January 20, 2011

DUNCAN CAMPBELL Chief Executive Officer UCSD Medical Group 8201

MARIA CRISTINA COLMENAR Controller Vice Chancellor Health Sciences 0012

Subject: Medical Group Overhead Expense Allocation Process

AMAS Audit Project 2011-24

Audit & Management Advisory Services (AMAS) has completed a review of the Medical Group overhead expense allocation methodology as part of the approved audit plan for Fiscal Year 2010-11. This report summarizes the results of our review.

Background

The UCSD Medical Group provides billing, collection and accounts receivable management services to School of Medicine (SOM) departments. The SOM Controller, with support from the SOM Director of Decision Support and Operational Planning is responsible for compiling and reporting Medical Group financial information. Overhead allocation is an integral part of the financial analysis process.

The business overhead expenses associated with Medical Group services must be allocated to departments each month. Overhead expenses are separated into three categories: "billing overhead," "administrative overhead," and "Radiology billing support." The Medical Group Consolidated Income Statement (CIS) included a designated line item for each of these three categories.

According to the current allocation model, billing overhead includes all costs associated with the following business and computer services functions:

- Claims Preparation and Transmission
- Claims and Accounts Receivable Follow-up
- Cash Posting
- Cashiering Operations
- Customer Service
- Contract Management
- Revenue Management

Expense data from outside billing agencies such as RMAC¹ is also included in the billing overhead calculation.

Administrative overhead includes expenses for:

- Accounting and Finance
- General Administration
- Purchasing
- Board of Governors
- Clinic Administration
- Information Technology Support
- Decision Support
- Data Support
- Depreciation and Recharges from General Campus, and Medical Center
- Registration and Medical Records

Prior to 2008, overhead allocation and associated journal entries were calculated and prepared manually, which was time consuming and prone to human error. When Medical Group Finance was consolidated with the SOM Controller's Office, a decision was made to automate the billing and administration overhead allocation processes. The automation project was initiated by the SOM Director of Decision Support and Operational Planning in September 2008. The automated process was run parallel with the manual process for several months to ensure that the results were accurate and consistent.

The automated allocation methodology for the three overhead calculations was developed based on Controller's Office requirements using Microsoft Access data tables and queries. Data used in the calculations includes a file of Medical Group operating expenses from the campus Integrated Financial Information System (IFIS); a monthly detail transaction download from the Medical Group COGNOS database; and monthly transactions download from the Medical Group GE-IDX system. The IFIS, COGNOS and GE-IDX data files are imported into Access data tables. Various automated queries are used to distribute the data into tables, calculate expense distribution by department, and create the journal entries required to post the allocation to department accounts. SOM Controller's Office staff review the journal entries for accuracy and post approved entries into IFIS.

The "Radiology Billing Support" calculation was developed and approved by the Medical Group Board of Governors in 2010 based on an agreement with Department of Radiology management. The allocation was added to the Medical Group CIS dated June 30, 2010.

To make the overhead calculations more transparent in the future, Medical Group management is developing a "Master Plan". The Plan goal is to give department analysts the capability to recalculate the allocated overhead expense. The SOM Controller's Office plans to have a first draft of the Master Plan prepared by July 2011.

¹ RMAC is an outside billing agency that provides billing, collection and accounts receivable management services for the Neurosurgery and Otolaryngology Divisions in the Department of Surgery.

Audit Objective, Scope and Procedures

The objectives of our review were to ensure that IFIS, GE-IDX and COGNOS data downloads used to prepare the allocation were complete, determine whether the developed allocation methodology and logic used to create the data tables and queries were reasonable, and verify that the overhead allocated to departments was calculated accurately. The scope of the audit included processes used and transactions created for the period July 1 through October 31, 2010.

In order to achieve our objective, we performed the following procedures:

- o Reviewed Medical Group documentation that identified the type of expenses to be allocated to each overhead category;
- o Interviewed the SOM Director of Decision Support and Operational Planning to obtain information about the structure of the automated allocation process;
- o Discussed the Radiology allocations with the Department of Radiology Interim Administrative Vice Chair;
- o Interviewed the Director of Medical Group Information Services to discuss GE-IDX and COGNOS data quality assurance procedures;
- o Completed an analysis of the procedures used to create Access data tables and queries;
- Prepared process flowcharts for the billing and administrative overhead allocation processes (*Attachments A and B*);
- o Recalculated the September 30, 2010 billing overhead allocation and Radiology billing support journal entries; and the October 31, 2010 administrative billing allocation journal entries to verify the accuracy of the results;
- Traced the allocations included in selected journal entries to IFIS:
- o Analyzed the Fiscal Year 2010-11 administrative overhead baseline to verify that it was consistent with process guidelines; and,
- o Verified that journal entries were properly reviewed and approved by the SOM Controller's Office prior to being posted to IFIS.

Conclusion

Based on our review procedures, we concluded that the automated processes for allocating Medical Group overhead expenses was based on reasonable principles and was working as designed. The overhead amounts calculated and allocated to the various Medical Departments were both appropriate and accurate. *Attachments A and B* provide the overhead allocation process flowcharts.

Observations and Management Corrective Actions

Quality Assurance – Data Files

A formal quality assurance process for GE-IDX and COGNOS data files had not been implemented.

GE-IDX and COGNOS data files were compiled by Medical Group Information services and forwarded to the SOM to be included in the overhead expense calculations. A formal procedure for performing a quality assurance review on those files before transferring them to the SOM had not been implemented. A quality assurance review is important to ensure that all required data has been included in the files.

Management Corrective Action:

Medical Group Information Services management is in the process of developing, documenting and implementing a quality assurance process designed to ensure that GE-IDX data files compiled for computing the Medical Group overhead allocation are accurate. The quality assurance process has been put in place for COGNOS.

Expense Allocation Criteria

The criteria and percentages used as a basis for allocating overhead expenses should be periodically re-evaluated to ensure that they remain relevant and result in a reasonable expense distribution.

The Medical Group overhead allocation criteria have been in place for a number of years. One third of expenses are allocated based on collections, one third is based on total relative value units (tRVUs²) and the final one third is based on GE-IDX transactions. Professional and technical allocation percentages are also used in the process. Periodic re-evaluation of the criteria and percentages built into the allocation methodology will help ensure that department expense allocations remain reasonable and supportable.

Management Corrective Action:

Medical Group management will re-evaluate the expense distribution criteria and percentages included in the process at least bi-annually to ensure that basis for calculating the expense distribution and percentages used remain current and relevant.

Audit & Management Advisory Services appreciated the assistance provided during the review. 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. While management corrective actions have been included in the audit report, we may determine that additional audit procedures to validate the actions agreed to or implemented are warranted. We will contact you to schedule a review of the corrective actions, and will advise you when the findings are closed.

² Relative Value Units (RVUs) are a way for hospitals and physicians groups to calculate provider level of effort by using a set formula tied to various physician services. The acronym "tRVU" refers to total Relative Value Units.

UC policy requires that all draft audit reports (copied on tan paper for ease of identification) 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 this time.

If you have any questions regarding this report, please call me at 534-3617.

Stephanie Burke Assistant Vice Chancellor Audit & Management Advisory Services

Attachments

cc: D. Brenner

- R. Espiritu
- G. Hasegawa
- G. Matthews
- L. Majors
- T. McAfee
- T. Perez
- S. Vacca











