


MEMORANDUM

TO: Toni D'Agostino
Associate Vice President Research Administration, Associate Dean for
Research Services

FROM: Kimberly K. Hagara, CPA, CIA, CISA, CRMA 
Vice President, Audit Services

DATE: June 4, 2018

SUBJECT: Clinical Research Program Audit – Final Report
Engagement Number 2018-012

Attached is the final audit report regarding the Clinical Trial Research Program Engagement. This audit will be presented at the next Institutional Audit Committee meeting.

Additionally, please find attached Audit Services audit recommendation follow up policy. Each of the recommendations is classified by type at the end of its identifying number: System Priority (SP), Risk Mitigation (R), or Process Improvement (P). As you will note in the policy, the classification of the recommendation determines the frequency of our follow up. All follow up results are reported quarterly to the Institutional Audit Committee.

Thank you for your cooperation and assistance during the course of this review. If you have any questions or comments regarding the audit or the follow-up process, please feel free to contact me at (409) 747-3277.

Attachments

c: Danny O. Jacobs, MD
David W. Niesel, MD
Randall J. Urban
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The University of Texas Medical Branch
Audit Services

Audit Report

Clinical Trial Research Program

Engagement Number 2018-012

June 2018

The University of Texas Medical Branch
Audit Services
301 University Boulevard, Suite 4.100
Galveston, Texas 77555-0150

Clinical Research Program Audit

Engagement Number: 2018-012

Background

Research represents one of the University of Texas Medical Branch's (UTMB Health's) three core missions. In June 2011, UTMB Health re-established the Office of Clinical Research (OCR) to provide a human subject research component to Research Services. The OCR plays a key role in supporting the initiatives of the NIH Clinical Translational Science Award (CTSA) housed in the Institute for Translational Sciences (ITS). OCR is a multidisciplinary service organization, staffed by a team experienced in sponsored clinical research that supports faculty with sponsored clinical trials and investigator-initiated clinical research projects.

In January 2015, UTMB implemented Velos eResearch (Velos), a web based Clinical Trial Management System (CTMS) that combined research activities, financial, administrative and clinical data information from various sources. The goal of the Velos implementation is to simplify the management of the research project by linking study status, patient enrollment, calendars, budgets, and invoicing. OCR manages the research teams' access and role assignment within Velos. Additionally, OCR manages UTMB Health research teams' access to *ClinicalTrials.gov*, a federally-sponsored website for registering clinical studies and reporting required results and data.

Staffed with five employees, and reporting to the Vice Dean of Clinical Research, OCR plays a vital support role throughout the life of a research project. Key risk exposures for clinical research include reputational, financial, and patient safety.

Audit Objectives

The primary objective of this audit is to assess the efficiency and effectiveness of the operational processes established by the Office of Clinical Research supporting UTMB Health's clinical trials research program.

Scope of Work and Methodology

The audit scope covers current OCR operational and oversight and monitoring activities. Our audit testing will focus on assessing expected processes and procedures, and controls established to mitigate risks related to clinical research.

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

Policies and Procedures

OCR provides extensive guidance on its website to support the various administrative and compliance activities of the Principal Investigator and other research personnel. Audit Services review of the website available guidance indicated policies and procedures appear appropriately aligned with clinical trial processes and regulatory requirements.

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Training

OCR provides training classes covering the life cycle of a clinical trial and related activities for all employees involved in clinical trial research. The training plan and associated materials appeared comprehensive in scope and depth.

Prior to granting access to Velos, OCR requires all individuals complete an online Velos training module. Audit Services tested a sample of 45 active Velos users and determined that all had completed the required training.

Research Systems Access Management

During the training testing, we noted 4 of the 45 active Velos users were no longer UTMB Health employees. OCR does not have an established process to routinely validate user's continued access to the Velos System. Similarly, we noted that OCR does not have an established process to validate user access to *ClinicalTrials.gov*.

Recommendation 2018-012-01-RM:

The Director, Office of Clinical Research, should develop a process to routinely validate user's access to the research related systems to ensure only those with appropriate continuing business purpose maintain access.

Management's Response:

The Office of Clinical Research (OCR) will develop a process to validate user's access. Tools that will be developed will include: a report from Velos identifying users with no activity over the previous six months; a review of users established in *ClinicalTrials.gov*; and review of the monthly personnel reports listing terminated employees provided by Human Resources. The OCR Director will also work with the HSRPP Director to develop a report to identify protocols where the PI role is changed to another person to identify PI's who no longer need access to *Clinicaltrials.gov*.

Implementation Date:

Velos User Validation: November 30, 2018 (to allow for time to develop and test report);
Use of separation report June 1, 2018

ClinicalTrials.gov User Validation: November 30, 2018; Use of separation report June 1, 2018.

Clinical Trial Start-up Activities

In October 2014, the Clinical Trials Steering Committee mandated that all industry clinical trials be processed centrally by OCR. OCR performs numerous clinical trial start up activities including, but not limited to, processing all clinical trial confidential disclosure agreements (CDA); reviewing studies to determine necessity for coverage analysis and billing risk assessment; completing a billing grid and conducting budget negotiations for all industry clinical research studies with sponsors; and, processing all industry-sponsored clinical research contracts in coordination with Legal Services.

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Audit Services tested a sample of 10 (15%) active industry sponsored studies in Velos to validate the completion of start-up activities. Three of the ten studies reviewed were missing required data elements on the summary page. The OCR Director indicated the implementation of a quality assurance process to ensure data completion is under consideration.

Velos and InfoEd Systems Data Consistency

As noted previously, Velos is the first entry point in initiating a new human subject research protocol. Once a protocol is loaded into Velos, the study team loads the protocol into the Info Ed system used by the Institutional Review Board (IRB) to review and approve research protocols.

Audit Services compared the active studies in Velos to the IRB approved studies in Info Ed noting 11 of the 568 studies in Info Ed were not updated to “active study” status in Velos following IRB approval. Our review of a sample of 25 “pre-activated” studies in Velos indicated 12 of the 25 were not updated to “active”, “not activated” or “closed” after the IRB status change was automatically pushed from InfoEd into Velos.

Additionally, Audit Services noted a lack of reconciliation process to ensure the consistency of data between Velos and Info Ed related to clinical trials as entered by the research teams. There were 359 studies labeled as clinical trials in Velos and 207 in Info Ed.

Recommendation 2018-012-02-RM:

The Director, Office of Clinical Research, should establish a quality assurance process to ensure the completeness of data elements entered by the research teams into Velos. Additionally, working with the Director, Human Subject Protection Program, an appropriate reconciliation process should be established to ensure the consistency and accuracy of data reported between Velos and Info Ed.

Management’s Response:

The Director, OCR will establish a quality assurance process to ensure completeness of data elements in Velos. Existing SOPs will be reviewed to ensure expectations around data entry are covered. OCR and HSRP will work together with Information Systems to implement a process to identify and improve continuity of data between Velos and InfoEd. OCR is currently working with Information Systems to increase the data exchanged between InfoEd and Velos. The existing InfoEd reports will be augmented with reports developed using Crystal to ensure all studies are captured as part of the quality assurance review and reconciliation.

Implementation Date:

Review and reconciliation of Velos and InfoEd – July 01, 2018; Feasibility of two-way communication between InfoEd and Velos, September 1, 2019

Velos data entry review – September 01, 2018 (allowing for review of and training on SOP)

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Epic and Velos Subject Management

OCR initiates the requests to load studies into Epic to ensure study participants are appropriately not billed for research related procedures. The study team is then responsible for ensuring their individual study subjects are entered into Epic prior to the visit occurring for charges to be routed to the Epic research work queue. OCR monitors and dispositions these charges within the work queue to ensure the guarantors/research accounts are appropriately billed. OCR's expectation is to clear the work queue within 7 days.

Audit Services noted the current oversight and monitoring activities for the Epic research work queue appears inadequate to ensure timely disposition of charges. At the time of our review, the Epic research work queue contained 24 items, of which 11 were between 9 and 14 days old and 2 were greater than 45 days old. OCR immediately dispositioned the 2 items greater than 45 days old after our inquiry regarding their status.

Recommendation 2018-012-03-RM:

The Director, Office of Clinical Research, should establish appropriate oversight and monitoring processes to ensure timely disposition of charges in the Epic research work queue.

Management's Response:

The current OCR Manager will review Epic Work Queue progress on a weekly basis with responsible staff person to ensure the seven day turn-around is achieved or assist where issues occur. An escalation policy will be utilized when the lag is due to unresponsiveness of PI or study staff.

Implementation Date: July 1, 2018.

Once study subjects are enrolled in Epic, the study team is responsible for ensuring the subjects are also entered into Velos. This allows for the tracking of the study progress and proper and timely billing of sponsors. In January 2018, OCR implemented a standard operating procedure for the Epic and Velos subject management which clarified the roles between OCR and the study staff related to subject management within Epic and Velos. At the time of our engagement, OCR had not established an appropriate data monitoring and reconciliation process between Velos and Epic.

Recommendation 2018-012-04-RM:

The Director, Office of Clinical Research, should establish an appropriate review process to ensure study data completeness and consistency between Velos and Epic.

Management's Response:

OCR will monitor whether subjects are entered in Velos by reviewing enrollment numbers reported to the IRB at continuing review and, if applicable, linked in Epic as charges are being reviewed in the Epic Work Queue. This will not account for all consented subjects as only some studies have charges come through the Work Queue. OCR will contact the study team to request that Velos and Epic be updated as per the Epic and Velos Subject Management SOP.

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Implementation Date: September 01, 2018

Industry Sponsored Invoicing and Reconciliation Activities

OCR is responsible for the invoicing and reconciliation activities for industry sponsored clinical trial studies, while the Grants and Contracts Accounting division is responsible for these activities related to other sponsored research including certain clinical trials. Audit Services noted that this is a manual process performed both in and out of Velos. Additionally, Audit Services noted studies beginning prior to 2015 are not tracked in Velos, and all invoicing and payment activity occurs outside of Velos. OCR is notified by the research team when assistance is needed; if the study is up for IRB annual review; or, if the study closes to initiate invoicing the sponsor for subject visits. Reconciliation of study accounts occur at the end of the study when OCR reviews the contract and milestones to invoice any outstanding items as well as close out fees.

Audit Services tested a sample of 30 invoices from 10 active industry sponsored studies in Velos to review the accuracy, completeness and timeliness of invoicing and reconciliation. Within our sample, we noted numerous exceptions including late invoicing, incorrect invoicing, lack of invoice to payment reconciliation, lack of payment to milestone reconciliation, posting of subject payments within Velos for invoicing without corresponding active subjects, and lack of payment reconciliation for invoices created outside Velos. Details of the errors were provided to OCR for follow up and resolution. It appears there is insufficient oversight, monitoring and reconciliation related to the industry related clinical trial billing and payment processes.

Additionally, Audit Services selected a sample of 10 studies from the Velos aging report to determine the status of invoicing and payment activity, noting the following:

- 2 studies were identified as closed with no reconciliation of the payments to the invoices occurring within Velos
- 4 invoices while reconciled, the status was not updated on the aging report
- 2 payments did not feed over to Velos, therefore were not reconciled on the aging report
- 2 payments were not reconciled to invoices in Velos

Audit Services interviews with OCR personnel indicated Information Services is working to resolve the following issues previously identified by OCR:

- The aging report of invoicing and payment activity within Velos is not functioning properly as some payments that are reconciled are not removed from the aging report.
- Payments applied in PeopleSoft are not always interfacing with Velos appropriately.

Recommendation 2018-012-05-RM:

The Director, Office of Clinical Research, should ensure there is sufficient oversight, monitoring and reconciliation activities to ensure the accuracy of the invoicing and payment recognition for the industry sponsored clinical trial billing and reconciliation activities. Additionally, the Director, Office of Clinical Research, should explore the

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feasibility of having Contracts and Grants Accounting manage the invoicing and payment receipting processes for all industry sponsored clinical trials.

Management's Response:

The Director, OCR agrees that additional oversight, monitoring and reconciliation of activities to invoicing needs to occur. OCR is currently working with Velos to fully resolve the issues in the aging report and has been working with Grants & Contracts and Information Systems regarding the feeding over of payments to Velos. UTMB plans to meet with the University of Texas Health Science Center at San Antonio team on June 15 to learn more about how they are using Velos for invoicing and reconciliation.

The Director, OCR will begin exploring the feasibility of Grants and Contracts Accounting managing the invoicing and payment receipting processes for all industry sponsored clinical trials.

Implementation Date:

OCR will begin defining an oversight, monitoring and reconciliation process July 1, 2018. Due to a transition in leadership and the approaching year end activities, discussions regarding transition of invoicing and payment receipting processes will begin November 01, 2018 with roles and responsibilities between the two entities being finalized February 1, 2019.

Subject Reimbursement Activity

UTMB Health utilizes the Greenphire ClinCard System (ClinCard System) to compensate subjects for their participation in research trials. OCR pre-sets study visits with payment information according to the study protocol and enters study team staff members into the ClinCard System. The research team is responsible for ensuring study subjects are set up in the ClinCard System and that subject reimbursements are appropriate and timely.

Audit Services selected a sample of 12 ClinCard holders to ensure appropriate set up and timely reimbursement, noting no exceptions. However, Audit Services did note a segregation of duties issue related to the same person registering and approving the subject for payment within the ClinCard System.

Additionally, 3 of the 12 cardholders had missed visits that were not dispositioned in the ClinCard system, so it appeared the missed visit could still be selected for reimbursement to the subject. Additionally, two study team departments interviewed indicated they do not perform a reconciliation of the individual subject's reimbursement activity to ensure subjects were reimbursed appropriately.

Recommendation 2018-012-06-RM:

The Vice Dean for Clinical Research, should establish a process to ensure effective internal control and proper oversight and monitoring of the ClinCard subject reimbursement activity.

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Management's Response: The Vice Dean for Clinical Research will ensure an SOP is implemented that defines proper internal control processes related to management of the ClinCard. The Vice Dean will also confirm a monitoring process exists to ensure adequate oversight exists. The Vice Dean will request updates and findings from the monitoring activities.

Implementation Date: July 01, 2018

***ClinicalTrials.gov* Compliance**

The *ClinicalTrials.gov* Protocol Registration System (PRS) is a federal web-based data-entry system that provides public access to a directory of clinical trials that test the effects of drugs, biologics, devices, and procedures on medical diseases and conditions.

At the time of our review, OCR was tracking 41 instances of non-compliance within *ClinicalTrials.gov* consisting of entries not completed, not recently updated, updated not released or trials with late results of Food and Drug Administration Amendment Act (FDAAA) dating back to 2012. OCR notifies the research study teams for those studies not in compliance with *ClinicalTrials.gov*. If there is no response from the study team, OCR notifies the Office of Institutional Compliance, which sends a follow-up notification to the study team. There is not an additional escalation process in place for communicating continued instances of non-compliance to the next level supervisor of the Principal Investigator.

The Office of the Provost is currently reviewing the draft Institutional Handbook of Operating Procedures (IHOP) policy 11.03.02 *Registration of Clinical Trials on ClinicalTrials.gov*. This policy builds awareness of the responsibility and accountability for ensuring compliance with *ClinicalTrials.gov* and includes penalties for non-compliance.

Recommendation 2018-012-07-RH:

The Vice Dean for Clinical Research, should establish a monitoring and escalation process to ensure the study teams are appropriately registering and/or updating their studies appropriately and timely in *ClinicalTrials.gov*.

Management's Response:

Building on the current procedure of notifying Institutional Compliance to send out a follow-up notification to the PI of ongoing non-compliance, the Vice Dean will work with the Vice President of the Office of Institutional Compliance to develop an escalation process.

Implementation Date: August 1, 2018

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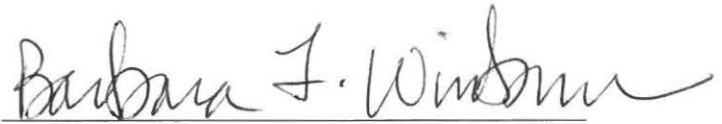
Conclusion

Audit Services assessed the efficiency and effectiveness of the operational processes established by the Office of Clinical Research. Opportunities exist for the Office of Clinical Research to strengthen current processes related to information system access and data integrity, financial activities, and oversight and monitoring.

We greatly appreciate the assistance provided by the Office of Clinical Research staff and hope that the information presented in our report is beneficial.



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