CU I&E Submission: Decreasing Clinical Research Startup Time [1]

Category

Customer Service
Sponsored Projects/Research

Submitted By

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Project Description

The Clinical Translational Research Center (CTRC) Study Startup process faced persistent issues, such as the inability to track protocol readiness across 7 different cores, confusion on document version causing errors, and inefficient communication between multiple teams. These issues led to delays, frustration, and potential regulatory compliance and patient safety concerns. In 2024, 237 CTRC research protocols went through this tedious process. The CTRC Study Startup Dashboard is an innovative home-grown technological solution that facilitates status tracking across CTRC cores; positions templates/instructions in a single, convenient location; document version control; and automated targeted email alerts to team members when their input is required. The tool supports collaborative inter-disciplinary document creation, including nursing orders, which are a detailed 'blueprint' to conduct a study visit for any given protocol. This comprehensive solution has enhanced transparency, accuracy, communication and overall efficiency of study startup for both CTRC staff and users spanning across CU campuses.

Project Efficiency

CTRC study startup requires collaboration between multiple teams including 7 CTRC cores, >300 study teams, and CU and UCHealth pharmacies. The new dashboard utilizes Microsoft Power Apps and SharePoint to facilitate integrated, real-time progress at every study startup step, allowing multiple workflows to occur concurrently. Since the Dashboard's release in December 2024, the time to finalize nursing orders has been more than halved (pre-dashboard 32d vs post-dashboard 15d), significantly enhancing efficiency and saving thousands of dollars in reduced startup time. Other important efficiencies include improved teamwork and collaboration, user satisfaction, regulatory compliance, and patient safety.

Project Inspiration

Annual CTRC customer satisfaction surveys consistently indicated dissatisfaction with the CTRC study start-up process, especially development of nursing orders. The CTRC receives >200 new research protocols/year from a diverse customer base with varying training backgrounds. The high turnover rate of research coordinators exacerbated issues related to study startup. Improvement and automation were necessary. Additionally, the CTRC User Advisory Board identified this as our highest priority project for 2024 and provided guidance during its development to ensure that it met user needs. The goal was to deliver faster, high-quality CTRC research study start up to our users and ensure patient safety.

What Makes You Happiest about this Project?

This project has fostered unexpected connections between CTRC cores, users, and pharmacy teams. "We developed understanding of each other's startup processes, which has promoted ongoing collaboration" says Kyla Wulff, CTRC Charge Nurse, who was instrumental in the development of this tool. The dashboard users expressed that it is "an incredibly efficient solution". Most importantly, the resultant 53% time savings enable CTRC to support more studies and participants safely. This is efficiency personified and happiness for us! The dashboard can be adapted to any environment where multiple teams need to collaborate on processes and track real-time status, making this solution versatile.