utmb Health

The University of Texas Medical Branch
Audit Services

Audit Report
Information Services - Service Centers Audit
Engagement Number 2017-023
August 2017

The University of Texas Medical Branch
Audit Services
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Background
The University of Texas Medical Branch's (UTMB Health's) Institutional Handbook of Operating Procedures (IHOP) Policy 04.05.01 Service Centers describes service centers as "activities that provide goods or services to the UTMB community. Service centers charge the user a rate based on actual cost incurred in providing the good or service. It is the expectation that service center rates will be sufficient to cover the cost of operations." Service center business plans cover a five-year span at the conclusion of which the center should be operating at a break-even point.

Effective management of internal service centers requires sufficient resources and processes to ensure customers are billed accurately and timely. Reputational and operational risks for the "business owner" are at stake when these processes do not function appropriately. Additionally, since service center charges are automatically posted to a customer's account/budget, inaccurate or untimely charging can negatively impact a department leader's ability to effectively manage his/her respective operating budget.

The Department of Information Services (IS) manages 12 business lines providing a variety of telecommunication and information technology support services to the UTMB Health community. Each business line effectively represents a "service center" with a unique operating budget and methodology for charging its customers. Within the PeopleSoft Financial Management System (FMS), each line is identified by a "class number" consolidated to one of four operating units: IS Telecommunications; Information Technology Infrastructure Initiative (ITII); Cellular Phones; and, Pagers. The fiscal year (FY) 2017 operating budget for the four operating units totaled approximately $23 million including depreciation.

This audit was part of a series of service center reviews identified by the Executive Vice President and Chief Business Officer as part of Institutional Support hours in the annual audit plan.

Audit Objective
The primary objective of this audit was to assess the effectiveness of the operational, financial, and compliance controls for select business lines of the IS Telecommunications and the Information Technology Infrastructure Initiative (ITII) Service Centers.

Scope of Work and Methodology
Audit Services reviewed the FY 2017 operating budget for each of the 12 IS managed business lines/classes, identifying four classes representing approximately 72% of the total budget for the four operating units. The four classes selected as the scope for review included:

- Telecommunications Operating Unit
  - Class 11404 - Telephone Service Revolving
  - Class 11418 - Voice Campus Infrastructure
- ITII Operating Unit
  - Class 19275 - Desktop Support
  - Class 19276 - Enterprise Support
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Additionally, the scope included a review of the methodologies used to develop FY 2018 service rates. Our audit methodology included interviews with key IS Business Operations and Technical Services personnel; review and assessment of financial plan documentation and related institutional policies and procedures; and, transaction testing.

The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing as promulgated by the Institute of Internal Auditors.

Audit Results
Control Environment
Key to the achievement of an entity's goals and objectives is a control environment or framework comprised of the following elements: sufficient, trained personnel; documented policies and procedures providing appropriate internal controls such as segregation of duties and ensuring compliance with applicable laws/regulations; effective, timely communication; and, supervisory oversight and monitoring.

Based on the procedures performed, Audit Services identified numerous opportunities to strengthen management and oversight controls within the areas reviewed. Additionally, the discussions with IS leadership related to detailed audit observations lead to the consideration of a larger opportunity to strategically assess the structure, staffing and functionality of the IS service centers as most are similarly managed. For example, after considering the full cost to benefit of operating as a service center, it may be more appropriate to use a shared services allocation model to charge customers for use of some IS services.

Recommendation 2017-023-01-RM:
The VP and Chief Information Officer should assess the strategic and business impact of the current IS service center structure versus a shared services model to ensure continued alignment with institutional goals and objectives.

Management’s Response:
The Vice President and Chief Information Officer will assess the pros and cons of both the current service center approach and a shared service model approach. Results of the assessment along with recommendations will be provided to executive leadership.

Implementation Date: December 22, 2017

Segregation of Duties
During our review of Class 11404 – Telephone Service Revolving, we noted a lack of segregation of duties around operational processes. The same IS Business Operations employee prepares the journal entries for the Accounting department to post; performs the reconciliation; makes any necessary corrections; and, validates charging departments back for the invoices. Additionally, there was no evidence of a secondary review related to any of these processes.
Recommendation 2017-023-02-RM:
The IS Business Operations Manager should evaluate the current roles and responsibilities related to staffing to ensure an appropriate segregation of duties for operational processes, oversight and monitoring, including documented supervisory review.

Management's Response:
The IS Business Operations Manager will revise the current roles and responsibilities to ensure appropriate segregation of duties for operational processes, oversight and monitoring, and supervisory review.

Implementation Date: October 9, 2017

FY 2017 Business Plan and Cost Model Calculations
IHOP Policy 04.05.01 Service Centers requires service center management to work with the Department of Finance to establish financial plans and operating budgets based on rates established in accordance with disclosed cost accounting practices of UTMB Health and guidance provided in OMB Circular A-21. Audit Services interviews with IS Business Operations personnel indicated IS did not retain a copy of the FY 2017 Business Plan and Cost Model rate calculations as required in institutional policy. Additionally, certain rates had not been adjusted in several years. The FY 2018 plan and cost models were available for Audit Services review.

Class Invoice Transaction Testing – Summary
Each IS business line invoices customers varying rates based upon the type of service received. For example, Telephone Service Revolving passes through to the customer charges from the service provider plus a 10% administrative charge to cover maintenance expenses. Other business lines based their charges on attributes such as equipment type and age and/or average hourly technician wage. The following table reflects the overall exception themes identified during detailed testing of the internal customer invoicing process for the period January – April 2017:

<table>
<thead>
<tr>
<th>Theme</th>
<th>Class 11404</th>
<th>Class 11418</th>
<th>Class 19275</th>
<th>Class 19276</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice paid to the incorrect account</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Rates billed inconsistent for same type of service</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service not billed timely to the internal department</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Errors on monthly reconciliation not corrected</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates inconsistent with departmental service agreement for data storage</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Departmental service agreement for data storage not available</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Audit Services noted throughout the engagement, when errors were identified and communicated, IS personnel promptly worked to correct them. There were no exceptions in the transaction testing related to long distance telephone service (included in Class 11418) and ITII indirect expenses (included in Class 19276).

**Recommendation 2017-023-03-RM:**
The Vice President and Chief Information Officer should ensure sufficient oversight and monitoring controls are implemented to more effectively manage IS service center processes.

**Management's Response:**
The Vice President and Chief Information Officer will initiate and participate in a project to review and document all key IS Service Center processes in order to ensure sufficient oversight and monitoring controls are in place at all levels.

**Implementation Date:** December 22, 2017

**Detailed Class Transaction Testing**

**Class 11404 - Telephone Service Revolving**
UTMB Health supports its own telephone system with telephone switches located on campus and remote locations. Class 11404 includes IS invoiced vendor service expenses and an additional 10% administrative fee to internal departments to recover related maintenance expenses for the Telecom Expense Management System – Comview, which manages all vendor invoices. Currently, the administrative charge is manually applied to each departmental account with plans in development to transition to an automated process. In December 2016, IS implemented a monthly oversight process (reconciliation) to verify the charge back to the departments was accurate and the 10% administrative fee was charged to departments. Detailed testing identified errors in applying charges to the correct account; untimely billing; and, correcting errors identified through their monthly reconciliation process.

**Class 11418 - Voice Campus Infrastructure**
Class 11418 includes all long distance calls, one-time costs (OTC), and monthly recurring costs (MRC). Internal departments are charged based on the work and/or service received.

**Long Distance Charges**
Employees place business related long distance calls when on or off the UTMB campus using unique internal departmentally linked codes. All codes must be properly requested and approved by the department head before the IS issued authorization code is active. The five digit code provided to the customer is tied to their department's billing account. IS has a monthly process for charging the departments for all incurred long distance calls. This process captures the calls made and their duration, associated charges, and billing account information, which then interfaces with PeopleSoft (PS) to charge individual departments. Monthly, IS reviews the
expenditure trend to identify any abnormal monthly expenses. No exceptions were identified from detailed testing.

**One Time Costs (OTC)/Monthly Recurring Costs (MRC)**

UTMB Health departments submit all move/add/change requests to the Telecom Service Department. Service requests can include anything from a new phone request, to add on service i.e. voicemail, or any service with a monthly recurring expense that is not invoiced from a third party vendor. Currently the requests (work orders) are placed into an online service request ticketing system (LANDesk) by the departments and requests are manually logged into the legacy telecom expense management system (TMICs) by the telecom technicians. Requests are logged with associated services/equipment and cost tied to equipment codes within the system. When services have been completed the work orders are manually closed by IS Business Operations. A monthly process to push all closed work orders is automatically fed from TMICs to PS to charge the departments.

There is no systematic way to ensure all work orders are entered into TMICs. However, an incomplete work order listing can be obtained to validate the status of each work order to ensure that all work orders are closed and appropriately and timely billed to the departments. During an account clean up, IS identified a backlog of incomplete unbilled work orders dating from 2013-2016 within TMICs. Upon closing of these work orders in April 2017, IS absorbed a revenue loss totaling $60,497.90 for provided services that should have been charged to the departments.

It should be noted IS replaced the TMICS system with the CommIT system effective 07/24/17 which should result in a more automated process.

**Class 19275 – ITII Desktop Support**

IS Desktop Support provides technical support for Standard PCs, Macs, Laptops and Thin Client Computers including but not limited to installations, configurations, connections, maintenance, troubleshooting and/or repair of computers and peripherals. Computers receiving standard desktop support are managed with standard processes, tools, and policies. Remote administration tools are used whenever possible to minimize interruptions and provide faster service.

IS maintains the inventory of all equipment hardware in an inventory tracking system - Webtrax. Additionally, Webtrax maintains the rate table for each equipment type and corresponding monthly IS service charge to be charged to the departments. Departments have the ability to add or delete the support for each piece of equipment owned.

Audit Services review of the February and March Webtrax reports noted a support charge being incorrectly added to devices without active billing accounts. IS Business Operations was aware of the need to adjust the general ledger entry to ensure that customers were not inadvertently charged for these services and created a manual adjustment process preventing these charges from flowing to the general ledger. Audit Services review of the general ledger for February and March indicated that while this manual process was working, there was an opportunity for IS Business Operations to determine why the error was occurring and correct the system to
eliminate the need for monthly manual adjustments. IS Business Operations subsequently updated and corrected the system during the engagement, eliminating the need for monthly manual adjustment.

Class 19276 – ITII Enterprise Support

Data Storage
The Enterprise Information Systems team (IS Server Team) supports a variety of enterprise-wide applications, in addition to providing web hosting, support and development. Applications supported include, however are not limited to the Content Management System (CMS), Imaging and Process Management (ImageNow), Xythos Document Management (iSpace), electronic payments (ePay), EHCO, UTMB directory, and Everbridge.

This class includes revenue collected from departments having expanded server data storage. Departments request additional server storage from the IS Server team via tickets, phone calls, emails, etc. The IS Service Team works with the department to determine the appropriate needs of the department. Based on the departmental needs, IS develops a service agreement outlining the additional fees for approval by the department head for billing purposes. The Data Storage database holds the requests from departments with the associated cost billed monthly to the departments.

Indirect Expenses
ITII Indirect Expenses are for indirect support including internal support for employee’s email accounts, generic email accounts for conference rooms, office group emails etc. Departments are billed monthly based upon the number of users. IS Business Operations annually calculates the monthly user fee based on the estimated cost allocated among all active directory accounts at a given point in time.

Other Observations
Audit Services review of the FY 2018 rate cost models identified both incorrect formulas within the worksheets and incomplete documentation of the methodology for setting rates for services provided. This information was brought to the attention of management for correction and assessment on the impact of the approved rates for FY 2018.

Recommendation 2017-023-04-RM:
The VP and Chief Information Officer should develop and implement a review process for service center cost models to ensure data accuracy and completeness. Additionally, methodologies used should be documented for future reference.

Management’s Response:
The Vice President and Chief Information Officer will develop and implement an annual service center cost model review process that 1) will ensure data accuracy and completeness, 2) will incorporate outside review by the VP, Finance Institutional Support, and 3) that documents the methodology(s) used. Documentation will be
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retained according the Information Services approved records retention schedule.

Implementation Date:  December 22, 2017

Conclusion
Audit Services audit of IS service centers noted opportunities to improve and strengthen the overall control environment. Additionally, a global, strategic assessment of the IS service center concept appeared warranted.

We greatly appreciate the assistance provided by Information Systems leadership and IS Business Operations staff and hope that the information presented in our report is beneficial.

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