



The University of Texas Medical Branch
Audit Services

Audit Report

Epic In-Basket Management Audit

Engagement Number 2015-008

July 2015

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

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Background

The University of Texas Medical Branch's (UTMB Health) "The Road Ahead: Institutional Vision 2015-2017" outlines four strategic goals essential for achieving its vision and advancing its mission "to improve health for the people of Texas and around the world". For Institutional Goal #2, "Value", UTMB Health seeks to deliver "top-tier" service to its patients and streamline operating systems to improve/optimize outcomes and overall efficiency.

In 2008, UTMB Health completed implementation of the Epic Electronic Medical Record (EMR) system to improve quality of patient care, patient safety, and operational efficiency. The Epic "In-Basket" function is a secure, closed messaging system allowing users to send and receive messages about patient care and billing needs. While similar to email, it permits messages to be directly linked to patient accounts, charts, lab results, orders etc. Open messages/encounters are routed to one of 54 available folders to help organize user workloads and ensure timely responses.

In-Basket users complete message related tasks by clicking context-specific buttons on the In-Basket toolbar. The In-Basket function is customizable and allows the routing of messages by type to certain users or groups of users, such as a pool of nurses.

Ambulatory Operations' leadership indicated effectively managing the Epic In-Basket process has presented on-going challenges due to numerous factors including the complexity of the design and lack of initial, detailed guidance and training to foster standardized practices among users. In an effort to facilitate standardization and optimization of Epic In-Basket processes, Ambulatory Operations created a six-member In-Basket support team which meets regularly to prioritize projects and discuss process improvements with a goal of ensuring improved patient care, safety and satisfaction.

Audit Objective

The primary objective of this audit is to assess the processes in place to manage Epic In-Baskets in an effort to identify additional opportunities for standardization and optimization.

Scope of Work and Methodology

The audit scope included current processes used within selected areas of Ambulatory Operations. Our methodology included gaining an understanding of the In-Basket workflows through interviews and observation of key personnel within the Access Center, League City Family Health Clinic, Mainland Cardiology Clinic, and Women's Healthcare Clinic – Galveston. Additionally, we interviewed members of the In-Basket support team and reviewed applicable policies, procedures, and other related documentation.

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.

Epic In-Basket Management Engagement Number: 2015-008

Audit Results

Audit Services interviews with members of the In-Basket Support Team indicated the team has identified several opportunities and proposed changes to streamline and optimize In-Basket processes. These initiatives fall into four key areas:

- In-Basket Design/Functionality;
- Data/Reporting;
- Training; and
- Protocols and Processes

During our interviews and observations at select clinics and the Access Center, Audit Services identified additional opportunities to improve current In-Basket tools and processes. Identified opportunities by area include:

In-Basket Design/Functionality

Items Identified by In-Basket Support Team

- Add “Orders” as reason for call encounter type to allow routing directly to nurses – Request approved; however, still awaiting implementation.
- Create “hard stop” to require documentation of reason for phone calls.
- Create field to allow for secondary reason for phone call, if needed.
- Create ability to search by patient for multiple encounters open within different folders.
- Consolidate all messages/encounters related to medications into one folder (currently in 5 different folders).
- Disable MyChart standard auto response – It is a non-patient satisfier and does not facilitate addressing message.

Items Identified by Audit Services

- Consolidate messages/encounters related to test results into one folder. Identify other opportunities to reduce the number of folders used.

Data/Reporting

Items Identified by In-Basket Support Team

- Validate data in current reports for accuracy and completeness.
- Create a report to track response time for other call types not currently captured in existing reports.
- Create a report showing message backlogs by user and message type.

Items Identified by Audit Services

- Current reports available are for response time for the 7 reason for call types, response time for closing patient calls and report to view Open Encounters for Telephone, Letters, and MyChart folders only. Create similar reports for the other folder types.
- Create a report to show total Open Encounters within all other folder types to help facilitate monitoring of the other folders.

Epic In-Basket Management Engagement Number: 2015-008

Training

Items Identified by In-Basket Support Team

- Enhance basic In-Basket training for nursing staff and providers to include definitions of all folders and how messages are routed to each folder.
- Implement side-by-side shadowing with best practice In-Basket users.

Items Identified by Audit Services

- Develop and implement advanced training for each of the folder message types within the In-Basket for Patient Service Specialists (PSS) and clinical staff to better understand what is in the folders and how to manage their In-Basket activity.
- Develop and implement specialized training for PSS supervisors, clinic managers and clinic medical directors on how to monitor their area's In-Baskets and how to read and understand the reports available to monitor In-Basket activity.

Protocols and Processes

Items Identified by In-Basket Support Team

- Develop additional standard protocols for nursing and medical assistants to handle certain calls without sending to physician and awaiting a response.
- Implement standard methodology for working In-Basket messages – Need workflows for nurses to know when to done a message.
- Further define nursing pool roles to identify who can/should be working different types of messages.
- Establish standard processing time for providers to respond to messages if no actions taken.
- Standardize process for routing and “doneing” messages.
- Implement expected response time for all other call reasons.
- Establish expectation for providers to complete prescription messages (eRX) instead of routing to nurses.

Items Identified by Audit Services

- Establish guidelines for handling messages/encounters of users out on leave or when terminating their employment.
- Develop and implement guidelines for all folders/message types available within the In-Basket.
- Establish guidelines for providers to send results straight to MyChart to notify patients of normal test results instead of routing to nurses to complete.

Additionally, Audit Services identified the following opportunities in the areas of Oversight and Monitoring:

- Establish escalation process to address lack of timely response to messages and backlogs.
- Consider establishing a guideline for results that have not been closed timely to automatically route to the clinic manager's and medical director's In-Basket for follow up.
- Use available tools within Epic such as the In-Basket Dashboard to monitor activity.

Epic In-Basket Management Engagement Number: 2015-008

The recent rapid growth in and movement of UTMB Health's ambulatory clinics, coupled with increased focus on ensuring a consistent, high-quality patient experience across the enterprise, has put added pressure on existing organizational resources previously dedicated to operational optimization. Although the support team continues meeting weekly to discuss implementation status of proposed changes and enhancements, the extensive nature of its list outweighs currently available team resources, including those provided by Information Services, resulting in a lack of sufficient momentum to address items in a timely manner. Audit Services noted some change requests dated back to September 2014.

The importance of patient access to timely, responsive support for their health care needs and questions occurring outside of scheduled appointments with their providers is paramount to the overall success of UTMB Health's institutional vision related to patient care and satisfaction.

Recommendation 2015-008-01-R:

The Vice President, Ambulatory Operations, the Vice President, Chief Physician Executive and the Vice President, Chief Information Officer should develop a formal action plan with appropriate milestones, timelines, and resources to prioritize and implement Epic In-Basket process and design changes to ensure current and recommended Epic In-Basket initiatives are addressed in a timely manner.

Management's Response:

The VP, Ambulatory Operations, VP & Chief Physician Executive, and Chief Information Officer will develop a formal Epic In-Basket process and design change action plan with appropriate milestones, timelines, and resource estimates by December 23, 2015. The process improvements and design changes will be implemented by March 31, 2016.

Implementation Date:

Action plan – December 23, 2015. Implementation – March 31, 2016.

Conclusion

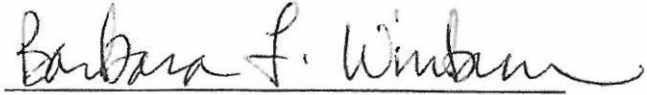
Audit Services completed an assessment of the Epic In-Basket Management Processes within Ambulatory Clinics to identify additional opportunities for standardization and optimization. In addition to opportunities previously identified by the In-Basket Support Team, Audit Services noted opportunities exist to further streamline and standardize current processes, provide additional user guidelines and advanced training, and perform oversight and monitoring. With the recent rapid growth in and movement of UTMB Health's ambulatory clinics, resources previously dedicated to operational optimization have been refocused. Without sufficient resources and momentum to ensure efficient and effective use of the Epic In-Basket function, the institution has an increased risk of not achieving its goals related to patient care, safety, and satisfaction.

**Epic In-Basket Management
Engagement Number: 2015-008**

We greatly appreciate the assistance provided by Clinics Administration and Support, and individual clinic/area personnel, and hope that the information presented in our report is beneficial.



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