



Office of Internal Audit

October 22, 2013

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Dr. Calhoun:

As part of the institution's fiscal year 2013 Audit Plan, we completed a risk-based operational audit of capital equipment acquisitions, leases, maintenance, and warranty arrangements. The objectives of the audit were:

- To determine whether processes for evaluating initial and replacement acquisitions of key capital equipment position the institution to achieve relevant strategic goals.
- To determine whether processes for evaluating and managing key capital equipment leasing, warranty, and maintenance arrangements position the institution to achieve economy and efficiency of operations.

This audit was conducted in accordance with guidelines set forth in The Institute of Internal Auditor's *International Standards for the Professional Practice of Internal Auditing*. We appreciate the assistance provided by management and other personnel and hope the information presented in our report is helpful.

Sincerely,

Kris I. Kavasch
Executive Director of Internal Audit

Enclosure

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Capital Equipment Operational Audit

October 22, 2013

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**UT Health Northeast
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Audit Report

Executive Summary

The UT Health Northeast Internal Audit Committee approved a risk-based operational audit of capital equipment acquisitions and associated contractual commitments as part of the institution’s fiscal year 2013 audit plan. This engagement was prioritized among other potential risk-based audits due to the considerable outlays involved for contractual commitments associated with servicing and maintaining capital equipment that is vital to carrying out the organization’s mission.

The objectives of the audit were:

- To determine whether processes for evaluating initial and replacement acquisitions of key capital equipment position the institution to achieve relevant strategic goals.
- To determine whether processes for evaluating and managing key capital equipment leasing, warranty, and maintenance arrangements position the institution to achieve economy and efficiency of operations.

The size and nature of this operational audit led us to a reporting approach unique to this engagement. The detailed results in the body of the report have been categorized and sequenced in an order that generally progresses from short-range recommendations to long-range considerations. Two of the short-range recommendation categories also have corresponding mid-range proposals that focus on process enhancements that require longer implementation windows. Rather than requesting management’s response for each observation, we grouped them by range, and reported management’s concurrence and target implementation dates **solely within this executive summary** rather than throughout the body of the report. Also, management’s decision to implement the two long-range considerations would involve institution-wide process improvement initiatives requiring substantial resource commitments of a long duration. **As such, our expectation, and management’s response, is solely that the long-range considerations be reviewed and assessed for feasibility. The implementation dates correspond to dates by which decisions to move forward will be determined.**

The table that follows provides a snapshot of the results, recommendations, proposals, and considerations:

Results category	Short-range recommendations (SRR)	Mid-range proposals (MRP)	Long-range considerations (LRC)
Authorization process	✓ (A series)		
Management of service arrangements	✓ (A series)	✓ (B series)	
Capital equipment acquisition process	✓ (A series)	✓ (B series)	
Contract visibility and awareness	✓ (A series)		✓ (C series)
Capital budgeting			✓ (C series)

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The Executive Vice President, Chief of Staff concurs with the observations and agreed to:

- Implement the short-range recommendations addressing the authorization process, management of service arrangements, the capital equipment acquisition process, and contract visibility and awareness (SRR 1.A – 8.A, and 10.A) by January 31, 2014.
- Implement the mid-range proposals, or viable alternatives, addressing the management of service arrangements and the capital equipment acquisition process (MRP 4.B – 7.B, and 9.B) by June 30, 2014.
- **Review and assess the feasibility of implementing** the long-range considerations addressing contract visibility and awareness and capital budgeting (LRC 11.C and 12.C) **and determine whether they should be implemented** by August 31, 2014.

We concluded that processes for evaluating initial and replacement acquisitions of key capital equipment have predominantly served the institution well in its current environment, positioning the institution to achieve relevant strategic goals. Although existing processes have not always been consistently applied, any adverse effects on achievement of relevant strategic goals appear to have been inconsequential.

Similarly, with one notable exception, processes for evaluating and managing key capital equipment leasing, warranty, and maintenance arrangements have largely served the institution well in its current environment, positioning the institution to achieve economy and efficiency of operations. Existing processes have not always been consistently applied, which appears to have had only a minor effect on both economy and efficiency of operations. One notable exception regards management of the arrangement for on-site biomedical equipment and imaging equipment services, whereby insufficient controls and processes for managing certain aspects of the arrangement have more moderately affected economy of operations.

As UT Health Northeast prepares for future growth, senior leadership may be challenged to sustain these overall positive positions unless it develops and strengthens centralized processes that support department leaders who have been empowered to make important decisions in these areas. Senior leadership should consider establishing a formal capital budgeting process, implementing a more robust capital equipment evaluation process prior to purchase, and developing and relying on more objective criteria as one element of this evaluation process. Also, senior leadership should consider increasing use of the powerful data and reporting capabilities of the institution's contract library system to transform its focal point to a planning tool that informs and supports decisions about equipment acquisitions and associated ongoing contractual obligations.

Background

The UT Health Northeast Internal Audit Committee approved a risk-based operational audit of capital equipment acquisitions and associated contractual commitments as part of the institution's fiscal year 2013 audit plan. This engagement was prioritized among other potential risk-based audits due to the considerable outlays involved for contractual commitments associated with servicing and maintaining capital equipment that is vital to carrying out the organization's mission. The backdrop of the current environment includes an outsourced on-site biomedical and imaging equipment vendor that administers a comprehensive maintenance program for a significant portion of the institution's equipment. This vendor manages some of this equipment in conjunction with institutional management decisions to keep existing service agreements in place. Management also identified the risks of potentially inadequate equipment replacement planning and indiscernible funding sources as areas to be assessed.

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The current environment is characterized by decentralized empowerment of department leaders to initiate decisions about acquiring capital equipment and purchasing associated contractual commitments. These leaders are also empowered to make decisions about coverage terms, placement entirely with the outsourced biomedical and imaging equipment vendor when applicable, or purchase of a separate agreement. Department leaders are also primarily responsible for day-to-day management of these service agreements. There are centralized administrative functions and controls in place to support and guide the decentralized decisions made by these leaders. This hybrid approach has compelling benefits, in that subject matter experts who understand the technical aspects and practical uses of the equipment, and who are aware of requirements for its proper maintenance and care, are entrusted to recommend equipment and service agreement purchase decisions from the bottom up. Ideally this approach is supplemented by processes and mechanisms that foster opportunities for input by cross-functional areas affected by these decisions, and by senior leadership responsible for the overall operational and financial well-being of the organization. The impetus for this audit was UT Health Northeast's interest in assessing the current approach to understand its ability to position the institution to achieve relevant strategic goals and economy and efficiency of operations, as outlined in more detail in the audit objectives that follow.

Audit Objectives

The objectives of the audit were:

- To determine whether processes for evaluating initial and replacement acquisitions of key capital equipment position the institution to achieve relevant strategic goals.
- To determine whether processes for evaluating and managing key capital equipment leasing, warranty, and maintenance arrangements position the institution to achieve economy and efficiency of operations.

Audit Scope and Methodology

We judgmentally defined key arrangements for testing to be equipment acquisitions valued at \$50,000 or more; and key lease, warranty, and maintenance arrangements to be transactions or related series of transactions value at \$10,000 or more. We made occasional exceptions to these quantitative delineations to consider qualitative factors and obtain breadth of selections across the institution, such as where certain equipment and their corresponding service agreements are characterized by a number of small, repeat purchases. The date scope was transactions occurring between March 1, 2012 and February 28, 2013.

To accomplish the audit objectives, we performed the following procedures, among others:

- Reviewed source documentation about the audit topics, including the current institutional strategic plan, policies and procedures, organizational charts, and institutional and system-specific risk assessments
- Performed an engagement-level risk assessment and identified the institution's risk management and control processes in place to address these risks
- Obtained and reviewed professional journal articles about each of the audit areas of equipment acquisitions; and leasing, warranty, and maintenance arrangements, in order to identify best practices and frame interview questions
- Tested a probe sample of transactions to identify talking points to focus interviews that followed

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- Interviewed a number of institutional leaders who are subject matter experts about each of the audit topics
- Based on information obtained from performing the steps above, developed criteria against which to test whether stated or documented processes are in practice, segmenting equipment acquisitions apart from service arrangements
- Queried asset and expenditure transactions within the date scope and judgmentally selected a sample of transactions for each segment, applying the quantitative definition of key transactions discussed above, while also selecting a breadth of departments, equipment types, funding sources, strategic initiatives, and types of service arrangements
- Tested the sample selections against the criteria developed for equipment acquisitions and separate criteria developed for leasing, warranty, and maintenance arrangements
- When applicable to the sample selections, also reviewed payments for repair or maintenance expenses to the same vendors to determine whether the contracted services were correctly incurred outside the scope of covered services of the vendor agreements
- For the outsourced biomedical and imaging equipment service function, performed additional tests to assess the level of institutional oversight of equipment inventory management and expenditure accountability by the vendor relative to expectations as stated in the terms and conditions of the contract

We conducted our audit in accordance with guidelines set forth in The Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

Audit Results

Authorization Process

One key element of ensuring that capital equipment acquisitions and related service expenditures position UT Health Northeast to achieve relevant strategic goals and economy and efficiency of operations is having a reliable purchase and expenditure authorization process that is aligned with the institution's governance structure. The existence of such a process provides fundamental documentation that key institutional leaders with knowledge of their functional areas are aware of these transactions, which are commonly among the higher dollar value and ongoing commitments of the institution.

Our review established that the following practices discussed in Observations 1 through 3 are occurring intermittently, but with enough regularity to reduce the effectiveness of the authorization process over equipment acquisitions and related service expenditures, when considered in combination. As a result, these observations culminate in corresponding short-range recommendations to immediately improve the effectiveness of the authorization process:

Observation 1: The role of an administrative officer has traditionally been an important designation at UT Health Northeast. The term administrative officer originates from Regents' Rule 20102, *Appointment of Officers*. This Rule identifies presidents, vice presidents, and deans as administrative officers, but does not preclude institutional presidents from designating other appointees as such. IHOP Policy 01.01.02, *Governance and Administration*, states that administrative officers are reflected on the organization chart at IHOP Policy 01.01.04, but this is no longer the case. A number of forms routinely used in daily operations contain signature lines for an administrative officer, including the account signature authorization, personnel action, request for travel authorization, and travel reimbursement voucher forms. Designation as an administrative officer at UT Health Northeast, whether formally or informally, has been

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generally accepted and understood to correspond to the titles of president, executive vice president, and vice president. Roles below that level, such as associate vice presidents, have not traditionally been considered administrative officers to our knowledge, at least in recent times.

During this engagement and via other ongoing monitoring activities we have learned that at least two associate vice presidents (AVPs) are authorizing transactions in the role of administrative officers. These arrangements may have been informally approved by the President. However, these roles are not indicated on the institution's organizational chart, so employees have been processing documents and transactions authorized by these AVPs on the administrative officer line without having a reliable source of verification of this designation. Similarly, some forms either commonly or occasionally used in association with capital equipment and purchases of related services, such as the capital expenditure request (CER) and sole source forms, require approval of the vice president (VP) to whom the requesting department reports. Due in part to the fact that some AVPs have come to be acknowledged as administrative officers, their signatures on lines designated for vice presidential approval have also become accepted. The associated procurements have moved forward with an AVP authorizing in the place of a VP, without notation that the approvals have been processed as such due to operational necessity in the absence of the appropriate VP.

Observation 2: The institution's organizational chart has traditionally served as a roadmap for designating the proper administrative officer to have secondary level approval authority over an account within that officer's span of control. In other words, if an account has a primary budget authority who ultimately reports to the Vice President of Clinical and Academic Affairs, this account would by default have this VP listed as the officer whose approval is required for requisitions over a certain dollar amount, such as \$5,000 - \$10,000. We regard this approach as one element of strong governance that promotes visibility of expenditures under the span of control of administrative officers who have been chosen to lead the organization based on their expertise and ability to oversee the functions that report to them.

However, this approach is no longer consistently applied. During our testing we noted five requisitions that were processed with the approval of any administrative officer, rather than the designated administrative officer that aligns with the organizational structure. This pattern is particularly evident in the case of the Vice President, Chief Business and Financial Officer, who instead of the designated administrative officer, approved four of the five requisitions with this exception type. Although this practice is operationally necessary if the designated administrative officer is away from campus for an extended period, none of the purchases reviewed had documented indications by either the administrative officer or purchasing personnel that the requisitions were being approved or processed by an alternate administrative officer on behalf of the designated officer. Also, in the case of one department associated with two additional transactions tested during this engagement, the signature authorization card was signed by one administrative officer, despite the fact the department reported to a different administrative officer. As a result, it is likely that all requisitions that required secondary approval above the designated dollar threshold missed the review of the administrative officer specifically designated by the President to oversee that function.

Observation 3: Other authorization shortcomings, noticed in previous engagements, were also evident in this engagement.

In one case, a purchase requisition for an extended warranty was processed at an amount above the sole signatory's authorization level.

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In a second case, an equipment purchase proceeded with no signature authorization form on file with the purchasing department. The signature authorization form for this account was not prepared until almost five months after the purchase order was executed for this piece of equipment.

In a final instance, an equipment purchase that required presidential approval of the two associated purchase requisitions for amounts over \$100,000 was processed in the absence of the President's signature. The President signs an annual delegation letter to allow for authorizations in his absence by the Vice President, Chief Business and Financial Officer and the Executive Vice President, Chief of Staff. The VP, Chief Business and Financial Officer signed the purchase requisitions in the absence of the President, who knew about and had verbally approved the purchase, but the VP did not document he was signing on the President's behalf. We believe that reliance upon the delegation letter is problematic unless its use is contemporaneously documented, especially in this instance, whereby for the larger of the two requisitions there was a 29-day window between the purchase requisition and purchase order execution dates. Upon request by Internal Audit, the Purchasing Manager provided calendar information from the Office of the President documenting the President was away from the office on both days the purchase orders for 90% of the cost upon installation and 10% of the cost upon final acceptance were executed. This information supported the fact the President was away from his office on the days the purchase orders were executed, but there was no indication of his inability to sign the requisitions during the remainder of the time window between the purchase requisition and order dates. The calendar information was not attached to either of the purchase orders, nor was the standing delegation letter. Finally, there was no documentation accompanying either purchase order containing an indication by the VP that he was signing in the President's absence, and there was no indication by purchasing personnel that the purchase orders were being executed due to reliance on the VP's authorization because the President was away from the institution.

Short-range recommendations (SRR 1.A – 3.A)

SRR 1.A: The EVP, Chief of Staff should oversee an evaluation of the appointment level at which institutional leaders are designated as administrative officers and make a recommendation to the President. The evaluation criteria should specifically address the inclusion of AVPs as administrative officers, since this appointment level is where contradictory information and approaches are evident. Once determined, the EVP should ensure the institution's organizational chart maintained in the IHOP denotes these designations so that AVPs and employees who process transactions approved by AVPs are aware of the President's designated administrative officers.

SRR 2.A: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer to communicate institution-wide the value of observing the organizational structure when initiating and processing purchases that require administrative officer approval. Specifically, signature authorization forms should only be signed by the administrative officer to whom the budget authority reports, not by any administrative officer. Once in place, purchase requisitions and similar transactions that require administrative officer level approval should only be authorized and processed once the designated administrative officer's approval has been obtained. Alternately, if a delegated administrative officer authorizes a transaction due to the extended unavailability of the originally designated officer, this action should be documented by the delegated officer upon approval, as well as by purchasing personnel that they acknowledge processing the purchase upon reliance on this delegation.

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SRR 3.A: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer to emphasize the importance of submitting and processing purchase requisitions that correspond to signature authorization forms on file with the purchasing department and that observe the approval level ladder for each account. This process improvement initiative should include ensuring that each administrative officer who chooses to file standing or temporary delegation letters creates and updates these letters at least annually, informs key direct reports about them, and files copies of the letters in the purchasing department. Once accomplished, the EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer to communicate reemphasized expectations for submitting and processing purchase requisitions and similar documents that are authorized in accordance with current signature authorization forms on file in the purchasing department. All employees involved in these processes should retain and routinely refer to these signed forms, and return for correction any requisitions that are not properly authorized. The communication plan should also establish expectations for documenting exceptions due to administrative officer extended unavailability by at least three individuals: the originally designated administrative officer, the delegated administrative officer in the administrative officer's absence, and purchasing personnel.

Management of Service Arrangements

Department leaders' active management of leasing, warranty, and maintenance arrangements is a key element of positioning UT Health Northeast to achieve economy and efficiency of operations. Decentralized processes for contract oversight, whereby department leaders are empowered to actively oversee agreements once they are procured, can be advantageous when expectations of these leaders include holding the contracted parties to the terms and conditions of the agreements. Disseminating this responsibility to leaders who are managing daily operations allows them to apply their expertise and day-to-day attentiveness to increase the vendor's accountability to carry out the agreed-upon scopes of work.

Our review established that the practices discussed in Observation 4 are occurring intermittently, but with enough regularity to reduce the effectiveness of the management of service arrangements, when considered in combination. The practices discussed in Observations 5 – 7 are all related to the same maintenance arrangement, which is UT Health Northeast's outsourced on-site, comprehensive program of biomedical and imaging equipment maintenance services. Regarding this specific arrangement, management of the contractual provisions discussed in Observations 5 – 7 is not effective. All four observations culminate in corresponding short-range recommendations to immediately improve effectiveness of the management of service arrangements. We have also presented four mid-range proposals that, if accepted, will facilitate a greater level of effectiveness of the management of service arrangements if institutional leadership aspires to realize even more progress in this area.

Observation 4: Purchase requisitions related to two invoices were processed for amounts not due by UT Health Northeast to the companies that submitted the invoices.

The first situation involved a \$1,888.36 Pathology department invoice for repairs to a microbiology culture analyzer. The equipment that was repaired is covered under a third-party service agreement. The purchase requisition prepared by the department to authorize payment for the repair was also used to authorize payment to the same vendor for repairs to a second piece of equipment that is not covered under a service agreement. The department errantly prepared a purchase requisition describing two repair bills as both being associated with the piece of equipment that was not covered under a service agreement, which is why coordination with and submission of the bill to the third-party service provider may have

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been missed. More importantly, the repair bill shows the work was requested by an employee of the third-party service provider that covers the equipment, yet this provider still billed the covered services to UT Health Northeast. This is a process breakdown that needs to be addressed with this third-party service provider, especially since this vendor is used to manage service agreements for multiple pieces of equipment, including apparatus used in the research area. The \$1,888.36 errant payment to the vendor that repaired the equipment was not noticed until this audit engagement. During the engagement a department administrative employee contacted the third-party service provider, which agreed the repair was covered under the terms of the service agreement. The service provider subsequently reimbursed the \$1,888.36 repair cost to UT Health Northeast.

The second situation involved a \$3,788.00 Plant Operations annual software support service agreement for monthly checks and tracers on the institution's boilers, chillers, and related equipment. The department requisitioned payment for the annual amount twice, once upon contract approval by the VP, Chief Business and Financial Officer, and again when the contracted service provider invoiced the annual agreement amount. The errant second payment may have occurred in part due to the fact it was requisitioned against an open \$10,000 contingency line item on the purchase order that was intended as a standing type order to be available for expected service, repairs, and parts throughout the year outside the coverage of the annual service agreement. The price for the annual software support service agreement was also listed as an individual line item on the purchase order, which is the where the first payment was correctly applied. Department leadership had not noticed the duplicate payment until this engagement. Department leadership contacted a vendor representative, who said the vendor had never issued a credit memo to the institution because its accounting system will only generate one if there is not an outstanding balance due on other invoices, which had not been the case since the October 24, 2012 accounting date of the second errant payment. Department leadership, internal audit, the Accounts Payable Supervisor, and the vendor subsequently collaborated to recognize the \$3,788.00 credit in the institution's accounting records to eliminate the overpayment situation.

Observation 5: UT Health Northeast contracts with a vendor to provide an on-site, comprehensive program of biomedical and imaging equipment services, including maintenance, repair, and parts services. The institution has only the following obligations associated with the equipment under this contract:

- Permit the vendor to access common areas
- Provide the vendor with readily available equipment service manuals
- Provide the vendor with access to a computer
- Perform routine care and cleaning of the equipment according to the manufacturers' instructions
- Permit the vendor to use certain space described in an exhibit to the contract
- Not permit any persons other than vendor employees or agents to perform maintenance on the equipment under contract without the vendor's written approval, which approval will not be unreasonably withheld

UT Health Northeast has no other obligations, including financial obligations to pay for the vendor's operating expenses outside of the computer and operating space designated in the contract. However, the institution has granted the vendor's Director of Biomedical Engineering, a non-UT employee, \$1,000 per transaction budget authority over an institutional account. The vendor has been using this budget authority to access the institutional express mail and freight accounts, access a long distance phone code, and place internal supply orders. For the one year scope period of this audit, March 1, 2012 to February 28, 2013, UT Health Northeast incurred total expenses outside of its contractually obligated payments to

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the vendor of \$1,173.33. None of these expenses have been billed to the vendor by the institution's Accounting department as reimbursable expenses to the institution.

Observation 6: UT Health Northeast management responsible for overseeing the biomedical and imaging equipment services agreement is not ensuring the account used to pay the related expenditures is being reconciled timely, in accordance with institutional policy. Specifically, as of the testing date of July 26, 2013, account reconciliation documentation for the fiscal year 2013 months of September 2012 through April 2013 should have been submitted to the institution's Budget and Decision Support department, yet no account reconciliation documentation had been submitted by vendor or department management year-to-date. In essence this is a shared responsibility with vendor management on site, in that IHOP Policy 03.02, *Account Reconciliation and Segregation of Duties*, calls for an institutional employee or "other designee" to be responsible for adhering to the policy. However, since the vendor is not contractually obligated to perform account reconciliations and is not being paid to do so within the scope of work, the institution's Director of Engineering, who is the primary responsible party for this contract, is responsible for ensuring the monthly account reconciliations are performed.

Observation 7: UT Health Northeast management responsible for overseeing the biomedical and imaging equipment services agreement is not managing the contract to reduce to an acceptable level the risk the institution is paying the vendor to manage equipment that is no longer in service. This circumstance has arisen in part due to the fact that the vendor has not always been routinely provided or required to enter the institution's asset identification numbers in the corresponding hospital number fields in its own inventory records. As a result, tracking equipment inventories across the two sets of records is more difficult and less efficient, putting the institution at greater operational and financial risk, than it would be if institutional asset identification numbers for all capital equipment were recorded in the vendor's records.

Specifically, institutional assets valued at \$114,659.77 (12.37%), out of total assets we reviewed valued at \$926,940.78, were not properly removed from the biomedical equipment services vendor's equipment inventory records when they were taken out of service and deleted from institutional capital asset inventory records. The corresponding item count is 14 assets (26.92%) out of a total of 51 we reviewed that should have been deleted from the vendor's inventory. These figures are important because both the total dollar value and the inventory item count are key elements in pricing the agreement. Also, the item count includes one asset, a hospital bed, for which the vendor has a duplicate listing in its asset inventory. Additionally, in the case of at least two pieces of equipment, vendor personnel initiated the deletion process, based on their knowledge of assets taken out of service. Vendor personnel provided the deletion detail to the UT Health Northeast Accounting department, yet the vendor never removed these two equipment pieces from their own inventory records.

Short-range recommendations (SRR 4.A – 7.A)	Mid-range proposals (MRP 4.B – 7.B)
<p>SRR 4.A: The EVP, Chief of Staff should collaborate with the Assistant Director of Laboratory Services to obtain documentation of receipt of the \$1,888.36 coverage payment from the third-party service provider. Additionally, the EVP, Chief of Staff should collaborate with the Director of Engineering to ensure the \$3,788.00</p>	<p>MRP 4.B: The EVP, Chief of Staff should collaborate with the Assistant Director of Laboratory Services, and the Director of Research, both of whom oversee agreements with the third-party service provider that requested covered repair services on the institution's behalf yet did not ensure the bill was paid. These department leaders</p>

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<p>credit due from the boiler and chiller maintenance vendor is offset to an outstanding invoice.</p>	<p>should reach out to their respective contacts for the three active contracts currently in place with this vendor. Each leader should identify controls this vendor will implement to prevent the institution from being invoiced by the manufacturer or other designated service provider for repairs covered under the respective service agreements. Once these controls are identified, the EVP, Chief of Staff should collaborate with these leaders to develop a monitoring plan that includes, at a minimum, extra oversight for a time period for services or repairs ordered and invoiced for the equipment under management. The EVP, Chief of Staff should also collaborate with the Director of Payroll Services, who oversees the accounts payable function, and the Purchasing Manager to determine whether it is operationally feasible to always require a specific invoice when processing purchase requisitions and associated vouchers for payment of amounts due under contracts. Alternately, if this approach is not operationally feasible, the same individuals should collaborate to determine if other preventive processes or monitoring controls could be implemented to reduce the risk that payments are made to vendors both upon contract initiation and upon vendor invoicing for the same contractual obligation.</p>
<p>SRR 5.A: The EVP, Chief of Staff should collaborate with the Director of Engineering to convey to the vendor's Director of Biomedical Engineering that he and other vendor representatives should no longer use institutional system access or accounts to obligate UT Health Northeast to pay for expenses outside of contractually obligated expenses. Account access to the institutional express mail, freight, and supply order accounts should be removed accordingly. If management determines it is operationally beneficial to the institution for vendor employees to continue to have access to long distance access codes to use the institution's phones, the EVP, Chief of Staff should work with the Accounting and Information Technology departments to bill call detail to the vendor at operationally feasible intervals, such as quarterly. Alternately, the long distance codes used by the vendor's employees should also be deactivated.</p>	<p>MRP 5.B: The EVP, Chief of Staff should oversee an assessment to determine whether other contracted or outsourced vendors have access to systems and accounts that obligate the institution to pay for expenses beyond those that are contractually obligated. We recommend the EVP reach out to both department leaders responsible for agreements and process owners of systems who manage user identifications for access to express mail, freight, supply fulfillment, and long distance phone services. If access to such systems is identified from this assessment, the EVP, Chief of Staff should oversee processes of either removal of access or contract modifications to incorporate institutional obligations to pay for these expenses, at his discretion. If access is continued, the EVP, Chief of Staff should also consult the Information Security Officer and the Executive Director of Legal Affairs to identify any pertinent contract provisions that should be added to the</p>

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	corresponding agreements beyond routine statement of work and cost provisions.
<p>SRR 6.A: The EVP, Chief of Staff should collaborate with the Director of Engineering and the Budget and Decision Support department to ensure the monthly account reconciliations for the biomedical engineering account are caught up to be in compliance with institutional policy and maintained as such. The biomedical equipment services vendor is not contractually obligated to prepare or review account reconciliations. As a result, the EVP, Chief of Staff should ensure the Director of Engineering designates department personnel to perform this work.</p>	<p>MRP 6.B: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer and the Director of Budget and Decision Support to assess the financial risks versus the operational benefits of permitting non-employees to be account owners or authorized signers on accounts. If the operational benefits outweigh the financial risks, the collaborators should identify mitigating controls and implement these controls to minimize the associated risk that non-employees will obligate the institution to expenditures that are not in the best interests of the institution. If the financial risks outweigh the operational benefits, the collaborators should identify each non-employee account owner or authorized signer to whom budget or expenditure authority has been granted and oversee an initiative to communicate to the applicable department leaders that the practice of allowing non-employees to be account owners or authorized signers has been discontinued. This change should be documented in IHOP Policy 03.02, <i>Account Reconciliation and Segregation of Duties</i>, and department leaders should revise signature authorization forms on file with the purchasing department, designate personnel to perform monthly account reconciliations, and take responsibility for reviewing these reconciliations.</p>
<p>SRR 7.A: The EVP, Chief of Staff should collaborate with the Director of Engineering to ensure the biomedical equipment services vendor removes from its equipment inventory the 14 assets valued at \$114,659.77 identified during this audit as being no longer in service.</p>	<p>MRP 7.B: The EVP, Chief of Staff should collaborate with the Director of Engineering and the Senior Accountant who manages the capital asset accounting process to establish a method for assessing equipment that is still in the biomedical equipment maintenance vendor's inventory but appropriately no longer included in the institution's capital asset records because they have been taken out of service. Due to the size of the inventory, we suggest taking a risk-based approach by ensuring all biomedical equipment deletions recorded in institutional records since the 2009 inception date of the current arrangement with the biomedical equipment maintenance vendor are in fact deleted from the vendor's inventory records. From that point, we suggest setting a reasonable dollar equipment value threshold and cross-referencing</p>

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	equipment above that threshold between the two sets of records to ensure UT Health Northeast is not paying for maintenance coverage on any equipment of significant value. Both segments of the initiative should incorporate determination and entry of the institution's asset identification number into the hospital control number field in the vendor's inventory records whenever applicable. Additionally, the collaborators should work together to determine a process to ensure all future additions to the vendor's inventory reference UT Health Northeast's asset identification number whenever the new equipment meets the institution's capital asset threshold.
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Capital Equipment Acquisition Process

UT Health Northeast has capital expenditure operating procedures in place, supported by a formal capital expenditure request (CER) form. The procedures require that the CER form be completed prior to issuing a purchase order for any capital expenditures, including capital equipment. A capital expenditure is defined in the operating procedure as an expense for any single item with a useful life of over one year and with a purchase price of \$5,000 or greater, as guided by the Texas Comptroller of Public Accounts. The CER form is designed for requesting departments to provide additional information related to the proposed purchase, such as whether the capital asset is new or a replacement, compatible with existing assets, subject to a maintenance contract, proposed in consultation with physician input, and requires space renovations and installation arrangements. The CER procedure and form also include requirements for approvals of institutional leaders from a number of disciplines to ensure all areas associated with the capital asset purchase, installation, construction, and use authorize the purchase. The institution also actively uses checklists and has accompanying processes for proposed equipment purchases that require additional review and documentation, such as for software components, information security considerations, and business associate agreement assessments for equipment vendors that may have access to protected health information.

During the engagement we focused more in depth on capital equipment acquisition processes in areas that rely heavily on clinical equipment to perform or support patient care services, such as the radiology, mammography, radiation therapy, and pathology and laboratory medicine areas. We learned that capital equipment acquisition decisions in these areas are informed by collaborative processes that precede preparation of CER forms. For example, leaders of these areas hold monthly meetings, at a minimum, where analyses of existing capital equipment, upcoming system upgrades, and consideration of new or replacement equipment are standing agenda items. These leaders also evaluate patient volume figures, perform research, obtain input from physicians and other health professionals, and apply professional judgment to determine whether patient volumes, standards of clinical care, and customer service considerations support acquisition decisions. Also, the institution's on-site biomedical engineering equipment maintenance vendor maintains a comprehensive database of service history for the institution's clinical equipment, even if the equipment is covered by a manufacturer's warranty or serviced by the manufacturer or another third party vendor. The on-site vendor also maintains a color coded "end of life" list that highlights equipment that will need replacing.

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We tested eleven key capital equipment acquisitions valued at approximately \$4.7 million in total. For each new acquisition, we were able to correlate the purchase to achievement of a relevant goal in the institutional strategic plan. For each replacement acquisition, we were able to identify a valid justification for the replacement purchase. However, our review established that the practice discussed in Observation 8 is occurring intermittently, but with enough regularity to increase the risk that the evaluation process for initial and replacement acquisitions of key capital equipment could be ineffective if the practice is not addressed. As a result, the observation culminates in a corresponding short-range recommendation to immediately improve effectiveness of the capital equipment acquisition process.

Observation 9 that follows discusses a broad snapshot of the overall capital equipment acquisition process, with a focus on process enhancement as opposed to simply ensuring improved application of existing processes. We have presented a corresponding mid-range proposal that, if accepted, will advance the institution's position toward achievement of strategic goals if institutional leadership aspires to realize even more progress in this area.

Observation 8: For four out of eleven capital equipment acquisitions tested, responsible parties did not complete the required capital expenditure request (CER) form prior to the institution's purchase of the equipment. Three of the four exceptions were associated with the use of non-capital accounts used to initially authorize the purchases. Although reliable institutional processes are in place to subsequently capitalize these purchases, and all three were in fact capitalized through a journal process, the use of non-capital accounts to initialize capital equipment purchases reduces the likelihood that the CER procedure and form will be followed. Despite the fact the procedure and form state the CER process is required for all capital expenditures regardless of funding source, and the form prompts identification of initial non-capital funding sources, we only identified one instance out of four acquisitions with non-capital funding sources tested wherein the CER form was completed as required.

Short-range recommendation: (SRR 8.A)

SRR 8.A: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer to ensure capital expenditure request (CER) forms are completed for all capital expenditures prior to purchase.

Observation 9: A previous version of the capital expenditure operating procedures and CER form included separate tabs to document a required 5-year feasibility study and a 5-year proforma profit and loss statement for all new capital purchases valued at \$25,000 and above. Management eliminated this requirement several years ago due to the low level of perceived benefit for a controlled number of new capital purchases each year in comparison to the resources required for department leaders to perform these complex calculations. Management determined there was adequate awareness and information to make decisions about the types of capital expenditures that were supportable, without requiring department leaders to perform these additional calculations. We concur that complex, 5-year projections such as these may not be beneficial in support of evaluating capital equipment acquisitions relative to the time and level of financial acumen required to apply two sets of detailed calculations to all new capital purchases valued at \$25,000 and above. However, we believe a viable substitute may be to direct the evaluators to a more detailed assessment of one of the key components of the prior proforma and feasibility study requirement, which was to outline the anticipated annual maintenance or extended warranty agreement costs.

It is clear that contractual obligations for service agreements correspond to recurring, substantial expenditures incurred by UT Health Northeast. For example, one extended warranty alone on a key piece

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of radiation oncology equipment, which was the highest valued agreement we reviewed during the engagement, cost \$238,000 annually, and \$952,000 total over the 4-year term of the agreement. Yet sufficient information about the magnitude of these commitments does not appear to be routinely presented up front when the equipment to be serviced is evaluated. The current CER form requires that a yes or no question be answered about whether a maintenance agreement will be required, and if so, the annual cost of the agreement. The form is not structured to prompt the department leader to list the reason a service agreement is required or recommended, why it would be beneficial for the institution to purchase the proposed agreement as opposed to incorporating the service into the scope provided by the on-site biomedical engineering equipment maintenance vendor, the number of years of recommended or required service agreement purchase, the total anticipated cost of the agreement rather than just the annual cost, or ratio calculations of the annual and total costs of the agreement in relation to the acquisition cost of the equipment.

Elaborating further on the concept and importance of performing ratio calculations during the acquisition phase, we arrived at this premise based on the realization that it would be meaningful for management to have at least one largely objective data point as input for assessing one of the most significant ongoing expenses commonly associated with capital equipment purchases. We calculated these ratios as one way to characterize service agreements and to supply management with some baseline data to begin to develop benchmarks and trends. We took this approach because we came to understand the predominantly subjective nature of making decisions about warranties and service agreements, decisions that place a tremendous amount of responsibility on one leader who is the technical expert about the service needs of the equipment being acquired to make the best financial and operational decisions for the institution.

We found that for all transactions tested, the decisions to purchase service, maintenance, and extended warranties appeared to be reasonably made and informed by institutional department and senior leaders who are subject matter experts. For decisions related to services for key clinical equipment, for example, management considers important factors such as life safety issues, continuity of care and treatment plans, equipment criticality and the potential for lost revenue due to downtime, equipment redundancy, training and experience of the manufacturer's technicians, reputation and perpetuity of the manufacturer, value of the equipment, access to crucial diagnostic testing equipment, and availability and cost of parts when deciding whether to purchase a separate service agreement from the manufacturer and which coverage terms and duration to purchase. In some instances the decision to purchase a service agreement is essentially out of management's control, because certain large manufacturers with expensive, new technology command the market due to the unique demand for their products, and require that only their own employees or a specifically designated third-party vendor service their equipment to avoid violating warranty terms. As the technology matures, these manufacturers often no longer have the level of market dominance that affords them the ability to make such demands. Finally, management routinely considers and utilizes the typically economical and efficient contracts negotiated by group purchasing organizations (GPOs), the UT System Supply Chain Alliance, and other state contracts when available for the purchase at hand. Yet, when resources are limited, we believe it may be prudent to require additional justification for service agreement purchases that exceed a certain annual or total cost to acquisition ratio set by senior leadership based on actual, institutional data developed over time. For example, if the proposed equipment purchase is accompanied by a recommended service agreement purchase that greatly exceeds a periodically set ratio figure, such as the median, senior leadership could require more robust linkage to strategic priorities, documentation of patient life safety concerns if the agreement is not purchased, or an in-person presentation by the department leader.

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To illustrate the ratio data we discerned from our review, the lowest **annual** service to acquisition cost ratio we tested was for preventive maintenance and inspections on a centrifuge used in the research enterprise, at 1.45%. The lowest **total** service to acquisition cost ratio we tested was 7.84%, for extended warranties on a set of tablet computers. The highest **annual** and **total** service to acquisition cost ratios, 43.58% and 174.34% respectively, were both associated with the same piece of equipment, an extended four-year warranty for a radiation dosimetry quality assurance system. The ratios for this dosimetry system were significantly higher than the median values of the annual and total service to acquisition cost ratios we tested, calculated at 6.40% and 31.17%, respectively. Since the ratios for this dosimetry system greatly exceed the medians, if this was a piece of equipment pending acquisition, it is the type of purchase for which senior leadership could request additional justification or a proposal discussed in-person. In this particular situation, during testing we identified the qualitative factors of very high patient safety considerations and associated regulatory requirements that justified the purchase of the extended warranty from the equipment manufacturer in the first place. We identified the intensive, ongoing software update and refreshment demands of this type of system as correlating with the high service to acquisition cost ratios. The extended warranty covers these constant software upgrades, rendering the system essentially like new at the end of the term due to continual reinvestment into the product, funded by the cost of the warranty.

Additionally, although the CER form has a number of check boxes and yes or no questions, as well as space to describe the equipment or project, we believe UT Health Northeast could benefit by making the following improvements to the capital expenditure operating procedures and the corresponding CER form in order to achieve more informed evaluations prior to purchase:

- Ensure the operating procedure and CER form emphasize their applicability to capital expenditures initially coded to any type of funding source, not solely to capital funding sources.
- For new equipment purchases, require identification of the relevant institutional strategic plan initiative. If the department leader cannot identify an associated strategic plan initiative, require a detailed explanation of the reason for the proposed purchase.
- For replacement equipment purchases, structure the form to require a detailed description of the reason the replacement is needed. Prompt the preparer to discuss and provide data for topics such as repair history and cost, patient safety, revenue generation, customer service, critical infrastructure, research integrity and operations, grant requirements, and continuity of operations.
- Identify required human capital requirements associated with the purchase. Structure the form to discuss topics such as the sufficiency in number, technical expertise, and qualifications of personnel required to support and operate the equipment to realize its full potential. Ensure that this section addresses initial and ongoing information technology resources and personnel to support the hardware, software, and data management associated with the purchase. List training requirements and how the vendor or the institution will meet both initial and ongoing training needs.
- Include a section to identify the expected useful life of the equipment, one that incorporates concepts of operational functionality and projected marketplace obsolescence rather than simply depreciable useful life for financial accounting purposes. This section should include free-form space to discuss how the expected useful life was determined. It should also prompt the preparer to avoid relying primarily on a reference table used to identify depreciable life for financial accounting purposes.
- Expand upon current “yes/no” check boxes on the form to require explanations for questions regarding related supply purchase obligations and compatibility with existing equipment.

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- Substitute the question about whether physicians were involved with or consulted on the purchase decision with one that requires the department leader to identify end users pertinent to the proposed purchase at hand and document who was consulted. This could include physicians, other clinicians, researchers, educators, administrative personnel, customers, and any number of other categories of end users. It is important that the structure of this category moves away from a default selection of end users and be replaced by a focus on the broad possibilities of types of personnel who will benefit from, operate, and support the equipment.
- Incorporate the Equipment Pre-Purchase Acceptance Checklist recently created by the institution's Director of Engineering and the on-site vendor's Director of Biomedical Engineering. As background, currently an additional equipment evaluation form is often completed for clinical equipment purchases by biomedical engineering and physical plant personnel to document their recommendations regarding the proposed purchase. This form is essentially supplemental, providing a format for subject matter experts to document their review and recommendations in more detail to accompany their authorizations on the CER form. The CER form sparsely covers space renovations and modifications necessary for installation or completion of the proposed equipment or project, in that it contains one question that focuses on the cost of bids or estimates associated with the renovations, rather than technical specifications such as utility and space modifications that will be needed. The current supplemental equipment evaluation form is supported by the biomedical equipment maintenance vendor's pre-purchase evaluation policy and procedure that is used when UT Health Northeast personnel request the vendor's assistance. However, the form is not supported by a corresponding institutional policy or procedure requiring its use. Also, the form has not been updated in a number of years and needs to be revised. During the engagement we collaborated with the institution's Director of Engineering and the on-site vendor's Director of Biomedical Engineering to request they begin thinking about how they would retool the evaluation process and form to be more useful to the institution in planning for space, utility, and construction modifications associated with capital equipment requests. We learned that these two leaders had coincidentally already addressed this topic, creating an Equipment Pre-Purchase Acceptance Checklist they had not had a chance to implement.
- Once the CER form is revised to incorporate the points above, revisit the supporting operating procedure to determine whether all sections of the form will be required for proposed capital equipment purchases below certain dollar levels. Consider the cost versus benefit of requiring all sections of the form be completed for smaller purchases, such as those valued at between \$5,000 and \$25,000.

Mid-range proposal: (MRP 9.B)

MRP 9.B: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer, the Director of Engineering, and the contracted Director of Biomedical Engineering to facilitate an assessment of the capital expenditure operating procedure and corresponding capital expenditure request (CER) form. The assessment should incorporate consideration of each of the topics listed above.

Contract Visibility and Awareness

UT Health Northeast has implemented a contract management solution system that is widely used. The system is a powerful management tool that provides cross-functional access and visibility to contracts by a number of employees who need to refer to them in their daily work. The institution's Office of Legal Affairs is the designated departmental data owner for the system. However, senior leadership has not

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intended that this Office be primarily responsible for ensuring completeness of the contract library. Rather, each contract is assigned at least one institutional or department leader who is responsible for ensuring that executed contracts within their span of control or area of expertise are included in the contract database. Written contract procedures guide employees to upload all executed contracts and similar agreements into the system's contract library, and the Office of Legal Affairs has provided training on these procedures. In addition to uploading pertinent contract documents, the assigned responsible parties are tasked with ensuring certain searchable parameters are entered into the system. Key parameters applicable to this engagement include contract effective and expiration dates, and annual and total contract values.

Our review established that the practice discussed in Observation 10 below is occurring intermittently, but with enough regularity to reduce contract visibility and management's awareness of contract parameters that play an important role in positioning the institution to achieve economy and efficiency of operations. As a result, this observation culminates in a corresponding short-range recommendation to immediately improve contract visibility and awareness processes toward a goal of greater effectiveness.

Our review also resulted in Observation 11, followed by presentation of a long-range process improvement initiative management should consider to better position the institution to achieve economy and efficiency of operations:

Observation 10: During our testing of leases, warranties, and maintenance arrangements we reviewed approximately twenty sets of contracts or similar agreements associated with our sample. Two of the twenty sets of agreements were for extended warranties on sets of tablet computers. For these two sets, due to the high volume and low dollar value of these agreements institution-wide, as well as the fact that access to needed warranty services is centrally managed by the IT department, we did not expect to find individual computer warranties in the institution's contract management system. We believe this would be cost prohibitive from the standpoint of both the data entry resources required and the system fees charged per record. For the remaining eighteen sets of contracts or similar agreements associated with our sample, we tested them for inclusion in the contract management system, in accordance with institutional policy and operational best practices for contract visibility and awareness. Out of the eighteen contracts or similar agreements we expected to be in the contract library, we identified exceptions with seven of them, as follows:

- Two agreements were never uploaded by the departments' responsible parties into the institution's contract library. The reason for not incorporating these agreements into the contract library is at least in part related to the fact they are group purchasing organization (GPO) agreements that were readily obtainable from the purchasing department's access to the GPO's system. We found the processes and responsibilities for retaining contractual documents associated with UT System Supply Chain Alliance and GPO agreements are undefined and circular. We were in fact able to readily obtain key documents such as preferred supplier agreements and scopes of work that apply to all UT institutions that choose to access these arrangements. We were also able to readily obtain from the purchasing department signed copies of our institutional participation agreements. However, we were unable to readily obtain signed copies of important riders, such as the maintenance agreement riders. We were able to review pricing and equipment lists from documentation attached to the associated purchase orders, but as time passes it may become difficult to know where to locate this documentation unless it is centrally maintained in the institution's contract library. This risk has actually occurred, in that we were unable to readily obtain documents associated with the former copier leasing arrangement that expired during our

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audit scope period. The responsible department could not locate the contract, and it was not uploaded into the contract library system. Because this agreement was arranged through a former GPO of which the institution is no longer a member, the purchasing department could not readily obtain the agreement, the riders, or the signed institutional participation agreements. As a result, the institution may have no official record of this contract.

- One agreement for a substantial extended warranty has contract duration parameters listed in the contract library that were approximately seventeen months earlier than the actual parameters. The date parameters need to be adjusted to account for the one-year complimentary manufacturer's warranty and the agreed-upon contract inception date rather than the date the quote was signed by an authorized institutional representative.
- One record in the contract library contains the agreement for an original equipment purchase and the date parameters for a corresponding 5-year service agreement quote that was never purchased, rather than for the associated 1-year service agreement selected for testing. The institution began purchasing coverage from the manufacturer on a year-to-year basis after the complimentary 1-year warranty expired. The contract library record description of an equipment purchase and a corresponding service agreement, with the originally quoted service agreement value and an expiration date of April 2016, is incorrect. There are no agreements related to either the equipment purchase or related warranties or maintenance arrangements that expire that far from now. Rather, the current one-year agreement that is the subject of the selected transaction expired in August 2013. This agreement was never uploaded into the contract library.
- Another record in the contract library solely contains information related to the corresponding equipment purchase and its one-year included manufacturer's warranty rather than the information about the substantial extended warranty being purchased on a year-to-year basis. As a result, the contract library record shows an expired status associated with the original manufacturer's warranty that ended over a year ago, and the contract value parameter is listed as the original equipment purchase amount rather than the value of the extended warranty that is now in place.
- One set of related service agreement renewal quotes for maintenance services stated that the agreements would renew in accordance with the terms and conditions of the original documents. However, the original documents have not been uploaded as a record in the contract library, and the responsible party at the department level does not have them available.
- One active service agreement had a corresponding archived contract library record only for the expired term directly preceding the agreement currently in force.

We believe the general cause of these exceptions is department leaders' insufficient level of awareness about the importance of a complete and accurate contract library in the current environment, as well as few opportunities since implementation to understand and utilize the power of the system as a management tool.

Short-range recommendation: (SRR 10.A)

SRR 10.A: The EVP, Chief of Staff should oversee an effort to ensure contract library data parameters and documents are added or corrected for each of the seven exceptions listed above.

Observation 11: During our review we learned that the contract management system is widely used and supported by an institutional policy that requires its use. However, in its current form, the system's focal point is predominantly contract development, access, and document retention. The system has available features and reporting capabilities, as well as at least one set of key data fields, we believe are

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underutilized. By activating these features and undertaking an institutional process improvement project to enhance key leaders' access to the system and proficiency with its tools, UT Health Northeast could move along the continuum to transform this system into one with more of a planning focus. When combined with an initiative to hold department leaders increasingly accountable for ensuring all agreements have been included in the system with accurate data parameters, this process improvement project could bring improved visibility to service arrangement types, vendors, expiration dates, dollar values, and responsible parties, among other data parameters. Key leaders could make decisions about future arrangements sustained by ongoing, readily accessible information from the system. In this manner, long-term initiatives for change could be shaped by real-time information about the characteristics of current contractual commitments, tapping into the system's power as a data warehouse with query capabilities.

We learned that each contract library entry contains a built-in asset tab with key data fields that are not being widely used. This tab contains pre-populated, searchable data fields, such as asset item, description, and cost, which if used would promote visibility and awareness of capital equipment that is covered under warranty and maintenance arrangements, as well as the associated annual and total cost of coverage in relation to the asset acquisition cost. During the audit we found it difficult at times to correlate capital equipment acquisitions and descriptions listed in contracts, purchase orders, and accompanying coverage schedules to the institution's capital asset inventory records due to limited usage of institutional asset identification numbers on documents and contract library records associated with those assets. The obstacles we faced in our test work translates to the risk that employees who need to determine if a capital asset is covered by a service agreement rely on incorrect information because service providers have only been provided equipment descriptions to list in their agreements, and the covered equipment is not readily searchable in the contract library by the assigned institutional asset identification number. These same obstacles translate to the risk that leaders rely on inefficient, manual processes to analyze ratios of service agreement to equipment acquisition costs to provide objective data for future acquisition decisions, when system querying capabilities could provide calculations of these figures institution-wide for comparisons across equipment types, vendors, and departments.

During the engagement we experimented with the robust querying capabilities of the system. We learned there are a large number of useful pre-built standard reports that institutional and department leaders may already be using as management tools in their respective areas. More importantly, we came to understand the system's custom report writing and automatic scheduling capabilities, which are not being widely used. We found the custom report writing capabilities to be easy to use, allowing users to freely select data fields of interest and select limiting criteria from drop down menus. Users can export their custom reports to Microsoft *Excel*, which facilitates ease of further sorting and analysis of the resulting records. Finally, we learned about the powerful functionality of the system's auto-reporting, scheduling, and user dashboard features. Contract library reports can be scheduled to run automatically on a recurring basis to select user groups. The output of scheduled reports can either be saved in the system for later access or emailed to end users who rely on contract data to manage their areas. The reports contain hyperlinks to the contract documents that correspond to the data results. Additionally, end users can easily tailor their main page dashboards to display the automatically scheduled reports that have been distributed to their accounts.

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Long-range consideration: (LRC 11.C)

LRC 11.C: The EVP, Chief of Staff should consider overseeing a two-phased long-range process improvement initiative to broaden the focal point of the institution's contract management system, potentially requiring additional centralized resources to accomplish. In the first phase, department leaders would be held increasingly accountable for complete and accurate inclusion in the system of contracts for which they are responsible. This phase could also include an initiative to identify institutional asset identification numbers and values for equipment under service agreements and responsibility for ensuring this information is entered in the asset tabs for the corresponding contract record numbers. Once accomplished, the second phase would focus on increasing the use of the powerful reporting capabilities of the system to bring ongoing visibility to contractual obligations and transform the system's focal point to more of an ongoing planning tool.

Capital Budgeting

UT Health Northeast annually budgets for capital equipment in the form of a capital outlay line item in the approved operating budget. The budgeted amount for this line item is constrained in a manner similar to principles that apply to the overall budget, relying on an estimation of sources and uses of operating funds, with the capital outlay line item competing for allocated resources similar to other operating expenses. When essential needs for capital equipment outpace the net resources available from the annual operating budget, the institution draws down Revenue Financing System (RFS) funds approved annually by the UT System Board of Regents. The Revenue Financing System (RFS) is a cost-effective debt program secured by a system-wide pledge of all legally available revenues for debt issued on behalf of all 15 institutions and System Administration. UT Health Northeast has traditionally applied for and used RFS proceeds to finance equipment rather than other capital projects. In fact, during the engagement we established that purchasing capital equipment using the RFS is so cost-effective in comparison to entering into leasing arrangements that UT System discourages institutions' use of third-party financing arrangements for equipment, such as capital or operating leases, when RFS funding is available. As a result, UT Health Northeast does not lease equipment, except when the type of equipment is driven by the marketplace as predominantly financed by an operating lease, such as copier equipment that is typically bundled with maintenance arrangements based on usage. The institution's copier lease was the only instance of a key leasing arrangement we identified during the engagement.

One final source of funding occasionally allocated to the institution for capital equipment purchases is the Faculty STARS (Science and Technology Acquisition and Retention) program. The Faculty STARS program is funded through Permanent University Fund (PUF) bond proceeds to help purchase state-of-the-art research equipment and make necessary laboratory renovations to encourage faculty members to perform their research at UT institutions. The PUF debt program is used to fund projects at 13 of the 15 System institutions plus System Administration. PUF debt is secured by distributions from the PUF to the Available University Fund (AUF).

Management also considers total depreciation expense and financial ratios, such as the Composite Financial Index (CFI) administered by UT System, when determining the optimal yearly level of resources available for capital equipment purchases. A net addition to equipment typically corresponds to increased depreciation expense, which in turn affects overall profit or loss. Additional debt financing typically has a negative impact on financial ratios calculated by UT System and others, which has the effect of creating a ceiling on the desirable level of new equipment purchases funded by RFS debt financing.

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One way senior leadership stays informed about capital equipment needs and requests from department leaders is by use of a rolling 5-year capital budget request master workbook. Using this mechanism, departments provide detailed information about and justification for their capital requests. They also prioritize requests according to a prioritization key. This system provides a vehicle to communicate upcoming capital equipment needs. However, it is not used as a formal budgeting document. In other words, there is not a formal process to decide upon the requests, track requests versus fulfillment according to any data parameter of interest, or correlate the identified funding sources in the document to uses of those funds over time.

Our review resulted in Observation 12, followed by presentation of a long-range process improvement initiative management should consider to better position the institution to achieve relevant strategic goals:

Observation 12: When capital equipment acquisitions are a component of a larger capital construction project, UT System collaborates with UT Health Northeast to prepare formal project budgets, or the project owner or department overseeing a smaller, local project prepares project budgets or ledgers. However, this accounting and recordkeeping is account-specific and not directly correlated to the institution's formal budgeting system that applies to many department-level expenses. Specifically, only expenditures funded by state general revenue and faculty practice plan revenue are formally budgeted within the PeopleSoft Enterprise Performance Management (EPM) system. As a result, although management can readily view expenditures for capital equipment by querying the year-to-date capital transfer transactions posted to the equipment account in the general ledger, neither the sources nor uses of capital funds is formally tracked. For example, during our audit we reviewed equipment acquisitions funded by the operating budget, RFS financing, and PUF STARS funds. The aggregate of these sources of funds is not formally budgeted as a capital budget, nor are expenditures on capital equipment formally applied or allocated to reduce the available capital budget. Also, once a new year begins, there is no formal mechanism to carry forward a capital budget balance, since there is not a uniquely identifiable account or conglomeration of accounts in either the PeopleSoft budgeting or general ledger modules set up to serve this purpose.

Because equipment purchases initially requisitioned using capital accounts in the general ledger do not have corresponding budget entries in the PeopleSoft EPM module, they are not formally subject to budget checks when Purchasing personnel are processing requisitions or accounts payable personnel are processing vouchers. Thus, in essence, a small office supply purchase, which is subject to a department budget entered annually into the system, is less likely to "pass budget" for a department low on unencumbered funds, than is a large equipment purchase made from a capital account, because the capital purchase is not subject to any systematic budget check that triggers a budget review and approval for a budget transfer if warranted. This is a control vulnerability, in that some of the institution's larger expenditures, which are for capital purchases, do not have this automated system control applied. The exception would be for capital purchases originally requisitioned using state general revenue or faculty practice plan funds, and subsequently transferred to capital accounts. These purchases, which are not routine but also not uncommon, are by default subject to the budget check process since their original funding sources are annually budgeted in the EPM system.

During the engagement we asked budget and accounting personnel whether it would be feasible in the current environment to recommend uniformity of the requisition process, at a minimum, so that all known capital purchases would be requisitioned using a capital account and subject to authorization by a more uniform group of senior leaders rather than solely by one senior leader to whom the requesting department organizationally reports. We thought this might be a starting place that would precede management's

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consideration of a longer-range process improvement initiative to address capital budgeting. We also thought that by originating the transaction with a capital account, this would prompt department leaders to complete the required Capital Expenditure Request (CER) form discussed in Observation 8 above, whereby we noted that three of the four exceptions occurred when non-capital accounts were requisitioned. However, we decided that making this short-range recommendation would not be in the best interests of the institution at this time, because it would negatively affect existing accounting processes used for proper fund accounting. Specifically, budget personnel currently rely on the original coding for cash-based accounts such as designated, restricted, and grant accounts, to prompt reduction of the corresponding general ledger fund balances in those accounts. If the process was changed to initially requisition these purchases using capital accounts, in the current system design there would be no visibility of the intended funding source of the transactions in the capital transfer journals, since no capital transfers would be required.

A capital budgeting process is useful for documenting capital needs across the institution and prioritizing projects within funding constraints. This comprehensive review of capital needs and funding sources allows for systematic prioritization to help position an organization to achieve relevant strategic goals. The capital budgeting process achieves:

- identification, assessment, and planning for the capital needs of the institution over a longer-range period, such as four or five years;
- a basis for determining alternative sources of funding for capital needs, including identification of sponsorship opportunities for donors;
- a basis for the assessment of the impact of new capital expenditures on the operating budget; and
- a system for accounting for the capital resources of the institution

In contrast to UT Health Northeast, many universities have formal capital budgeting processes. The processes vary in complexity and maturity level, but all are designed to achieve goals similar to those listed directly above. One university we researched during this engagement prepares an annual capital budget for each fiscal year, presenting it within the context of a five-year capital plan. Once specific capital expenditures are approved in the annual budget, the project or equipment budgets are available until expended. The budgets are available only for the approved capital items and cannot be expended on operational or other capital needs. In addition to making an annual capital budget request, budget managers are required to submit capital budget planning information for four additional years. Specific equipment or other capital items are detailed for the first two of the four years with estimated costs. For the final two of the four years, projections of capital needs are outlined to complete the capital budgeting process. Departments and programs that plan to utilize non-capital funds that are designated for departmental or program support include the capital items on the annual capital budget request and make a notation that funding is available from departmental support funds and identify the fund accounts. The objective is to develop a rolling five-year capital plan with the greatest level of detail provided in the first year.

Another university we researched has a three-tiered capital budgeting process that differentiates between restricted and unrestricted funding sources. Capital projects budgeted from restricted funding sources, such as grant or endowment accounts, make up the first tier. The second tier consists of resources that do not have restrictions, which are pooled into one account per year. A separate pooled account is used for each year of the capital budgeting process. As the President or his or her designee authorizes the initiation of individual projects, specific project accounts are created for the expenses and funds are moved to the project account from the pool. Once projects are completed, any excess funds are moved

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back to the pooled account to be used for other capital project priorities. The third tier is for smaller projects or equipment purchases costing less than a \$25,000 threshold, which are accommodated via departmental budgets within the university's operating budget. The capital budget is approved annually. The capital budgeting process involves an opportunity for departments' input regarding institutional capital needs during an annual window for requests to be presented as part of the overall documentation of needs. Future year projects are also assessed and presented in the capital budget, for a total of four years. However, the additional three years are provided for planning information only and are revisited annually for changes in content, priorities, and funding. The process rolls forward to the next year, accomplishing an ongoing planning effect anchored by specific approval of the first year's capital budget and new figures for the tail year as the process cycles forward.

Long-range consideration: (LRC 12.C)

LRC 12.C: The EVP, Chief of Staff should collaborate with the VP, Chief Business and Financial Officer to consider overseeing a long-range process improvement initiative designed to transform UT Health Northeast to a formal capital budgeting process over time, one that incorporates the institution's PeopleSoft Enterprise Performance Management system as an integral part of the process.

Conclusion

Processes for evaluating initial and replacement acquisitions of key capital equipment have predominantly served the institution well in its current environment, positioning the institution to achieve relevant strategic goals. Although existing processes have not always been consistently applied, any adverse effects on achievement of relevant strategic goals appear to have been inconsequential.

Similarly, with one notable exception, processes for evaluating and managing key capital equipment leasing, warranty, and maintenance arrangements have largely served the institution well in its current environment, positioning the institution to achieve economy and efficiency of operations. Existing processes have not always been consistently applied, which appears to have had only a minor effect on both economy and efficiency of operations. One notable exception regards management of the arrangement for on-site biomedical equipment and imaging equipment services, whereby insufficient controls and processes for managing certain aspects of the arrangement have more moderately affected economy of operations.

As UT Health Northeast prepares for future growth, senior leadership may be challenged to sustain these overall positive positions unless it develops and strengthens centralized processes that support department leaders who have been empowered to make important decisions in these areas. Senior leadership should consider establishing a formal capital budgeting process, implementing a more robust capital equipment evaluation process prior to purchase, and developing and relying on more objective criteria as one element of this evaluation process. Also, senior leadership should consider increasing use of the powerful data and reporting capabilities of the institution's contract library system to transform its focal point to a planning tool that informs and supports decisions about equipment acquisitions and associated ongoing contractual obligations.



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**UT Health Northeast
Capital Equipment Operational Audit**

Summary of Significant Findings

According to The University of Texas System, a significant finding is one that may be material to the operation, financial reporting, or legal compliance of the university if corrective action has not been fully implemented. This would include an internal control weakness that does not reduce the risk of irregularity, illegal act, error, inefficiency, waste, ineffectiveness, or conflict of interest to a reasonably low level.

In view of the above requirements, the Capital Equipment Operational Audit had no significant findings.