# REGENTS COMMUNICATION 

## Item for Information

Subject: Report of University Internal Audits
March and April 2008
Background:
This is the report of the Office of University Audits activities for the period March 1 through April 30, 2008. The summaries of audits contained in this report were previously reported to members of the Regents' Finance, Audit and Investment Committee and included in discussions at Committee meetings.

Included in this report:

- Summaries of each audit report issued during the period, including Management's Plan to enhance specific control processes discussed with the audit client and presented in the report.
- Summaries of follow-up review reports issued during the period, including the actions taken by Management. Follow-up reviews are designed to give assurance that Management's Plan for corrective action has been implemented and controls are working appropriately.
- A report on the status of follow-up reviews as of April 30, 2008.

If you have any questions or would like additional information, please contact me at 647-7500 or by e-mail at csenneff@umich.edu.

Respectfully submitted,


Attachment: March and April 2008 Report

## ORIGINAL REPORTS

## Campus

## University of Michigan - Dearborn Office of the Provost \#2008-204 Issued March 19, 2008

The University of Michigan-Dearborn (UM-D) Provost is the chief academic officer for that campus. Four schools and colleges report to the UM-D Provost along with Information Technology Services, the Mardigian Library, the Fairlane Center, and several other departments on the UM-D campus.

This review focused on the following:

- Documentation of departmental policies and procedures
- Payroll
- Purchasing
- Academic administrative searches
- Financial reporting and monitoring
- Disbursement and authorization of discretionary funds
- Delegated authority
- Conflict of interest and conflict of commitment policies
- Fairlane Center operations


## Control Discussion:

- The control environment within the UM-D Office of the Provost is sound. During our testing we noted only two procedures that, if changed, would strengthen controls over payroll processing. A secretary intermediate had access to her approved time report. Additionally, the Gross Pay Register (GPR) was not reconciled to source documents. Management agreed that these procedures should be changed and immediately adjusted their process. An administrative specialist agrees the GPR to source documents and also reviews the secretary intermediate's time report to ensure no changes were made after it was approved.

The remaining recommendations relate to the Fairlane Center.

- Approved Recharge Rates - The Office of Financial Analysis in Ann Arbor must approve all recharge rates used by University of Michigan units. UM-D has published room rental rates in the UM-D Facilities Use Policies and Procedures dated March 15, 2005. Included in the policy are rates for several UM-D buildings. These rates have not been approved by the Office of Financial Analysis. In addition to this issue, the Fairlane Center is using a rate schedule dated October 31, 2003 to charge rental fees. Most of these rates differ from the policy dated March 15, 2005.

Management Plan - UM-D Financial Services will work with the Office of Financial Analysis to facilitate the review and approval of rental rates for space on the UM-D campus by the Office of Financial Analysis.

- Deposits - The Fairlane Center is not located on the main UM-D campus and staff members are not on the main campus on a daily basis. Cash receipts are generally not deposited on the day of collection. Standard Practice Guide 502.1 states all funds collected by any unit or department of the University are to be deposited into a University account on the date of collection. Where this is impractical and where the total deposit is less than $\$ 500$, the deposit may be made within one business day of collection. Any exceptions to this policy must be approved by the Treasurer's Office. The Fairlane Center has not received an exception.

Management Plan - The Fairlane Center will comply with Standard Practice Guide 502.1.

- Receivables - Several UM-D departments use space at the Fairlane Center for events. Payments for the use of space are processed as follows:
- Fairlane Center staff prepares journal entries to transfer funds from the departments who used the space for charges associated with the event.
- The journal entries are sent to the department for approval and chartfield/shortcode completion if this information was not previously provided.
- The journal entries are returned to the Fairlane Center by the departments.
- Fairlane Center staff sends the entries to UM-D Financial Services for processing.

Receivables have resulted because departments are not returning journal entries to the Fairlane Center for processing. The Fairlane Center contacts the departments to request the return of the journal entry but, in some instances, the journal entries are never returned and the funds are not transferred. This results in internal receivables and potential loss of income for the Fairlane Center.

Management Plan - UM-D Financial Services has provided instruction to the staff of the Fairlane Center for obtaining chartfield combinations for UM-D departments. Charges are now posted to general fund operating accounts unless otherwise instructed. Receivables no longer exist between the Fairlane Center and UM-D departments for extended periods of time. This issue is closed.

- Access Database and Calendar - The Fairlane Center maintains an Access database to track and monitor payments related to events. Events for which there are no charges are also included in the database. Room rental fees are not charged for certain events including UM-D committee meetings and School of Management Intern Program events.

University Audits noted inconsistencies between the Access database and the paper calendar. There were instances when events for which there was no charge did not appear on the handwritten calendar, but were listed in the Access database. We also noted instances when events for which there was no charge were listed on the calendar and not included in the Access database. Reports of activity for the Fairlane Center are produced for the Provost using the Access database. If all events are not listed in the database, incomplete information will be provided to the Provost.

The Fairlane Center currently uses a paper calendar to schedule events. Several entries can be made on one day for different activities. There are times when there is insufficient room for entries or entries that are difficult to read.

Management Plan - The Fairlane Center has begun using an electronic calendaring system. A separate calendar for room rental is maintained. All events are recorded on the calendar and in
the Access database. The database has also been updated to generate various reports to assist in the management of accounts receivable. This issue is closed.

- Customer Credit Card Information - Non-University affiliated organizations are allowed to charge event fees using a credit card. Credit card information for non-active clients is kept for two years. VISA and MasterCard rules require legible copies of sales drafts be retained for eighteen months for the purpose of settling any disputes after which time the documents should be shredded in order to protect card holder information. All documents containing cardholder information should be destroyed when there is no longer a business or legal need to retain the documents. Therefore, all credit card information should be destroyed after a period of eighteen months.

Management Plan - The Fairlane Center has destroyed all credit card information for clients that is greater than eighteen months old. This issue is closed.

The Provost and her staff consider internal controls to be very important and are committed to implementing and maintaining strong controls.

## Information Technology Central Services Computer Showcase

Issued April 14, 2008
The Computer Showcase (Showcase) sells computers, related supplies, and software to U-M students, current UM faculty and regular staff, U-M emeritus faculty, and Regents of the University. The Showcase also provides support services, such as software installation and repairs. The Showcase's primary location is on the ground floor of the Michigan Union; there is a smaller store, selling high demand software and supplies on North Campus. Procurement Services has entered into contracts with major vendors, such as Apple and MicroSoft, to offer products at a discounted price to eligible purchasers. The Showcase's sales for fiscal year 2007 are summarized below.


The results of audit procedures are summarized below:
Policies and procedures - The Showcase has detailed written policies and procedures which document the related processes and provide training, guidance, and best practices to Showcase employees.

Eligible sales - The Showcase has incorporated effective controls into their point of sale system relating to eligibility and purchase history requirements. The Showcase requires purchasers to sign license agreements.

Cash, check, and credit card handling - The Showcase has implemented cash, check, and credit card handling controls in accordance with University guidance.

Inventory controls - The Showcase utilizes the point of sale system to track inventory. Inventory items are relieved from inventory automatically through sales of merchandise. The Showcase regularly performs a physical inventory count and all variances are investigated and accounted for.

Payroll deductions - The Showcase allows eligible employees to pay for purchases via payroll deduction over a maximum period of 90 days. The Showcase maintains an accounts receivable ledger and transfers delinquent accounts to U-M's General Receivables department to perform collection efforts.

Procurement - The Showcase has established controls over purchasing of inventory items that are in compliance with University policy.

Returns - The Showcase accepts returns of recently-purchased, unopened software and unwanted or defective hardware and supplies. Vendors send credit memos directly to Procurement Services. Supervisors approve all returned items prior to being re-entered into the point of sale system.

Support Services - The Showcase has established labor rates and time estimates for common services. Service technicians do not accept payment. All sales are collected and recorded via the point of sale system used for merchandise sales.

Payroll - The Showcase utilizes the online time entry system that requires unique user sign on and records the IP address from which the time was entered. The employee's supervisor approves the time sheet and an individual from Information Technology Central Services (ITCS) agrees the monthly Gross Pay Register to approved time documents. The University's payroll system tracks accumulated pay for Federal Work Study students, ensuring that aid is not granted to the student in excess of the amount awarded.

Conflict of Interest - The Showcase's conflict of interest policy was shared with the staff.
The Showcase has achieved a strong control environment by thoroughly documenting their procedures, implementing the point of sale system's checks and balances, timely monitoring of transactions, and utilizing the University's resources to the fullest extent available.

## Information Technology

## Information Technology Security Services Security Plan Audits

\#2008-304
Issued Marcy 14, 2008
University Audits conducted an audit of the Information Technology Security Services (ITSS) Office's University-wide IT security program. ITSS was established to collaborate with individual University of Michigan units to develop a University-wide security strategy and to implement best practice security efforts. The objective of creating ITSS was to help achieve consistent security practices throughout the University and to develop appropriate IT security policies, standards, and strategies. ITSS is responsible for:

- Facilitating campus-wide incident response activities
- Providing security assessments and consultation, network scans, and education and training
- Managing University-level IT security issues

ITSS worked with nearly fifty University of Michigan units to develop IT security plans that demonstrate unit security strategy and implementation efforts. These unit security plans were originally scheduled for completion
in February 2007. As of September 2007, these plans were in various stages of completion.
This audit reviewed the ITSS process for determining the completion status and acceptability of University unit's IT Security Plans. It included a review of the guidance units were provided and how plans were being tracked by ITSS. The detailed objectives of this audit included:

- Determining how ITSS tracks and reviews security plans
- Determining if (a judgmental sample of) security plans included the required components according to ITSS guidelines
- Determining if units were implementing security plans

Training for all University units and several resources to aid the units in developing security plans were provided by ITSS. Plans are measured against ITSS's 'Evaluation Criteria for Unit Information Security Plans prior to approval. As noted in the graph (below), the majority of University units reviewed had a documented plan and schedule for fulfilling other critical security program criteria including:

- Scope
- Asset Management
- Resource Allocation
- Roles and Responsibilities
- Risk Assessment Scoping and Plan
- Incident Management Plan


The Risk Evaluation of Computers and Open Networks (RECON) methodology for assessing risk was produced and is maintained by IT Security Services. It is a self-directed methodology and is designed to be performed locally by units, schools, and colleges to assess IT risk. Along with the assessment tools, RECON includes realworld, hands-on security testing. Use of this methodology throughout the University facilitates consistent security decisions across the U-M community.

All University IT service providers were required to perform IT risk assessments as part of the ITSS security program. During the ITSS security training, IT administrators were provided a template and trained on how to perform the RECON-based risk assessments. Each Unit scoped and planned its risk assessments and conducts them according to their plan.

In their Security Plan, each University unit agreed to develop and actively maintain procedures detailing the handling of all security incidents. All units are expected to comply with the University's incident handling guidelines documented in the Standard Practice Guide section 601.25 while developing unitlevel procedures. Additionally, University units agreed to designate information security coordinators and/or administrators to participate in the security training provided by ITSS. Results of the review of ITSS Recon-Assessment/Incident Procedures/Training are shown below.


## Control Discussion:

- UNIT Security Plan Template - The Unit Security Plan Template is one of the resources ITSS provided University units to aid in the process of developing security plans. The Unit Security Plan Template is concise and provides sufficient instructions for developing a security plan. However, due to the completeness of the template, some of the units have only substituted the unit name (where appropriate) and have not given thorough consideration to what is necessary to secure their IT environments.

Management Plan - The security planning process is being revised; specifically an annual plan update process is under development. The revised process will include a base plan template, an annual plan
update template, and separate planning guidelines. Sample data will be removed from the templates and units will be required to enter their own data.

- High Level Approvals - Sign-off approval is required for all Unit Security Plans. ITSS has not stipulated the level of sign-off required within each unit. In some cases, the IT director who is responsible for the plan is also the approver of the plan.

Management Plan - The revised security planning process will clearly state the required approval level.

- Security Plan Updates - ITSS does not have an update process for Unit Security Plans to be reviewed and modified. Completed plans provide a schedule for implementing all of the security plan components. With changes to staff, technology, procedures, applications, hardware, and other variables, security structures change and require modifications to the Security Plan.

Management Plan - A planning update process is in progress. The approach has been reviewed and endorsed by the IT Security Council and the IT Security Community Advisory Group in late 2007.

Non-conformance to Security Template - Although the Unit Security Plan Template is provided to all units by ITSS, some units do not follow the template. When the template is not used, critical security areas may not be addressed. Currently, ITSS has not required that all units follow the template but there is also no process in place to address security plans that do not conform to the model.

Management Plan - The new Excel template for the annual plan update will require units to provide incremental plan updates in a structured format that will facilitate review and roll-up of unit information into a University-wide view. ITSS will require units to use the Excel template for the annual plan update. ITSS will continue to allow flexibility in formatting the base plan (typically a Word document), however, by providing the plan evaluation criteria ahead of time, units are aware of what components they need to include in the plan. The evaluation process for the base plan is based on content criteria, rather than format.

ITSS has excellent processes for tracking plans, ensuring that they are updated on a timely basis, and ensuring that they are approved. Their efforts have helped raise the level of IT security at the University of Michigan and have created a benchmark against which best security practice can be judged.

## Spreadsheet Integrity Review

\#2008-301
Issued April 23, 2008
Spreadsheets are used widely across the University for managing and reporting data for both financial and operational processes. Many of the applications are large and complex. Some spreadsheets are built and used by one user, while others have many users who modify or add data and change formulas and reporting formats. The Sarbanes-Oxley Act of 2002 brought attention to the risks associated with the use of spreadsheets. Of particular concern is the integrity of the information reported to management and external stakeholders.

PriceWaterhouseCoopers published a white paper in 2004 entitled The Use of Spreadsheets: Considerations for Section 404 of the Sarbanes-Oxley Act. In that document, they quoted an article in the May 24, 2004, issue of Computer World that said, "Anecdotal evidence suggests that $20 \%$ to $40 \%$ of spreadsheets have errors, but recent audits of 54 spreadsheets found that 49 (or 91\%) had errors, according to research by Raymond R. Panko, a professor at the University of Hawaii."

Rather than auditing the detail of several specific spreadsheets, University Audits focused on developing a tool set that can be used across the University by users to improve spreadsheet controls. While the tool set can be used on any spreadsheets, this review focused on spreadsheets that are large, contain sensitive data, or have multiple users.

In order to understand and prioritize spreadsheet control risks, a sample of units were invited to work collaboratively with University Audits to assess spreadsheet controls in their areas. The sample included:

- Biomedical Research Core Facilities
- Physical Plant Financials
- Patient Financial Services
- Procurement
- Athletics
- Hospital Finance

University Audits developed a self-assessment questionnaire to assist the selected areas in examining controls over their spreadsheets. Area responses were used to further refine the questionnaire, create instructional documentation on securing spreadsheets, and create informational documents on spreadsheet security.

The self-assessment questionnaire addresses the following areas of spreadsheet controls:

- User Access
- Data Transmission
- Documentation
- Development
- Segregation of Duties
- Version Controls
- Storage, Backup, and Recovery

An overview of the findings in each of the control areas is included below.

- User Access

User access addresses the question of who can access a spreadsheet, and what they can do with it once they have access. The self-assessment asked users to look at both the permissions on the spreadsheet file, and the folder that contains it. The tool also addresses access within the spreadsheet by asking about locked and hidden cells. The existence of file access logs is also examined.

One method of controlling access to a spreadsheet is by locking the cells. Locking cells prevents users from entering, deleting, or changing the information within the locked cell. This will protect the spreadsheet from accidental and/or malicious changes. On the whole, University Audits found that locked cells were not in wide use. A few spreadsheets employed them with great success. Instructional documents were created detailing the process of locking cells. These instructional documents have been reviewed by the groups whose spreadsheet controls were examined, and in some places, implemented. None of the areas examined were using spreadsheets that had cells restricted by user. Most groups were unaware of this functionality. Instructional documents detailing the process for restricting cells were created and distributed for review to the areas examined.

Access to spreadsheets can be controlled through the use of restrictive file permissions. Permissions on the files and folders were found to be excellent throughout. Nearly all of the areas reviewed had created a directory structure based on job requirements. This allowed them to restrict access at the folder level, without having to worry about access on individual files.

File access logs can be used to find out which users accessed and/or changed a file, and when. This can be useful in tracking down the cause of a problem. File access logs were not found to be in use. This was not unexpected, and did not raise any concern. Access logs are important for areas that have spreadsheets used by multiple users multiple times a day. This was not the case in the areas we reviewed. Each unit was encouraged to talk to their IT support team about access logs, whether they were appropriate for their environment, and if anything was currently being logged.

## - Data Transmission

Microsoft Excel has the ability to transfer information between individual worksheets within a workbook (spreadsheet), and between different spreadsheets. While this can be a very useful feature, it also creates the opportunity for loss of data integrity. University Audits asked the groups reviewed if they were transmitting data between, and within spreadsheets and what controls were in place to protect such transmitted data.

Excel's ability to transfer data between spreadsheets was not found to be in wide use. Only one of the areas reviewed was actively using it, and they were phasing it out. This group has excellent managerial and group review practices in place to ensure data integrity.

## - Documentation

Knowing what spreadsheets exist and what they are used for is the first step in determining how to secure them. In the documentation section of the self-assessment, University Audits asked about spreadsheets being used, their purposes, primary users, and user permissions. The self-assessment document also addressed documentation of complex formulas along with their purpose and location.

In most areas, documentation was found to be lacking. Some groups had a tab within their spreadsheets with basic instructions for using the spreadsheet. This is an excellent start but documentation needs to be strengthened. Proper spreadsheet documentation is very useful in training new hires, audit reviews, and correcting data problems that may arise within the spreadsheets.

- Development

The development section of the self-assessment focused on the creation of new spreadsheets. It is important that a good process be in place for the development of new spreadsheets before they are brought into the production environment to ensure that they are error free and properly documented. The self-assessment addressed the creation and updating of spreadsheets, and the creation of documentation, testing, managerial review, and replacing old versions of existing spreadsheets.

Documentation of the development phase activities is not generally available. Each group reviewed would assure a sound spreadsheet development environment by documenting expectations and spreadsheet development procedures. Good testing and review practices are in place. Old versions are moved or denoted as being out of date. Most groups need to improve the creation of documentation.

## - Segregation of Duties

Many of the spreadsheets reviewed had one primary user. In such cases, one person enters the data into the spreadsheet, performs the steps needed to process the data, and delivers the output. Concentrating these duties with a single individual creates a segregation of duties issue. It allows that individual to accidentally or maliciously make inappropriate changes to a spreadsheet. The self-assessment addressed the division of these key tasks among users.

There was a low instance of segregation of duties issues. In places where the duties could not be separated due to low staffing numbers, managerial review was recommended to mitigate the segregation of duties concern.

- Version Controls

Because spreadsheets are heavily used for tracking (i.e. time, materials, schedules), multiple versions are frequently kept. In order to ensure that all users are working with the most current production version, older versions need to be well controlled. If possible these old versions should be modified to allow read only access to prevent someone accidentally using one to perform computations. University Audits checked to see if all users were working with the most recent production version and how access was controlled; i.e., if access was being restricted, if ability to make changes was being restricted, and if a simple naming convention was employed.

Most of the groups had excellent naming conventions to assist them in identifying the most recent versions. However, these areas generally were not segregating or restricting access to old versions. A small percentage said that no steps are taken to ensure that all users are working with the most current version.

- Storage, Backup, and Recovery

Spreadsheets often contain data that is integral to the way an office functions. Sometimes this data is critical to business processes. The importance of these spreadsheets makes good backup and recovery procedures essential. University Audits reviewed departmental procedures to determine if:

- Spreadsheets are regularly backed-up
- Backup media is stored off site
- Old versions are archived

University Audits also asked participating units if spreadsheets were stored on local hard drives or removable media (such as thumb drives). Those stored locally or on removable media are not normally backed-up properly. Spreadsheets stored on network drives are usually professionally maintained and regularly backed-up. Recovery procedures were examined to ensure that they are in place and regularly tested.

All of the groups reviewed had good storage, backup, and recovery procedures in place. All of them have this function taken care of by a University IT service provider.

## Summary

Across the six groups reviewed by University Audits, we observed a wide variety of spreadsheet uses and purposes. These groups provided a broad cross section of the University. University Audits observed a number of excellent controls and control methods, and noted some control deficiencies. These helped in building the documents that came out of this review.

Instructional and informational documents received a thorough review by the units examined and many positive changes came from the comments of the groups involved. The tools that were developed have been updated based upon the experiences of the units reviewed and will better serve those who use them in the future.

The tools created from this project will be made available to all groups across the University to help them better secure and control their spreadsheets and ensure data integrity.

## FOLLOW-UP REPORTS

College of Engineering and Computer Science U-M Dearborn Departmental System Administration
Original Report issued June 28, 2007
University Audits recently conducted a follow-up review of actions taken by management to address the remaining items in the report. As part of this follow-up, Information Technology Services (ITS) at Dearborn ran a scan of the College of Engineering and Computer Sciences (CECS) servers to help identify server vulnerabilities.

The recent network scan revealed that no high-risk vulnerabilities were found on the server segments identified in the original audit. This confirms that the original high-risk vulnerabilities were successfully addressed by CECS management. Some high-risk vulnerabilities were found on a new server segment. However, this is to be expected in an ongoing risk assessment process. CECS management is currently addressing these vulnerabilities.

Recommendations on other issues pertinent to sever administration within CECS are being addressed. These recommendations concern IT administrative processes including:

- Off-Site Backups
- Administrator Documentation
- Administrator Training
- Risk Assessment Practices
- Policies and Procedures
- Incident Response Plan

Corrective actions proposed by management are continuing for these items. University Audits will follow up on this progress in June 2008.

University of Michigan Physical Medicine and Rehabilitation Orthotics and Prosthetics Center \#2007-827
Original Report issued September 24, 2007
Follow-up Report issued April 1, 2008

- Open and Unbilled Patient Encounter Forms: The Physical Medicine and Rehabilitation Orthotics and Prosthetics Center (UMOPC) has made significant progress in resolving hundreds of aged open, and potentially unbilled, patient encounter forms (PEFs). As of the report date, UMOPC still has unresolved PEFs that are greater than six months old. See comparative status below.

Open/Unresolved Patient Encounter Forms for UMOPC Visits

| Age of PDFs | May 1, 2007 Census Report | March 7, 2008 Census Report | March 26, 2008 <br> Census Report |
| :---: | :---: | :---: | :---: |
| More than 1 year old | 941 | 96 | 22 |
| 6 months to 1 year old | 522 | 178 | 75 |
| Less than 6 months old | 986 | 743 | $\begin{gathered} 730 \\ \text { (see Note 1) } \end{gathered}$ |
| TOTAL Open PEFs | 2,449 | 1,017 | $\begin{gathered} 827 \\ \text { (see Note 2) } \end{gathered}$ |

[^0]Note 2: UMOPC practitioners also see patients at the U-M Medical Center and Domino's Farms. These visits are not reflected on the Census Reports referenced above. As of the March 26, 2008, there was a combined total of 72 open PEFs six months and older for these locations.

Physical Medicine and Rehabilitation management should continue to provide oversight and monitoring to ensure encounter forms are resolved on a timely basis.

- Patient Encounter Form Issuance and Control: UMOPC management developed a new process for requesting and accounting for encounter forms that allows practitioners to receive billing forms on a timely basis and eliminates the need for back-up PEFs. UMOPC has documented the new process and provided training to staff. This issue is closed.
- Prior Authorizations: Management provided practitioner training to ensure required third-party payor pre-authorizations are obtained before providing finished products to patients. This issue is closed.
- Charge Entry Accuracy: UMOPC management implemented changes to charge capture sheets to enhance legibility. Management also created a quieter work environment for individuals entering charges into the clinic charge capture system to reduce errors caused by work interruptions. Self-review and management review processes are still under development. University Audits will continue to monitor the progress of this action plan.
- Reconciling Inventory to Billing Data: UMOPC staff issues pre-numbered receipts for all patient payments, including payments for off-the-shelf products. UMOPC also implemented changes in the fabrication area using LEAN techniques, including a supply requisition system. UMOPC is in the process of installing computers in examination rooms and implementing a new online inventory system. University Audits will continue to monitor the progress of these improvements.
- Cash Handling Procedures: UMOPC management improved procedures to keep cash secure and make timely deposits, and the new billing supervisor has completed cash handling training. However, UMOPC has not fully implemented procedures to reconcile pre-numbered receipts to deposits and the monthly Statement of Activity. UMOPC estimates these procedures will be implemented by April 30, 2008. University Audits will continue to monitor the progress of this action plan.
- Change Fund: UMOPC moved the safe containing its imprest cash fund to a more secure area and appointed a new custodian to monitor the fund. UMOPC also implemented a new policy to safeguard the safe combination. This issue is closed.
- Quality Assurance Program: UMOPC management is drafting an RFP (Request for Proposals) to hire an outside reviewer with orthotics and prosthetics experience to evaluate UMOPC medical record documentation, including patient working files. The UMHS Compliance Office is considering the use of specialized software to select random samples and evaluate results. University Audits will continue to monitor the progress of this action plan.

Managenent completed appropriate steps and corrective action on three of eight audit recommendations. The remaining corrective actions are significantly underway. University Audits will perform additional follow-up in September 2008.

Action plans to strengthen fire and emergency safety procedures and to enhance data maintenance and backup are complete. Security planning, charge posting monitoring, and timekeeping initiatives are progressing as described below. This audit is closed.

- Security Planning: UMHS Facilities Planning and Development has installed a camera in the vestibule of the lab check-in area. A card reader has been installed at the connection door from Mott into Med Inn, and is secured via key lock. Construction planning for additional security measures is underway.
- Fire and Emergency Safety: UMHS purchased two enunciators, which were installed at the Sleep Disorders Laboratory - South State Street. The enunciators provide an audible alarm to warn of fire, water, or duct emergencies. Management updated fire and emergency safety procedures for the State Street Lab to incorporate the enunciator warning system.
- Fiscal Responsibilities: Management updated timekeeping procedures, which were reviewed with Sleep Disorders Center supervisors and staff. The Chief Department Administrator and Finance Manager regularly perform independent reviews of the Gross Pay Register. The Department of Neurology is participating with Michigan Administrative Information Services (MAIS) to identify a viable mechanical timekeeping system. MAIS will coordinate vendor selection, system testing, and implementation.

P-Card procedures were modified to ensure cardholders do not have access to approved statements. An administrative assistant collects approved statements from the P-Card approver and submits them to the P-Card Group for processing. However, multiple people continue to use a single P-Card for lab purchases. Procurement Services is currently consulting with management of the Sleep Disorders Center and Department of Neurology to match departmental procurement needs with appropriate University policy.

- Charge Posting Timeliness: Management augmented monitoring of outstanding medical documentation. Weekly monitoring reports are generated and reviewed by management within the Sleep Disorders Center and the Department of Neurology. The department's billing office also reviews charge posting timeliness reports regularly.
- Maintenance and Backup of Critical Data Stored on Workstations: Backup hard drive systems were installed at each lab location. Incremental backups are performed daily, and full backups are performed monthly. As patient data is finalized, it is also archived to DVD, which is stored in a separate room at the Med Inn location.

The Sleep Lab engineer modified the display settings of workstations located in the control room to timeout after sixty minutes of inactivity. The login ID and password assigned to all acquisition systems is changed annually, in accordance with Medical Center Information Technology guidelines.

- Network Placement of Production Server: The eResearch system's unified hardware architecture did not conform to MAIS standards for secure network placement. MAIS Technical Information Operations (TIO) planned to reconfigure the hardware architecture, separating the database server from the web/application server, and place it in the Secure Zone network.

MAIS has moved the eResearch development environment to the new, divided hardware as planned. A small number of technical issues are being addressed before moving the production environment, which is projected to occur in April.

- Required Application Items Not Enforced: Certain items on the eResearch application form marked as "required" did not have to be completed prior to submitting an application. MAIS Research planned to amend the test plan to include validation of all required fields on all pages beginning with the December 2007 release.

MAIS validated required fields in December to ensure they are all properly configured. This work was documented in a special test plan which was reviewed by University Audits. University Audits also examined a judgmental sample of these required items in the eResearch "sandbox" practice environment. For the project we created, the application treated each of the six re-tested items in the manner specified in the test plan.

MAIS has incorporated this testing into their standard review process when new pages are added to the application or existing pages are modified.

Management has taken appropriate corrective action on all audit recommendations. This audit is closed.

## Intercollegiate Athletics NCAA Team Travel <br> \#2007-412 <br> Original Report issued October 10, 2007 <br> Follow-up Report issued April 15, 2008

- Justification for Cash Advances: The ICA Business Office (ABO) developed tools to educate coaches and administrators about cash usage and track cash returns against advances. ABO management requested staff use P -Cards instead of cash where feasible and is challenging cash advance requests that appear excessive. They are also assisting coaching staff in determining cash needs.
- Promissory Notes: ABO management incorporated a promissory note into the Travel Request Form and updated the ICA travel policy to emphasize that coaches are personally accountable for cash advances.
- Segregation of Duties Over Cash Handling: ABO management reviews travel expense vouchers for unusual corrections and alterations and traces deposits to the cash receipt ticket to mitigate risks associated with a lack of segregation of duties in expense voucher processing.
- Lack of Complete Documentation and Review: ABO management developed a checklist for reviewers to use when analyzing travel expense vouchers and supporting documentation. In addition, the Business Manager is developing an educational checklist for coaches and administrators that will provide helpful hints on accounting for travel expenditures.
- Meal Per Diems: ABO management revised the Travel Squad/Per Diem List to allow space for coaches to list the daily amount and meal provided on the form. They also updated the ICA travel policy to provide guidance about documenting per diems. Exceptions to per diem amounts are documented and approved when they occur.

Action plans to strengthen cash controls and enhance management of travel expenditures are complete. This audit is closed.

## University Audits - University of Michigan

Open Audits Follow-up Table
April 30, 2008

| Audit Title | Report Date | Issues | Expected Completion |
| :---: | :---: | :---: | :---: |
| U-M Computing Environment Kerberos Passwords 2007-304 | 6/22/07 | Disaster recovery plan | First follow-up was completed January 2008 |
|  |  |  | Second followup June 2008 |
| UM-Dearborn College of Engineering and Computer Science Departmental System Administration 2007-308 | 6/29/07 | Vulnerabilities based on the periodic scanning of CECS servers | First follow-up was completed November 2007 |
|  |  |  | Second followup was completed April 2008 |
|  |  |  | Third follow. up June 2008 |
| Digital Media Commons CTools 2007-301 | 6/29/07 | Persistence of login sessions; log review; SLA between ITCS and Digital Media Commons; upgrade approval process | First follow-up was completed January 2008 |
|  |  |  | Second followup June 2008 |
| Medical Center Information Technology Arbor Lakes Computing Facility 2008-307 | 12/20/07 | Generator Plaza Security; Machine Room Security; Safety | June 2008 |
| Information Technology Central Services Software Licensing and Distribution Billing Systems and Practices 2007-106 | 2/7/08 | Documentation of procedures for licensing negotiations and billing | October 2008 |
| Information Technology Security Services Plan 2008-304 | 3/14/08 | Update templates; define approval levels; updates; exceptions to plan format | August 2008 |
| UMH Operating Rooms - University Hospitals Supply Chain Management 2007-108 | 8/17/07 | Product recall follow-up; consistent and documented inventory practices; and conflict of interest communications | June 2008 |
| Medical School Biomedical Research Core Facilities Financial Internal Controls 2007-826 | 10/23/07 | Recharge rates; capital equipment; separation of duties; procurement; payroll; DNA sequencing services and billing services; policies and procedures | June 2008 |
| University of Michigan Health System Human Resources Fiscal Responsibilities 2008-209 | 1/21/08 | Payroll management; documentation of processes | July 2008 |


| Audit Title | Report Date | Issues | Expected Completion |
| :---: | :---: | :---: | :---: |
| University of Michigan Health System Offsite Professional Contracts | 2/29/08 | Documentation of business practices for renewal of contracts; evaluations of physician assistants | July 2008 |
| Michigan Public Media Phase II 2006-806 | 4/24/06 | Documentation and implementation of internal control policies and procedures | First follow-up was completed May 2007 |
|  |  |  | Second followup May 2008 |
| Plant Operations Zone Maintenance Purchasing Controls 2007-812 | 4/24/07 | Purchasing. New methods for handling inventory receiving and tracking | First follow-up was completed December 2007 |
|  |  |  | Second followup May 2008 |
| Matthaei Botanical Gardens \& Nichols Arboretum, Business Office Internal Control Review 2007-817 | 6/19/07 | Strengthen cash handling procedures; instructor payments; credit card refund controls; remove unnecessary sensitive data in files. We will observe and review the annual plant sale in May 2008 | June 2008 |
| Intercollegiate Athletics Academic Support Services 2007-408 | 7/18/07 | Student counseling practices; employment and payroll controls; staff training and development | June 2008 |
| Ross School of Business Dean's Office Fiscal Responsibility 2007-821 | 7/20/07 | Purchasing; financial monitoring of their merchandise store; formalizing authority delegation; Statement of Account and Gross Pay Register reconciliations; employee overtime | May 2008 |
| Intercollegiate Athletics NCAA Compliance - Student-Athlete Equipment and Apparel 2007-409 | 8/24/07 | Record retention | June 2008 |
| Army ROTC Business Office Internal Controls 2007-818 | 9/11/07 | Orientation training for new Army Executive Officers to include: University purchasing, hosting, traveling, and reconciliation processes | May 2008 |
| University Human Resources Family and Medical Leave Act 2007-403 | 12/17/07 | Training; update relevant SPG sections; written notifications | June 2008 |
| Ross School of Business <br> Multidisciplinary Action Projects | 1/10/08 | Travel registration; procurement; expendable restricted funds; documented procedures | $\begin{gathered} \text { September } \\ 2008 \end{gathered}$ |


| Audit Title | Report <br> Date | Issues | Expected <br> Completion |
| :--- | :---: | :--- | :---: |
| Transportation Services 2007-101 | $1 / 28 / 08$ | Controls over physical access; system <br> user access levels; commercial <br> driver's license testing; vehicle <br> inventory monitoring; fuel inspection <br> upon delivery; gross pay register <br> review; imprest cash fund; formal <br> policies and procedures | September <br> 2008 |
| I-9 Employment Verification Process <br> 2007-823 | $1 / 29 / 08$ | Filing timeliness; automation; training | September <br> 2008 |
| U-M Dearborn Office of the Provost <br> Fiscal Responsibilities 2008-204 | $3 / 19 / 08$ | Fairlane Center: Approved recharge <br> rates; deposits | July 2008 |


[^0]:    Note 1: UMOPC business requires long cycle times. The interval between the patient's first visit and the final fitting may be as long as six months due to delays in obtaining pre-authorization from third-party payers, multiple fittings, and patient cancelations and postponements.

