	5
	B. Bulk Statement Timeliness	6

Exhibit A: Professional Fee Bulk Billing Process Flowchart

Exhibit B: Medical Group Billing Error Summary

***Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25***

I. Background

Audit & Management Advisory Services (AMAS) has completed a review of Medical Group research billing process in accordance with the Fiscal Year 2009-10 audit plan. This report summarizes the results of our review.

UCSD has over 700 faculty members involved in laboratory or clinical research. A number of different regulatory requirements govern billing for different types of research studies. Research subject registration information is entered into the Medical Center Patient Care Information System (PCIS). Completed registrations are then interfaced to the Medical Center Financial Management System (FMS) and the UCSD Medical Group GE-IDXBAR billing and accounts receivable systems to facilitate the billing process.

Medical Group Business Services (MGBS) assists UCSD research study coordinators with ensuring that research related physician fees are appropriately charged to a research study bulk account or to the research subject's insurance carrier. As part of the study approval process, the Principal Investigator (PI) or his/her designee must submit a Departmental Research Agreement (DRA) and a bulk account application to MGBS. Bulk accounts are used to capture all charges that should be billed to a study. The purpose of the DRA is to request specific services required by the study protocol from Medical Center departments at the research rate. Laboratory and Imaging Services are among the Medical Center departments that have established standardized research rates, which are listed on the bulk application. After the study is approved by the UCSD Institutional Review Board (IRB), and the DRA is approved by the department providing the services, a bulk account is created and forwarded along with DRA information to the MGBS billing manager.

The MGBS billing manager creates a bulk bar case for each subject enrolled in the study. The billing manager regularly reviews bulk bar cases to assure that a case has been established for each study subject, and that expired bulk bar cases have been closed. The Current Procedural Terminology (CPT)¹ codes listed on the bulk application and the DRA are also added to each subject's bar case dictionary in GE-IDXBAR to identify study related services. Research rates for the CPT codes are sent to the Medical Group Information Technology (MGIT) department to be loaded into the bulk table in GE-IDXBAR.

MGBS receives charges from various Medical Center systems including the Radiology Information System (RIS), the Surgical Pathology system, Tamtron and others. All

¹ Current Procedural Terminology, an accepted method developed by the American Medical Association in connection with the Health Care Financing Administration Common Procedure Coding System to describe a medical service by use of a numeric code. This has been established as the standard code set for reporting health care services in electronic transactions.

***Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25***

charges are electronically interfaced to or are manually entered into the GE-IDXBAR Transaction Editing System (TES), which filters out charges that do not conform to defined rules. For example, a research procedure with missing or inconsistent data would generate a TES edit. Edits are classified into nine categories including, bulk/research, case management and managed care, and are classified based on the type of inconsistency identified. TES edits for charges assigned to a research bulk category occur if a subject's visit type does not match the bar case, or if the CPT code assigned to the procedure is not in the subject's bar case dictionary. Each TES edit category has been assigned to a MGBS staff work group to review charges and resolve edits. Bulk account edits are resolved daily by one MGBS staff member. The Moores Cancer Center (MCC) is unique in that its Clinical Trials Office (CTO) staff review and release MCC professional fee charges into the GE-IDXBAR system.

Charges that clear TES edits or those that were modified based on TES edits are extracted nightly into GE-IDXBAR. For invoices with a bulk payer FSC², bulk statements are generated during the first week of the following month. Bulk statements are reviewed by two MGBS billing staff to ensure that charges are accurate by verifying that the research rate has been applied, and that the charge is consistent with the TES comments and visit detail. MGBS billing staff review all available documentation to verify charge accuracy. Any charges that appear on the bulk account at the regular rate are analyzed to determine whether research rates are applicable based on the DRA and bulk application.

After reviewing the statements, any adjustments and/or corrections are noted on the printed bulk statement and mailed to the study coordinator for review. The billing staff then enters the research index number and the associated credit into the MGBS account in the IFIS system, and prepares credit documents that are sent to the Cash Posting unit staff who will post the transaction into GE-IDX BAR.

It is possible for MGBS staff in various billing and collection units to make changes to the FSC based on correction requests from study coordinators prior to payment posting. The bulk statement review process performed by the billing staff helps to ensure that any FSC changes entered into the system after the bulk statements are printed have been incorporated into the billing documents.

MGBS accounts are closed the last day of each month. Bulk statements are printed the first week of each month and reviewed. The IDXBULKR report becomes available to study coordinators in InfoPac in the first week following month end closing. The IDXBULKR report includes the previous month recharge entries. A flowchart depicting the bulk billing process for the MG Business Office is presented in ***Exhibit A***.

² Financial Statement Classification (FSC) code is used to group similar types of payers or large individual payers for registration, billing and tracking.

***Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25***

The UCSD Research Compliance Program (RCP) provides education, systems evaluation and research charge monitoring services which help to streamline clinical trials administrative and financial processes while ensuring institutional compliance with the applicable laws and regulations. RCP provides assistance to clinical trials staff through the maintenance of a general research helpline for research related questions and questions regarding MC processes. The RCP has developed and maintains an intranet site which centralizes information and forms necessary to conduct research/clinical trials at UCSD.

The “Staff Handbook for Conducting Research and Clinical Trail Activities at the UCSD Medical Center” issued by the RCP in December 2009 specifies that the PI or study coordinator is responsible to review bulk account statements to verify that all expected charges have been charged to the bulk account. The Handbook indicates that, if an expected charge has not been posted to the IDXBULKR report, the person completing the bulk account review should notify MGBS personnel and request that the appropriate service unit be contacted to locate the charge.

II. Audit Objective, Scope, and Procedures

The objective of our review was to determine whether MGBS process controls for billing research services were adequate to ensure that charges directed to the study bulk account were accurate, and research billing data was available to key users in a timely manner to facilitate effective charge monitoring. To achieve our objective, we performed the following audit procedures:

- Interviewed the MGBS Information Services Director and Interim Chief Operational Officer;
- Discussed MGBS research billing process with the MGBS Billing Manager and billing staff;
- Prepared a flowchart to identify process control strengths and weaknesses (*Exhibit A*);
- Selected a judgmental sample of 10 studies to determine whether research related services were appropriately charged to insurance or to the related research bulk account; and,
- Identified the cause of identified billing errors.

Audit findings associated with charges for hospital services performed for the studies included in the audit sample were reported in the audit report for a concurrent project: *Clinical Research Billing Process Review*, AMAS Project #2009-15.

**Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25**

III. Sample Set Selection

A judgmental sample of ten studies was selected for this review. The December 2009 and January 2010 PFS and MG bulk account statements were accessed from InfoPac. The population was confined to studies that had both Medical Center and MGBS charges for those months.

A number of patients were randomly selected from each study. Detailed information for each study selected is presented in the table below.

IRB #	Bulk Account #	Abbreviated Study Title	SOM Department or Organized Research Unit	Total Subjects Enrolled	Subjects Included in Sample
081783	9922485	Torax	Surgery	21	10
090240	9933854	Bazhenova-Morab-009	Moore's Cancer Center (MCC)	5	5
071340	9922428	Plaxe GOG	MCC	6	6
090502	9936212	Helsten - TDM	MCC	2	2
081093	9934795	Jameson-MF TG101348-0	MCC	4	4
051037	9930934	MUST Trial	Ophthalmology	10	10
090531	9935008	Glaxo ADC112355	Internal Medicine	10	10
071588	9934159	MD Wallace	Anesthesiology	9	9
070885	9928482	Optima	Psychology	8	8
060635	9928979	NTM Study A	Medicine	74	10

IV. Conclusion

Based on our review procedures, we concluded that MGBS process controls for billing research services were effective and helped to ensure that charges directed to the study bulk account were accurate. A number of manual controls were in place to prevent any incorrect charges from being posted to the bulk account. As a result, a significant amount of time sometimes elapsed before the bulk statement was available to the research unit to assist with monitoring the study charges.

The majority of the billing errors identified during the audit were not caused by MGBS process weaknesses. Errors were the result of an incorrect insurance type within the visit selected during the scheduling process, or an incorrect order being placed by the research unit. For one study, a charge for an electrocardiogram was billed at an incorrect rate in the research bulk account because the MGBS staff was not provided with an updated DRA for the study. A summary of the research professional services billing errors identified in the test sample are summarized in *Exhibit B*.

The RCP provides ongoing reviews and monitors research billing through the analysis of reported billing errors, study adverse events and bulk account registrations to assess research compliance and identify potential noncompliance. Through its help line and

**Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25**

other initiatives, RCP staff coordinate regulatory training and support; and work with the staff in individual research units as needed to identify and correct processing errors.

The accessibility of the MGBS bulk account statement is discussed in more detail below.

V. Observations and Management Corrective Actions

A. Research Billing Errors

Review of the selected charges in the test sample identified research charge errors.

AMAS' review of selected charges for 10 studies identified the following charge errors:

Number of charges	Dollar Value	Type of Error
27	\$26,474	Incorrectly billed to insurance
9	\$ 1,044	Incorrectly billed to the study bulk account
5	\$ 1,813	Charges had not been submitted

Additional detail for the charge errors is provided in **Exhibit B**.

We observed that majority of the errors were not caused by MGBS process weaknesses. Insurance billing errors were generally caused by an incorrect order being placed by the research unit, or the visit being scheduled with an insurance payer code. For one study (IRB# 081783), MGBS had not received the updated DRA from the department, which resulted in procedures being billed to the bulk account at the incorrect rate. Two of the studies (IRB# 070885 and #081783) had missing charges for study procedures performed on five research subjects. The missing Esophageal Motility Study charges for IRB#081783 were caused by the research unit not submitting the charges for billing to the Department of Surgery professional fee billing staff. In addition, Imaging Services did not generate charges for services provided to IRB #070885.

Management Corrective Actions:

1. Imaging Services and the Department of Surgery have submitted charges for non-billed services identified during this review.
2. MGBS management, in collaboration with RCP, will correct the billing errors identified during this review.

*Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25*

B. Bulk Statement Timeliness

MGBS bulk billing statements were not provided to the research unit on a timely basis.

MGBS established a thorough review process, which involved completing a monthly review of all charges billed to the bulk account for each study. The review process began after the MGBS monthly closing, and required staff to gain access to visit and TES comment histories, communicate with study coordinators, and process charge corrections, as needed. As a result, charges were sometimes not available to research unit staff for up to one month after the service was provided.

In some cases, charges for research services posted in GE-IDXBAR took several weeks to appear on the IDXBULKR statement in InfoPac. For example, a bulk charge posted on March 5, 2010 appeared on the bulk statement printed for MGBS staff review during the first week of April. Staff reviewed the charges on the printed bulk statements for accuracy, and then entered approved charges into the study financial account in the campus Integrated Financial Information System (IFIS) throughout the month of April. After charges were entered into IFIS, a paper copy of the study bulk statement was sent to the research unit. However, the IDXBULKR report that included the March 5 charge was not available in InfoPac until the first week of May, after the MGBS April closure date. The research unit received a paper copy of the annotated bulk statement by the end of April, but had to wait nearly two months to review the charge in IDXBULKR report. A delay in the availability of billing reports may result in lost opportunities for billing charges to a regular insurance account.

As a comparison, Medical Center bulk statements for research charges are available for review the day following the service post date. Research units have the option to review Medical Center bulk statements on a daily, weekly or monthly basis. However, corresponding professional charges for the same services may not be available until several weeks after the Medical Center bulk reports are reviewed. Inconsistencies in the availability of these reports may create confusion and the research unit may neglect to review the IDXBULKR.

If standard research rate has not been established for a required study service, the research unit must negotiate a rate with the department that provides the services for each study. If the CPT code for each study related service is not entered into the bulk research table, the system automatically selects the regular rate from the GE-IDXBAR master table, causing charge errors. To help ensure that rates

***Medical Group Research Billing Process Review
Audit & Management Advisory Services Project 2010-25***

charged to studies are correct, MGBS staff review and verify the rate for each service charged to a study bulk account, which is a time consuming process.

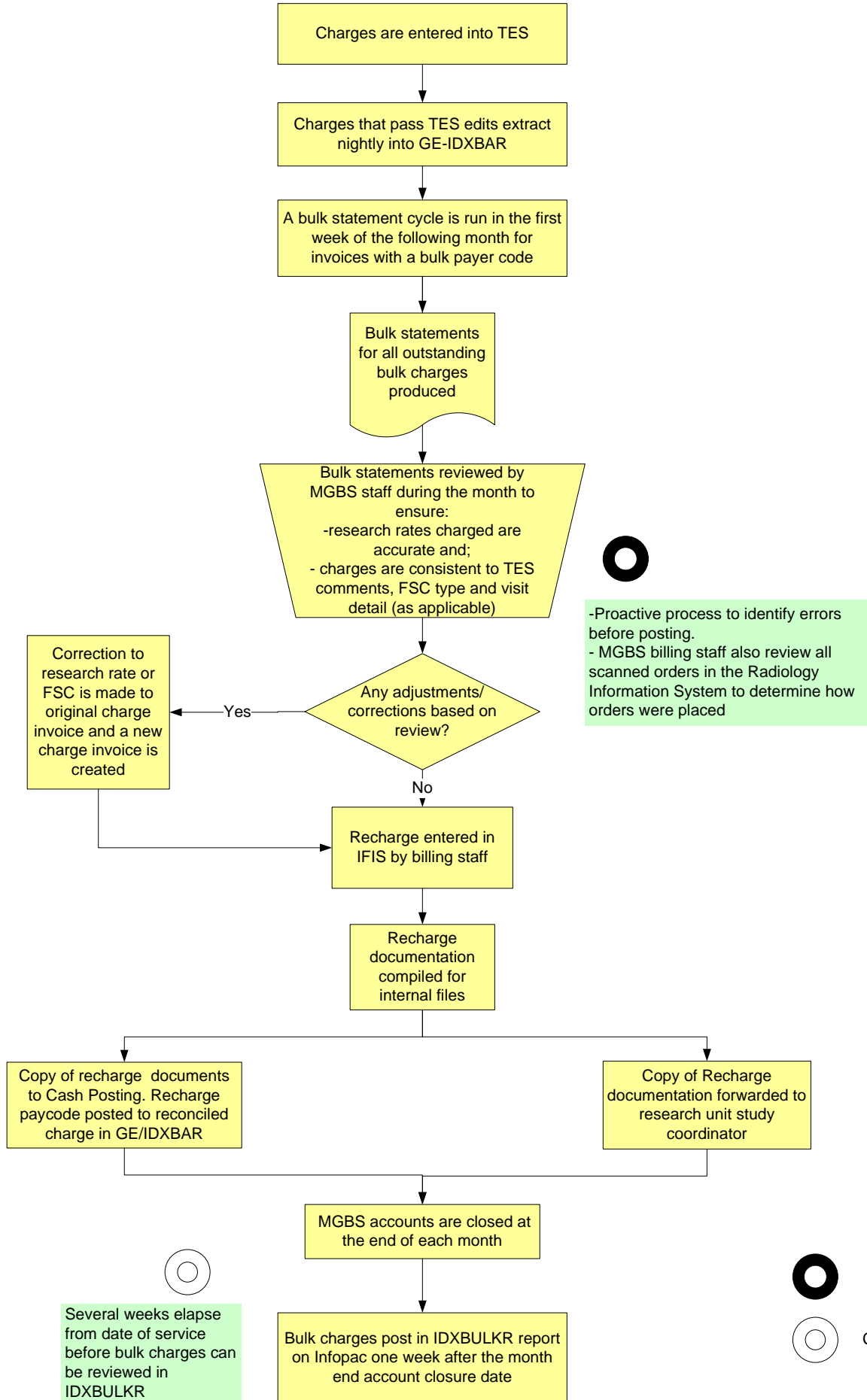
The MGBS Billing Manager advised AMAS that new processes and/or procedures are being considered to improve billing process accuracy and efficiency. MGBS is in the process of establishing standardized research rates. Standardization of the research rates would reduce the amount of time needed to complete a bulk account review, and would also eliminate the need to periodically update the bulk table in GE-IDXBAR. Elimination of these tasks should decrease the time required to issue the paper bulk billing statements to the research unit. In addition, MGIT is adding a case module to the GE-IDXBAR Database Management System (DBMS) query, which is used to print remittances. The new module will allow charges to be posted in real time. When fully implemented, the new module will allow any charges posted to the system after the query is initiated to be incorporated into the remittance report. Continued re-evaluation and implementation of research billing process controls based on risk of inaccuracy will likely provide adequate control using fewer staff resources.

Management Corrective Actions:

1. MGBS and the Research Compliance Office are negotiating with SOM departments to establish standardized research rates for professional services.
2. MGBS will identify process efficiencies that will result in IDXBULKR reports being generated and posted to InfoPac on a more frequent basis to improve the timeliness of report availability.

**Medical Group Clinical Research Billing Process Review
Audit & Management Advisory Services Project #2010-25**

EXHIBIT A - Professional Fee Bulk Billing Process Flowchart



**Medical Group Clinical Research Billing Process Review
Audit Management Advisory Services Project #2010-25**

Exhibit B - Medical Group Billing Error Summary

Study IRB#	Study Name	Subject	Error Type	Incorrectly billed to:	Amount
090240	MORAB	0478	Pulmonary	Insurance	\$ 103.00
090240	MORAB	1312	CT Scans	Bulk	\$ 528.00
081093	TargeGen	6373	Bone marrow	Insurance	\$ 1,657.00
		6061	Bone marrow	Insurance	\$ 2,329.00
		7934	Bone marrow	Insurance	\$ 3,431.00
		5222	Bone marrow	Insurance	\$ 1,428.00
051037	MUST Trial	1950	Ophthalmic & angiography	Insurance	\$ 432.00
		2691	Ophthalmic & angiography	Insurance	\$ 195.00
		2691	Office visit	Insurance	\$ 96.00
		7759	Ophthalmic & angiography	Insurance	\$ 794.00
		7759	Office visit	Insurance	\$ 302.00
		4695	Ophthalmic & angiography	Insurance	\$ 794.00
		9984	Ophthalmic & angiography	Insurance	\$ 1,968.00
		9984	Office visit	Insurance	\$ 347.00
		7014	DXA Bone Density scan	Insurance	\$ 138.00
		7014	Ophthalmic & angiography	Insurance	\$ 150.00
		7014	Office visit	Insurance	\$ 120.00
		9583	DXA Bone Density scan	Insurance	\$ 138.00
071588	MDWallace	7314	Surgery/Anesthesiology	Insurance	\$ 8,731.00
		2881	Surgery/Anesthesiology	Insurance	\$ 1,440.00
		6389	Surgery/Anesthesiology	Insurance	\$ 750.00
		6389	Office visit	Insurance	\$ 399.00
		6716	Office visit	Insurance	\$ 157.00
		7672	Office visit	Insurance	\$ 157.00
		9152	Office visit	Insurance	\$ 95.00
081783	TORAX	1342	Office visit	Insurance	\$ 323.00
		2246	Esophageal Motility charge missing ¹	Not charged	\$ 215.00
		7396	Esophageal Motility charge missing ¹	Not charged	\$ 215.00
		5949	TORAX charge missing	Not charged	\$ 987.00
		5949	Upper GI double billed	Double billed to bulk	\$ 280.00
		1840	EKG ²	Bulk	\$ 38.00
		1342	EKG ²	Bulk	\$ 38.00
		1550	EKG ²	Bulk	\$ 32.00
		0770	EKG ²	Bulk	\$ 32.00
		7396	EKG ²	Bulk	\$ 32.00
		0227	EKG ²	Bulk	\$ 32.00
		5949	EKG ²	Bulk	\$ 32.00
070885	Optima	8879	Hand & foot xray (2)	Not charged	\$ 264.00
		4658	Hand & foot xray	Not charged	\$ 132.00

¹ MGBS billing staff did not receive billing documentation from provider

² EKG DRA was not received by the MGBS billing staff