Listed below are the internal audit reports that were issued since the October 2014 meeting of the Board of Curators. A summary of action items by category and an executive summary of the audits are included for your information.

PricewaterhouseCoopers LLP (PwC) will be presenting a summary overview of the audits and will be available to answer questions. The date indicated on each audit is the date when the audit report was issued. There is a time-lag between when field work is completed and when a report is issued in order to provide appropriate time for audit recommendations and the corresponding management responses to be written. The full audit reports are available upon request from the Office of the Vice President for Finance and Chief Financial Officer.

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<tr>
<th>Observations by Risk</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
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<td>1. HIPAA/HITECH Security Assessment, MUHC, December 2014</td>
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<td>2. Obstetrics, Gynecology and Women’s Health Department, MUHS, December 2014</td>
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<td>3. Office of the Provost, Missouri S&amp;T, January 2015</td>
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<td>4. Expenditure Governance Review, UM System-wide, January 2015</td>
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<td><strong>Total</strong></td>
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The reports include our findings and assessed level of risk, as well as management's remediation plan for the findings. Below is the criteria used for the assessment of risk.

**Assessment of Risk:**

**High (H)** – Significant impact to the Institution, campus, or unit. Individually or aggregately material in terms of financial impact, external compliance violation, adverse publicity, significant or pervasive weakness in control environment, significant inefficiencies, etc.

**Medium (M)** – Moderate in terms of impact to the Institution, campus, or unit. Individual instance or an aggregate of low risk items considered moderate terms of financial impact, compliance violation, adverse publicity, weakness in control environment, efficiency, etc.

**Low (L)** – Low in terms of impact to the Institution, campus, or unit. Relatively immaterial in terms of financial impact, no external compliance violation, little adverse publicity, minor inefficiencies, etc.
Internal Audit Summary Report
MUHC HIPAA/HITECH Security Assessment
Report Date: December 1, 2014

Background:
The fiscal year 2014 University of Missouri Health System (MUHS) Internal Audit Plan included an assessment of the University of Missouri Health Care (MUHC) HIPAA Security. The federal Health Insurance Portability & Accountability Act of 1996 (HIPAA) required the U.S. Department of Health and Human Services (HHS) to develop regulations protecting the privacy and security of certain health information. HHS fulfilled the security requirement by publishing the HIPAA Security Rule, Security Standards for the Protection of electronic Protected Health Information (ePHI), to establish a national set of security standards for protecting certain health information that is held or transferred in electronic form. This rule covers the technical and non-technical safeguards that covered entities must put in place to secure individuals’ ePHI. The American Recovery and Reinvestment Act (ARRA) was signed into law in 2009 creating significant changes and implications to HIPAA Security through new regulations in the Health Information Technology for Economic and Clinical Health (HITECH) Act.

Primary support for MUHS HIPAA Security compliance is the responsibility of the MUHS Information Security Officer with support from the Chief Privacy Officer and Chief Compliance Officer. While information security responsibility is primarily owned by MUHC, certain underlying information security activities are managed by Cerner in alignment with MUHC guidance.

Scope and Approach:
The scope of work focused on the people, processes, and technologies associated with safeguarding ePHI at MUHC. Procedures evaluated MUHC’s level of compliance with the federally mandated HIPAA Security requirements.

Key Highlights:
- **Improve the IT security risk assessment process and risk management framework.**
  MUHC should implement and execute a formal IT security risk management program to proactively track, identify, monitor and mitigate identified risks and vulnerabilities affecting the organization’s ability to protect ePHI. The last formal risk assessment process was completed in 2012. Improving the IT security risk assessment process and risk management framework will better manage and protect MUHC’s ePHI. (M)

- **Develop a formal governance structure to improve the policies and procedures supporting key HIPAA/HITECH Security processes.**
  While MUHC has a number of policies and procedures supporting HIPAA/HITECH processes, a formal governance structure is needed to support the effectiveness of these policies and procedures. Several policies supporting key HIPAA/HITECH processes either do not currently exist, should be updated to reflect additional requirements, or have not been reviewed and updated to reflect the current environment. Developing a formal governance structure will assist in creating a more controlled environment. (M)
- **Strengthen current security incident reporting processes.**
  The existing process for reporting HIPAA/HITECH related security incidents should include a formal escalation and triage process to facilitate improved communication across impacted functions. In addition, there is currently no formalized post-incident process by which an assessment is performed to identify the root cause of the incident and how to prevent reoccurrence. Strengthening current security incident reporting processes will help ensure HIPAA/HITECH related security events are appropriately identified and evaluated. (M)

- **Improve disaster recovery and business continuity processes.**
  Disaster Recovery and Business Continuity policies and procedures (BCP) are currently being revised; however, the existing process does not adequately involve MUHC’s business unit owners in key activities related to these plans. In addition, no documentation exists to support the last performed test and testing results of the “UMHC Tiger Institute BCP”. By improving disaster recovery and business continuity processes, the risk of inappropriate prioritization of critical assets in disaster recovery processes is decreased and the risk of the inability to recover or process ePHI in the event of a business interruption or disaster is decreased. (M)

- **Improve the use of encryption to protect ePHI.**
  While various encryption technologies are utilized on workstations, MUHC issued mobile devices, and wireless transmissions, encryption technology is not implemented on servers hosting ePHI data, production databases and backup databases. Improving the use of encryption will better protect the confidentiality of protected health information. (M)

- **Improve controls to maintain the integrity of ePHI.**
  Although MUHC has implemented access and cryptographic controls that protect the confidentiality of ePHI, there are no integrity controls in place to validate that ePHI maintained by MUHC has not been altered or destroyed. Improving controls to maintain the integrity of ePHI will better ensure validity of protected health information. (M)

- **Enhance monitoring procedures with respect to IT security logs.**
  While some network security activity is reviewed on a proactive basis, current monitoring processes are not formalized and activity at the application and database levels are only monitored on an as-needed basis, rather than on a pre-established frequency based on the risk of the system or data being logged. Enhancing monitoring processes of the IT security logs will assist in the identification, tracking and resolution of potential inappropriate access to ePHI. (M)
Internal Audit Summary Report
MUHS Obstetrics, Gynecology and Women’s Health Department
Date: December 19, 2014

Background:
The fiscal year 2014 University of Missouri Health System (MUHS) Internal Audit Plan included an assessment of the Obstetrics, Gynecology, and Women’s Health Department (OB/GYN) within the University of Missouri School of Medicine.

The Department consists of 6 divisions: General OB/GYN, Gynecologic Oncology, Maternal/Fetal Medicine, Reproductive/Fertility, Female Pelvic Medicine and Reconstructive Surgery, and Reproduction and Perinatal Research. The Department provides patient services at the University of Missouri Women’s Health Center, University Hospital and Women’s and Children’s Hospital. Additionally, the Department offers an eight week OB/GYN rotation for MU Medical students and a fully accredited residency program.

The Department’s revenue for fiscal year 2013 totaled $9.3 million, with $7.2 million stemming from Physician revenue. The Department includes 25 faculty members.

Scope and Approach:
The scope of work included activity occurring Fiscal Years 2013 and 2014. Procedures focused on relevant processes and key internal controls to analyze the efficiency and effectiveness of operations and to assess compliance with University and School of Medicine policies and procedures.

Key Highlights:
- **Evaluate the yearly incentive calculation process and related procedures.**
  Efficiency of the yearly incentive compensation calculation process could be improved. The current process relies on manual procedures, compiles data from various sources, and includes some discretionary components that are not formally documented. The current process presents increased opportunity for error and is not always clear to faculty members. Improving the process will decrease the risk for manual data entry errors, and increase visibility to stakeholders throughout the Department. At the time of the audit, School of Medicine and University Physicians leadership were aware of the situation and working with the Department to enhance the plan for the coming academic year.  
  (M)

- **Continue to enhance communication processes with faculty members throughout the Department.**
  Communication with faculty members has improved relative to financial decisions, results and overall departmental strategy through various committee meetings and an annual one day retreat. However, at the time of the audit, multiple individuals indicated a desire for enhanced clarity around the strategic direction of the Department to further their understanding of the relationship between the Department’s mission, strategic initiatives and related investments. For example, the Department could develop a defined, strategic plan for the investment of Department resources to enhance alignment and collaboration with stakeholders. School of Medicine leadership was aware of improvement opportunities in this area and has worked with the Department over the
past year to implement processes that will further involve faculty in defining and implementing departmental strategic goals. (M)

- **Improve compliance with University purchasing card policies and procedures.**
  Compliance with University procurement policies and review / monitoring of expenditure activities could be improved. Instances were identified in which purchases did not follow appropriate purchasing card approval protocol and related documentation retention practices. Enforcing compliance with University policies and guidelines mitigates the risk of unauthorized purchases and increases transparency of Departmental expenditures. (M)

- **Ensure fiscal processes are documented and increase awareness of University policies throughout the department.**
  Fiscal processes and job responsibilities are not formally documented and some individuals are not fully aware of current University policies within the Department. Further, limited cross-training has been provided to some OB/GYN personnel. Documenting fiscal processes and responsibilities and cross-training individuals can improve the efficiency and effectiveness of fiscal operations, provide a single point of reference for fiscal staff, assist in delineating appropriate owners for controls and drive accountability in the Department. (M)

- **Improve cash receipts processes in the Department.**
  Cash receipts processes in the Department should be improved. Although a limited amount of cash and checks are received in the Department, current processes do not include a cash receipt log, proper segregation of duties, or formal reconciliation procedures. Further, cash receipts are not always deposited timely. Implementing proper procedures should better safeguard University funds and ensure compliance with University policy. (M)
**Internal Audit Summary Report**  
**Missouri S&T Office of the Provost**  
**Report Date: January 19, 2015**

### Background:
The fiscal year 2015 Internal Audit Plan included a review of the Office of the Provost (the Provost’s Office or the Office) at the Missouri University of Science and Technology (Missouri S&T).

The Provost’s Office is responsible for all aspects of teaching, research, and oversight of the following areas at Missouri S&T: graduate and undergraduate studies, sponsored programs, enrollment management, the Curtis Wilson Laws Library, information technology, and institutional research and assessment. On July 14, 2014, Missouri S&T welcomed Dr. Robert Marley as the new Provost and Executive Vice Chancellor for Academic Affairs. Dr. Marley succeeded Dr. Warren K. Wray, who became Vice Chancellor for Global and Strategic Partnerships at Missouri S&T.

The Office houses three full-time executive assistants in addition to the Provost. Total expenditures for the Office during fiscal year 2014 were approximately $800,000.

### Scope and Approach:
The scope of work included activity occurring in fiscal years 2013, 2014 and fiscal year 2015 through September 30, 2014. Procedures focused on relevant processes and key internal controls to analyze the efficiency and effectiveness of operations and to assess compliance with University policies and procedures. The scope of the audit included the Provost’s Office only. Programs and units that report directly to the Provost were not in scope for this audit.

### Key Highlights:

- **Realign the Office budget to better account for and reflect expenditures.**  
  Alignment of funding sources and actual expenditures in the Office’s budget could be improved. The current budget does not accurately reflect how certain expenditure items in the Office are funded. The budget includes each item but does not adequately allocate funds at the line item level to cover all expenditures related to each respective item. Additionally, the Office has several accounts that were originally budgeted for other purposes that are now used to cover the shortages. Assessing the current budget and realigning accounts to properly reflect what funds will actually be spent on should provide for a more transparent environment and provide improved data to be utilized in the development of future budgets and when making strategic decisions. (M)

- **Expand and formalize budgetary monitoring procedures.**  
  Current budgetary monitoring procedures for the Office could be expanded and formalized. The Office does not currently perform a variance analysis between budget, actual, and prior period balances. Including the analysis in periodic budgetary reviews, as well as ensuring all academic and administrative areas that report to the Provost perform the same analysis, would allow for improved transparency and oversight of University funds. (M)

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➢ **Develop a more robust process to document and track Provost financial commitments.**

The Office could develop a more robust process to document and track all financial commitments (i.e. requests for financial assistance related to strategic endeavors) requested by academic and administrative areas, whether approved or denied. This would benefit the Office by providing increased insight into what units are requesting financial assistance for, the purpose, dollar amount, etc. An improved process would also present opportunity to analyze data to identify trends that could provide insight into the effectiveness of fiscal management in select units throughout the campus. (M)

➢ **Ensure Office staff members are cross-trained on fiscal activities and fiscal processes are documented.**

Fiscal processes and job responsibilities are not formally documented and limited cross training with respect to fiscal processes has occurred. Recent turnover and transition of fiscal staff proved challenging as remaining staff members had received minimal training in fiscal areas and had limited experience with fiscal processes. Documenting fiscal processes and responsibilities and cross-training Office staff can be beneficial when turnover occurs in the future and during periods when an individual is out of the office. (M)
Internal Audit Summary Report
UM System-wide Expenditure Governance Review
Report Date: January 21, 2015

Background:
The fiscal year 2014 Audit Plan included an analysis of University of Missouri System (the System or UM System) expenditure activity. The purpose of the audit was to utilize data analytics tools to analyze UM System-wide spend data and leverage this analysis in identifying select units to perform further inquiry procedures related to expenditure monitoring and review/approval procedures.

Goods and services can be purchased via multiple avenues, including: purchase orders (PO), Non-Purchase Orders (Non-PO), purchasing cards (p-card), Show-Me-Shop (SMS), and Travel and Expense reimbursements (T&E). During fiscal year 2014, nearly $1.3 billion was spent System-wide via these methods. In order to ensure University funds are being used appropriately and mitigate the risk of unauthorized purchases, it is critical that proper review, approval and monitoring controls are in place for each respective purchasing method.

Scope and Approach:
The scope of work included fiscal year 2014 expenditure activity. Procedures focused on relevant processes and key internal controls to evaluate effectiveness and efficiency of review, approval and overall monitoring operations related to University expenditures. Only expenditure activity made via PO, Non-PO, p-card, T&E and SMS were in scope for this audit.

Key Highlights:

- **Enhance communication and awareness for University expenditure resources.**
  Communication of policy updates and awareness of expenditure related resources (i.e., documents/training materials available on University websites) and training opportunities could be improved. Enhanced communication should improve awareness and allow University fiscal staff to better understand and appropriately utilize the various purchasing methods. It will also promote improved compliance with established University policies and facilitate a more consistent approach to purchasing items via the various methods throughout the System. (M)

- **Enhance monitoring procedures for spend throughout the University.**
  Spend monitoring procedures throughout the University could be improved. Not having detailed enough review and approval procedures presents opportunity for University funds to be used inappropriately. Enhancing spend monitoring procedures should help identify potentially inappropriate purchases, ensure appropriate use of University funds and promote increased compliance with University policy. (M)
University of Missouri System

Board of Curators

February 5-6, 2015

Audit Committee

Internal Audit Quarterly Report

UM
Summary of Internal Audit Activity
Since our October 2014 Report to the Audit Committee

- Completed four internal audits
- Drafted one report
- Planning/performing fieldwork for six internal audits
Internal Audit Projects Completed
Since our October 2014 Report to the Audit Committee

- HIPAA/HITECH Security Assessment, MUHC
- Obstetrics, Gynecology and Women’s Health Department, MUHS
- Expenditure Governance Review, UM System
- Office of the Provost, Missouri S&T

Note – One page summaries and the full reports have been provided in advance to the Committee.
HIPAA/HITECH Security Assessment, MUHC

- Background and Scope
  - Federally regulated security standards for protecting ePHI
  - Focused on people and processes designed to safeguard ePHI

- Key Highlights
  - Implement an IT security risk assessment
  - Develop a formal policy and procedure governance structure
  - Strengthen security incident reporting
  - Improve disaster recovery and business continuity processes
  - Strengthen data integrity controls (e.g. encryption)
  - Enhance IT security log monitoring procedures

Observations by Risk

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Obstetrics, Gynecology and Women’s Health Department, MUHS

Background and Scope

- Department consists of 6 divisions and approximately 25 faculty
- Approximately $9.3 million in revenues for FY2013
- Scope period: 7/1/12 – 6/30/14

Key Highlights

- Evaluate the yearly incentive calculation process
- Enhance communication within Department
- Improve compliance with University purchasing card policies
- Document fiscal processes
- Improve cash receipts processes
Office of the Provost, Missouri S&T

- Background and Scope
  - Provost Robert Marley hired 7/14/14
  - Office is responsible for all aspects of teaching and research
  - Approximately $800,000 in expenditures in FY2014
  - Scope period: 7/1/12 - 9/30/14

Key Highlights
- Align budget to better account for actual expenditures
- Improve budgetary monitoring procedures
- Enhance the financial commitment process
- Document fiscal processes and cross train staff

Observations by Risk

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Expenditure Governance Review, UM System

- Background and Scope
  - Focused on expenditure monitoring and review/approval procedures for spending avenues (PO, Non-PO, P-card, SMS and T&E)
  - Approximately $1.3 billion spent System-wide in FY14
  - Scope period: 7/1/13 – 6/30/14

- Key Highlights
  - Enhance communication and awareness of University expenditure resources
  - Enhance spend monitoring procedures
Questions?