

# UNIVERSITY OF MICHIGAN

## REGENTS COMMUNICATION

### Item for Information

Subject: Report of University Internal Audits

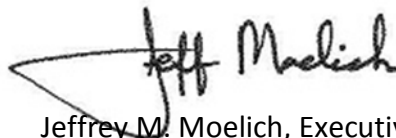
Attached is the report of activities completed by the Office of University Audits for the period **May 1 through July 2, 2014**.

Included in the report are a:

- Summary of each audit report issued during the period, including Management's Corrective Action Plans. These audits were presented at the Regents' Finance, Audit, and Investment committee meeting in July.
- Summary of each follow-up review memo issued during the period, including the actions completed by management. Follow-up reviews are designed to provide assurance that Management's Corrective Action Plans have been implemented, are working as intended, and are sustainable.
- Table of open audit issues as of **July 2, 2014**, including estimated completion dates.

If you have any questions or would like additional information, please contact me at 647-7500 or by e-mail at [jmoelich@umich.edu](mailto:jmoelich@umich.edu).

Respectfully submitted,

A handwritten signature in black ink that reads "Jeff Moelich". The signature is written in a cursive style with a large, sweeping initial "J".

Jeffrey M. Moelich, Executive Director  
University Audits



Board of Regents

Internal Audit Reports – May 1 through July 2, 2014

September 18, 2014

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## **Reports Issued**

### **International Center**

**2014-206**

Report issued May 2014

#### **A. Executive Summary**

##### **1. Overall Conclusion**

The International Center has effective control over its operations, which are working as intended, and no high-risk issues were identified. In response to the audit, management has committed to strengthen controls related to the protection of sensitive personal data and to improve the review and approval of the Center's monthly Statement of Activity.

University Audits also validated the efficiency of the controls associated with the International Center's core functions. University Audits confirmed that the Center has effective monitoring tools in place to oversee its operations, specifically:

- Federal compliance linked to F-1, J-1, and H-1B visa processes
- Compliance with health insurance requirements
- Visa status verification and tracking through the Student and Exchange Visitor Information System (SEVIS), as required by the U.S. Department of Homeland Security

##### **2. Audit Scope and Identified Risks**

The following table lists the key activities audited, along with the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the International Center. This process included input from Student Life administration and members of the International Center.

Key Activities Audited						
		International Center Processes	Fiscal Responsibilities	Human Resources	Procurement/Accounts Payable	Information Technology
Sub Activities Audited		Compliance management	Management tools	Conflict of interest/commitment process	Expense reporting	Security assessment
		Visa programs	Budget process	Payroll process	Training	Data protection (1)
		Training	Statement of Activity reconciliation (2)	Overtime approval	P-Card use	Account management
		Background verification	Internal controls certification	Policy compliance	Split transactions	Access authorization
		Recharge services			Vendor utilization	
		Student health insurance				

**Note:** Section B of this report (Audit Issues and Management Action Plans) provides details of the medium risk issues identified during the audit. Low risk issues were communicated directly to unit management and are not included in the report.

### 3. Audit Objectives

- Determine whether the International Center has an effective control environment to support University compliance with federal regulations.
- Assess the department’s policies, procedures, and control environment.
- Determine compliance with health insurance requirements.
- Determine whether recharge activity is accurate and timely.
- Evaluate compliance with University policy, including management of potential conflicts of interest or commitment and payroll responsibilities.
- Assess effectiveness of purchasing controls. Review documentation to confirm travel expenses are reasonable, authorized, and consistent with University and sponsor regulations.
- Determine whether University processes for safeguarding sensitive data and mission-critical systems within the International Center are being followed.

### **A. Context and Key Risk Considerations**

The mission of the International Center is to provide advice, information, and referrals on matters such as immigration regulations, cultural adjustment, employment, overseas travel and study, volunteer work, and international careers. The International Center also advocates for international education as a campus-wide and national priority.

The International Center reports to Student Life. During the Fall 2013 semester, 8,967 international students, scholars, faculty, and staff from 115 countries studied or worked at U-M, and their numbers are increasing each year.

The International Center provides a wide range of services and programs to these individuals in order to assist them in achieving their academic, professional, and personal goals while here at the University. The International Center focuses on international students who attend the Ann Arbor campus, while the Faculty and Staff Immigration Services (FSIS) division of the Center serves all three campuses – Ann Arbor, Dearborn, and Flint. FSIS advises departments on U-M and federal policies and procedures for employing foreign nationals, prepares and files employment-based immigrant and non-immigrant petitions, and coordinates other employment-based immigration petitions with retained, external immigration attorneys.

The International Center recently consolidated their Central Campus and North Campus offices into new space in the Student Activities Building, which is expected to facilitate collaboration within the department.

### **B. Audit Issues and Management Action Plans**

<b>1. Protection of Sensitive Data</b>	<b>Medium</b>
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**Issue:** Security enhancement was not applied to all computers that process sensitive data in Faculty and Staff Immigration Services (FSIS).

**Risk:** Sensitive information may be compromised.

**Support:** FSIS computers are managed under the MiWorkspace service by Information and Technology Services (ITS). FSIS works with personal information such as social security numbers that is categorized as sensitive under Standard Practice Guide Section 601.12, *Institutional Data Resource Management Policy*. MiWorkspace computers that process this type of data should receive a security enhancement referred to as “hardened configuration.” Information and Infrastructure Assurance (IIA) confirmed that 1 of the 4 computers handling sensitive data at FSIS did not receive such configuration during the MiWorkspace implementation last year.

**Recommendation:** The department should apply security enhancement to all computers that process sensitive data. When employees onboard with FSIS, the department should

also contact Information and Technology Services (ITS) to arrange for enhanced security on those employees' computers.

**Management Action Plan:** The International Center submitted a MiWorkspace Help Desk ticket (incident 157208) asking for the "hardened configuration" to be applied to the computer in question. ITS picked up the Central Processing Unit (CPU) on April 15, applied the "hardened configuration," and returned it on April 16. All four FSIS computers now have the required security enhancement. Also, the International Center will add an additional item to the onboarding checklist for new employees, which will state that if the new employee is filling one of the FSIS positions, ITS must be contacted to ensure that the new employee's computer has any required security enhancements.

**Action Plan Owner:** Assistant Director, Faculty and Staff Immigration Services

**Expected Completion Date:** May 2014

<b>2. Statement of Activity Reconciliation Process</b>	<b>Medium</b>
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**Issue:** The staff member who makes purchases also reconciles the Statement of Activity. A higher authority does not review reconciliation results.

**Risk:** Errors and fraudulent charges could go undetected.

**Support:** While some transactions flow through the Concur expense approval process and the Director and Student Life Finance personnel review financial management reports, no detailed review is performed at the transactional level. Standard segregation of duties is not feasible due to the department's size.

**Recommendation:** Process improvements resulting from the Shared Services initiative will ultimately address this issue. Until then, the Director should conduct a monthly review of the reconciliation results.

**Management Action Plan:** The Business Services Manager will continue to make purchases and reconcile the Statement of Activity using e-Reconciliation on M-Pathways. The Business Services Manager will provide a monthly e-Reconciliation report to the Director of the International Center with receipts and/or other supporting documentation. Additional oversight reports, including a Vendor Utilization report and a Concur spend/reimbursement report will also be sent to the Director to mitigate risk related to the segregation of duties issue.

In the future, reconciliation may be transitioned to the Administrative Services Transformation (AST) Shared Services group. At that time, there will be further separation of duties.

**Action Plan Owner:** Business Services Manager

**Expected Completion Date:** May 2014

**University of Michigan Dearborn Information Technology Services 2014-216**

Report issued May 2014

**A. Executive Summary**

**1. Overall Conclusion**

University of Michigan Dearborn (UM-D) Information Technology Services (ITS) faces the difficult challenge of addressing the increasing IT needs of the Dearborn campus while attempting to implement effective controls in an environment that is characterized by limited resources and low staffing levels. UM-D ITS has been successful in meeting some of these challenges. However, they have struggled to provide all of the services necessary for a stable and secure computing environment. UM-D ITS has expanded their scope by consolidating all college IT and UM-D ITS staff into a shared services group, which should improve both efficiencies and the overall IT control environment. Management has committed to improve the overall safety, integrity, and continuity of operations of information systems and data security at UM-D. Further, management has also committed to control physical assets more effectively and to monitor business operations for compliance with University policies.

The security of the computing environment at UM-D would benefit from improving IT security technology, processes, policy, and documentation necessary to keep malicious and accidental activity from affecting the computing environment. The security of sensitive and regulated data is at an elevated risk for data loss. Management has committed to resolving these items and continuing to improve the IT control environment at UM-D.

**2. Context and Key Risk Considerations**

The UM-Dearborn mission includes “using advanced technologies to meet changing educational needs and establish links with the global community.” UM-D ITS implements the mission by supporting the instructional and administrative computing needs at UM-Dearborn. UM-D ITS is responsible for the campus network, email, web services, the Banner student information system, computer labs, and the Help Desk. As of fiscal year 2014, all information technology at UM-D have been consolidated into a shared services group that includes college technical teams and UM-D ITS. The increase in responsibilities resulted in the hiring of additional staff and more assets to manage.

UM-D ITS is comprised of several units that have functionally unique support responsibilities:

- Administration
- Student Information Systems
- Network System Services

- User Support Services
- Computer Labs
- Help Desk Technicians

During January 2013, Information Technology Services at UM-D underwent a leadership change, and more recently, the IT structure was again reorganized. UM-D ITS is the responsibility of the Provost and Vice Chancellor for Academic Affairs. The new Director of UM-D ITS reports to the Assistant Vice-Provost who reports to the Provost and Vice Chancellor for Academic Affairs.

The safety and integrity of the data and systems at UM-D are a priority for the University. UM-D hosts federally regulated and sensitive data (i.e., FERPA<sup>1</sup>, ITAR<sup>2</sup>, PPI<sup>3</sup>, PCI-DSS<sup>4</sup>). UM-D ITS has contracted with Information Infrastructure Assurance (IIA) from the Ann Arbor campus to enhance IT security and to leverage the expertise and resources available from IIA. Working with several UM-D ITS employees whose jobs include security, a 50% FTE from IIA has been assigned to oversee and manage IT security of the computing environment at UM-D.

During November 2013, an attacker compromised a web server by exploiting a long-known vulnerability that had been patched by the vendor. UM-D ITS did not apply the patch until after the web server was compromised. This web server hosted several applications that have access to sensitive data. The initial vulnerability has been contained and IIA determined that no sensitive data was compromised.

### 3. Audit Objectives

The objective of this review was to document and assess the following controls over UM-D ITS:

- Determine whether suitable controls exist to minimize the risks to the safety and integrity of institutional and sensitive data.
- Determine if management of software assets aligns to campus needs and compliance with software licenses terms and conditions.
- Assess if the architecture of the computing environment aligns with current and future needs of the campus.
- Determine if IT policy and controls are comprehensive.
- Determine whether there are proper controls around asset management, including controls over tagging, tracking, and disposal.
- Assess whether procurement transactions are performed in accordance with University policies.

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<sup>1</sup> Family Education Rights and Privacy Act

<sup>2</sup> International Traffic in Arms Regulations

<sup>3</sup> Private Personal Information

<sup>4</sup> Payment Card Industry Data Security Standard



- Assess the adequacy of financial management controls as they pertain to budget and expenditures.
- Evaluate overall compliance with the University policies.

**4. Key Activities Audited and Conclusions by Sub-Activity**

The table on the following page lists the key activities audited, along with the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities conducted by UM-D ITS. This assessment process included input from UM-D ITS management and interested parties from other University functions.

Key Activities Audited						
	IT Security	IT Policy	IT Operations	Asset Management	Procurement / Accounts Payable	Fiscal Responsibilities / HR
Sub-activities Audited	Vulnerability detection and remediation	Security plan	Performance monitoring	Asset management process	Expense reporting	Management tools
	Network perimeter defense	DRP/BCP (issue 6)	Alerts and response	Inventory reconciliation	Training compliance	Budget process
	Security awareness training	IT Change management	System Redundancy (issue 6)	Asset removal	P-Card use	Statement of Activity reconciliation
	RECON	Incident response	Backup/restore		Split transactions	Policy compliance
	Access management	General IT policy	Software licensing		Vendor utilization	Conflict of interest / commitment
	Malware defense					Internal controls certification
	Network design					Payroll process

**Note:** Section B of this report (Audit Issues and Management Action Plans) provides details of the high and medium risk issues identified during the audit. Low risk issues were communicated directly to unit management and are not included in the report.

## B. Audit Issues and Management Action Plans

### 1. Vulnerability Detection and Remediation

High

**Issue:** Security issues sometimes go unresolved.

**Risk:** An insecure computing environment can result in data loss, compliance violation, reputational damage, and unplanned spending for incident response and investigations.

**Support:** UM-D ITS has not secured the computing environment from several high and critical risk vulnerabilities. A remediation policy for these vulnerabilities does not exist.

During the audit, an unknown attacker compromised a production system containing sensitive data.

Good practices are not always followed, allowing some services to be configured with default usernames and passwords, and development<sup>5</sup> systems to have direct access to the Internet.

Multiple vulnerabilities were identified on both external systems (with services exposed to the Internet) and internal services (those only available to the UM-D network). The number of total vulnerability types identified were (by Risk Level):

- 7 Critical
- 52 High
- 161 Medium

As critical risk issues were identified by the auditor, IIA security staff assigned to UM-D worked with UM-D ITS staff to resolve the vulnerabilities.

UM-D has .5 FTE dedicated to IT security; however, other UM-D ITS staff also have responsibility for elements of IT security.

**Recommendation:** The UM-D ITS dedicated security resource should perform regular credentialed<sup>6</sup> vulnerability scans and resolve high and critical risk findings within two weeks of discovery. UM-D ITS should develop a remediation policy that governs continuous vulnerability assessment and remediation. UM-D ITS should also reassess available resources for detection and remediation of vulnerabilities.

**Management Action Plan:** UM-D ITS systems have undergone regularly scheduled vulnerability

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<sup>5</sup> Development systems can contain sensitive data and are typically less secure due to unfinished programming code.

<sup>6</sup> Credentialed vulnerability scans provide results that are more accurate and are the only way to identify client side vulnerabilities. #4 SANS Top 20 Critical Security Controls, Associated NIST Special Publication 800-53, Revision 3, Priority 1 Controls RA-3 (a, b, c, d), RA-5 (a, b, 1, 2, 5, 6)

## 1. Vulnerability Detection and Remediation

High

scans for the past ten years. We acknowledge the value of adding credentialed scans to the current process, and of more formally organizing review and response to vulnerabilities as they are identified.

UM-D ITS will establish a schedule of credentialed scans across major UM-D ITS-owned systems, with regularly-scheduled review and remediation of results. Once appropriate technology is in place, credentialed scans will be extended to all UM-D ITS systems. Vulnerabilities identified in scans will be captured and tracked via the UM-D ITS Ticketing System.

A patch and vulnerability policy is in-development; this will explicitly include continuous vulnerability assessment and remediation – process, schedule, and resources.

Members of the ITS Infrastructure and Technology team will be assigned to membership of the team charged with review and remediation of scan results.

**Action Plan Owners:** Scan review and remediation: Information Technology Planning Manager  
Policy: UM-D ITS Director

**Expected Completion Date:** Scans under way, policy completed by August 2014.

## 2. Malware Detection and Remediation

High

**Issue:** UM-D ITS does not adequately protect the computing environment against malware and virus attacks.

**Risk:** Malware can go unnoticed, resulting in further penetration into the network and increased risk of compromise to sensitive systems. Undetected malware can allow an attacker to use University resources to attack other targets.

**Support:** UM-D ITS does not have a centrally managed anti-malware system. Anti-malware software on end user machines does not notify staff when it identifies malware.

During testing of anti-malware processes, University Audits uploaded a piece of malware that is not harmful to a file server. The server did not have any process to detect the malware and it went undetected.

**Recommendation:** UM-D ITS should develop and implement a strategy to detect and remediate malware on all UM-D ITS managed systems and be notified when malware is detected.

**Management Action Plan:** UM-D ITS has implemented a central management system (System Center Configuration Manager, or SCCM) that will enable deployment of malware detection and remediation software to UM-D ITS-managed Windows and OSX-based systems.

UM-D ITS will work with Ann Arbor-based resources to add Linux systems to the plan.

## 2. Malware Detection and Remediation

High

**Action Plan Owner:** Information Technology Planning Manager

**Expected Completion Date:** Software implementation completed. Configuration and reporting to be completed by August 2014

## 3. Account Provisioning and De-Provisioning

Medium

**Issue:** UM-D ITS does not review current and authorized Banner user accounts on a regular schedule.

**Risk:** A disgruntled former employee could access, modify, or destroy data. An attacker could use old accounts to mask their actions and go unnoticed.

**Support:** UM-D ITS receives a list of terminated employees on a quarterly basis. UM-D ITS staff responsible for Banner stated that they use the list to remove access to Banner as well as being notified directly by units during unit exit procedures.

As of January 2014, all Banner user accounts were compared to University Human Resources records to determine if any user accounts belonged to former employees that had been terminated for longer than 3 months.

Of the 342 accounts reviewed, 24 belonged to former employees gone for more than 3 months.

**Recommendation:** UM-D ITS staff responsible for Banner should review Banner accounts at least semi-annually to verify that access has been granted only to those users with a business need and that access has been rescinded from those employees who no longer have a business need for the access. UM-D ITS should conduct a review of current access removal processes.

**Management Action Plan:** Semi-annually, UM-D ITS provides end-user departments with lists of their employees with Banner accounts, including the level of access and system privileges. UM-D ITS is dependent on end-user leadership to review appropriateness of their employees access and advise.

UM-D ITS will institute a program of escalation for those departments that do not respond in a timely manner. In addition, we will establish a team to periodically review employee terminations to ensure removal of exited employees' accounts. This team will include members of UM-D ITS, Human Resources and the Registrar's office.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** October 2014

<b>4. Network Segmentation</b>	<b>Medium</b>
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**Issue:** The design of the UM-D ITS data center network does not protect internal systems from malicious activity.

**Risk:** Attackers may exploit external systems to gain access to internal system or infected systems may be introduced to the internal network and cause harm to data and subvert security, potentially causing damage to the University.

**Support:** Internal network configuration guidelines do not exist. Network diagrams are not always complete. Important systems are not isolated into trust zones<sup>7</sup> or segmented from end user machines.

Funding for internal firewalls has been approved for the next fiscal year.

**Recommendation:** UM-D ITS should create secure configurations, document guidelines for internal network configurations and segment important systems from end-user machines and machines that have direct access to the Internet into trust zones or another type of segmentation.

**Management Action Plan:** UM-D ITS is working to create secure zones for UM-D ITS-managed critical services within the data center; the identification of critical services and documentation standards will be assembled in a UM-D ITS policy and/or procedure guides, to be reviewed and updated annually

**Action Plan Owner:** Information Technology Planning Manager

**Expected Completion Date:** October 2014

<b>5. Software Asset Management</b>	<b>Medium</b>
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**Issue:** UM-D ITS cannot determine if they are compliant with software licenses.

**Risk:** Fines or other penalties can result from not being compliant with software licenses. Over or under spending on software can occur.

**Support:** An inventory of software licenses was not initially available on request. UM-D ITS has since started to develop an inventory.

UM-D ITS does not have a solution to manage software licenses for all software products.

**Recommendation:** UM-D ITS should formalize their software asset management processes. An

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<sup>7</sup> Trust Zone may be set up between different network segments that require specific usage policies based on information processed.

<b>5. Software Asset Management</b>	<b>Medium</b>
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inventory of all software licenses should be completed and compared against deployed software in the computing environment. UM-D ITS should assess all licenses for proper use. Policy and procedures governing the software life cycle should be documented.

**Management Action Plan:** MU-D ITS has implemented System Center Configuration Manager (SCCM), a central management system which will enable creation of an enterprise inventory of all deployed software on desktops, managed laptops, and Windows Servers.

After creation of an enterprise inventory, we will be able to compare this inventory with the contents of the Key Server, which maintains a record of all valid licenses. We will use a Satellite server to capture Linux-based software. An analysis of the gap between the software inventory and the Key Server inventory will follow.

**Action Plan Owner:** Manager Customer Experience

**Expected Completion Date:** October 2014

<b>6. IT Disaster Recovery and Business Continuity</b>	<b>Medium</b>
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**Issue:** UM-D ITS does not have a plan to address continuity of business processes in the event of a disaster.

**Risk:** Loss of data, extended down times, confusion, and reputational damage could occur.

**Support:** Standard Practice Guide Section (SPG) 601.12, *Institutional Data Resource Management Policy* requires that responsible areas address the continuity of business operations.

The disaster recovery infrastructure is near completion. However, it has not been tested.

Important systems do not have any redundancy or failover capabilities.

**Recommendation:** UM-D ITS should complete the disaster recovery infrastructure and develop a business continuity plan. UM-D ITS should periodically conduct testing to assess the effectiveness of the infrastructure and plan.

**Management Action Plan:** Development and implementation of a disaster recovery plan, which will ensure ability to reestablish critical system data and processing capabilities, will begin with identification of critical systems, assessment of risk, cost, and timing of responses to potential disaster events.

UM-D ITS will conduct disaster desktop simulations to validate documentation and procedures; hardware-specific backup and recovery testing will follow pending adoption and funding of a disaster recovery site strategy.

<b>6. IT Disaster Recovery and Business Continuity</b>	<b>Medium</b>
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**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** Risk assessment completed, plan draft document and costs identified: October 2014.

<b>7. IT Change Management</b>	<b>Medium</b>
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**Issue:** UM-D ITS does not have an effective change management process.

**Risk:** Ineffective change management processes can cause an unstable environment, down time, security gaps, data loss, and miscommunication.

**Support:** Change management policies and procedures are not documented. A change event log that consistently tracks changes is not maintained.

**Recommendation:** UM-D ITS should document their change management policies and procedures and develop a change event log that can be accessible to the Dearborn campus.

**Management Action Plan:** Configuration management/change management information is maintained in a variety of systems, depending on technical domain. A log of modifications to core Banner code is maintained in the Applications Group, as are logs of patches and upgrades to applications and the database engine. Likewise, changes to network and infrastructure are maintained in the Technical Planning Group.

In late summer 2014, we will initiate a process to codify which changes are captured, and how they are communicated to our constituents. This process will be applied to critical services as identified in the Disaster Recovery planning initiative. This process should result in policies and template procedures for overall change management, and potential projects to identify appropriate tools for maintenance and dissemination of the results.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** November 2014

<b>8. Fixed Asset Management</b>	<b>Medium</b>
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**Issue:** The department does not manage its assets in accordance with the University and UM-D local policy or good business practices.

**Risk:** Stolen or lost assets may go undetected.

**Support:** According to SPG Section 520.01, *Acquisition, Use, and Disposition of Property (Exclusive of Real Property)*, all movable equipment costing \$5,000 or more, whose useful life is 2 or more years is considered capital equipment and must be tagged by Property Control and recorded in

<b>8. Fixed Asset Management</b>	<b>Medium</b>
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the University's inventory. Local policy uses \$3,000 as the threshold.

During the review, University Audits noted that 8 out of 10 assets tested were not tagged and were missing from the inventory listing maintained by Dearborn Financial Services. The value of each asset is at least \$5,000.

A monitoring process for assets under \$3,000 does not exist.

**Recommendation:** UM-D ITS should perform a full inventory count of assets above \$3,000, which will include a two-way reconciliation of the recorded and existing assets. Also, UM-D ITS should create an inventory management process for assets under \$3,000. Use of this more stringent policy could be a good business practice considering the recent increase in responsibilities.

**Management Action Plan:** UM-D ITS currently tracks and verifies department assets that are included in UM-D Financial Services' annual inventory of equipment over \$3,000. Going forward, UM-D ITS will proactively work with Financial Services to ensure that assets with a value of \$3,000 or greater will be tagged and added to the inventory. UM-D ITS will also implement a process to manage assets under \$3,000.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** September 2014

<b>9. P-Card Review Process</b>	<b>Medium</b>
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**Issue:** A process to review P-Card credit limits and spending levels on a periodic basis does not exist within UM-D ITS.

**Risk:** High P-Card credit limits increase exposure to fraudulent transactions.

**Support:** University Audits testing revealed that the monthly P-Card spending limit was set too high on 1 of 3 P-Cards the department owned.

**Recommendation:** UM-D ITS should implement a process to periodically review limits of P-Cards and adjust the spending limits accordingly.

**Management Action Plan:** UM-D ITS will annually review limits on department P-Cards and adjust them to minimal required levels.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** June 2014



<b>10. Management Reports</b>	<b>Medium</b>
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**Issue:** Management does not review relevant management reports available in M-Reports.

**Risk:** Lack of monitoring may result in overlooked errors and irregularities.

**Support:** Departmental practices are inconsistent with what is reported for the Annual Unit Internal Control Certification Process. The form specifically requires review of reports for the following areas:

- Employment/payroll process
- P-card process
- Cash handling process
- Employee travel and expense (Concur) process

**Recommendation:** UM-D ITS should periodically (at least quarterly) review management reports.

**Management Action Plan:** UM-D ITS will review online management reports on a quarterly basis.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** June 2014

<b>11. Conflict of Interest/ Commitment</b>	<b>Medium</b>
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**Issue:** A process to identify and report conflicts of interest (COI) or commitment (COC) does not exist in UM-D ITS.

**Risk:** If UM-D ITS does not report a potential conflict, it may lead to improper decision-making and damage the University's reputation.

**Support:** UM-D ITS does not have a process requiring staff to fill out a COI or COC form on a periodic basis (e.g., annually). There are no guidelines to follow in case a potential conflict arises. New employees are introduced to the COI/COC policy through the local procedures; however, no further actions are required.

**Recommendation:** UM-D ITS should increase awareness of the COI/COC process by educating staff at hire and at regular intervals during the year (e.g., staff meetings). They should require each employee to attest annually that they have read the policy and disclosed all conflicts or indicate that they have no conflicts to disclose.

**Management Action Plan:** UM-D ITS department Policies and Standards include information about University policies on Conflict of Interest/Commitment. This information is shared with all department staff, including new staff at the time of hire. UM-D ITS will continue to educate staff at regular intervals during the year about the COI/COC process. UM-D ITS will also begin requiring employees to sign a disclosure form during the performance review process to attest that they

<b>11. Conflict of Interest/ Commitment</b>	<b>Medium</b>
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have read the policy and disclosed any conflicts.

**Action Plan Owner:** UM-D ITS Director

**Expected Completion Date:** August 2014

**School of Dentistry**

**2014-215**

Report issued May 2014

**A. Executive Summary**

**1. Overall Conclusion**

Beginning in August 2013, University Audits initiated a leadership transition audit following the appointment of a new Dean in September 2013 and subsequent reorganization of the School's administration.

The School of Dentistry (the School) has a decentralized structure with five department Chairs that operate fairly independently. As a result, there is significant variation in the implementation and monitoring of internal controls (e.g., cash handling, human subject incentive payments, expense report approvals) and a reduced transparency of activities occurring in each department. Overall, the School was in need of a long-term strategic plan. This arrangement allowed Chairs to operate in ways that benefit their individual departments without full consideration of the impact on the School and its overall mission. Under the direction of the new dean, a strategic planning committee has now been formed.

Chairs, in conjunction with Graduate Program Directors, are responsible for the oversight of patient specialty clinics. University Audits identified instances where some clinics are not complying with key regulations and laws, including State of Michigan controlled substance inventory requirements, federal credit reporting requirements for patient payment plans, and Medicaid requirements. While there is a School Compliance Officer and an Infection Control Liaison, their documented responsibilities allow for control gaps in important processes including comprehensive review and verification of specialty clinic compliance (e.g., controlled substance procurement and disposal).

The School does not consistently define teaching expectations for full-time faculty and adjuncts. This may lead to inefficient staffing levels, negative impact on student supervision, and potentially higher costs. An assessment of School-wide teaching needs is in process. An atypical salary and incentive model combined with the lack of consistent and documented contractual expectations may encourage activities that detract from the School's key goals of education and patient service.

The new Dean and the Senior Associate Dean were responsive during the course of the

audit and have already taken important steps in addressing many of the issues facing the School.

## 2. Scope and Identified Risks

The following table lists the key activities audited, along with the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the School of Dentistry as well as input from current and former members of School administration.

**Key Activities Audited and Conclusions by Sub-Activity**

Departments and Clinics	Payroll	Student Education and Awards	Procurement	Cash Handling and Credit Cards	Conflict of Interest and Nepotism	Faculty Practice and Administration
Clinic supply and instrument inventory	<b>Salary and incentive model (1)</b>	Graduate program admissions	Procurement process	Cash handling process	COI and COC reporting and management	Dental Faculty Associates Clinic
<b>Clinic controlled substance procurement</b>	Other, supplemental, and additional payments	Continuing education and specialized programs	P-Card review	Imprest cash and cash equivalents	Nepotism reporting and management	Adjunct and visiting faculty
Compliance oversight structure		Merit awards and financial aid funding	Miscellaneous expenses	Credit card processing		<b>Research funding, buyouts and contractual obligations (1)</b>
Infection control		Student validation and off-campus safety	Travel and hosting			Credentialing process
<b>Patient eligibility and registration</b>			Travel programs and registry			Required trainings
Financial monitoring						<b>Business, service, and space agreements</b>
Administrative reporting and authority						
Billing office - Medicaid						

**Note:** Section B of this report (Audit Issues and Management Action Plans) provides details of

the high and medium risk issues identified during the audit. Low risk issues were communicated directly to the unit management and are not included in the report.

### **3. Audit Objectives**

- Evaluate department and clinic activities (including Medicaid billing and accounts receivable aging) to verify controls are in place to monitor for compliance with School, University, and government guidelines.
- Assess controls over payroll functions for completeness and accuracy and verify the payroll structure is sustainable.
- Evaluate oversight of student programs and funding for appropriateness and compliance with School and University guidelines.
- Verify expenses are necessary, supported, and approved by an individual that has knowledge of the reason for the expense.
- Verify there are effective controls and procedures over cash handling and credit card transactions.
- Verify the conflict of interest and conflict of commitment disclosure and management process is effective and includes monitoring for compliance.
- Confirm faculty administration, student, and patient contact are in compliance with contractual obligations and School, University, and federal requirements.

The following risk areas were considered, but were out of scope for this audit:

- Temporary employees
- Overtime pay
- Visa and background checks
- Undergraduate admissions
- Physical assets
- Research grants, contracts, and subcontracts
- Recharge revenue
- MCHOR – Michigan Center for Oral Health Research
- Gifts and development
- Information technology
- Animal safety and compliance
- Other aspects not listed above of the Central Billing Office)

### **4. Context and Key Risk Considerations**

The School of Dentistry is one of the nation's leading dental schools with fifteen programs of study. A new Dean was named in March 2013 and her five-year appointment was effective September 1, 2013. Among her responsibilities, the Dean serves as an Ex Officio member of the School's Executive Committee.

There is a Department Chair for each of the School's five departments. Department managers are responsible for the day-to-day management of administrative functions. In addition, fourteen Graduate Program Directors provide oversight of the School's

specialty clinics. Students also practice at off-site clinics and hospitals. The departments rely on over 300 adjunct faculty to oversee students in these specialty clinics. Faculty and staff are required to have current credentials.

Both undergraduate and graduate students see patients, with faculty oversight, in the general dental care and specialty clinics. The Central Billing Office is responsible for medical billing and collections for services performed at the general and specialty clinics. In fiscal year 2013, revenue from clinic activity exceeded \$20 million.

School of Dentistry has created shared service models for processing transactions associated with contracts and grants, accounting and procurement, and human resources.

## **B. Audit Issues and Management Action Plans**

<b>1. Salary and Incentive Model</b>	<b>High</b>
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**Issue:** The School of Dentistry's atypical salary and incentive model has not been adequately evaluated to confirm that it meets the fiscal sustainability and academic needs of the School.

**Risk:** The current model may encourage conflicts of commitment with the mission of the School. Without proper stewardship of the School's funds, operations and School goals may be impeded. There may be overspending if staffing levels are greater than the existing need.

**Support:** The School of Dentistry salary and incentive model has X/Y/Z components defined as base salary (X), at risk salary the faculty is expected to generate (e.g., research grants) (Y), and calculated incentive payments (Z). There is a lack of expectation or requirement that base salary funds (X), provided by the Dean using General Funds, be repaid if a faculty member exceeds the at-risk (Y) portion of their salary through revenue or grants and reduces their teaching load. This excess amount is essentially a buyout of General Funds provided to the department by the Dean.

Historically, the Dean's Office pays for a set number of full-time faculty and adjuncts each year, without performing an assessment of academic need. Requests for additional adjuncts are paid for by the Dean's Office. Adjuncts are hired to fill teaching loads vacated by full-time faculty who have received research funding.

Instead of offsetting the General Funds provided by the Dean's Office, up to two-thirds of the teaching load buyout stays in the department as reserves. For fiscal year 2013, revenue and research funding that exceeded the Y obligation was \$1.4M (this is not reflective of the department's reserve). This process has reduced transparency of transactions.

Faculty contracts and adjunct memorandums of understanding often do not specify teaching load requirements. Most contracts state the split of the X/Y percentages; however, because not all faculty contracts are the same, some contain Y and Z incentive payments that are guaranteed and

**1. Salary and Incentive Model**

**High**

funded by the Dean's Office or departments without time limitations.

In fiscal year 2013, incentive (Z) payments were \$1.1M across departments. Departments are responsible for calculating Z payments and there is a lack of clarity and consistency about how this is done, which leads to the inability to verify the accuracy of payments. In addition, because of a lack of standardized method, it takes a large amount of administrative effort to calculate the payments.

Faculty are allowed to make the determination if they want their Z incentive payment paid out as a monthly bonus or to put all or some of it into a discretionary account. For fiscal year 2013, approximately \$400k was put into discretionary accounts. This process creates tax implications that have not been evaluated or adequately addressed.

**Recommendation:** School-wide, define teaching load requirements and faculty release rules, including rules regarding who funds adjuncts used to backfill. Include reference to policy and any exceptions to teaching requirements in faculty contracts.

Complete the School's already initiated assessment of current teaching needs. Require departments to annually justify the need for full-time faculty positions, and when positions are vacated. Additionally, document the justification criteria and hiring requirements of adjuncts.

Consider term-limiting guaranteed Y and Z funding or build in reassessment time periods.

If the X/Y/Z payment model is to continue, document and communicate criteria for the X/Y split percentages. Consider capping Z payments as a percentage of base salary.

Define expectations for the source of incentive payment funding (e.g., Dean's Office, department) for faculty that receive revenue or research funding in excess of their Y.

Assess the attributes of the current funding model. Review other salary models. Identify a model that is both incentivizing and attractive while also sustainable. Revise or phase out the current funding model as needed.

Standardize, and consider centralizing, the process for calculating Z incentive payments.

Work with the Tax Office to evaluate and document the process for how faculty choose the method for receiving their Z incentive payments, ensuring all tax implications are addressed. Confirm controls on discretionary accounts are effective in monitoring for personal spend, especially when faculty are leaving.

Assess how much departments are retaining for reserves from excess Y amounts. Determine what is a reasonable amount to stay in the department as a reserve; limit accordingly. Consider the use of sweep accounts.

## 1. Salary and Incentive Model

High

Conduct a review of all current faculty contracts to determine the fiscal obligations of the School. Going forward, improve contracts to include teaching requirements and funding and contract time limits where necessary. Consider including verbiage to allow for modification of the model in the absence of clear time limits.

### Management Action Plan:

1. Faculty funding models of other units on campus and peer dental schools will be reviewed.
2. A model that provides incentive to the faculty and department while stewarding general funds will be identified and implemented consistently across departments.
3. All faculty contracts will be reviewed and updated if necessary.
4. All new faculty contracts will include teaching load requirements and specifics regarding the funding model.
5. The assessment of curricular teaching needs will be completed and serve as a guide for faculty hires.

**Action Plan Owners:** Dean; Director of Budget and Finance (TBN); Department Chairs; Associate Dean for Faculty Affairs and Institutional Effectiveness; Associate Dean for Academic Affairs

### Expected Completion Dates:

1. July 2014
2. August 2014
3. January 2015
4. August 2014
5. July 2014

## 2. Patient Payment Plans

High

**Issue:** The Orthodontic Clinic is offering payment plans that are not in compliance with federal regulations including the Truth in Lending Act (TILA) and the Equal Credit Opportunity Act (ECOA).

### Risk:

- TILA - Failure to comply with TILA (may trigger civil liability for actual damages, including the recovery of litigation costs and attorney fees. Anyone who willingly and knowingly gives false or inaccurate information or fails to provide information which he/(she) is required to disclose will be fined not more than \$5,000, imprisoned for not more than one year, or both.
- ECOA - Failure to comply with this prohibition can lead to civil individual or class actions for actual and punitive damages, including litigation expenses and attorney fees. Courts can also grant equitable or declaratory relief.

**Support:** The Orthodontic Clinic offers 12- and 24-month payment plans to their patients. 98% of new patients (441 patients per year) enter into payment plans, which total approximately \$1.6M

## 2. Patient Payment Plans

High

per year. A credit report is pulled for each applicant and reviewed by the Clinic Manager. There are no policies and procedures related to the process.

- The TILA requires persons who regularly extend consumer credit payable in more than four payments to provide consumers with loan cost information. The disclosures have to be made in writing, clearly and conspicuously, before the transaction is consummated, and in a form the consumer can keep. Patients are not given required TILA disclosures.
- The ECOA prohibits a creditor from discriminating against any applicant with respect to any part of the credit transaction based on race, color, religion, national origin, sex or marital status, or age; because all or part of the applicant's income derives from any public assistance program; or because the applicant has exercised her rights under the Consumer Credit Protection Act. Because the clinic lacks documented procedures regarding who is eligible for payment plans, it might raise concerns about a potential for bias and discrimination. ECOA also gives the unsuccessful applicant a right to know the reasons their credit was denied.

### Recommendation:

- The School should adopt a written policy on payment plans that includes an express prohibition of discrimination in determining payment plans recipients.
- Mandatory disclosures and notifications under TILA and FCRA should be made to all applicants.
- The School should work with the Office of General Counsel to verify the School is in compliance with these federal regulations.
- Consider using a third party to process patient payment plans.

### Management Action Plan:

1. The School will work with the Office of General Counsel to verify the School is in compliance with these federal regulations.
2. We will draft a language change to our Credit History authorization form to include acknowledgement of receipt of the federal regulation website links: Truth in Lending Act (TILA), Equal Credit Opportunity Act (ECOA), and the Fair Credit Reporting Act (FCRA).
3. The School will work with the Office of the General Counsel to explore contracting with a third-party agency to provide applicants with the mandatory disclosures and notifications under the Truth in Lending Act (TILA), Equal Credit Opportunity Act (ECOA), and the Fair Credit Reporting Act (FCRA).

**Action Plan Owners:** Department Chair, Orthodontics and Pediatric Dentistry; Clinic Director; Manager, Clinic Billing Office

**Expected Completion Date:** June 2014

## 3. Controlled Substances Procurement and Inventory

High

**Issue:** There is inadequate oversight of controlled substance procurement from the Health System Pharmacy and controlled substance inventory reporting may not be completed in accordance with



### 3. Controlled Substances Procurement and Inventory

High

State requirements.

**Risk:** Controlled substances may be misappropriated. Clinics may not be in compliance with State of Michigan controlled substance inventory reporting requirements. Controlled substances may be ordered for unauthorized uses.

**Support:**

- Clinics are using the DEA number of a doctor that has no responsibility in the clinic. The doctor did not authorize the use of his DEA number to order pharmaceuticals but it has been used by two separate areas that he is aware of.
- There is no segregation of duties in the ordering, pickup, and reconciliation of controlled substances. An employee can fax in an order for a controlled substance and pick the controlled substance at the Health System pharmacy without detection.
- The School of Dentistry does not complete the annual controlled substance inventory reporting required by the State of Michigan and per discussion with the Health System Pharmacy the School's inventory is not included in the inventory report the Health System submits to the State.

**Recommendation:** Assign a patient services employee to work with the clinics and:

1. Identify all clinics and laboratories ordering controlled substances. Determine whether the DEA number being used to order is appropriate and was approved by the owner.
2. Move all ordering clinics and laboratories to the online order system.
3. Verify segregation of duties in the ordering, pick up, inventorying, and reconciliation of controlled substances is in place for all clinics and laboratories that order controlled substances.
4. Work with the Office of General Counsel to determine whether the School is subject to the required annual State of Michigan Administrative Rules for controlled substance inventory reporting (including R338.3151 and R338.3152). If so, provide central oversight to verify the inventory is completed and paperwork is submitted as required.

**Management Action Plan:**

1. We have identified all clinics where controlled substances are used and have confirmed that the appropriate DEA license is approved by the owner for ordering. We have identified the research projects where controlled substances have been approved for use in the project and are investigating the ordering practices of those projects.
2. Three of the four clinics where controlled substances are currently used order using the online system. In order to use the online ordering system, a Level 2 password is needed. The fourth clinic's (Graduate Periodontics) previous requests for a Level 2 password have been rejected. It has been one month since we last submitted a request for Level 2 password for an Allied Health Associate Supervisor and a Senior Dental Assistant to the UMHS Compliance Office. In the meantime, Graduate Periodontics has been instructed to order controlled substances using the Pharmacy email address.

### 3. Controlled Substances Procurement and Inventory

High

3. We have identified a staff member to audit all clinical areas to identify any gaps in procurement, storage, documentation, and disposal of controlled substances. We will continue the process for laboratories, thereafter. Once complete, we will maintain a list of areas where controlled substances are used. Other outcomes of this activity will be standardization of inventory and disposal throughout the School and documentation of controls and segregation of duties in each unit.
4. We will consult with the Office of the General Counsel, the University Health System, and the School of Pharmacy to determine all federal and state reporting requirements and will inform all units using controlled substances of those requirements. We will insure compliance with those reporting requirements by centralizing the submission of the reports to the appropriate regulatory agencies.

**Action Plan Owners:** Senior Associate Dean; Compliance Officer

**Expected Completion Dates:**

1. Completed
2. August 2014
3. August 2014
4. August 2014

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

### 4. Business Associate Agreement

High

**Issue:** The School of Dentistry uses a third-party vendor to send and receive patient personal health information via email without having a signed Business Associate Agreement.

**Risk:** HIPAA non-compliance can carry significant civil and criminal penalties including fines of up to \$1.5M for the School and fines and imprisonment for the individual that disclosed the personal health information.

**Support:** The School migrated to Google email, which is not compliant with the Health Insurance Portability and Accountability Act (HIPAA). In order to send and receive personal health information (PHI) securely, some clinics and administrators began using a third-party vendor to send and receive emails containing PHI. Because the vendor has access to PHI, HIPAA requires the School to enter into a Business Associates Agreement (BAA) with the vendor. This agreement is meant to ensure the vendor will safeguard PHI in accordance with HIPAA requirements. Attempts to have the vendor sign a BAA, as required by HIPAA, have failed; however, the School continued to use this service knowing a BAA was not in place.

**Recommendation:** Stop using the third-party vendor until a Business Associate Agreement has been signed.

If the third-party vendor will not sign a BAA, use an alternate vendor that will.

#### 4. Business Associate Agreement

High

Do not begin using services of a third-party vendor until a BAA is signed.  
Consider migrating to the health system email service, which is HIPAA compliant.

**Management Action Plan:** We have ceased use of HushMail and replaced it with an alternative, DataMotion <http://www.datamotion.com/>. DataMotion has signed a Business Associate Agreement (BAA). We are currently writing up documentation and training staff. At this time, we are not considering migrating to the health system email service because of the difficulty in obtaining Level 2 access for our faculty and staff.

**Action Plan Owner:** Associate Dean for Faculty Affairs and Institutional Effectiveness

**Expected Completion Date:** Completed

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

#### 5. Credentialing

Medium

**Issue:** After the initial hiring credential verification, the School does not always obtain updated license, vaccination, and CPR certification information as they expire.

**Risk:** Incomplete credential information may result in non-compliance with Commission on Dental Accreditation (CODA) requirements. Dentists working with expired licenses may face disciplinary action by the State of Michigan and may be non-compliant with state and federal regulations.

**Support:** Credentials refer to evidence of having obtained the necessary education, experience, and licenses to provide expected patient care in the School's clinics. It also refers to maintaining the necessary licensure to provide such services and any additional education and/or experience necessary to keep abreast of changes in patient care.

One department was selected for testing. There were no expired licenses as part of the sample; however, there were 25 expired certifications (e.g., Hepatitis B and Tuberculosis tests). During the audit, School management disclosed challenges with obtaining updated certification documentation from adjunct faculty members.

**Recommendation:**

- Compliance should track and notify departments of expiring credentials.
- Compliance should contact the affected faculty and staff several times before the expiration occurs (e.g., one month out, two weeks out, two days out).
- Create an escalation process that would include cc'ing the applicable department manager and Chair, as well as, the Senior Associate Dean, on communication as the expiration date nears.
- Faculty and staff members with expired credentials should not be allowed to see patients and their access to MiDent, the School's electronic patient records system, should be

<b>5. Credentialing</b>	<b>Medium</b>
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suspended immediately.

**Management Action Plan:** We reviewed the audit sample and there were no faculty members who had expired dental licenses. The audit did reveal the need for more consistent follow-up regarding CPR/basic life support (BLS) certifications. Individuals with expired CPR/BLS certificates in the School will be contacted and informed their MiDent access will be suspended unless and until proof of current certification is provided.

We currently track the status of required credentials and notify individuals and department leads of pending expirations. Departments are the primary lead of the renewal portion of credentialing. Although we communicate with them regarding pending expirations, they may not fully appreciate their role in the process. To that end, we will simplify the reports sent to departments and explain the credentialing process to Chairs and administrators.

In order to strengthen our current credentialing system, we will consider using multiple methods for communicating pending expirations to affected individuals (e.g., email, hard copy letter, etc.) and will create a process for escalating credentialing concerns as expiration dates near. We will also review current processes to determine best practices for removing access to our patient information system when credentials have lapsed.

We are investigating our options related to the TB test requirements in consultation with the University Hospital.

**Action Plan Owner:** Compliance Officer, School of Dentistry

**Expected Completion Date:** September 2014

<b>6. Adjunct Onboarding and Oversight</b>	<b>Medium</b>
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**Issue:** The onboarding, including hiring and training, and monitoring of adjunct faculty is inconsistent among departments and may not be effective in achieving required compliance of all individuals.

**Risk:** Student and patient health and safety may be less than ideal without adequate training, effective communication, or completion of compliance or credentialing requirements.

**Support:** In fiscal year 2013, there was one visiting faculty and approximately 340 adjuncts, with salary payments of \$1.4M. Adjuncts (without dry appointments) are the equivalent of 26 full-time equivalents.

Unlike the process for hiring full-time faculty, Central School Human Resources is not involved in the hiring process of adjuncts to ensure proper hiring practices, necessity of adjunct positions, or their teaching commitments/requirements. Departments are to use School manager checklists;

<b>6. Adjunct Onboarding and Oversight</b>	<b>Medium</b>
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however, the checklists are incomplete.

Adjuncts are not consistently trained by departments on major systems (e.g., MiDent) or the University's My LINC online training system. Some clinics have had difficulty getting adjuncts to complete required compliance items (e.g., HIPAA training) and there is not an established escalation process for ensuring compliance.

There is no singular mechanism for the School to effectively communicate important information to all adjuncts (e.g., UM email). School administration and leadership have reported difficulty in communicating with adjuncts. There is no requirement for adjuncts to check or use UM email. For those that use personal email addresses, some are returned as undeliverable.

Teaching requirements or expectations are not noted in adjunct contracts and current teaching loads vary; some adjuncts work a half day per month. Adjuncts have taken time off without advance notice, making it difficult to achieve best practice ratios between clinical supervisors and students and their patients.

As a result of discussions between the School and UMHS, current School practice is that adjuncts who work below a certain time threshold each month are not verified for current tuberculosis testing. However, per UMHS policy, testing is required for all dental staff and volunteers working in the hospital as a condition of employment (within two months of date of hire) as well as annual testing. Because of current practices, the level of compliance with this requirement is unknown.

**Recommendation:**

1. Develop and document a standard hiring, onboarding, and training process for adjuncts that includes formal MiDent training and review for completion of compliance requirements before allowing student or patient contact. Additional department onboarding may supplement, but should not replace the School's onboarding process.
2. Determine the best method for effectively communicating with adjuncts to ensure they are aware of important information (e.g., safety hazards, compliance requirements). Do not allow the UM email address to be forwarded to a personal email or create a process to follow-up with the adjunct when emails are returned undeliverable.
3. Include teaching expectations as well as conditions of employment in adjunct contracts to ensure the quality of student education and the safety of patients (e.g., credentialing, infectious disease testing).
4. Assign responsibility at the School level to verify contract requirements and conditions of employment are met, including Dental School employees working in the UM Health System (e.g., tuberculosis testing).
5. Create a process to review and determine annually if the appointment should be renewed.

**Management Action Plan:** We will bring together an ad hoc committee of department administrators, a representative from the Human Resources Service Center, the Patient Information system (MiDent) trainer, and a programmer from Dental Informatics. The Associate

<b>6. Adjunct Onboarding and Oversight</b>	<b>Medium</b>
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Dean for Faculty Affairs and Institutional Effectiveness will chair the committee. The charge of the committee will be to: (1) plan a compliant adjunct onboarding workflow that includes MiDent training; (2) develop a plan for ongoing MiDent training for all adjuncts; (3) determine the best method for communicating with adjuncts; (4) revise adjunct letters of offer and contracts to include teaching and safety expectations and compliance; and (5) devise a system to verify that contract requirements and conditions are met. The Associate Dean for Faculty Affairs and Institutional Effectiveness will work with the chairs to plan an annual process of adjunct renewal.

**Action Plan Owners:** Associate Dean for Faculty Affairs and Institutional Effectiveness; Department Chairs; Associate Dean for Academic Affairs

**Expected Completion Date:** December 2014

<b>7. Additional Compensation Payments</b>	<b>Medium</b>
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**Issue:** Not all additional payments, including incentive payments, are supported, reconciled, or include documented approval.

**Risk:** Payments may not be accurate, necessary, or approved by appropriate management, which could result in a misuse of Dentistry funds.

**Support:** Fiscal year 2013 payments for added duties differential, administrative differential, salary supplements, and services unrelated to appointment payroll earn codes were approximately \$700k. For the same period, incentive payments were approximately \$1.1M.

Testing showed that not all payment requests submitted through FootPrints, the Dentistry HR processing system, were supported, had documented approval, or agreed to approved amounts. Additional and incentive payments require the approval of the Department Chair and the Dean. The amount processed in M-Pathways is not completely reconciled to the amount approved by the Dean or to the amount requested by the department to verify accuracy and completeness.

There was at least one past instance where an employee received additional payment for a role (e.g., Directorship) in which they were no longer active.

It is the department's responsibility to review the job description and responsibilities of employees to determine if additional payments are necessary. It is not evident that this is consistently occurring or that the department managers have access to pertinent information (e.g., personnel files).

**Recommendation:** Document the annual process of reviewing and approving additional payments and incentive payments, including the requirement of documented approval of the amounts by the Department Chair and the Dean. To gain efficiencies in the annual process, the Human Resources Service Center should use the approved documents as the source to process payments

<b>7. Additional Compensation Payments</b>	<b>Medium</b>
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rather than require departments to submit requests for each individual. Any payments subsequent to this process should require documented approval by the Department Chair and the Dean.

Develop and document reconciliation procedures that require the HR Service Center to reconcile the amount entered in M-Pathways to the amount approved by the Dean to verify accuracy and completeness.

Develop a checklist that requires departmental review of the employee's job description, performance evaluation, and other pertinent information to verify the additional payment is necessary. Work with the Human Resources Service Center to obtain any other pertinent information (e.g., contracts) that is not held by the department. The Human Resources Service Center should require the signed checklist as support before processing the transaction.

Develop a Human Resources Service Center checklist that helps verify support and approval (e.g., department checklist) before processing any additional pay transaction (subsequent to the annual process). As part of the review, include steps to confirm the payments have effective and end dates. When processing transactions for employees that move to new positions, confirm additional payments are still necessary.

**Management Action Plan:** The School's annual process of reviewing and approving additional payments and incentive payments has always included the requirement of documented approval of the amounts by the Department Chair and verbal approval by the Dean. The Human Resources Director will develop an Additional Pay Compensation policy. The Additional Pay spreadsheet/document will heretofore require both the Department Chair and Dean's signature. The Human Resources Service Center will use the approved spreadsheet as the source to process annual additional payments and incentive payments. Any payments subsequent to this process will require documented approval by the Department Chair and approval by the Dean to be submitted by the department for processing.

To mitigate risk and ensure good financial stewardship, the Human Resources Director will incorporate reconciliation procedures into the Additional Pay Compensation policy. The Human Resources Service Center and the department manager will continue to reconcile the amount entered in M-Pathways to the amount approved by the Dean to verify accuracy and completeness.

With regard to additional payments, the Human Resources Service Center will develop a department checklist that requires departmental review of the employee's job description, performance evaluation, and other pertinent information to verify the additional payment is necessary. Managers will work with the Human Resources Service Center to obtain any other pertinent information (e.g., contracts) that is not held by the department. The Human Resources Service Center will require the signed checklist as support before processing the transaction.

The Human Resources Service Center will develop a checklist that reviews for support and



<b>7. Additional Compensation Payments</b>	<b>Medium</b>
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approval (e.g., department checklist) before processing any additional pay transaction (subsequent to the annual process). As part of the review, we will include steps to confirm the payments have effective and end dates. When processing transactions for employees that move to new positions, we will confirm if additional payments are still necessary.

**Action Plan Owner:** Human Resources Director

**Expected Completion Date:** June 2014

<b>8. Clinic Medicaid Procedures</b>	<b>Medium</b>
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**Issue:** The four clinics reviewed do not have documented Medicaid patient acceptance procedures and some are not consistently verifying the Medicaid eligibility status of patients or removing uncovered benefits before submitting claims for reimbursement.

**Risk:** If the clinic bills Medicaid for non-covered benefits or procedures, the University waives their opportunity to bill the patient, resulting in lost revenue. Additionally, this practice is not in compliance with Medicaid provider requirements.

**Support:** The University was informed by Medicaid representatives in November 2013 that clinics are required to have Medicaid patient acceptance procedures on when Medicaid patients are seen (e.g., certain days or time slots).

In fiscal year 2013, Medicaid was charged \$4.2M for services and reimbursed the University \$1.3M at the standard reimbursement rate (approx. 30%).

Although limited testing showed only one instance where a clinic billed Medicaid for an ineligible patient and the claim was denied, the Dentistry Central Billing Office acknowledges this is an ongoing concern that can cause significant delay in billing and receiving reimbursement from the patient.

If the clinic bills Medicaid for non-covered benefits or procedures, the University waives their opportunity to bill the patient, resulting in lost revenue. Actual write-off amounts for these situations cannot easily be determined due to the inability to quantify instances where a claim was incorrectly billed to Medicaid when the patient was enrolled in Delta Dental Healthy Kids (a public-private partnership to improve access to dental care for underserved children).

The Central Billing Office is reliant on service providers to submit the correct procedure code and on clinic staff to verify patient insurance eligibility and to bill Medicaid for only covered services.

The Central Billing Office created a listing of all non-covered procedure codes in MiDent. When a code for a non-covered benefit is included as part of a Medicaid claim, the claim is printed as a paper hard copy and is not transmitted electronically to Medicaid. Paper claims are reviewed by



<b>8. Clinic Medicaid Procedures</b>	<b>Medium</b>
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the Billing Office staff and are sent out to patients.

**Recommendation:** Document Medicaid patient acceptance procedures or service schedules for all clinics. Develop a standardized checklist for clinic staff to use before checkout that includes a review for Medicaid patient eligibility and the removal of non-covered benefits. Inform patients of their financial obligation and if possible, obtain payment at the time of service. Reeducate clinic staff on covered Medicaid services as necessary.

**Management Action Plan:**

Patient Acceptance/Scheduling: The Comprehensive Care Clinics (predoctoral dental and hygiene students) accept all Medicaid patients with no scheduling restrictions. Follow-up has occurred with the Administrators of the various graduate clinics to determine what their acceptance/scheduling requirements are. We will create and share this list with all clinics.

Verification of Eligibility: The Department of Patient Services has prepared procedural process documents and made them available for all staff and faculty. These documents are distributed specifically to new hires for the Patient Services Assistant and Associate positions.

Due to the structure of the organization, not all registration and clerical staff report to the same manager. Follow-up will occur immediately with all supervisors who have patient registration and insurance billing responsibility to ensure the procedures are distributed.

Claim Submission Review and Correction: The Manager of the Clinic Billing Office will ensure that the claims are reviewed before submission so that procedures that are not considered a covered benefit by Medicaid are not submitted to insurance. Review will also be conducted to ensure that benefit coverage templates are current.

**Action Plan Owners:** Manager, Clinic Billing Office; Administrative Specialist, Office of Patient Services

**Expected Completion Date:** September 2014

<b>9. Job Responsibilities and Performance Evaluations</b>	<b>Medium</b>
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**Issue:** Not all job responsibilities are documented or current and there is insufficient monitoring to verify performance evaluations are completed annually.

**Risk:** Additional compensation may be paid for work that is part of job responsibilities. Gaps in job responsibilities may not be identified and addressed resulting in essential tasks not being performed. Performance issues may not be addressed and corrected in a timely was. Morale may suffer if periodic evaluations of performance are not completed.

**Support:**

<b>9. Job Responsibilities and Performance Evaluations</b>	<b>Medium</b>
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- Administrative Assistants in the Dean's Office did not receive performance evaluations for at least fiscal year 2013.
- While job responsibilities for the Department Chairs, Associate Deans, and Assistant Deans have recently been updated, job responsibilities for staff have not been reviewed to verify they are still consistent with work being performed.
- Although contracts are in place for four department Chairs, one department Chair is working without a contract. His contract expired two years ago and has not yet been renewed.

**Recommendation:**

- Job responsibilities and contracts for all positions (e.g. departments, clinics, administration) need to be reviewed for accuracy and updated as necessary.
- Reviews of job responsibilities should occur periodically. This expectation should be documented and Human Resources should coordinate the effort.
- Review the University's Performance Management Best Practices. Implement those best practices that align with the School's needs.
- Performance evaluations for all positions should occur annually according to School policy. Evaluations should be documented and signed by the reviewer and the employee. Copies of the evaluations should be sent to School Human Resources to verify evaluations were completed. Human Resources should track the annual completion of these evaluations and follow up on all that are outstanding. There should be an escalation process for evaluations that are not completed despite contact by Human Resources.

**Management Action Plan:** Consistent with the School's Performance Communication and Guidelines, job responsibilities and contracts for all positions (e.g. departments, clinics, and administration) are to be reviewed for accuracy and updated as necessary.

Job descriptions will be reviewed annually and attached to the Annual Performance Summary that is submitted to School Human Resources.

The School has established guidelines for conducting performance planning and the annual evaluation or assessment on its Intranet. Heretofore, managers/supervisor will be directed to review the guidelines prior to holding performance conversations with staff.

Annual performance evaluations are a School requirement and must be documented and signed by the reviewer and the employee. Copies of the Annual Performance Summary are sent to Human Resources to verify evaluations were completed. The Human Resource Service Center will track the annual completion of these evaluations and follow up on all that are outstanding. There will be an escalation process developed for evaluations that are not completed despite contact by Human Resources including the Supervisor's Manager, the Department Chair, Dean or Director, the Human Resource Director, and the Senior Associate Dean.

<b>9. Job Responsibilities and Performance Evaluations</b>	<b>Medium</b>
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**Action Plan Owner:** School of Dentistry Human Resources Director

**Expected Completion Date:** August 2014

<b>10. Compliance Roles and Responsibilities</b>	<b>Medium</b>
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**Issue:** The individual compliance roles and responsibilities have not been communicated to the School's faculty, staff, and students. Additionally, there is no defined escalation process for issues identified and no requirement to share issues and remediation status with School administration.

**Risk:** Compliance issues may not be addressed effectively and timely resulting in non-compliance with federal regulations, state laws, or University and School policies.

**Support:** There are three employees responsible for distinct pieces of compliance with federal regulations, state laws, and School and University policies.

The Associate Dean for Research is responsible for managing research-related regulatory and compliance activities (e.g., animal care compliance).

The School Compliance Officer is responsible for ensuring employees are in compliance with the rules and regulations of regulatory agencies, the University and School policies (e.g., HIPAA).

The Infection Control Officer is responsible for infection control compliance (e.g., sharps disposal).

Through discussion with staff, they are unsure of who to contact should they have a compliance-related concern and were unsure of the responsibilities of each of these compliance functions. The roles and responsibilities of the three compliance professionals have not been communicated broadly to faculty and staff.

There is no process to verify that all issues are remediated and escalated to School administration as necessary.

Undergraduate clinics are monitored for infection control compliance; however, responsibility for monitoring compliance in specialty clinics was never assigned.

**Recommendation:**

- Review job descriptions for each compliance role. Confirm they are complete and accurate to ensure there are no gaps (e.g. monitoring of specialty clinics) or unnecessary redundancies.
- Create a communication plan that includes notifying all faculty, staff, and students of each compliance function's role and their duty to report concerns. Introduce new faculty, staff, and students to these compliance functions during onboarding.
- Require compliance professionals to regularly reporting of compliance issues to School

<b>10. Compliance Roles and Responsibilities</b>	<b>Medium</b>
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administration. School administration should assign responsibility for oversight to ensure effective resolution of compliance issues and to identify trends that require attention.

- Define and document an escalation process for compliance issues.

**Management Action Plan:** The School recognizes that the School community needs to be aware of the resources available to them for the various compliance areas.

We will document the areas of compliance within the School, identify gaps, and determine roles and responsibilities for each of the areas. School leadership will be engaged to determine the desired structure in the School for addressing all of the compliance areas and providing oversight and reporting of high-risk areas and for corrective action plans where there is non-compliance.

We will review compliance-related job descriptions for appropriateness and will revise to address the areas of responsibility identified above.

We will establish regular meetings and communications between individuals performing compliance functions and will develop compliance reporting for departments and Senior Leaders. Within each compliance area, we will identify key stakeholders and develop a response and escalation process to address non-compliance.

The Infection Control Monitoring Program was initially scoped to include only undergraduate clinics with the intent of expanding to graduate and specialty clinics. Now that it has been firmly established within undergraduate clinics, we will proceed with the expansion.

**Action Plan Owner:** Compliance Officer

**Expected Completion Date:** September 2014

<b>11. Disposal of Controlled Substances</b>	<b>Medium</b>
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**Issue:** Controlled substances not used during a procedure are not disposed of in accordance with School of Dentistry's documented best practices.

**Risk:** Violations of federal and state pharmaceutical disposal regulations may result in fines. Continued improper disposal of controlled substances may impact the watershed. Unused controlled substances may be misappropriated if a second person does not witness the disposal.

**Support:** The School of Dentistry's Infection Control Best Practices manual outlines the School's expectation that unused controlled substances be disposed of in the sharps container; however, per discussion with clinic staff, unused sedation medication is being poured down the drain in one clinic and in the garbage can in a second clinic. Additionally, per discussion with clinic staff, one clinic does not require a witness to disposal.

<b>11. Disposal of Controlled Substances</b>	<b>Medium</b>
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**Recommendation:** Consider consulting with UMHS to identify disposal best practices. Determine the School's preferred method for disposal of controlled substances (e.g., disposing in the sharps container). When a process is determined, communicate the expectation for controlled substance disposal. Include controlled substance disposal expectations in faculty, staff, and student training. Place signs near disposal areas to remind staff of disposal techniques. Assign an individual to occasionally walkthrough the clinics and determine if the process is being followed. Identify an escalation process if it is not.

**Management Action Plan:** A meeting took place with the School of Dentistry infection control and compliance officers along with clinic coordinators for the departments utilizing controlled substances. The School of Dentistry and its clinical research sites now follow the current method of controlled substance disposal utilized by the University of Michigan Medical Center.

**Action Plan Owner:** Clinical Department Associate

**Expected Completion Date:** Completed

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

<b>12. Human Subject Incentive Payments</b>	<b>Medium</b>
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**Issue:** Oral Surgery does not always use the Human Subject Incentive Program (HSIP) Office to pay for research study participants and Visa gift cards used for participant payments were purchased with a P-Card.

**Risk:** Gift cards may be subject to misappropriation. Current practice is non-compliant with the University Standard Practices Guide. Applicable taxes may not be withheld from payments when necessary.

**Support:** Standard Practice Guide Section 501.07-1, *Research Subject Incentives*, requires that all human subject payments be requested from HSIP. Over \$1,300 in Visa gift cards for human subject payments were purchased over two months from a retail store using a P-Card. While the Principal Investigator stated on the Institutional Review Board approved research study application that Visa gift cards issued by HSIP would be used, he did not notify the HSIP of his study as required.

**Recommendation:**

- Do not make human subject incentive payments outside of HSIP.
- Notify HSIP of this particular study.
- Assign someone from the School's Office of Research to review all current studies with human subjects research to validate payments are made through the HSIP. Notify HSIP of those that are not compliant.

<b>12. Human Subject Incentive Payments</b>	<b>Medium</b>
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- Assign someone from the School's Office of Research to periodically remind faculty of University policies related to the use of human subjects.

**Management Action Plan:**

1. The PI has confirmed that the study in question is no longer recruiting patients and no remaining Visa Gift cards exist. The PI has contacted the Research Finance Program Manager HSIP of this particular study and has sent a message to all department faculty and to the department study coordinator reminding them of the requirement for HSIP involvement in any study using incentives from University funds.
2. The School recognizes the importance of compliance with HSIP human subject payment procedures. The Office of Research will convene the appropriate people to review current process and determine best practices to remind faculty involved in human subject payments of proper HSIP procedures.

**Action Plan Owners:**

1. Associate Professor of Dentistry, OSHD (4/24/2014)
2. Associate Dean for Research and Research Training

**Expected Completion Date:** September 2014

<b>13. Conflict of Interest and Conflict of Commitment</b>	<b>Medium</b>
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**Issue:** School administration provides insufficient oversight of the Conflict of Interest and Conflict of Commitment (COI/COC) disclosure process.

**Risk:** COI/COC may not be identified resulting in non-compliance with federal and state laws, and University policy.

**Support:**

- While the School does have a staff COI policy and a faculty COI policy approved by the Provost, School Administration was unaware of that policy. Additionally, a new policy has been written and is being used but has not been approved by the Provost.
- Follow-up with departments on uncompleted COI disclosures is ineffective and time consuming. Despite repeated follow-up, there are still 16 faculty and staff who have not completed their fiscal year 2013 disclosures, which were due on July 31, 2013.
- There is no process to verify department chairs have created management action plans when necessary. While the School's approved COI/COC policy states that all plans must be reviewed with the Senior Associate Dean annually, this was not occurring.

**Recommendation:**

- Determine whether the approved COI policies are sufficient. If not, send updated policies

<b>13. Conflict of Interest and Conflict of Commitment</b>
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<b>Medium</b>
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to the Provost for approval.

- Enforce current policy until changes have been approved by Provost.
- Conduct annual disclosures in conjunction with annual performance reviews to streamline the process.
- Have Human Resources track the annual disclosures and follow up as necessary with department managers. This should be limited, as all employees should be receiving annual evaluations and therefore, should be disclosing.
- Determine an escalation process for dealing with faculty and staff that are not compliant.

**Management Action Plan:** Human Resources and Compliance will review policies previously approved by the Provost and revise as necessary. The revised policy will be sent to the Provost for approval and education on the revised policy will be done after posting the policy.

We have begun discussions around conducting the annual COI disclosures in conjunction with the annual performance reviews. One area of concern is the incongruent timeframe for completing disclosures (July – August) and completing annual reviews (May – June). We will consider ways to adjust the performance review process and forms to include COI disclosure: changing our performance review forms to include prompts for supervisors to ask about potential COI, incomplete or missing disclosures, and determine if a management plan is needed.

Our Human Resource Service Center reviews performance review documents. If any of these documents indicates that a potential conflict exists or that a management plan is required, the Human Resources Service Center, in conjunction with the Compliance Officer, will work with the supervisor to ensure that an appropriate management plan has been developed and is on file.

We will collaborate with campus Human Resources and the Office of the General Counsel to identify appropriate sanctions for non-compliance with the University and School's disclosure requirements and will subsequently include an escalation process in our COI disclosure workflow.

**Action Plan Owner:** Compliance Officer

**Expected Completion Date:** September 2014

<b>14. Nepotism</b>
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<b>Medium</b>
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**Issue:** Departments do not consistently identify and manage instances of nepotism. Some required management plans have not been created; others are in place, but are not reviewed or updated annually.

**Risk:** Supervisors may not be able to maintain objectivity in their working relationships, leading to favoritism or discrimination. Individuals may be hired that are not qualified to perform their job responsibilities.

<b>14. Nepotism</b>	<b>Medium</b>
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**Support:** As part of the Human Resource Service Center checklist for recruitment of all employees, departments are responsible for identifying if candidates are related to anyone working in the School of Dentistry prior to hire. Departments are not held accountable for their lack of identification and management of known instances.

A review of current employees, including temporary employees, identified 68 instances where 2 or more employees share the same address and 263 instances where 2 or more employees share the same last name (these were not further reviewed for false positives). Review of the supervisors of the identified employees revealed that there were at least two instances where employees with the same address and last name had the same supervisor without a management plan on file.

There are approximately 25 management plans on file for nepotism. Of these, over 15 are outdated and 7 were approved after documentation was requested by University Audits. Not all were signed by the employees.

Compliance with University Standard Practice Guide Section 201.23 relating to nepotism is required. The School is also guided by conflict of interest and commitment policies, including nepotism, for faculty and staff that are on file with the Office of the Provost.

**Recommendation:** Reeducate staff on their responsibility to identify and report instances of nepotism. Develop and document a central monitoring process to review for compliance with nepotism policies. Include steps to verify, at least annually, that management plans are current and complete (e.g., required signatures), and departments are managing employees as outlined in the plans.

**Management Action Plan:** The Human Resources Director will reeducate staff on their responsibility to identify and report instances of nepotism. A central monitoring process will be developed and documented to review for compliance with nepotism policies. Steps will verify, at least annually, that management plans are current and complete (e.g., required signatures) and departments are managing employees as outlined in the plans.

The Human Resources Director will develop a semi-annual administrative review and report for departments. The Human Resources director will meet with department chairs and department administrators to review the report and gaps: The bi-annual review/report will include: 1. Nepotism and COI/COC Management Plans; 2. Additional Pays subsequent to the Annual Salary Program; 3. Staffing Changes; 4. Personnel Issues; 5. Professional Development/Staff Engagement; 6. Human Resources Quality/Service Transaction Report and Feedback.

**Action Plan Owner:** Human Resources Director

**Expected Completion Date:** January 2015



<b>15. Procurement Expenses</b>	<b>Medium</b>
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**Issue:** Departmental review of procurement expenses, including those for travel and hosting, does not consistently verify expenses comply with procurement policies before approval.

**Risk:** Purchases may not be compliant with the University Standard Practice Guide and other funding source requirements (e.g., for purchases of alcohol), which results in the reimbursement of inappropriate expenses.

**Support:** Of the 35 transactions sampled, the following were noted:

- Lack of receipts and other supporting documentation, including pre-approval for business class flights
- Inaccurate per diem calculations; per diems were paid for meals that were provided
- Lack of itemized receipts or lists of attendees for hosting meals
- Gifts for graduates are not compliant with University SPG Section 501.12, *Awards, Gifts, and Prizes*, or tax policy
- Use of inaccurate exchange rates for foreign transactions
- State sales tax paid (the University has tax-exempt status)
- Use of alternative travel sites (e.g., Expedia) without support that it was the cheapest option
- Receipts containing full credit card numbers
- Purchases of office supplies from non-strategic vendors
- P-Card used for purchases from a strategic vendor

**Recommendation:**

- Reeducate department personnel responsible for preparing, reviewing, and approving expenses to verify expenses are compliant with University SPG, specifically Section 507.01, *General Policies and Procedures* and Section 507.10-1, *Travel and Business Hosting Expenses Policies and Procedures for Concur Users*.
- Implement a School-wide, aggregate review of expenses by the Director of Budget and Financial Planning to identify trends, areas for cost savings, and assist departments in their efforts.
- As a best practice, include supporting documentation for conferences or other kinds of travel to calculate per diems accurately.
- Designate and communicate to departments the appropriate senior University official responsible for pre-approving all business class travel expenses.
- Consider developing a Dentistry gift policy that details the use of appropriate funding sources, purchase amount thresholds, pre-approval expectations, and reporting requirements (e.g., PeoplePay forms, financial aid).

**Management Action Plan:** The list of P-Card holders along with their delegates and approvers will be updated. The Interim Director of Budget and Finance will forward to each delegate and approve the links to SPG Sections 507.01, 507.10-1, and 501.12. Audit support will be discussed

<b>15. Procurement Expenses</b>	<b>Medium</b>
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with School of Dentistry Department Administrators.

Department Administrators will remind faculty P-Card holders of travel and hosting rules and limits. The majority of reimbursements and faculty P-Card reconciliations are completed by the Accounting and Procurement Service Center staff. All audit findings and recommendations were reviewed with Service Center staff. The Director of Budget and Finance will review and analyze School of Dentistry spending. The Director of Budget and Finance will follow up with communication of recommendations regarding more appropriate procurement choices when appropriate. Communication will include a reminder of shared Google.doc "Purchasing Best Practices." The Director of Budget and Finance will determine who is the appropriate higher-level administrative person to pre-approve business class travel. This information along with the rules for business class travel will be communicated to all Department Administrators, P-Card holders, and Concur delegates.

A School of Dentistry Gift Policy will be developed by the Director of Budget and Finance or designated staff. The policy will include appropriate funding sources, purchase amount thresholds, preapproval expectations, and reporting requirements through PeoplePay or financial aid. The policy will be shared with all School of Dentistry department administrators and saved in a shared file location for future reference.

**Action Plan Owners:** Interim Director of Budget and Finance; Director of Budget and Finance (TBN)

**Expected Completion Date:** October 2014

<b>16. Segregation of Duties</b>	<b>Medium</b>
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**Issue:** There is a lack of segregation of cash handling in the Continuing Dental Education (CDE) office.

**Risk:** Cash paid on the day of a CDE event may be misappropriated. Without an accurate list of attendees, cash reconciliations may not detect misappropriation.

**Support:** CDE programs are typically one to five days in length. A single staff member is assigned to oversee a CDE course, process cash payments on the day of the event, update the registration list to reflect the new attendees, and process the course completion certificates, which could result in an additional attendee going unnoticed.

**Recommendation:** Segregate responsibility for same-day event payments, cash deposits for the event, and updating of the registration list for that event. The Director of Finance could provide oversight.

**Management Action Plan:** It has been rare to receive cash payments on the day of a CPE event.

<b>16. Segregation of Duties</b>	<b>Medium</b>
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As of May 1, 2014, we will no longer accept cash on the day of a CDE event.

**Action Plan Owner:** Executive Director of Alumni Relations and Development

**Expected Completion Date:** May 2014

<b>17. Leased Space Agreements</b>	<b>Medium</b>
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**Issue:** Dentistry Budget and Finance staff are not sufficiently monitoring leased space agreements to ensure they remain current.

**Risk:** Without a current contract, the University may be responsible for claims, expenses, damages, or fines associated with staff and students practicing at offsite locations and leased space under expired agreements. Students may not receive adequate training or clinical exposure to complete their curriculum requirements.

**Support:** There are nine active lease agreements. Of these, at least one lease agreement is expired. Leased space agreements exist primarily for research efforts and are managed and tracked separately from service agreements.

Lease agreements should clarify matters such as:

- Legal liability
- Insurance requirements
- Confidentiality of client/patient information

**Recommendation:** Develop and document a process or schedule that allows for proactive review of agreements by all necessary stakeholders (e.g., Office of General Counsel) and includes escalation procedures to ensure there is no lapse in coverage.

**Management Action Plan:** The lease agreement for the one missing location was obtained when the question was raised regarding School of Dentistry lease agreements. A schedule is currently in place that includes the lease start date and end date. Budget and Finance staff will review and follow up on any expired lease or other information on a semi-annual basis.

**Action Plan Owner:** Interim Director of Budget and Financial

**Expected Completion Date:** Completed

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

<b>18. Service Agreements</b>	<b>Medium</b>
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**Issue:** Community and Outreach Program staff are not sufficiently monitoring service agreements to ensure they remain current.

<b>18. Service Agreements</b>	<b>Medium</b>
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**Risk:** Without a current contract, the University may be responsible for claims, expenses, damages, or fines associated with staff and students practicing at offsite locations and leased space under expired agreements. Students may not receive adequate training or clinical exposure to complete their curriculum requirements.

**Support:** There are 33 active service agreements. Of these, 5 service agreements are expired.

The School of Dentistry has agreements with offsite locations as part of the Community Based Dental Education and Community Outreach Programs to allow fourth-year dental hygiene undergraduates and graduate residents to gain practical dental experience serving in communities as part of their learning curricula.

Service agreements should clarify matters such as:

- Legal liability
- Insurance requirements
- Confidentiality of client/patient information
- Confidentiality of student records

**Recommendation:** Develop and document a process or schedule that allows for proactive review of agreements by all necessary stakeholders (e.g., Office of General Counsel) and includes escalation procedures to ensure there is no lapse in coverage.

**Management Action Plan:** The temporary lapse was because the Office of the Vice-President and General Counsel were updating our service agreement with the current language used by UM. There was concern by the General Counsel's Office regarding School credentialing facility dentists as Adjunct Clinical Lecturers. This issue was resolved in January 2014. The Community-Based Dental Education office keeps a spreadsheet of all current service agreements listing the facility, city, and expiration date. The service agreement is owned and updated by the CBDE Administrative Specialist and is shared with the Assistant Dean for CBDE and the Administrative Assistant.

**Action Plan Owner:** Assistant Dean for Community-Based Dental Education

**Expected Completion Date:** Completed

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

<b>19. Internal Control Gap Analysis</b>	<b>Medium</b>
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**Issue:** There is insufficient oversight of the annual internal control gap analysis process, resulting in inaccurate and incomplete department responses.

<b>19. Internal Control Gap Analysis</b>	<b>Medium</b>
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**Risk:** School Management may make decision based on inaccurate information.

**Support:** The School is decentralized and in fiscal year 2013 reliance was put on the departments to verify they had the required controls in place. Each department's completion of the gap analyses help School Administration gain comfort that controls are in place. There are ten gap analyses that can be completed but not all tasks in a gap analysis are performed by each department. To minimize the amount of time departments spent completing the gap analyses, the determination of which gap analyses were applicable to each department was made centrally.

Several fiscal year 2013 gap analyses submitted by departments were incomplete or inaccurate.

- P-Card Gap Analysis: 2 of 15 departments did not complete their assigned P-Card gap analysis.
- Cash/Checks: 5 of 17 departments did not complete their assigned Cash/Check gap analysis.
- Credit Cards: 3 of 10 departments did not complete their assigned Credit Card gap analysis.

For at least two of the gap analyses, the designation of "Not Applicable" was inaccurate.

- 1 department with P-Cards identified the P-Card gap analysis as "not applicable" to their department.
- 1 department was providing gift cards to human subjects, but identified the Gift Cards gap analysis as "not applicable."

**Recommendation:**

- Require departments to verify applicability of each gap analysis to their department.
- Educate each department manager on the process to complete the gap analysis.
- The Director of Finance should review the department responses timely, for reasonableness and completeness. Compare information from the departments to known information (e.g., departments with P-Cards should not identify the P-Card gap analysis as "Not Applicable") and follow up on discrepancies.
- Work with departments to address identified gaps in controls.
- Consider requiring departments to complete annual internal control sub-certification.

**Management Action Plan:** The Director of Budget and Finance will begin the Gap Analysis process with a completion date of mid-September in mind. The Director of Budget and Finance will determine which sections of the Gap Analysis must be prepared by each department. Department Administrators will be notified in early August that they should begin working on the responses to the Gap Analysis sections that apply to them. Opportunity will be given for Department Administrators to meet with the Director of Budget and Finance to go over any questions or concerns regarding their response to the Gap Analysis sections. A due date of August 31 will be requested for the completion of the Gap Analysis. In early September, the responses will be reviewed and the Manager for Finance will follow up with any department manager that has not

<b>19. Internal Control Gap Analysis</b>	<b>Medium</b>
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completed the requested sections of the Gap Analysis or who has indicated internal control gaps that need to be addressed. The Director of Budget and Finance will review all responses before recommending sign off by the Dean. This timetable, opportunity for one-on-one meetings and follow-up should allow for the Internal Control Gap Analysis to be completed accurately and in time for the Dean's signature at the end of September.

The School of Dentistry Director of Budget and Finance and the Manager of Finance will evaluate and consider the implementation of annual internal control sub-certification.

**Action Plan Owners:** Interim Director of Budget and Finance; Director of Budget and Finance (TBN)

**Expected Completion Date:** September 2014

<b>20. Travel Registry and Policy</b>	<b>Medium</b>
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**Issue:** Individuals travelling internationally are not consistently registering with the University Travel Registry.

**Risk:** Faculty, staff, or students may find themselves in situations that require University support to ensure their health or safety. Without accurate information in the Travel Registry, it may be difficult for the University to properly assist individuals and in a timely manner.

**Support:** Foreign travel expenses for faculty and staff were approximately \$200k for fiscal year 2013.

The School of Dentistry policy on international trips requires that School-sanctioned trips be reviewed and approved by the Global Oral Health Initiatives Advisory Group.

Written communication and verbal information from the Director and Assistant of the School's Global Oral Health Initiative is used to inform travelers about the requirement to register with the Travel Registry, obtain travel insurance, and have updated vaccinations and travel documents. In a sample of 10 individuals that were required to register their travel with the University Travel Registry, 6 did not register.

**Recommendation:** Reeducate individuals, particularly those with responsibilities for booking travel, that all international travel for University business must be registered in the University Travel Registry. Periodically verify that employees with charges for foreign travel in expense reports (e.g., airfare) are appropriately registered and send reminders to individuals who are not in compliance. All faculty time away should be preapproved by their Department Chair.

As the Global Oral Health Initiatives Advisory Group restructures and begins meeting regularly, they should review online content and School travel policies to ensure requirements are up-to-

<b>20. Travel Registry and Policy</b>	<b>Medium</b>
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date, review and approval are consistently documented, and the information is communicated to faculty, staff, and students. All international student travel should be preapproved by the Advisory Group. As part of these policies, consider adding information regarding safety, funding, and the University's requirement to register University-related international travel.

**Management Action Plan:**

1. Yearly notification will be sent by the Director of Global Oral Health Initiatives to students, staff, or faculty who plan travel of registration requirements and the website.
2. All students, staff, and faculty are required to enter their travel in the School's Time Away system. If international travel is required for conferences or consulting, they are required to select the International Travel box. A link to the Global Michigan Travel Registry is provided. Email is automatically sent to approvers who can verify that the registration has occurred.
3. Training Grant mentors and trainees will receive information regarding the University Travel Registry through an email, orientation information will be updated with the information, and when trainees inquire about travel through the Office of Research they will be informed of the University Travel Registry requirement.

**Action Plan Owners:** Associate Dean for Faculty Affairs and Institutional Effectiveness; Director of Global Oral Health Initiatives; Associate Dean for Research and Research Training

**Expected Completion Date:** June 2014

<b>21. Cash Handling and Depository Training</b>	<b>Medium</b>
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**Issue:** No one is verifying employees have completed required training prior to handling cash, processing credit cards, or making cash deposits.

**Risk:** Misappropriation of financial assets may go undetected.

**Support:** Payment for dental procedures can be made at the central information desks, as well as in a number of the School's specialty clinics. Cashiers in these locations are assigned change funds to use to process cash payments. In fiscal year 2013, the School of Dentistry deposited approximately \$12.2 million in cash, checks, and credit cards.

There are 23 employees who receive a change fund each day. A change fund allows them to process cash payments. Additionally, these 23 employees process credit card payments.

- 6 of 23 employees that handle cash did not complete the TME103 – Cash Handling Certification training.
- 20 of 23 employees that process credit cards did not complete the TME102 – Merchant Certification training.
- 3 of 23 employees responsible for depositing did not complete the TMT101 – Depository Certification training.

<b>21. Cash Handling and Depository Training</b>	<b>Medium</b>
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These training courses are required by the Standard Practice Guide.

This issue could have been self-identified during the internal control gap analysis process.

**Recommendation:**

- Cash bags are assigned by the Patient Billing Office. Bags should not be assigned until it is verified employees have completed all required training.
- Departments should review all employees who process credit cards and make deposits and verify they have completed all required training.
- Training should be completed by new hires with cash handling, credit card processing, and depository responsibilities.

**Management Action Plan:** The Department of Patient Services is aware of and acknowledges inconsistencies and concerns with the training and certification monitoring process. Because the individuals who require this training and subsequent certification report to different departmental administrators, the follow-up is not consistent.

A report will be run quarterly to review certification dates. When a request for MiDent access is submitted for new access or a change to access, the report will be run and reviewed.

As is currently done, before a new Bank ID is assigned to a staff person by the Manager of the Clinic Billing Office, proof of the certification must be provided to the Administrative Specialist in Patient Services.

As is currently done, before a cash bag is prepared and assigned to a staff person, proof of the certification must be provided to the Administrative Specialist in Patient Services.

Effective July 1, 2014, if a staff member has not been trained and certified as trained by the Treasurer's Office, access to MiDent will be end dated. A cash bag will not be issued to the staff member until certification is provided.

**Action Plan Owner:** Administrative Specialist, Patient Services

**Expected Completion Date:** June 2014

<b>22. Student Discount Eligibility Verification</b>	<b>Medium</b>
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**Issue:** School of Dentistry students and their family receive discounted services; however, clinics are not verifying student status prior to providing the discount.

**Risk:** Patients may be receiving discounts for which they are not eligible resulting in lost revenue for the clinic.



<b>22. Student Discount Eligibility Verification</b>
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<b>Medium</b>
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**Support:** Through discussion with clinic patient service staff, they do not verify a patient is an enrolled student prior to applying the discount to the procedures recorded in the patient's electronic file. In fiscal year 2013, there was \$53k in student discounts given.

**Recommendation:** Verify student and their family is eligible to receive discounted services prior to performing the dental procedures. Add this step to documented procedures and train the appropriate staff.

**Management Action Plan:** A review and update of the student and family discount plan occurred in February 2014. The procedures for the staff verifying student status are outlined in detail in the Information Desk folder in the school-wide shared drive. They require confirmation of student status. The supervisor will review these procedures with the Information Desk staff annually. The Patient Services Administrative Specialist will run a report at the end of each semester to verify scanned IDs match the code in the records. This will begin immediately. The patient student monitors will include this as part of their exit interviews with the graduating dental students to remove the student and family codes. The updated exit interview checklist will be used with the next graduating class (2015 winter semester).

**Action Plan Owner:** Clinic Services Manager, Patient Services

**Expected Completion Date:** Completed

*Auditor's Note: Completion of this action plan will be tested during the follow-up review.*

<b>23. Graduate Program Admissions</b>
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<b>Medium</b>
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**Issue:** Although there are established application requirements for each graduate program, the process for selecting qualified candidates for admission into some programs is undocumented.

**Risk:** Undocumented decision-making processes or selection criteria do not promote transparency, may result in inconsistent admissions, and is not efficient for continuity of operations. Independence of the selection may be compromised without procedures for handling conflicts of interest.

**Support:** There are 14 graduate programs. Each operates autonomously with their own managing director.

All programs have application requirements documented and posted on the School of Dentistry website.

Selection criteria or decision-making processes for admission are not documented for all graduate programs. Those that are documented have not been shared with the Associate Dean for

<b>23. Graduate Program Admissions</b>	<b>Medium</b>
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Academic Affairs.

According to the Associate Dean for Academic Affairs, the responsibility for managing graduate program admissions was not communicated to her when she assumed the position.

**Recommendation:** For each graduate program, document the process for selecting qualified applicants for admission (e.g., use of selection committee). Include instructions for handling potential and actual conflicts of interest (e.g., donor or faculty/staff relations). Password protect any spreadsheets used in the decision-making process, lock key cells, and limit access to make changes. All documented processes should be shared with the Associate Dean for Academic Affairs for periodic review and oversight.

**Management Action Plan:**

1. Graduate program directors have been asked to provide documentation of their admissions processes and selection criteria to the Associate Dean for Academic Affairs, no later than May 30, 2014.
2. These documents will be reviewed by the Graduate Program Directors committee to share best practices in the June 2014 meeting.
3. These documents will be stored in Academic Affairs shared drive.
4. Annually, at the beginning of the academic year, the Graduate Program Directors will be contacted to provide any updates or changes to these documents and processes.

**Action Plan Owner:** Associate Dean for Academic Affairs

**Expected Completion Date:** June 2014

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**General Laboratory Safety**

**2014-401**

Report issued July 2014

**A. Executive Summary**

**1. Overall Conclusion**

It is the University's legal and ethical obligation to provide employees and students with safe working conditions. Good science and safe lab practices are complements that strengthen the University's research and academic mission. A coordinated approach for laboratory safety, including strong executive support, is necessary to provide consistent direction and strengthen the safety culture.

Our review included Ann Arbor campus laboratories in academic and research settings that require chemical and other hazardous materials or equipment to conduct research and provide instruction. The audit excluded labs in clinical settings such as the hospital and labs located on the Dearborn and Flint campuses. Lab-intensive research or study involving areas such as animal research, recombinant DNA, radioactive materials, and

use of infectious agents have specific external regulatory monitoring, accreditation, and oversight at U-M and were not reviewed as part of this audit.

The scope of the audit was determined based on an assessment of the risks associated with general lab safety. This process included input from OSEH, UMOR, the Provost's Office, facility managers, research deans, lab managers, and principal investigators. The audit process involved reviewing OSEH policies and procedures, meeting with various stakeholders across campus to discuss safety, completing walkthroughs of a small selection of labs to observe the OSEH inspection process, and comparison with other select research institutions.

The report recommends that the University:

- Institute a campus-wide safety oversight process
- Strengthen lab safety education and monitoring of training programs
- Develop campus-wide registries for labs, chemicals, and equipment

Research and campus leadership proactively requested a review of research and academic general lab safety and the Department of Occupational Safety and Environmental Health's (OSEH) inspection process. General lab safety was reviewed and, overall we found a lack of robust accountability and governance structure. Because of the small sample of labs visited during the audit process, University Audits cannot draw conclusions on the adherence to general safety standards for campus labs. While we did not review all labs, discussions with significant stakeholders indicated labs could improve their general safety oversight to mitigate potential risk. Overall, the University needs a more coordinated effort to ensure uniform compliance with general safety standards.

The rapid growth in size and complexity of the laboratory environment within academia has increased the importance of preventing unsafe practices and serious accidents. While the U-M has not had a recent incident resulting in serious injury, accidents at other universities involving serious injuries and fatalities have resulted in substantial fines, penalties, reputational damage, and criminal prosecution. In addition, historical facility lab design and infrastructure does not always provide efficient means to be safety compliant under current regulatory requirements.

Opportunities for strengthening and improving general lab safety include:

- Senior leaders should make general laboratory safety a higher priority and set an institutional culture of safety
- Oversight and reporting of safety risks and deficiencies can be strengthened to be more cohesive and to insure that problems are fully addressed
- Accountability, authority, roles, and responsibilities can be more clearly defined
- Researchers and students can be trained to understand and practice industry-wide safety standards and to consistently adhere to those standards

- Communications can be improved and streamlined so that OSEH is always informed of lab hazards or involved with lab hazard management
- Increased education about requirements to use protective gear will help to ensure that researchers, students, and lab staff are fully aware of them and of the consequences of failure to comply with regulations
- Enhanced compliance monitoring tools, such as reports and training records, will help to identify training needs and thus, contribute to overall safety

Steps can be taken in the short term to improve the general safety in labs. However, instilling a University-wide culture of safety requires time, patience, and action from all levels of authority in the University.

## **2. Context and Key Risk Considerations**

The U-M conducts over \$1.3 billion dollars in annual research, with the majority (62%) coming from the federal government. Sponsored research funding has tripled over the last 20 years, reaching a point where the University's research portfolio is one of the largest in the country for a public university. To support the research and academic programs, the University has approximately 2 million square feet of lab space, which is a growth of 28% since 2005.

The University has not experienced any serious laboratory accidents or injuries in recent years. However, other research universities have experienced high profile lab accidents that resulted in severe injuries and fatalities.

In addition to the risk of injury or fatality, there are also many regulatory requirements that may result in fines or other adverse actions such as loss of research funding. Both federal and Michigan Occupational Safety and Health Administration (OSHA), require employers to furnish each employee with a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm. Many federal and state regulations that apply to research safety also apply to the University. A few examples include the U.S. Nuclear Regulatory Commission Byproduct license, National Institute of Health (NIH) and USDA laboratory animal safety requirements, federal and Michigan DOT regulations for hazardous material transport.

OSHA fines can range from \$1,000 for "other than serious violations" to \$500,000 plus six months jail for willful violations resulting in death. A willful violation is when the employer is aware a hazardous condition exists, knows the condition violates a standard or other obligation, and makes no reasonable effort to eliminate it.

OSEH is responsible for promoting health, safety, and environmental compliance at the Ann Arbor campus. It provides training and offers expertise on areas related to research such as physical, biological, chemical, and radiation safety. OSEH management has developed a lab inspection schedule and is empowered to shut down laboratories in cases of critical deficiencies. Critical deficiencies create unsafe conditions where there is

reasonable probability that, if allowed to continue, serious physical harm, fire, or significant environmental impact could occur. OSEH prefers to work in cooperation with lab managers, principal investigators, and others to resolve deficiencies. In cases where the researcher does not take corrective action, OSEH will escalate uncorrected deficiencies to the department chair and ultimately, the dean.

The University's Standard Practice Guide (SPG), Section 605.01, *Occupational Safety and Environmental Health Policy* was last updated in 1989. The policy holds "every faculty member and person in a supervisory position" responsible for safety in their labs. According to the policy, OSEH's role is to coordinate and assist in educating those working in labs about the standards applicable to the University associated activities and safety efforts. Additionally, OSEH's role is to provide advice, render service, investigate accidents, and maintain statistics related to occupational safety and health. The policy is not current with respect to the lab safety regulatory environment and technology, and does not effectively support a University-wide culture of safety.

University Audits focused on the overall laboratory safety culture and spent a significant amount of time discussing accountability with OSEH, U-M Office of Research (UMOR), researchers, facility managers, and lab managers. A consistent theme was that OSEH has dual and somewhat conflicting responsibilities: education and support for a safety culture, and enforcement of regulatory requirements. It lacks sufficient authority to bring non-compliant laboratories up to U-M standards. In addition, it would benefit from regular communication with deans and other academic leaders to encourage their support. In discussing accountability with other research institutions and reviewing an article on lab safety by the American Chemical Society<sup>8</sup>, the audit team found that a structure that may be more effective is a University-wide laboratory safety committee. Additionally, there are governance models currently in place at U-M such as the Radiation Policy Committee, Institutional Review Boards, Institutional Biosafety Committee, and University Committee on Use and Care of Animals that provide a model for accountability and enforcement.

Findings and observations for improvement are detailed in Section B of this report and are applicable to general biological and chemical lab safety. OSEH, UMOR, and the Provost's Office are collaborating to develop and implement corrective actions. University leadership is deeply committed to providing a safe work environment. Specific observations and recommendations for OSEH's internal operations are contained in a separate management advisory memorandum.

### **3. Audit Scope and Identified Risk**

See Executive Summary-Overall Conclusion for audit scope. The following table lists the key activities audited, along with the overall risk of the audit issues identified for each sub-activity.

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<sup>8</sup> *Creating Safety Cultures in Academic Institutions*: Copyright 2012

Key Activities Audited					
Governance		Oversight and Monitoring	Lab Population and Hazard Assessment	Training and Education	
Sub Activities Audited	Policies (Issue 1)	Escalation and enforcement (Issue 2)	Lab and hazards inventory (Issue 3)	Training records (Issue 4)	
	Roles and responsibilities (Issue 1)	School/unit safety structure (Issue 2)	OSEH guidance	Communication and awareness (Issue 7)	
	Culture of safety (Issue 1)	Safety coordinators (Issue 2)	Self-assessment tools	Collaboration with U-M research partners	
	Infrastructure priorities (Issue 1)	Monitoring reports and trends (Issue 5)		Standard operating procedures	
	Safety role definitions (Issue 6)	Inspection process		Training programs	
Key		High Risk	Medium Risk	Low Risk	

**Note:** Section B of this report (Audit Issues and Management Action Plans) provides details of the high and medium risk issues identified during the audit. Low risk issues were communicated directly to the unit management and are not included in the report. See Appendix I for risk definitions.

4. **Audit Objectives** The objective of this audit was to:
- Assess the research community awareness and compliance with state and federal regulations
  - Review safety compliance monitoring and oversight of the labs
  - Assess OSEH’s inspection and escalation process, the documentation of lab deficiencies, and OSEH’s policies and procedures
  - Review record keeping and reporting tools and assess communication effectiveness
  - Assess lab safety training programs and processes for tracking required training
  - Comparison of OSEH’s inspection process and available resources against similar research institutions

## B. Audit Issues and Management Action Plans

<b>1. Safety Culture</b>	<b>High</b>
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**Issue:** U-M lacks a robust integrated process to foster a safety conscious laboratory work

## 1. Safety Culture

High

environment.

**Risk:** Without a pervasive safety-conscious culture, safety may not be a high priority in all labs. Potential consequences include life-threatening injuries, regulatory non-compliance, harm to institutional reputation, facilities damage, legal liability, and monetary penalties.

### Support:

- SPG Section 605.01, *Occupational Safety, and Environmental Health Policy* has not been updated since 1989. There have been significant changes in the lab safety regulatory environment, technology, and laboratory-dependent research at U-M since that policy was written.
- Principal investigator responsibilities listed in the faculty handbook do not address lab safety.
- Historic lab design and existing facilities infrastructure does not always provide efficient means for researchers, students, and staff to be safety compliant. Administrative and non-lab functions are not always physically separate from hazardous lab work.
- Interviews with lab personnel, principal investigators, school administrators, and University leadership indicate that the University's laboratory and teaching environment does not consistently prioritize a safe work place. Some observations from our testing:
  - Researchers and lab managers were sometimes unaware and unconcerned about requirements to wear safety glasses or enforce eyewear policy.
  - Researcher and lab managers were observed not wearing other personal protective equipment (such as lab coats, respirators, or other protective gear) or enforcing students and staff wearing personal protective equipment.
  - Facility managers and OSEH noted instances of faculty stating nothing would be done if they failed to comply.

**Recommendation:** Senior leadership needs to set the tone that it is everyone's legal and ethical obligation to promote a safe work and educational environment. Administrators, the research team, and OSEH all play a part in supporting a safe and accountable laboratory work and teaching environment. Recommendations for strengthening the safety culture:

- A. University leaders should make general laboratory safety a higher priority and communicate the University's obligation to promote a safe work and educational environment.
- B. The University should prioritize and develop long-range plans for addressing lab design and infrastructure constraints.
- C. The SPG for *Occupational Safety and Environmental Health Policy* should be updated and contain interactive links to the OSEH website and other regulatory sources to keep guidance current.
- D. The University should review the following areas to determine the best approach for administering them in a manner that helps strengthen the overall safety culture at the

## 1. Safety Culture

High

University.

- a. Require periodic affirmation that administrators, principal investigators, and lab managers understand and comply with University and regulatory safety standards.
- b. Review the Faculty Handbook and clarify faculty responsibilities regarding safety.
- c. Determine the feasibility of updating position descriptions and performance evaluations of principal investigators, lab managers, and administrators that include safety as a responsibility.
- d. Develop a program to improve undergraduate students' understanding of lab safety and their responsibilities for a safe work environment where applicable.
- e. Develop a policy for payment of fines or other costs due to labs not following well-established precautions or clearly stated procedures.

### Management Action Plans:

- A. A strong safety culture will develop an understanding that every action taken or not taken may have safety implications and that these need to be included in the decision process. Senior leaders recognize the importance and obligation of the University to provide and promote a safe and healthy work and learning environment, as well as to promote a comprehensive research safety program. A statement to that effect will be written by the three executive vice presidents and the vice president for research and it will be communicated annually to every school and college.

**Action Plan Owner:** Vice President for Research

**Expected Completion Date:** December 2014

- B. Laboratory design at all research institutions has evolved considerably over the years, shifting from small standalone laboratory rooms with good separation of activities to large open bay labs with multiple researchers and a desire to have all activity centered around the laboratory bench area. Driven by safety considerations, the trend has now shifted back toward a medium point where open bay labs can still promote research cross-fertilization and provide separation from non-laboratory activities such as computer work or areas to conduct other business. The Architecture, Engineering, and Construction (AEC) team has already shifted design to the updated standard for the new Biological Science Building to include separation of work activities in the lab isolated by glass partitions. AEC's design guidelines for new labs and major renovations will be updated to reflect the evolving state-of-the-art infrastructure requirements.

**Action Plan Owner:** Associate Vice President for Facilities and Operations

**Expected Completion Date:** December 2014



## 1. Safety Culture

High

- C. A provisional draft of Standard Practice Guide Sections 605.01 and 605.02 will be available by December 31, 2014.

**Action Plan Owner:** Executive Director of OSEH

- D. A group will be established to review and make recommendations for addressing the issues of administration, faculty, and lab manager responsibilities for safety. The group will solicit feedback and guidance from the deans. Items to be considered include:
- Attestation of understanding about safety responsibilities
  - Clarification of faculty responsibilities for safety in the Faculty Handbook
  - Reviewing position descriptions and performance evaluations as they relate to general laboratory safety
  - Clearly stated process for assigning responsibility for payment of fines or other costs due to labs not following well-established precautions or clearly stated procedures
  - Develop a process to educate undergraduate students about their responsibilities to work safely in laboratories. This could include an orientation program on safe laboratory practices for all undergraduate students who will learn or work in a laboratory setting.

**Action Plan Owners:** Executive Vice Presidents for Academic Affairs, Business and Finance, Medical Affairs, and the Vice President for Research

**Expected Completion Date:** Preliminary plan by June 2015

## 2. Oversight and Monitoring

High

**Issue:** U-M does not have a University-wide oversight body and escalation process to promote lab safety and accountability. Additionally, lab managers and principal investigators lack consistent department-level structure to promote safety, communicate new initiatives and regulations, and proactively address risks.

**Risk:** The University is exposed to higher levels of risks when noted deficiencies remain uncorrected. OSHA fines can range from \$1,000 for “other than serious violations” to \$500,000 plus six months jail for willful violations resulting in death. A willful violation is when the employer is aware a hazardous condition exists, knows the condition violates a standard or other obligation, and makes no reasonable effort to eliminate it.

**Support:**

- OSEH has conflicting roles. It is charged with educating and supporting a safety culture. Additionally, it is responsible to help enforce state and federal safe workplace regulations.

## 2. Oversight and Monitoring

High

Enforcement responsibilities may hinder their efforts to educate and support a safety culture.

- OSEH's escalation policy is to contact the department chair when principal investigators fail to correct deficiencies. If still not corrected, OSEH escalates to the dean. There is no further action taken if the dean fails to act. OSEH's conflicting roles makes taking corrective action, except in cases of critical deficiencies, very challenging.
- The University Committee on Use and Care of Animals (UCUCA), the Radiation Policy Committee, and the Institutional Biosafety Committee have executive and regulatory drivers that enable them to successfully work with labs to implement corrective action. There is no corresponding University-wide model for general lab safety.
- Of the six labs sampled in the review, one department had established a safety committee. This particular lab has both a department-level safety committee and a college-level safety committee. OSEH is currently working with other departments and schools to establish such committees as a best practice.
- The safety coordinator is the appointed departmental contact for safety, health, and environmental issues of concern to OSEH. They have the responsibility to disseminate information from OSEH to department personnel, inform employees of changes to related practices, notify OSEH of known or potential issues, attend OSEH safety coordinator meetings, assist in the scheduling of OSEH services, and notify OSEH when principal investigators are setting up a new lab.
  - OSEH has established guidelines for the appointment of lab safety coordinators and their specific responsibilities. There were inconsistencies in what safety coordinators understood to be their responsibilities.
  - OSEH holds an annual meeting to inform coordinators of initiatives and updates to the program. Some coordinators fail to attend the annual meetings and one was unaware of holding the position of safety coordinator.

### Recommendation:

- A. Establish a University-wide Laboratory Safety Committee to provide oversight and promote safety. The committee should function similarly to other University regulatory structures like the Institutional Review Board and UCUCA including having faculty representation. The committee would work in concert with OSEH to implement enforceable corrective action for laboratories with serious or chronic lab safety issues. The committee should provide an annual assessment to senior management regarding the progress made in establishing a strong safety culture.
- B. Require schools or departments with labs to establish a safety committee to promote safety and educate staff members about safety, and meet regularly to discuss incidents and near misses to help proactively address risks. The College of Engineering and the Department of Chemistry have existing safety committees that may be a model for other schools and colleges to emulate.
- C. Formalize and empower the safety coordinators position to be active participants in helping the school or department safety committee drive the safety culture. Add safety

## 2. Oversight and Monitoring

High

coordinator duties to position descriptions and performance evaluations.

- D. Assist the schools and colleges in developing a structure for the safety coordinator positions and a reporting line to a position of authority.

### Management Action Plans:

- A. A Laboratory Safety Committee (LSC) will be established jointly by OSEH and UMOR to be structured and function in a similar mode as the Radiation Policy Committee. The LSC will review reports generated by OSEH, review policies and procedures for lab safety, and make recommendations for improvements and additions as needed. The LSC will also work with OSEH to implement enforceable corrective actions for laboratories with serious or chronic lab safety issues. The committee will report up to the University Research Oversight Committee (UROC) and provide regular reports on the progress made in improving the campus safety culture and on issues of concern.

The members of the faculty-led LSC will include UMOR, OSEH, chairs of the safety committees from the largest schools with laboratory research (Medical School, LSA, Engineering, Public Health, and Dentistry), one member who would represent other schools and colleges, and one member to represent research centers and institutes.

- B. In addition to the network of departmental lab safety coordinators already established by OSEH, each college, school, and all major research units with laboratories will be required to establish a unit-level laboratory safety committee, with the committee developed by the College of Engineering acting as one possible model. Small research units or departments may collaborate to establish shared, unit-level laboratory safety committees.

The LSC will work closely with OSEH to disseminate information through the unit-level safety committees and the safety coordinators to inform lab personnel of changes to related practices.

- C. The LSC will develop the charge for the unit-level safety committees and create position descriptions, standard operating procedures, and performance evaluations for the safety coordinator positions.
- D. Units will be required to provide information about reporting lines and local oversight authority for the safety coordinators.

**Action Plan Owners:** Executive Director of OSEH and the Associate Vice President for Research-Policy and Compliance

**Expected Completion Date:** Implementation and appointment of the LSC by December 31, 2014, with full implementation of unit-level safety committees and formalized job descriptions, standard operating procedures, and reporting lines for the safety coordinators by June 2015.

## 3. Defining the Lab Population and Identifying Hazards

High

**Issue:** The University does not maintain an accurate centralized inventory record of laboratory

### 3. Defining the Lab Population and Identifying Hazards

High

locations, potential hazards, required safety equipment, and required safety training for personnel.

#### Risk:

- The University cannot provide assurance that all labs are identified, inspected, and deficiencies are addressed.
- The University lacks a central system to consistently identify quantities and specific locations of some hazardous materials, which impacts the effectiveness of outreach and education efforts.
- A lack of complete and accurate inventory records impedes lab safety inspectors' ability to identify potential hazards and assess risks.
- Regulatory reporting of certain hazardous materials may be incomplete.
- There may be redundant acquisition of costly safety equipment that could be shared with nearby labs.

#### Support:

- OSEH has not completed a risk ranking on all identified labs with hazardous materials. Per OSEH, the goal is to complete the process by June 2015.
- OSEH has not performed inspections of all labs within the timeframe outlined in their *Laboratory Risk and Safety Inspection Performance* document. The data shows OSEH has inspected labs known to have the highest risk of hazards according to the plan, but has completed inspections of less than 50% of potentially lower risk labs.
- Based on our discussions with OSEH, the current University space inventory process is not precise enough to meet OSEH's specialized lab identification requirements. OSEH noted that the survey has instances where space identified as labs are actually closets, empty rooms, and computer labs. Facility managers and OSEH indicated that they were not always informed when a new lab was commissioned. During a lab visit, the auditor observed OSEH discovering a new lab that was not on their list of active labs.
- Labs are required to document hazardous chemicals used in their operations as part of their chemical hygiene plan, but not required to send the information to OSEH. Having a central location for chemicals in use is valuable for informational and educational purposes. It is also vital when U-M needs to alert researchers to an incident involving a specific chemical or category of chemicals.

#### Recommendation:

- A. OSEH should complete the lab ranking process and assess resources to facilitate completion of inspections in accordance with their planned inspection schedule.
- B. Investigate options for collecting and managing vital information about lab space, lab employees, chemical inventory, biohazards, equipment, and other hazards. Solutions could exist with existing systems, (e.g., Geographic Information System) or a commercially available laboratory database.

### 3. Defining the Lab Population and Identifying Hazards

High

When a management system is implemented, require principal investigators and lab managers to provide regular updates of information into the software package or database.

- C. Establish a University-wide lab commissioning process similar to the lab decommissioning process.
- D. To make the chemical inventory databases operated by OSEH fully functional, require labs to assign their responsibility centrally in the department or unit. Alternatively, labs should individually update their list of hazardous materials in the database when completing annual inventories.

#### Management Action Plans:

- A. OSEH has initiated a process where laboratories are categorized based upon risk, running from a Lab Hazard Rank (LHR) 0 with no risk up to LHR 4, which is a high hazard risk based upon materials, processes, or research being performed. The frequency goal for LHR 4 labs is to be inspected every 6 months, LHR 3 every year, LHR 2 every 18 months, and LHR 1 every 2 years. The overall goal is to better utilize limited OSEH resources by applying them to the highest risk operations on campus. Initially all lab spaces identified in the University Space Inventory (7,311 rooms) have been assigned into the LHR 3 category because most of the risk on campus does fall into this grouping. By March 2015 all labs will have been visited and stay as ranked or be moved to the appropriate LHR categories.

OSEH will assess staffing levels in the laboratory safety program, based on the LHR process, to meet the established inspection schedule. The assessment will be completed by June 2015 to insert budget initiatives into the fiscal year 2017 budget cycle.

- B. As part of the IT governance process, a proposal was submitted to the Administrative Domain Advisory Committee on May 20, 2014, for IT support to assess the feasibility of creating a comprehensive management information system to collect and manage laboratory information across campus. Representatives from the Provost's Office, UMOR, academic units, and other administrative areas vote on these proposals to allocate workload in ITS.
- C. Once notified about new labs, OSEH works with new principal investigators to assist them in setting up their safety programs. OSEH will work with UMOR and the Provost's Office to establish a consistent, University-wide process of notifying OSEH whenever a new lab is brought on line or an existing lab undergoes major renovations in order to perform a commissioning of the operations. This process will be established by March 2015.
- D. Laboratories have been required to maintain chemical inventories as part of their Chemical Hygiene Plan for several decades. The inventories have been available for use by staff in the labs, but were not centralized or in a consistent format for use by OSEH. The Department of Chemistry has operated a functioning central chemical inventory system for

### 3. Defining the Lab Population and Identifying Hazards

High

many years with the support of the OSEH department. In 2009, OSEH determined a need for a central system to cover the other parts of campus, went through the purchasing process, selected and implemented use of the web based Environmental Health and Safety Assistant (EHSA). The inventory management system has been implemented, but there is no mandate that everyone must use EHSA.

OSEH will review the use of the Chemistry system and the EHSA system for managing chemical inventories across campus and will work with UMOR and the Provost's Office on the best method to require laboratories to use and maintain their inventories in either of the two systems by December 2014.

**Action Plan Owners:** Executive Director of OSEH and Assistant Vice President for Research-Regulatory and Compliance Oversight

### 4. Training and Education

Medium

**Issue:** OSEH provides effective training programs based on the type of lab environment, but the University does not have an effective way to monitor that all lab personnel, visiting scholars, guests, or other personnel have taken required training.

**Risk:** Lab personnel, visiting scholars, guests, and students may lack appropriate training. Potential consequences include life-threatening injuries, regulatory non-compliance, facilities damage, legal liability, and monetary penalties.

**Support:**

- OSEH uses the University's MyLinc database to offer and document lab staff training.
- MyLinc has several shortcomings that do not address regulatory compliance training needs.
  - MyLinc does not provide principal investigators, lab managers, and facility managers the ability to filter records to view their staff's safety training records in MyLinc.
  - Not all annually required safety-training classes maintained in MyLinc are programmed to send out reminders.
- OSEH does not have a complete record of safety training completed by laboratory personnel. Information about training taken outside of MyLinc is not always updated in MyLinc (e.g., Global Harmonizing System (GHS) Training).
- The audit noted gaps where required training was not taken. Seven out of 43 lab staff from the sample of six labs reviewed had not taken the required GHS training. Of the seven, two are principal investigators and two are lab managers.
- Labs do not have a consistent approach for new employee orientation that emphasizes safety training.
- Many corporations report the need to retrain researchers and graduates on safety because academia has not stressed this value.

#### 4. Training and Education

Medium

##### Recommendation:

- A. In the short-term, work with Information Technology Services (ITS) so annual reminders will be sent to employees for required classes in MyLinc. Document all required lab safety training using the MyLinc system regardless of where the training was received, so a student or employee has one source for training records.
- B. In the long-term, OSEH, principal investigators, lab managers, and facility managers need one comprehensive system that will manage, track, and report on student and employee safety training. OSEH, ITS, and UMOR management should assess whether the current training platform, MyLinc, can support this or if other solutions are required.
- C. All labs should have an orientation that documents the risks, protective equipment, and training requirements for anyone accessing the lab.

##### Management Action Plans:

- A. OSEH has completed this task for mandatory, annual training requirements.
- B. Safety training for research staff and students is provided by various groups at the University including OSEH, UMOR, Unit for Laboratory Animal Medicine (ULAM), University Hospital System, internal lab-specific training by the principal investigator, and external training through professional organizations. The OSEH, UMOR, ULAM, and Hospital training is managed using two primary systems – MyLinc and MLearning (MLearning data is in the process of being switched to a third system). Discussions regarding upgrading the training management system for employees have been underway for several years between University Human Resources (UHR) and ITS but it has not risen to a high priority against all of the other IT systems on campus. Business and Finance agrees with the goal of creating one system used by everyone at the University, and will work through ITS and UHR as the business owner for employee training management to support it becoming a U-M priority in the IT governance process. Facilities and Operations will resubmit the project to ITS for reprioritization by December 2014.
- C. OSEH will work with Provost's Office and UMOR to develop and implement an orientation program that can be used by principal investigators or lab managers to inform both workers and visitors in the lab of the risks and requirements. Part of the orientation for new lab workers will include completing the training needs assessment tool to determine which courses individuals need to complete prior to working in the lab. In addition, a simplified safety orientation will be required for all undergrad lab activities involving hazardous materials or processes. This program will be implemented by June 2015.

**Action Plan Owners:** Executive Director of OSEH and Assistant Vice President for Research-Regulatory and Compliance Oversight



## 5. Monitoring Reports and Trend Analysis

Medium

**Issue:** OSEH is not communicating full inspection results to school or unit leadership. Further, OSEH does not provide an analysis of safety trends to the wider University community.

**Risk:**

- Senior leaders may not fully understand the complete picture of lab safety issues and trends in their units.
- Senior management and OSEH partners like UMOR, Risk Management, and other interested parties currently lack sufficient information about safety trends that will help them drive a safety culture.

**Support:**

- For each lab inspected, OSEH provides the principal investigator and lab manager with a report detailing deficiencies and required corrective action. This information is not reported to the deans, research deans, or facility managers who may be able to use this information to change the safety culture of their organization.
- OSEH sends an annual memo to each dean summarizing the number of rooms inspected, number of critical deficiencies found, the number of corrective action plans submitted, and a detailed list of rooms that have not corrected their deficiencies. The memo does not provide trend analysis for their particular school.
- Facility managers, research deans, and UMOR expressed interest in receiving more detail on all deficiencies and an analysis of trends across individual schools and research units.

**Recommendation:**

- A. OSEH should assess the reporting needs of their constituents including the provosts, deans, research deans, facility managers, Risk Management, and UMOR. Based on the analysis, provide multi-tiered reports geared to the various audiences.
- B. Complete periodic trend analysis and root cause analysis, and report results University wide via newsletters, the OSEH website, and other appropriate venues.

**Management Action Plan:**

- A. OSEH will investigate the types of trend analysis that can be performed from the data available, and will prepare a draft report template to share with constituents as a model of the type of information that can be reported on an annual basis. The challenge is to provide relevant information. OSEH will work with appropriate offices to determine venues and types of information that can be broadly shared. Information gathering will be complete by March 2015 in order to begin providing the reports to constituents by June 2015.
- B. OSEH will investigate the types of trend analysis that can be performed from the data available. Root cause analyses are already performed on major lab safety incidents. OSEH will work with appropriate offices to determine venues and types of information that can be broadly shared. The trend data sharing will be in place by June 2015.



<b>5. Monitoring Reports and Trend Analysis</b>	<b>Medium</b>
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**Action Plan Owner:** Executive Director of OSEH

<b>6. Safety Role Definitions</b>	<b>Medium</b>
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**Issue:** Roles are not defined for the groups and individuals responsible for lab safety at the University.

**Risk:** There may be a duplication of effort or requirements missed due to lack of defined responsibilities.

**Support:**

- Conversations with OSEH partners such as UMOR and facility managers noted areas of confusion between the groups as to expectations and responsibilities.
- OSEH partners rely on OSEH guidelines as guidance. Acceptable variances or alternative methods of compliance to established standard operating procedures are not always clearly identified.
- Roles are not clear with affiliated activities. Examples include but are not limited to:
  - U-M leased space from private industry
  - University space being utilized without a lease or contract.
  - Joint ventures
  - Non U-M employees working in U-M labs

**Recommendation:**

- A. Formalize roles and responsibilities for groups and individuals engaged in providing a safe laboratory work environment to reduce potential for duplicated effort or confusion over responsibilities. Stakeholders include but are not limited to UMOR, facility managers, research deans, unit safety committees, safety coordinators, Institutional Biosafety Committee, Institutional Review Board, UCUCA, and ULAM.
- B. Review the OSEH guidelines to confirm they are up-to-date. Additionally, highlight procedures that are authorized variances to regulated procedures.
- C. The University should establish contractual arrangements with affiliated activities that include safety responsibilities.

**Management Action Plans:**

- A. OSEH and UMOR will establish a document that defines the roles of each stakeholder in the campus safety environment related to laboratory safety. This document will be vetted with executive officers for formal adoption, and will be used as the basis for reviewing and updating various safety and health policies and guidelines. The assessment will be completed and the document will be drafted by October 2014 and be ready for formal adoption by December 2014.
- B. OSEH will begin the process of evaluating and updating OSEH guidelines and policies once the formal adoption of the safety roles has been completed and will have all OSEH

## 6. Safety Role Definitions

Medium

guidelines updated within six months of beginning the process. Tentatively, based on the timeline in the first recommendation above, this effort will be completed by June 2015.

- C. The work under this recommendation is related to contractual agreements governing how we use laboratories in relation to outside entities. This effort will require engagement of Office of General Counsel in developing standard contract language including compliance oversight as a first step. The second step will require a leadership-driven process to make the use of the language mandatory among all University entities entering into such agreements.

**Action Plan Owners:** Executive Director of OSEH, and Assistant Vice President for Research-Regulatory Compliance and Oversight

**Expected Completion Date:** July 2015

## 7. Communication and Awareness

Medium

**Issue:** Although OSEH provides robust safety training and guidance, the methods of communicating requirements for lab safety are not always effective.

**Risk:** Important information is not reaching lab personnel regarding regulatory requirements, OSEH programs, and resources available to provide for a safe work environment.

**Support:** OSEH management has put a significant amount of effort into educating the research lab community on regulatory requirements and changes in OSEH inspection procedures. However, some lab staff members were not aware of specific OSEH programs and regulatory requirements. The following are some examples of OSEH programs where lab managers and staff lacked awareness:

- OSEH has a Safety First Recognition Award program
- OSEH has a prescription safety eye protection program
- Blood borne pathogen training is an annual requirement
- Personal protective equipment is required to be worn in the labs at all times
- Food and drink are not allowed in any lab at any time
- The University Compliance Hotline can be used to anonymously report lab safety concerns

### Recommendation:

- Collaborate with UMOR's Communication Director or other campus communication resources to build a robust communication plan.
- Review OSEH's website and newsletter format to determine what safety information can be provided to help drive awareness and compliance.
- Have OSEH representation on all appropriate groups to help communicate the importance of safety including groups like the Research Administrators Network (RAN).
- OSEH should post a link to the University Compliance Hotline on their website and review

<b>7. Communication and Awareness</b>	<b>Medium</b>
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for displayed hotline posters during their inspections.

**Management Action Plan:** UMOR will join with OSEH and key campus communicators to devise and implement a comprehensive communications plan aimed at strengthening and maintaining the culture of laboratory safety. Key elements include the following:

- Announce our commitment to lab safety and our plans for strengthening it concurrent with the public release of the audit report.
- Highlight lab safety and programs available on the comprehensive redesign of the UMOR web site, with appropriate links to the OSEH site.
- Review content of OSEH website and revise and update as necessary for the clarity, accessibility, and comprehensiveness of lab safety information.
- Review OSEH’s communications to assess what safety information is communicated and how; update or revise as needed.
- Identify key channels and opportunities for highlighting the importance of lab safety to the University community on a regular basis. Target specific audiences for specific programs as needed.
- Create signs for posting in laboratories that emphasize the importance of safety, including mention of the University Compliance Hotline and the OSEH web site.
- Circulate annual reminders to the research community on the importance of safety.
- Create and publicize an annual Lab Safety Day that incorporates OSEH’s Safety First Recognition Award and other activities.
- Create a brief handout emphasizing laboratory safety for use with new faculty orientations, UROP students, and others. Include key links to further resources and information, including the University Compliance Hotline.
- Keep apprised of laboratory safety issues as they arise and manage communication of responses for optimum effectiveness.
- Monitor the effectiveness of steps taken to raise awareness.

**Action Plan Owner:** Executive Director Strategic Communications, UMOR

**Expected Completion Date:** Work will start with issuance of the audit report and evolve with implementation of other management action plans

### **Follow-up Reports Issued**

<b><u>Knight-Wallace Fellows Program</u></b>	<b>2013-202</b>
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Report issued June 2013

Follow-up report issued June 2014

University Audits issued an audit report on the Knight-Wallace Fellows (KWF) Program in June 2013. A follow-up review was completed to assess the progress in addressing audit recommendations. A summary of the completed corrective actions follows. **This audit is closed.**

### **Procurement**

**Competitive Bidding:** All expenses were reviewed for the current fiscal year and there were none that required a competitive bid. KWF staff are aware of the University bid requirement for purchases over \$5,000. Expenses that were over \$5,000 in the current fiscal year were for airfare or passports/visas that were purchased for a group, but individually were under the \$5,000 threshold. The Yale Club continues to be used for events. A contract for the 2014 event is in place and was signed by Procurement Services. **Closed**

**Strategic Vendors:** Vendor purchases for the current fiscal year were reviewed. KWF uses strategic vendors where possible. In instances where other vendors were used it was due to strategic vendors that were not able to meet their needs (e.g., large bus for transportation). **Closed**

**Flight Upgrades:** Airfare expenses were reviewed for the current fiscal year. All upgrade purchases were pre-approved by a higher administrative authority. **Closed**

**Expense Support and Reconciliation:** Conference itineraries and brochures are now included as part of expense support to assist in accurately calculating per diems. Unique trip identifiers continue to be used to reconcile trip expenses. Expenses for the trip to South America were reviewed without exception. Reimbursement for flights and visas were received from non-Fellow travelers. **Closed**

### **Time and Pay**

**Compensatory Time:** Compensatory time for exempt and nonexempt staff is not allowed. KWF time and pay procedures have been updated to state that time for nonexempt staff should be paid at one- and one-half times the staff member's regular rate of pay for hours worked in excess of 40 hours in the calendar week. By recommendation of University Human Resources, for exempt staff, work is encouraged to be structured to avoid accumulation of compensatory time. **Closed**

**Additional Pay Approvers:** The procedures for processing additional pay for speakers are documented and requires approval from both the Associate Vice Provost for Academic and Budgetary Affairs and by an authority from the speaker's department. **Closed**

**Time Approval Separation of Duties:** To properly separate duties, the Assistant Director's time is now approved by the Director. **Closed**

### **Administrative Processes**

**Memorandum of Understanding:** Letters outlining KWF and sponsor obligations were sent to program affiliates in Brazil, Argentina, England, and Korea. It is recommended that as part of this process KWF receive back a signed copy of the letter from sponsors constituting their written acceptance. As necessary, retain a copy on file with the Office of the Provost.

## University Audits

Summary of reports issued – May 1 through July 2, 2014

The International Fellowship section of the KWF website has been updated to state that up to six international fellowships are available if funding is available. This accurately takes into account the obligations that KWF has to select Fellows from sponsoring companies. **Closed**

**Process Documentation:** All procedures recommended were documented, including procurement, time and pay, continuity planning, Fellow sponsorship, oversight, additional payments, and the Livingston Awards. **Closed**

**Conflicts of Interest and Commitment:** A policy was developed that requires staff to complete online conflict of interest and commitment tutorials and sign off on their completion every September. This process was completed by all KWF staff members for fiscal year 2014. The Director completed the faculty tutorial; however, going forward, it is recommended that he personally sign off on his completion of the tutorial. **Closed**

**Delegation of Authority:** A delegation of authority memo was created in September 2013, to be renewed annually, that delegates authority to the Assistant Director to sign documents in the Director's absence that require his signature. **Closed**

**Fine Art Collection:** KWF worked with Risk Management to update the insurance coverage of their fine art collection. It is encouraged to continue to revisit appraisal values every couple of years to confirm adequate coverage of the collection. **Closed**

## Student Publications

**2013-203**

Report issued June 2013

Follow-up report issued June 2014

University Audits issued a report for the Office of Student Publications audit in July 2013. A follow-up review was conducted to assess progress toward addressing audit recommendations. Several issues remain open. A second follow-up will take place in the second quarter of fiscal year 2015. **This audit remains open.**

**Strategic Plan and Vision:** Student Publications continues to operate with a substantial deficit. While many positive changes have been made to operations, there is still no strategic plan or long-term business model to ensure sustainability. Advertising sales historically comprised two-thirds of all revenue. Advertising continues to plummet at a dramatic rate. Fiscal year 2013 revenue for the month of January totaled roughly \$128,000 and in fiscal year 2014, it totaled roughly \$52,000. According to cash flow forecast determined by the General Manager, Student Publications will need to sell \$100,000 of stock from their quasi-endowment in April 2015 to sustain operations. **Open**

External consultants were hired last year to make recommendations regarding the structure and decreasing advertising revenue. Many operational changes were made in hopes of addressing sustainability. Some of the changes implemented include redefining roles of professional staff to provide structure and continuity, increasing newspaper drop spots and visibility, and updating the compensation structure for advertising sales.

**External Bank Account/Student Payments:** The external bank account remains open and is used to reissue uncashed checks and receive Google advertising revenue for their website. All student employee reimbursements are now processed in Concur. All customer refund checks are processed through PeoplePay. While a Google document is being used to track all preapproved travel, this document has yet to be shared with the Office of Financial Aid. It will be shared with the Office of Financial Aid at the end of the semester. **Open**

**Documented Policies and Procedures:** Policies and procedures have yet to be documented for operations or job roles. The professional staff has been working with the student employees to document and define their roles and responsibilities. **Open**

**Training:** A process has not been implemented to ensure that professional and student employees have completed required training. All required staff have not completed required depositor, cash handling, credit card merchant, and Concur training. **Open**

**IT Services:** Student Publications will be moving to MiWorkspace in the summer of 2014. ITS has determined that they will not be able to provide the services required by Student Publications, including 24/7 coverage for student operations and support for AdPro, the software system used to manage the newspaper. Student Publications has yet to identify a vendor that will be providing these services going forward. **Open**

**Internal Control Certification and Gap Analysis:** Student Publications has met with the Office of Internal Controls to discuss the process. They determined that a member of the finance committee on the Board for Student Publications would certify to financial results and internal controls. Less than half of the gap analysis components have been completed. All control gaps noted so far are related to written documentation. **Open**

**Procurement Contracts:** Vendor contracts have been established through Procurement Services for all but one vendor. Student Publications will work with Procurement to establish a contract for the remaining vendor. **Open**

**Accounting System:** Student Publications worked with Financial Operations to improve the reconciliation process between QuickBooks and M-Pathways. They previously reconciled finances with Financial Operations on an annual basis and are now doing it quarterly. Student Publications will continue to use QuickBooks as a management tool with the understanding that M-Pathways is the official book of record. Additional work with Financial Operations identified inconsistencies in fixed assets and depreciation that have since been resolved. **Closed**

**Recharge Rates:** Internal recharge rates were approved by the Office of Financial Analysis (OFA) in December 2013. These rates will be approved by OFA on an annual basis. Student Publications has scheduled a meeting with the Tax Department to discuss any potential tax issues related to external rates including unrelated business income tax. **Closed**

**Imprest Cash Fund:** Imprest cash funds have been formally established with Accounts Payable for use as a change fund. **Closed**

**Facility Access:** Electronic card reader access was installed but is not used. A passcode is still used for building access and will be changed on an annual basis. **Closed**

**Travel Approval and Tracking:** A Google document is used to track all preapproved travel. This document is maintained by the General Manager, shared with professional staff and student leadership, and updated regularly. **Closed**

**Conflict of Interest/Commitment (COI/COC):** An annual process has been implemented for all professional staff to review the University COI/COC policy and sign documentation identifying any existing conflicts. All COI/COC forms are shared with the Board for Student Publications. **Closed**

## **Student Life – University Health Service**

**2013-206**

Report issued November 2013

Follow-up report issued June 2014

University Audits completed an audit of University Health Service (UHS) and issued an audit report in November 2013. The report identified opportunities to improve management of the patient billing operations and staff utilization of MiChart reporting. Some security and privacy concerns were also identified. A follow-up review has been completed to determine that the following items have been satisfactorily completed. **This audit is closed.**

**MiChart Implementation: Accounts Receivable:** The audit identified that some charges to patient accounts had not been billed, followed up on, or collected. Gross patient accounts receivable (A/R) for UHS increased over a million dollars between June 2012 and June 2013 due to problems during the MiChart patient billing implementation. As of the date of the follow-up review, gross patient A/R for UHS decreased from \$1.6 million as of June 20, 2013, to \$545,000, which is in line with pre-MiChart levels. UHS staff has worked with MiChart Business Systems personnel to get the reports and details they need to manage their A/R. **Closed**

**MiChart Implementation: Reporting Capabilities:** UHS management was not effectively monitoring their clinical and business operations due to the lack of adequate understanding and development of MiChart reporting tools. UHS staff worked with the Health System MiChart team to obtain access to reporting tools for both the clinical operations and business operations. UHS has hired a new position who is focusing on MiChart reporting. **Closed**

**MiChart Implementation: Check Out Procedures:** The audit identified that some UHS clinics were not following MiChart check-out procedures. A new check-out procedure was written and implemented for Sports Medicine, Physical Therapy, and Nutrition. A supervisor performs a weekly audit of the check-out procedure that is reviewed monthly by the Director of Ancillary Services. **Closed**

**IT Risk Assessment:** The information technology footprint of UHS has changed since the implementation of MiChart, MiWorkspace, Radiology Information System, and Laboratory Information System. This invalidated the last risk assessment performed on the UHS IT systems and infrastructure. Information Technology Services (ITS) is scheduled to perform an updated risk assessment (RECON) at UHS. ITS has made this a high priority and a July 2014 date is anticipated for the RECON to start. **Closed**

**Excluded Parties Screening:** The audit identified that UHS was screening their clinical staff against the federal excluded parties list but not screening all employees. UHS management immediately began a manual process to screen all UHS employees on a monthly basis. Shortly thereafter, UHS was incorporated into the UMHS HR screening process where all new employees are included in the background screening process (including excluded party check) and existing UHS employees are regularly checked against the excluded parties list. **Closed**

**Procurement Practices: Business Associate Agreements:** The audit identified that required HIPAA Business Associate Agreements (BAA) were not in place with seven vendors that have access to UHS protected health information. BAAs have been signed by four vendors. Two vendors have sent in BAAs with edits that are in the Office of General Counsel for review. UMHS Compliance Office provided assistance with one vendor and made the determination that the entity is a health care provider and not a business associate because they bill one or more insurance companies. **Closed**

**Procurement Practices: Use of Strategic Vendors:** UHS did not Use existing University vendor contract when purchasing medical supplies. UHS compared vendor lists with the Kellogg Eye Center and concluded that there was no advantage to combining purchases. Student Life Budget and Finance has created a central procurement position that oversees UHS purchasing. Contacts have been made with UMHS Procurement regarding other strategic vendor contracts for clinical supplies. **Closed**

**Cash Handling Duties: Separation of Duties:** The audit identified incidents where separation of duties did not exist during collection and depositing of cash. The UHS Business Office realigned staff duties to create a proper separation of duties. For the times where there is a lack of separation due to staffing levels, the Business Offices initiated a process where the Business Manager will review and approve the process. **Closed**

**PCI Compliance:** UHS processes credit card transactions but management had not updated Treasury with current merchant contact and authorized staff information. Staff Training was not up-to-date. UHS has updated the merchant contact information with the Treasurer's Office, has entered authorized staff in M-Pathways, and all staff authorized to process credit card transactions are current with the training certification. **Closed**

**Patient Verification:** The audit identified that UHS did not consistently verify patient's identification by requiring photo identification at registration or appointment check-in. UHS



management evaluated the situation, compared their process to UMHS, and concluded they will continue with the process of not requiring photo identification but use other patient identifiers. **Closed**

**University Compliance Hotline:** UHS was not actively promoting the University Compliance Hotline to staff, students, patients, and others as a safe and confidential way to raise concerns regarding financial, regulatory, and patient safety issues. UHS management obtained and posted University Compliance Hotline Posters in areas throughout UHS including patient areas and staff and faculty lounges. UHS management also issued a department-wide email regarding the University Compliance Hotline program. **Closed**

**School of Natural Resources and the Environment** **2012-210**

Report issued September 2013

Follow-up report issued June 2014

An audit report was issued in September 2013 for the School of Natural Resources and Environment (SNRE). Since that time, there has been substantial staff turnover in the SNRE Business Office and Dean’s Office. University Audits spoke with the new Administrative Director multiple times to discuss the audit observations and understand the staffing and work assignments in place. Some functions are being staffed by temporary employees, some duties are being shared between newly hired employees, and some positions are still vacant. As a result of these short-term situations, SNRE has had to temporarily modify processes in order to keep regular research, academic, and business activities moving forward. In some cases this has meant adjusting their original action plans to remediate an audit observation. Once SNRE fills the existing open positions, original action plans will be put back in place or reassessed to determine if they are still the most efficient and effective solution. A second follow-up will be scheduled in November 2014 to determine if management’s final action plans have satisfactorily addressed audit observations in the report. **This audit remains open.**

**Information and Technology Services Domain Name Service** **2012-301**

Report issued May 2012

First follow-up report issued January 2013

Second follow-up report issued April 2013

Third follow-up report issued January 2014

Fourth follow-up report issued June 2014

University Audits reviewed the Information and Technology Services (ITS) Domain Name Service (DNS) infrastructure and issued the report in May 2012. An initial follow-up review concluded that many of management’s corrective actions were delayed due to initiatives related to the ITS Next Generation project (see follow-up memo dated January 2013). Second and third follow-up reviews were performed and although some corrective actions were completed, the ITS Next Generation project continued to affect completion of several items. This memo documents the fourth follow-up that was completed. All items have been resolved. Summarized below is the current status of each audit recommendation. **This audit is closed.**

**Recursion on Authoritative Name Servers:** University Audits suggested that management disable recursive queries on authoritative name servers in order to guard against DNS cache poisoning. Management indicated a project is underway to replace the Hostmaster DNS servers as part of the ITS Next Generation initiative. The project scope includes replacement of authoritative name servers and disabling of recursion. A test of recursive queries against the new authoritative name servers confirmed that recursion has been disabled. **Closed.**

**Authenticated Zone Transfers:** University Audits suggested that the Hostmaster group implement a process to cryptographically authenticate zone transfers and conduct a review of zone partners to mitigate the risks associated with impersonation. Management stated that they would work with its partners to authenticate zone transfers whenever possible and apply encryption as appropriate. Management has developed a process to securely encrypt zone transfers. Over 70% of identified DNS zones have been resolved. Some zones are unable to be cryptographically authenticated due to technical incompatibilities, however all zone transfers are limited to approved name servers. **Closed.**

**Performance Metrics:** University Audits suggested that the Hostmaster group proactively monitor performance metrics and alerts, develop a baseline analysis, and determine thresholds for early warning issue detection. The Hostmaster group was also advised to implement a system to automate the monitoring of performance metrics and alert the appropriate individuals when predetermined thresholds of the core DNS systems are exceeded. Management has implemented a tool to monitor the health and performance of DNS services and the underlying systems. **Closed.**

## **Donor & Alumni Relationship Tool**

**2013-106**

Report issued June 2012

Follow-up report issued June 2014

University Audits issued a report on the Donor & Alumni Relationship Tool (DART) in October 2013. The report identified opportunities for improvement in operations and ITS. ITS issues included password protection, data security, access controls, and network vulnerabilities. Operational issues included training, communication, organization of information, and completion of a data dictionary. A follow-up review has been completed to determine the status of the management action plans. Some action plans are still being implemented. University Audits will follow up on the open issues in October 2014. See below for details. This audit remains open.

**Changes to the Default Master Encryption Password:** The default master encryption password provided by the vendor for the DART application that contains regulated sensitive data was not changed by ITS. ITS has since change it and developed a process to change the password on an annual schedule. **This issue is closed.**

**Office of University Development (OUD) Dev/Net Web Application Security:** The OUD Intranet website uses versions of technology that are no longer supported by the respective vendors. The website contains some sensitive constituent data that is restricted to

Development staff. Although not directly, an attacker could access this data by exploiting a part of the website that was accessible to anyone who created a friend account (self-created guest account). The website was developed using insecure programming practices that are vulnerable to malicious attackers. OUD committed to removing friend account access as a short-term solution and replacing the site as a long-term solution. The friend account access has been removed. The website is expected to be replaced by the end of FY15. **This issue remains open.**

**DART Web Application Security:** A web application vulnerability assessment of the DART web applications identified potentially vulnerable components. ITS, OUD, and Information and Infrastructure Assurance (IIA) reviewed the findings and determined that no further actions need to be taken. IIA has accepted any risk that remains. **This issue is closed.**

**Network Vulnerabilities:** A network vulnerability assessment of OUD networks identified high- and critical-level vulnerabilities. Some vulnerabilities were addressed immediately during the initial audit. The remaining vulnerabilities were mitigated when OUD computers transitioned to MiWorkspace. A follow-up vulnerability assessment confirmed that no other high- or critical-level vulnerabilities are present. **This issue is closed.**

**Terminations and Periodic Review of User Access:** Roles and accounts of former employees were discovered that granted privileges to DART. OUD and ITS improved their processes to regularly review access and roles to DART so that privileges are removed more timely when an employee transfers out of a Development role or leaves the University. Extra steps have been implemented to deactivate M-Tokens as a precautionary measure in the event an M-Token is not returned during an employee off-boarding procedure.

ITS and OUD reviewed the role membership that would allow disabling audit functionality. The review determined that users with this privilege are appropriate. Other permissions that are granted with this role are necessary and separating the audit table privilege from the other privileges would be time consuming and costly. The cost of mitigating the risk is considered higher than the risk that is present. **This issue is closed.**

**Organization of Key Information:** Policy and procedure documents were incomplete and outdated. Various sites including DevNet and the Education and Training intranet site provided information but it was not well organized and user-friendly. The results were user frustration and the potential for users not to use DART to its full potential.

OUD has determined that the intranet system has a myriad of data beyond the information related to DART that needs a better structure. A task force is being formed to assess how the intranet is used and what is the best tool to house a redesigned site(s). In the short term, there has been an upgrade and clean up of the Training and Education site. Business processes that changed with version 3.0 have been updated and the in-system help function has been revamped to help users find information more effectively. **The issue remains open and will be reviewed again in October.**

**Completion of Project Tasks:** The data dictionary was not completed, which has the potential to negatively affect user efficiency. An assessment of the Blackbaud data dictionary (SKD) provided with the upgrade was made in February 2014. It was determined that the SKD did not meet the needs of the UM development community. A project is being developed to address the need. **The issue remains open.**

**User Training:** As part of the rollout of version 3.0, OUD created a number of training opportunities including refresher labs, videos, and new or upgraded quick reference cards. The training opportunities were publicized via Development Council, in monthly newsletters, and in direct e-communications. **This issue is closed.**

**Using Help Desk Information:** Footprints has undergone significant enhancements to better track and categorize tickets that come through the hotline. The upgrades help OUD assess the amount of time and resources used on specific issues. They are using the information to feed Tableau, a business intelligence application. All of the units in OUD will be on Tableau Server by mid fiscal year 2015 (January/February). Once the units are on Tableau Server, the information can be used to provide reporting that will help them analyze and address trends through communication and training.

ITS has implemented ServiceLink as part of the IT initiative. Using ServiceLink tools will provide more opportunities to identify trends and address commonly reported problems. OUD will assess the effectiveness of ServiceLink when it is available as an Enterprise system.

University Audits will follow up with OUD in the fall to assess the progress of analyzing and reporting Help Desk trends. **The issue remains open.**

**System Utilization Metrics:** OUD and ITS have partnered to roll out Tableau Server across the Development Community. A number of data sources have been provided to the Development Community deans and directors to provide feedback. Additionally, a survey was taken to determine the groups reporting needs. While formalizing standards and expectations remains a work in progress, OUD has made significant strides to provide the users with analytics to help assess performance. **This issue is closed.**

University Audits will follow-up in October to assess the progress on addressing the open issues.

## **UM–Dearborn College of Arts, Sciences, and Letters**

**2013-2014**

Report issued September 2013

Follow-up report issued June 2014

University Audits issued a report for the audit of the UM-Dearborn College of Arts, Sciences, and Letters (CASL) in September 2013. We recently conducted a follow-up review to assess progress toward addressing audit recommendations in several areas including financial oversight, conflict of interest and commitment, safety of minors at CASL, agreements with

third-parties, faculty course releases and stipends, records and advising, and roles and responsibilities. Progress has been made in several areas and CASL is committed to improving its controls structure; however, all issues from the audit remain open. University Audits will conduct a second follow-up during the second quarter of fiscal year 2015. **This audit remains open.**

#### **Financial Oversight – Open**

Financial oversight in CASL was decentralized resulting in varied departmental internal controls. CASL is now centralizing key financial tasks to improve central oversight.

*Procurement:* Department chairs were reminded of Concur expense report approval requirements and P-Card application routing requirements. The Financial Manager is periodically reviewing Concur reports to verify compliance with expense report approval requirements.

*Cash Handling:* Department chairs were reminded of cash handling requirements. Cash handling is expected to be centralized in the Dean's Office and corresponding policies written prior to January 2015.

*Reconciliations:* Procedures are being prepared to address the reallocation of responsibilities for reconciliations for staff on leaves of absence or when a position is vacant. Procedures for Gross Pay Reconciliations and time approval for the six academic departments have been prepared and will be implemented.

*Shadow Systems:* Departments have stopped using shadow systems. The Finance Manager will request coordinated training sessions in eReconciliation, M-Reports, and Unit Defined Commitments.

*Documented Procedures:* Gross Pay Register reconciliation procedures have been documented for the six academic departments. Statement of Activity reconciliation procedures will be documented when workflow has been determined. Procurement procedures have been documented and disseminated to CASL administration and department staff. Procedures for cash handling will be documented after key financial functions are centralized in the Dean's Office. Centralization is to be completed by January 2015.

*Internal Controls Certification and Gap Analyses:* Applicable processes and procedures are expected to be completed by September 2014.

#### **Conflict of Interest and Commitment - Open**

Annually, all CASL faculty are required to complete the Conflict of Interest and Commitment disclosure through M-Inform. The Dean generates regular reports to confirm that all faculty have disclosed. The Dean also sends periodic reminders to faculty who have not completed the disclosure process. The Finance Manager and the Dean must still determine CASL's methodology for obtaining and reviewing staff disclosures.

**Safety of Minors at CASL – Open**

CASL has engaged with minors on campus both through their own programs and external programs that use CASL resources. CASL is included in UM-Dearborn's implementation of *Standard Practice Guide Section 601.34, Policy on Minors Involved in University-Sponsored Programs or Programs Held in University Facilities* with an expected implementation date of August 2014.

**Agreements with Third Parties – Open**

CASL enters into agreements with external entities for a variety of reasons including articulation agreements with local community colleges. The UM-Dearborn Provost Office is developing a template to use when contracting with international educational organizations. CASL procedures for all other agreements with external parties are expected to be implemented by May 2014.

**Faculty Course Releases and Stipends – Open**

CASL faculty can accrue hours towards a course release or stipend by taking on leadership roles in the College. Currently, there is no limit to the number of hours that can be accrued by a faculty member.

*Policies:* The UM-Dearborn Faculty Senate is currently revisiting the Release Time Policy adopted in 2013. CASL Executive Committee is developing a policy for course release time accrual related to oversight of independent study courses. The CASL Dean and Financial Manager are in the process of drafting policies for requesting, granting, tracking, calculating, and banking course release time. When completed, CASL Executive Committee and the Administrative Council will review the policies.

*Calculation and Tracking:* An inventory of academic year faculty workload has resumed after a one year interruption. The inventory will document all faculty course releases taken in academic year 2012-2013. The inventory will be presented to CASL Executive Committee for review annually. Inventory is expected to be completed by May 2014.

*Banked Time:* CASL is adopting a new model for compensating department chairs and associate deans, which will capture course releases, administrative work effort and compensation. Additionally, the CASL Dean and Financial Manager are developing the cost measurements and effort calculations for all other course releases. These will be included with new course release and banked time policies and procedures. The model and new course release policies and procedures will be in place by July 2014.

*Duplication of Effort:* Processes to be determined when completed faculty workload information is received from CASL departments.

### **Records and Advising – Open**

*Curriculum Changes:* A representative from CASL Advising and Records has been appointed as a non-voting member of UM-Dearborn’s newly reconstituted University Curriculum and Degree Committee (UCDC), which establishes deadlines for curricular change/approval.

*Graduation Worksheets:* CASL has implemented Degree Works, a software package that includes current discipline-specific graduation worksheets for the College for new incoming students. CASL is creating processes that would allow for accurate graduate information to be communicated to existing students. Expected completion date is June 2014.

*Faculty Advising:* Degree Works allows for staff and faculty engaged in advising students to see a complete record of notes for each student, which allows for consistent advising.

### **Roles and Responsibilities - Open**

CASL does not have documented policies, procedures, and expectations for the associate deans, department chairs, and discipline chairs and does not provide training specific to their job responsibilities. The CASL Dean is currently evaluating the roles of the associate deans and new job descriptions are being developed. Additionally, the CASL Dean is evaluating and comparing the roles and responsibilities of department chairs as documented in CASL by-laws to other CASL documents describing their roles and responsibilities and to those identified by the Counsel of Colleges of Arts and Sciences (CCAS). The review is expected to be completed in July 2014. Once department chair roles have been defined, an evaluation of discipline chair roles and responsibilities will be undertaken.

## **Law School**

**2012-208**

Report issued February 2013

First follow-up report issued March 2014  
Second follow-up report issued June 2014

In February 2013, an audit report on the University of Michigan’s Law School was issued. A follow-up review was conducted in March 2014 to assess the status of the management action plans. The majority of action plans were completed and closed with one issue remaining open.

The remaining action plan involved Law School Clinic operating procedures. University Audits recommended that procedures, manuals, handbooks, and other supporting materials for all clinics be standardized to the extent possible for clinic operations. The Law School’s clinic faculty and administration discussed this issue and have determined that:

- The clinics operate as “independent” law firms.
- Clinical faculty members are exercising their academic freedom to make teaching decisions.

Based on their discussions, the Law School believes there is no risk and will not standardize the clinics’ operating procedures.

## University Audits

Summary of reports issued – May 1 through July 2, 2014

We discussed the identified risks with the Law School Administration. Some of University Audits' concerns included:

- Security and privacy of client information
  - Removal of data/information from clinics
  - Oath statements
  - Confidentiality agreements
- Conflicts of interest
- Equity of the educational experience
  - Credits earned
  - Expectations for the students (e.g., time requirements)

The Law School has elected to accept the risk of leaving the clinics to function independently. Clinic operating procedures will not be centrally standardized. **The audit is closed.**

## University Unions

**2012-201**

Report issued April 2013

Follow-up report issued June 2014

University Audits issued a report for the audit of Student Life University Unions (UU) in April 2013. We conducted a follow-up review to assess progress toward addressing audit recommendations in several areas including supplemental systems, imprest cash funds, documented procedures, and credit card merchant processes. Significant progress has been made in all areas, as noted below. University Audits will conduct a second follow-up in the second quarter of fiscal year 2015 for the issues that remain open. This audit remains open.

**Supplemental Systems:** The Student Life Budget and Finance Team is working on a project to develop an integrated, automated financial reporting and analysis system, leveraging existing University resources, which will reduce or eliminate the need for supplemental financial systems. Student Life is working with Information and Technology Services to expand UU's chartfield-based accounting structure to support multi-level reporting and analysis in M-Pathways.

Management has taken the following actions to streamline and manage its supplemental systems:

- Inventoried supplemental systems used throughout its units, including the purpose for the systems and frequency of use.
- Distributed financial reports generated from the University's financial systems to budget managers for a sample of UU's non-auxiliary units.
- Drafted steps for all of UU to follow when procuring or developing a new system for a business need that includes identifying stakeholders, reviewing existing system capabilities, and working with central offices to draft specifications, sourcing, and RFP.

During the second follow-up, we will review the status of the Student Life's efforts to redesign and expand UU's chartfield-based accounting structure to support reporting and data analysis



using M-Pathways and implementing controls over supplemental systems that will remain in use. **This issue remains open.**

**Imprest Cash Funds:** To reduce the risk of having excessive cash in hand, UU performed an assessment of the business need for its imprest cash funds and was able to close some to reduce the total value by more than \$12,000. UU no longer uses one imprest cash fund to replenish others.

Working with Procurement Services, UU established a contract with Fintech. As of December 2013, all payments to UU's alcohol vendors are made electronically through Fintech so that UU no longer has to use cash from imprest cash funds. **This issue is closed.**

**Payroll Processes – AFSCME Overtime Record Keeping:** To maintain compliance with the AFSCME union contract, the Catering department now keeps an overtime record for staff. The overtime log is posted in a common area and is emailed to relevant staff. UU also confirmed that its other units are keeping overtime logs compliant with the AFSCME contract requirements. **This issue is closed.**

**Documented Procedures:** In addition to existing documented procedures, UU drafted written procedures for the following processes:

- Budgeting
- Financial reporting
- Maintenance department inventory
- Cash office oversight
- Accident reporting

Documenting is an important ongoing business process. UU management should establish a regular schedule to evaluate whether there are any processes that should be documented and if so, to update and document those processes. Documented procedures should be shared with relevant staff and maintained in an easily accessible location. **This issue is closed.**

**Credit Card Merchant Processes:** Event Services now has a more efficient and consistent method for processing credit card payments. All three locations will now accept payments via an online system approved by the Office of the Treasurer. Student Life is leading a workgroup to standardize and improve procedures related to cash handling and credit card processing across the division. During the second follow-up, we will review the efforts of this workgroup specific to UU, including analysis of business need for terminals and a higher authority review of credit card refund activity. **This issue remains open.**

## **U-M Dearborn Office of Financial Aid**

**2012-201**

Report issued September 2013

Follow-up report issued June 2014

An audit report for the UM-Dearborn Office of Financial Aid (OFA) was issued in September

2013. A follow-up review determined management has made substantial progress in addressing most items from the audit. A second follow-up in November 2014 will review the status of the last remaining items. A summary of the initial observations and management's subsequent actions are below. **This audit remains open.**

**Peer Review Recommendations – Closed**

Many items from the peer review crossed over into other audit observations. By addressing the audit observations, the issue from the peer review was resolved. Remaining recommendations from the peer review will continue to be researched and addressed.

**Fund Reconciliation – Closed**

OFA and Financial Services have thoroughly documented reconciliation procedures for all major and significant accounts, and work is progressing to document procedures for the remaining accounts. Accounts are reconciled on a timely basis and questions or concerns are addressed promptly. Reconciliation meetings are held regularly between OFA, Financial Services, and Enrollment Management and Student Life (EMSL), to which OFA reports. Final reconciliations are initialed and dated when the review is complete.

**Banner Award Testing – Closed**

Documentation is now retained to support changes to the award rules. All changes are independently reviewed and the Director issues final approval. The department will establish a record retention schedule to maintain complete documentation records of most recent changes in the event of a significant data loss so that the award rules within Banner can be reconstructed. A final approval checklist, verifying that all changes were reviewed and approved, and indicating notes for future changes, will also be retained.

**Business Continuity – Closed**

A first draft of a master department calendar has been prepared, which includes required reporting schedules as well as reminders about significant milestones and events. This calendar will be available to all OFA employees. Reporting information, such as performance steps and samples, is being documented to serve as aids in the event the primary employee is not available. A new OFA e-mail address was created for campus units to send notification about departmental scholarships and awards. This has ensured that the information is accessible to other employees in the event of the primary employee's absence.

**Documenting Policies and Procedures – Closed**

A great deal of work has been done to document department policies. The core focus has been on documenting financial aid policies; documenting other office procedures will follow after this more critical piece is completed. The department is preparing a new procedure to store information that will group policies by "current" and "old", versus the current arrangement that carries forward policies into a new folder each year, even if there have been no updates. Documentation standards, including level of detail, version control and update history, are being instituted for consistency.

**OFA Workload Assessment – Closed**

The OFA Director performed an assessment of each employee's workload, considering job responsibilities and performance. Significant changes were instituted that have benefited the department, including reassigning employees to more appropriate roles.

**Employee Training – Closed**

Training is now included in each employee's annual goals as part of the performance review. The Director assigns training, whether out-of-area, local, or webinars, based on each employee's needs and availability, factoring in specific requests. Information learned is shared with other employees.

**Concentration of Duties – Open**

The audit report referenced a specific employee with the ability to both verify student enrollment and administer financial aid, with the potential to award aid for which a student was ineligible due to lack of attendance. OFA had prioritized working with UM-Dearborn Information Technology Services to prepare broader monitoring reports for access to financial aid tables, which was addressed in a separate management advisory memorandum. Now that those reports are in a suitable format, attention will be given to addressing this item. University Audits will review this item during the second follow-up.

**Conflicts of Interest or Commitment (COI/COC) – Open**

OFA was under the impression that the COI/COC reporting process for staff was being updated campus-wide. It has since been clarified that this is not the case, so OFA will develop a departmental COI/COC annual process for staff. OFA has obtained samples from UM-Ann Arbor and will write their own process, with the intention of tying it to the annual performance review. University Audits will review this item during the second follow-up.

**Open Audits Follow-up Table**

As of July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
UM-Flint Educational Opportunity Initiatives 2010–211	February 2011	Strategic oversight and guidance; campus support and collaboration; budget and financial management; staff management; event management; business continuity; documentation of policy and procedure	First follow-up April 2012 _____ Second follow-up April 2013 _____ Progress reviewed April 2014 _____ Final follow-up scheduled for August 2014
Financial Considerations for International Activity 2011–101	June 2011	Coordination of effort; documented policies and procedures	Follow-up February 2014 _____ Second follow-up scheduled for August 2014
UM–Flint Business Continuity 2011–303	August 2011	Business Continuity Planning standards template	First follow-up March 2012 _____ Second follow-up December 2012 _____ Third follow-up September 2013 _____ Fourth follow-up scheduled for September 2014

University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
e-Verify 2011-302	February 2012	Contract information; identification of employees; e-Verify notice requirements	Follow-up February 2014  Management actions complete, audit closure deferred to July 2014 pending stakeholder approval
UM-Dearborn College of Engineering and Computer Science 2012-302	June 2012	Financial oversight; documented policies and procedures; contracts, grants, and agreements; gift handling and monitoring; Engineering professional development	First follow-up April 2014  Second follow-up scheduled for December 2014
Residential Dining Service 2012-216	November 2012	Financial metrics; CBORD inventory	Follow-up September 2013  Second follow-up March 2014  Third follow-up scheduled for August 2014
MCommunity Enterprise Directory and Identity Management System 2012-310	January 2013	MCommunity server security; service agreements, identity management policy; server access; security information and event management; Security Information and Event Management security	First follow-up February 2014  Second follow-up scheduled for August 2014

University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
University Unions 2012-201	April 2013	Supplemental systems; credit card merchant processes	Follow-up June 2014  Second follow-up scheduled for December 2014
Medical School Department of Family Medicine 2013-211	April 2013	Japanese Executive Physical Program	Follow-up December 2013  Second follow-up scheduled for July 2014
Medical Center Information Technology and Arbor Lakes/North Campus Data Centers 2012-307	April 2013	MCIT Managed Data Centers lack a comprehensive continuity of operations plan.  Note: This issue requires long-term corrective actions and planning efforts are ongoing.	COOP Meetings June 2013 September 2013  Update March 2014  Next update scheduled for July 2014
College of Literature, Science, and the Arts Kelsey Museum of Archaeology 2012-201	April 2013	A second follow-up will be performed at the Museum store after the implementation of the new POS / Inventory control system	Follow-up March 2014  Second follow-up scheduled for August 2014
Molecular and Behavioral Neuroscience Institute 2013-214	May 2013	Long-term financial viability; IT disaster recovery	Follow-up January 2014  Second follow-up scheduled for July 2014

University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
Office of Student Publications 2013-203	July 2013	Strategic Plan and Vision; External Bank Account/Student payments; Documented Policies and Procedures; training; IT services; Internal Controls certification and Gap analysis; procurement contracts;	Follow-up March 2014 _____ Second follow-up June 2013 _____ Third follow-up scheduled for December 2014
School of Natural Resources and the Environment 2012-210	September 2013	Center/institute oversight; effort certification; admissions documentation; lab safety; documented processes	Follow-up June 2014 _____ Second follow-up scheduled for November 2014
UM-Dearborn College of Arts, Sciences, and Letters 2013-204	September 2013	Financial oversight; conflicts of interest/conflicts of commitment; safety of minors; agreements with third parties; faculty course releases and stipends; records and advising; roles and responsibilities;	Follow-up June 2014 _____ Second follow-up scheduled for December 2014
UM-Dearborn Office of Financial Aid 2013-201	September 2013	Concentration of duties; conflicts of interest or commitment;	Follow-up June 2014 _____ Second follow-up scheduled for November 2014
College of Engineering Research Software Licensing 2013-310	October 2013	Software licensing and usage; software for commercial research; acceptance of “click-through” licenses; tracking of software licenses in nanotechnology labs; creation of a research lab; definition of PhD student; recording software purchases to program codes; classification of software purchases	Follow-up April 2014 _____ Follow-up deferred to September 2014

University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
Donor & Alumni Relationship Tool (DART) 2013-106	October 2013	Changes to the Default Master Encryption Password; Office of University Development Dev/Net Web Application Security; DART Web Application Security; Network Vulnerabilities; Terminations and Periodic Review of User Access; Organization of Key Information; Assignment and Completion of Project Tasks; Ongoing User Training; Use of Help Desk Questions; System Metrics	Follow-up June 2014  Second Follow-up scheduled for October 2014
UM-Flint Banner System 2013-310	November 2013	Java update process; access revocation process; web application vulnerabilities; vulnerability scanning; encryption of Protected Personal Information (PPI); Access of PPI; audit logging guide; system documentation	Follow-up scheduled for September 2014
MHealthy 2013-213	December 2013	Written Agreements with Outside Entities; Employee Waiver and Release of Liability Forms; Taxation of Gift Cards to Employees; Project Healthy Schools; Cross-training and Documentation for Data Management Processes; timeliness of cash deposits	Follow-up scheduled for July 2014
Medical School – Office of Graduate and Postdoctoral Studies 2013-210	December 2013	Biomedical Science Graduate Student Admissions; Financial Award Distribution; Comprehensive Human Resources Model	Follow-up scheduled for July 2014
MiChart System Interfaces 2012-306	January 2014	Contract employee access to MiChart	Follow-up scheduled for August 2014



University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
Financial Operations Cost Reimbursement Office Effort Certification Process 2013-501	January 2014	Maximum allowable effort on federal projects; data validation	Follow-up scheduled for July 2014
Center for Research on Learning and Teaching 2013-222	March 2014	Visitor safety, Compliance Hotline awareness, segregation of duties - cash handling, conflict of interest/conflict of commitment	Follow-up scheduled for August 2014
Department of Chemistry 2013-212	March 2014	Recharge billing; facility access and security; reconciliation process; electronics shop oversight; support for lab fees; system configuration documentation; chemical inventory documentation; review and approval of student designed lab projects; international travel registry; inaccurate asset inventory records; Rackham research grants; admission and award process documentation	Follow-up scheduled for September 2014
Center for the History of Medicine 2014-210	April 2014	Segregating purchasing duties; approval of expenses on behalf of the director; educating employees on reporting responsibilities; management of medical artifacts	Follow-up scheduled for August 2014
MiServer 2012-314	April 2014	Shared privileged account; audit trail protection; service level expectation	Follow-up scheduled for September 2014

University Audits

Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
Export Controls 2014-404	April 2014	Governance; recordkeeping; Education and training; Lack of return or destroy procedures; foreign nationals; IT security; overseas travel	Follow-up scheduled for October 2014
International Center 2014-206	May 2014	Protection of sensitive data; statement of activity reconciliation process	Follow-up scheduled for November 2014
University of Michigan Dearborn Information Technology Services 2014-216	May 2014	Vulnerability Detection and Remediation; Malware Detection and Remediation; Account Provisioning and De- Provisioning; Network Segmentation; Software Asset Management ; IT Disaster Recovery and Business Continuity; IT Change Management; Fixed Asset Management ; P-Card Review Process; Management Reports; Conflict of Interest/ Commitment	Follow-up scheduled for November 2014

University Audits  
 Summary of reports issued – May 1 through July 2, 2014

Audit	Report Date	Open Issues	Expected Completions Date
School of Dentistry 2014-215	May 2014	salary and incentive model; patient payment plans; controlled substances procurement and inventory; business associate agreement ; credentialing; adjunct onboarding and oversight; additional compensation payments; clinic Medicaid procedures; job responsibilities and performance evaluations; compliance roles and responsibilities; disposal of controlled substances; human subject incentive payments; conflict of interest and conflict of commitment; nepotism; procurement expenses; segregation of duties; leased space agreements; service agreements; internal control gap analysis; travel registry and policy; cash handling and depository training; student discount eligibility verification; graduate program admission	Follow-up scheduled for November 2014
General Laboratory Safety 2014-401	July 2014	Safety culture; oversight and monitoring; defining the lab population and identifying hazards; training and education; monitoring reports and trend analysis; safety role definitions; communication and awareness	Follow-up scheduled for January 2015

## Appendix 1: Audit Issue Risk Definitions

Risk	Definition
<b>High</b>	<ul style="list-style-type: none"> <li>• Describes a control breakdown with a combination of potential impact and likelihood of occurrence to create <b>significant risk</b> to the audited entity. A high-risk issue generally requires <b>immediate</b> corrective action, or implementation of an interim control to minimize the risk until permanent corrective actions occur.</li> <li>• A high-risk issue could be a repeat medium-risk issue (i.e., during the last audit, the same issue was reported, but was not corrected on a sustainable basis).</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>• Describes a control breakdown with a combination of potential impact and likelihood of occurrence to create <b>enough risk</b> to require corrective action <b>within six months</b>.</li> <li>• A medium-risk issue could be a repeat low-risk issue (i.e., during the last audit, the same issue was reported, but was not corrected on a sustainable basis).</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>• Describes a control breakdown with potential impact or likelihood of occurrence to create low-risk to the audited entity. Low-risk issues do not require senior management attention but should be addressed by unit management.</li> <li>• Low-risk issues are not included in the audit report; instead, they are reported directly to management of the audited unit.</li> </ul>
<b>Out of Scope</b>	<ul style="list-style-type: none"> <li>• Sub-activity was not included in our audit testing</li> </ul>

## Appendix 2: Audit Issue Follow-Up Process

**High and Medium Risk Issues:** Every three months until completed, unit management should report the status of their action plans to University Audits. At six months, and every six months thereafter until the actions are completed, University Audits will conduct follow-up procedures to verify the actions are complete and are effectively managing the risk. University Audits will summarize the results of each six-month follow-up review in a written memo.

**Low Risk Issues:** Unit management is expected to address all low risk issues, which may be reviewed during our next audit. However, a status update is not required and University Audits will not conduct follow-up procedures.