August 2, 2010

BETSY GROSSMAN
Director, Revenue Cycle Administration
8911

Subject: Charge Description Master Maintenance
Audit Project 2010-16

The final audit report for Charge Description Master Maintenance, Audit Report 2010-16, is attached. We would like to thank all Medical Center personnel who participated in this review 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
Assistant Vice Chancellor
Audit & Management Advisory Services

Attachment

cc: D. Brenner
L. Donaldson
T. Jackiewicz
A. Kellogg
G. Matthews
M. Sonnenshein
S. Vacca
Charge Description Master Maintenance
August 2010

Performed by:
Jennifer Hornyak, Auditor
Terri Buchanan, Manager

Approved by:
Stephanie Burke, Assistant Vice Chancellor

Project Number: 2010-16
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I. Background

Audit & Management Advisory Services (AMAS) has completed a review of the Medical Center charge description master (CDM) and related processes as a part of the approved audit plan for Fiscal Year 2009-10. This report summarizes the results of our review.

The CDM is the master file (database) containing a comprehensive list of Medical Center procedures, facility and supply charges and their corresponding descriptions, revenue codes and billing codes, including HCPCS II & III\(^1\), CPT\(^2\), and modifiers.

There is only one CDM for the Medical Center, which is maintained electronically within the Medical Center Financial Management System (FMS). However, each hospital department may be comprised of one or more cost centers with a section of the CDM dedicated to the procedure and supply codes used in that area. Certain departments, such as the Clinical Laboratories and Imaging Services, manage cost center activities and generate charges through specialized applications or systems. The charge codes in those cost center based systems must be consistent with the cost center codes in the CDM to facilitate the accurate transfer of charges to patient accounts and payers. CDM data must also be consistent with other systems that may pass charges to FMS or use charge data for other purposes, such as budget development. Such systems include the Medical Group (MG) charge master, which is a component of the GE-IDX Billing and Accounts Receivable (IDXBAR) system, and the Decision Support (DS) cost accounting system.

Revenue Cycle Administration (RCA) personnel are responsible for managing CDM content. However, per Medical Center Policy #724.1E, *Charge Description Master Maintenance*, individual cost center management has primary responsibility for the accuracy of CDM content.

Charges may be generated using several different methods and systems. Cost center personnel may enter charges into the Patient Care Information System (PCIS) charge capture module, the electronic medical record system (Epic), or through the specialized applications discussed above. The cost center codes are linked to specific CDM billing information, which includes revenue codes, billing codes, and a set of established prices for various payers and activities. An overview of the systems involved in billing is provided below.

\(^1\) Healthcare Common Procedure Coding System (HCPCS) is the standard HIPAA code set for reporting supplies, orthotic and prosthetic devices, and durable medical equipment.

A service or supply code must be in the CDM before charges can be transferred to a patient invoice or insurance claim. Therefore, the accurate and timely update of the CDM is critical to completion of the billing process. CDM procedures codes should be evaluated and updated annually when the American Medical Association issues its annual CPT code updates. CDM updates may also be identified by cost center administrators when they recognize the need to implement codes for new physician services, separately billable supplies, or revise existing code prices. The general process for CDM maintenance and update is provided in Attachment 1.

RCA assists cost centers in maintaining the accuracy of the CDM by reviewing the updated CPT code book and contacting affected cost center administrators to discuss code changes that affect their CDM. RCA may also directly implement code changes in cases when one CPT code changes to another unique CPT code without consultation from cost centers.

Medical Center management also retains a consultant to annually evaluate the strategic pricing for services included in the CDM. The price evaluation is completed based on net revenue opportunity, area benchmarks, payer contract information, and payer mix. The consultant does not evaluate CDM service codes or review the charge master in other Medical Center applications or the Medical Group GE-IDX billing system. RCA typically sends notification of suggested price changes to cost centers for review before the prices are adjusted.
II. Audit Objective, Scope, and Procedures

The objective of our review was to determine whether CDM change management controls and related processes helped to ensure that CDM information was updated timely and was accurate.

In order to achieve our objective we performed the following:

- Reviewed prior UCSD audits and reports;
- Evaluated MCP 724.1E, *Charge Description Master Maintenance*; effective July 30 2007;
- Interviewed RCA staff, MG staff, DS staff, and a sample of cost center CDM administrators;
- Prepared overview flowcharts of CDM processes;
- Evaluated CDM maintenance and process controls, and,
- Observed selected RCA CDM maintenance processes.

The audit work completed during this project focused primarily on the identification of process controls that resulted in CDM content changes. CDM data and/or data in the charge masters in other Medical Center cost center applications or the GE-IDXBAR system was not analyzed during this review.

III. Conclusion

Based on our audit procedures, we concluded that the timeliness of CDM system changes appeared reasonable and associated controls helped to ensure that CDM content was accurate. Cost center and RCA staff had implemented formal and informal processes to maintain the accuracy of the CDM. However, cost centers may require additional expertise and/or tools to effectively perform CDM management responsibilities, and processes could be further optimized to ensure accuracy among CDMs and corresponding systems.

Opportunities for process improvement are discussed in the remainder of this report.

IV. Observations and Management Corrective Actions

A. CDM Management Responsibilities

Cost Centers are responsible for ensuring that the CDM is current and accurate. However, additional tools and expertise may be required within cost centers to effectively perform those responsibilities.

MCP 724.1E, *Charge Description Master Maintenance*, policy states that each charge producing cost center is responsible for ensuring that its CDM and the corresponding Medical Group Pricing Module for that revenue center are current
Charge Description Master Maintenance  
Audit & Management Advisory Services Project 2010-16

and accurate. There are over one hundred Medical Center cost centers that generate patient charges. CDM data for Imaging Services and Clinical Laboratory as of May 13, 2010 is provided in the following table as an example of the complexity of the CDM for these two large cost centers.

<table>
<thead>
<tr>
<th>Cost Center</th>
<th>Department</th>
<th># of Service Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>180</td>
<td>Clinical Laboratory</td>
<td>454</td>
</tr>
<tr>
<td>190</td>
<td>Clinical Laboratory</td>
<td>37</td>
</tr>
<tr>
<td>191</td>
<td>Clinical Laboratory</td>
<td>99</td>
</tr>
<tr>
<td>721</td>
<td>Clinical Laboratory</td>
<td>278</td>
</tr>
<tr>
<td>722</td>
<td>Clinical Laboratory</td>
<td>266</td>
</tr>
<tr>
<td>723</td>
<td>Clinical Laboratory</td>
<td>103</td>
</tr>
<tr>
<td>725</td>
<td>Clinical Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>730</td>
<td>Clinical Laboratory</td>
<td>74</td>
</tr>
<tr>
<td>731</td>
<td>Clinical Laboratory</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td><strong>Clinical Laboratory Total</strong></td>
<td><strong>1,396</strong></td>
</tr>
<tr>
<td>192</td>
<td>Imaging Services</td>
<td>100</td>
</tr>
<tr>
<td>201</td>
<td>Imaging Services</td>
<td>1,379</td>
</tr>
<tr>
<td>202</td>
<td>Imaging Services</td>
<td>113</td>
</tr>
<tr>
<td>204</td>
<td>Imaging Services</td>
<td>100</td>
</tr>
<tr>
<td>704</td>
<td>Imaging Services</td>
<td>100</td>
</tr>
<tr>
<td>756</td>
<td>Imaging Services</td>
<td>227</td>
</tr>
<tr>
<td>758</td>
<td>Imaging Services</td>
<td>264</td>
</tr>
<tr>
<td>759</td>
<td>Imaging Services</td>
<td>137</td>
</tr>
<tr>
<td>761</td>
<td>Imaging Services</td>
<td>112</td>
</tr>
<tr>
<td>763</td>
<td>Imaging Services</td>
<td>638</td>
</tr>
<tr>
<td></td>
<td><strong>Imaging Services Total</strong></td>
<td><strong>3,170</strong></td>
</tr>
</tbody>
</table>

CDM maintenance in some areas can be quite complex requiring specialized knowledge of CPT coding rules. However, not all cost centers employ staff with this type of expertise. Therefore, some cost center CDM administrators do not feel confident in their ability to establish correct codes in the CDM.

The majority of cost centers may require assistance with coding issues when the annual CDM review is completed, or when periodic coding questions arise. Certain cost centers provide services that are inherently more complex to code and may need to consult with a coding expert more frequently.

**Management Corrective Action:**

RCA management will identify options for providing ongoing coding expertise to assist cost center administrators as needed to complete their CDM update responsibilities effectively. Dedicated coding staff resources could also provide value to RCA business operations by:
B. Optimization of CDM Maintenance Processes

Responsibilities and processes had not been optimized to ensure timely CDM maintenance and accuracy and consistency among Medical Group, hospital, and specialized charge systems.

The effectiveness of the cost center CDM update or maintenance process varied among cost centers and individuals. Although most cost centers have designated the responsibility for completing the annual review and CDM service codes changes to an administrator(s), others have continued to rely on physician entry of new procedures on billing forms to identify the need for new or revised CDM services codes. This reactive approach to change management could create delays in implementing CDM changes or result in missed charges when codes are not available at the time of service.

RCA personnel indicated that because they were familiar with many of the staff who submitted CDM change requests, a list of authorized cost center CDM administrators was not maintained. This informal approach could be effective in some cases due to more frequent interaction between RCA and certain cost center CDM administrators. However, the absence of a formal change management process, starting with a list of authorized personnel, could result in ineffective communication between RCA and cost centers.

RCA relied on CDM administrators to access the cost center CDMs from Infopac to perform periodic reviews. Recent AMAS reviews of the Blood Bank Laboratory (AMAS project #2010-19A) and Gastrointestinal Endoscopy Clinic (AMAS project #2010-19B) verified that a formal CDM review and comparison of CDMs for multiple cost centers may not occur annually, and if completed, did not identify all code and price inconsistencies, indicating that user-friendly tools or reports may be needed to help staff more easily identify changes that are needed.

The CDM change process was initiated when a cost center submitted a change to RCA using an electronic form (e-form). However, the process for notifying cost center or department system administrators of required CDM updates that needed to be added to their system was manual. A manual or electronic routing document was not used to ensure that the changes were entered into all required systems. The current manual process was not efficient and required diligence on the part of cost center CDM administrators to communicate charge master
changes with all system administrators and verify that changes have been made. AMAS was advised by Imaging Services that CDM changes required a minimum of 12 days to implement due to the number of systems affected and the testing required. An Imaging Services CDM administrator provided an example where she submitted a request for a new CDM code on September 21, 2009 that had not been entered as of January 26, 2010 because a unique CPT code had not been established for the new procedure and additional consultation was needed regarding which alternate code could be used. This type of delay could result in lost charges and revenue opportunities. Also, the cost center budget would not reflect any revenue associated with charges for services that cannot be billed.

Through a review of CDM usage, RCA has determined that requested CDM updates have not always been loaded into cost center systems, and as a result, the codes are never utilized. We were advised that the Radiology Information System (RIS) charge master was matched against the hospital CDM when the new RIS was implemented. However, there is no current process or mitigating control to ensure that the FMS and RIS charge masters remain consistent.

A complete and accurate implementation of charge master changes in all affected systems is a complex process that would benefit from a more formal procedure. Maintenance of an updated cost center contact list would allow timely communication of any issues associated with charge master maintenance and periodic monitoring. Expanded use of the e-form as a tool to track change approvals and implementation in other affected systems could further improve the timeliness, accuracy and consistency of CDM and other charge module content.

**Management Corrective Actions:**

RCA management will:

1. Establish clear accountability and responsibility for formal documentation of CDM change control and maintenance that includes appropriate coordination between authorized administrators for cost centers, charge source systems, charge posting systems and RCA. A list of authorized administrators will be compiled.

2. Design a formal process for periodic review and submission of revisions to the CDM, which may include:

   a. Disseminating CDM content to each cost center administrator;

   b. Developing standard tool/extracts that help administrators focus on code standardization and comparison between cost centers;
c. Providing oversight of cost centers to require positive confirmation that the cost center CDM has been evaluated; and

d. Conducting periodic integrated charge tests to determine whether charge mapping between systems is working effectively from charge source to claim generation.
The strength of cost center CDM update or maintenance varied among cost centers and individuals.

NOTE: CDM updates may include pricing changes, new CPT codes, new services, etc. Updates may also be required in other charge and cost accounting systems.

The strength of cost center CDM update or maintenance varied among cost centers and individuals.

Research required changes and required information for CDM update and complete CDM e-form

The charge master update is entered into FMS

Cost center notification is not an automatic process and failure to notify or delay in notification increases the CDM update time requirements.

Cost center based Information Services (I/S) unit or administrator is notified of the need to update cost center systems or documentation (this process cannot be completed until the CDM code is received from RCA)

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The strength of cost center CDM update or maintenance varied among cost centers and individuals.

Individuals who request CDM updates (and related updates) may perform follow up to ensure that all updates were processed completely

Charges require CDM update?

Charges are submitted for updated CDM codes, processed, and monitored by RCA and MG

DS enters the CDM updates in the TSI system

RCA enters the data into FMS and enters the information into a spreadsheet for DS.

The next day, RCA verifies that the CDM update was entered correctly and notifies the cost center by email of the update.

Once a month, RCA sends a file to DS containing CDM updates

Monthly, DS utilizes a reject charges list to update TSI for CDM changes

NO

End

YES

RCA and MG may identify CDM updates that should be initiated and notify cost center administrators.

If applicable, MG is notified of the need to update the MG charge master

The charge master update is entered into FMS

Medical Group notification is not an automatic process and failure to notify or delay in notification increases the update time requirements.

Decision Support (DS)

Revenue Cycle Administration (RCA)

Cost Center

Medical Group (MG)