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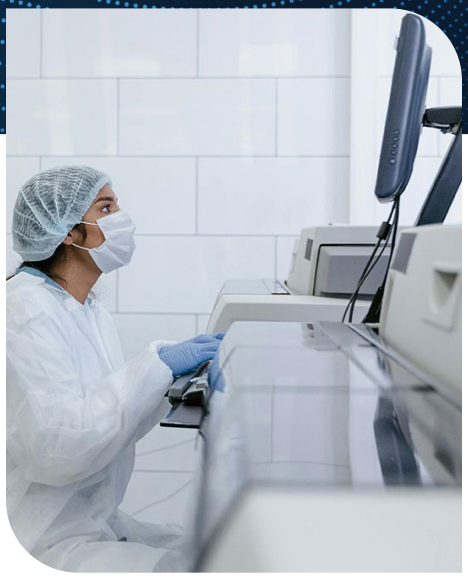

CASE STUDY

Standardized Implant Tracking Tool Speeds Patient Aid:

Cognitive's Rapid-Response UX Approach Helps VHA Enhance Workflows on Reduced Timeline

PROJECT DETAIL:

CAPABILITIES:
Clinical Knowledge Analytics and Management

AGENCY:
The Veterans Health Administration

INTRODUCTION

The Veterans Health Administration (VHA) uses biologic implants (BIs) to treat a wide range of conditions, but it lacked a standard process for documenting these implants across different specialties within its Computerized Patient Record System (CPRS). This lack of the fundamental processes, controls, and systems needed for accurate documentation meant that VHA had no way to systematically alert affected Veterans in the event of a manufacturer's BI recall.

With more than nine million Veterans across the U.S. Department of Veterans Affairs' (VA) hospitals, outpatient clinics, and nursing homes at risk, VHA needed an enterprise-wide clinical documentation template to capture and track implant information and ensure the safety of its healthcare beneficiaries.

CHALLENGE

From heart valves and artificial joints to dental and hearing loss implants, biologic implants vary widely in function, material, and accompanying documentation. Due to these differences, the process for documenting biologic implants was largely determined by specific VA sites, specialties, and practitioners rather than by a cohesive, system-wide standard. Any need to identify a patient with a specific type of implant would launch a time-intensive search of patients' individual medical records. In addition to putting patients at risk, this lack of a consistent system put VA facilities at risk of noncompliance with The Joint Commission accreditation.

CHALLENGE, CONTINUED

Through an existing contract with the Department of Veteran Affairs, Cognitive was tasked with developing a standardized Biologic Implant Tracking Tool. As part of Clinical Decision Support Task Order 8, Cognitive's team would develop a preliminary working model for standardized BI documentation. Insight gathered from user research sessions would shape a documentation template to establish the foundation for consistency across all VA sites.

It was a tall order, demanding a blend of a work model, scenario walkthrough, user interviews, and a heuristic evaluation. And it was an order made more complex when the client dramatically accelerated the developmental timeline and reduced the sample size available to Cognitive's researchers to two specialty outpatient settings: podiatry and ophthalmology.

SOLUTION

To meet the VHA's accelerated timeline, Cognitive's team adopted a guerrilla user experience (UX) testing approach. Compared to more traditional UX methods, guerrilla UX testing is a rapid-response technique focused on human-centered methods using scenarios and think-aloud protocols.

Through scenario-based interviews, Cognitive gathered data about the existing BI documentation process, including how end users entered product-specific information and the existing tools and templates they currently used. With this information, Cognitive identified the broad steps for documenting a BI procedure. Next, this data was analyzed to understand the differences across users' processes, information that would inform future template features and workflows.

By operating within a Scaled Agile Framework (SAFe), Cognitive was able to rapidly address user feedback on its template and deliver updates. This process was fueled by a reporting convention Cognitive developed in which interview findings were mapped to reference numbers placed on BI documentation screen markups. This helped make findings clear for all stakeholder groups and enhanced cooperation between the client, end users, project managers, and software developers.

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RESULTS

Despite the challenging constraints on timing and interviews, Cognitive successfully developed a pioneering standardized BI documentation template for use in CPRS across VA pilot sites. While ultimate success will be measured by factors such as the swift identification of patients during recall events, enhanced compliance with The Joint Commission requirements, and greater user satisfaction, Cognitive's efforts also yielded transformative insights for future improvements. These recommendations will pave the way for the VHA to significantly reduce user burden, frustration, and error rates.

By consolidating this work with research from a wider range of specialties, Cognitive's achievements provide the powerful foundation for a universal template capable of accommodating the diverse needs of all VA outpatient clinics handling biologic implants. This advancement promises to set a new standard in clinical documentation and patient safety.

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