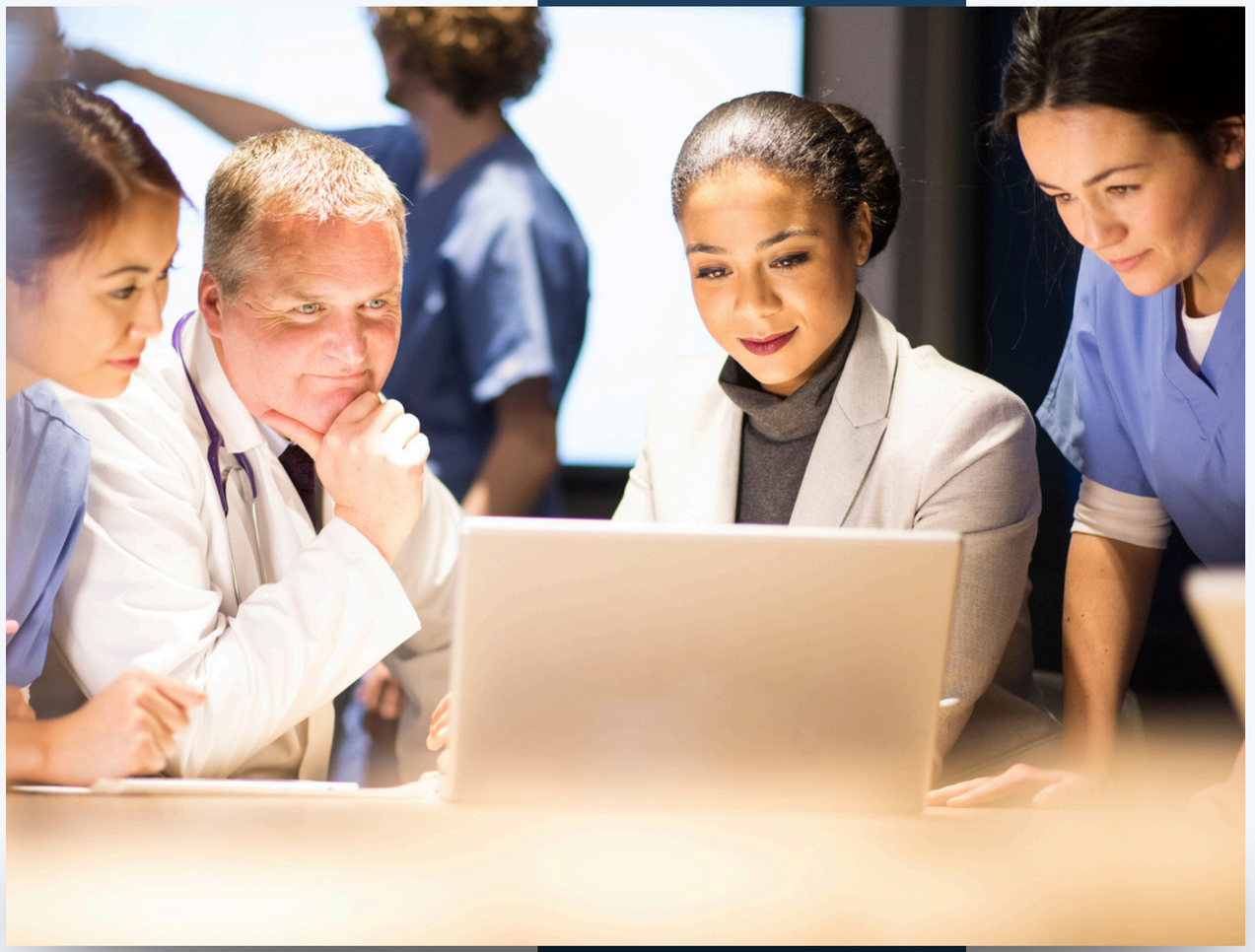
eHealth Ontario

CASE STUDY



O Ontario
L Laboratory
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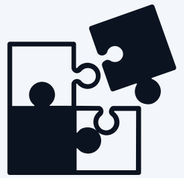
BACKGROUND

eHealthOntario, an agency of the Ontario Government, was tasked with creating a digital information system for the recording and sharing of medical laboratory results for the provincial healthcare system.



PROBLEM

The initial interface was created with a focus on data integrity, security and back-end functionality. While these are critical aspects of any application, what resulted was a system that was difficult to navigate, non-intuitive and carried a heavy cognitive load.

END-USERS

Fom lab techs, to physicians and nurses at varying stages of their careers and with varying educational backgrounds. Most of these users are working in a fast-paced environment (hospital ERs) with a multitude of distractions and very little time to focus.

They currently utilize various in-house solutions that are not amalgamated throughout LHNs but express concerns about adapting a new solution due to security of medical data and privacy risks associated with online platforms. They are also hesitant to adapt new software due to the costs of training staff.

TASKS

- view patient lab results
- enter patient lab results
- share results with other clinicians

GOALS

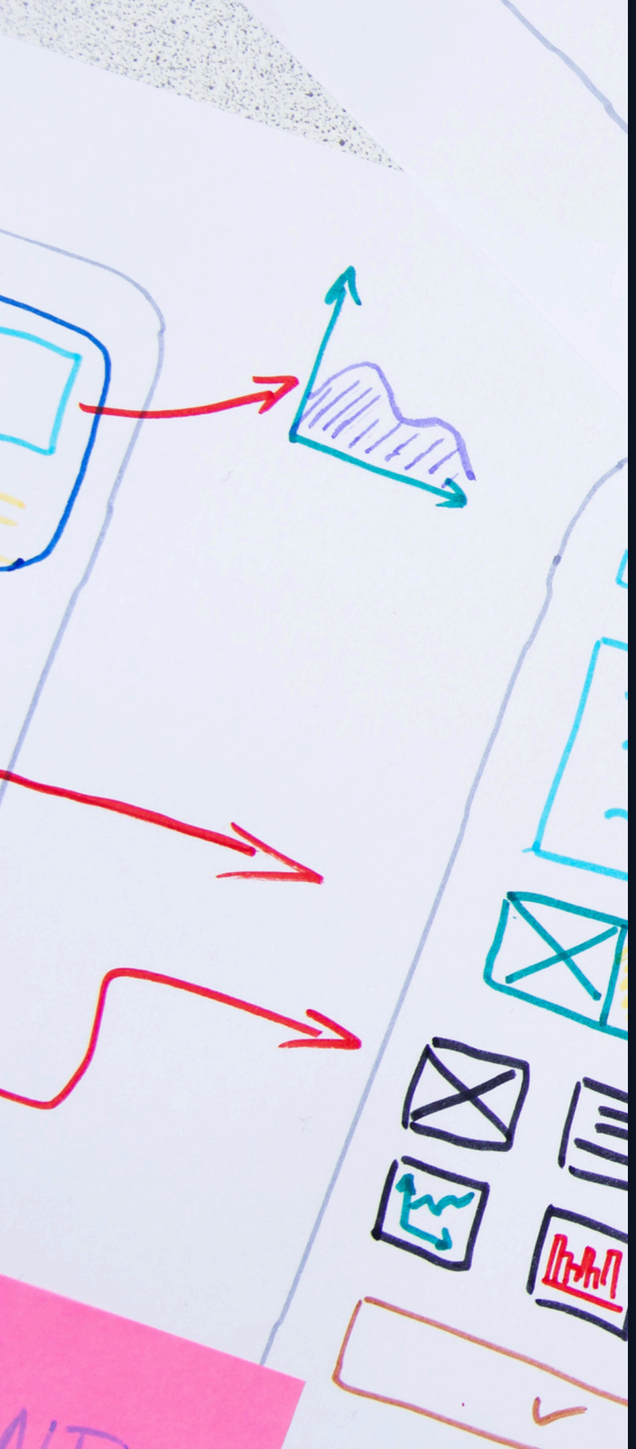
- streamline the process of accessing lab results
- observe trends in patient history
- maintain current system - ability to integrate application with current system

BARRIERS

- fast-paced environments, no time to learn new software
- concerned with patient confidentiality
- not comfortable with new technology training costs

INFLUENCES

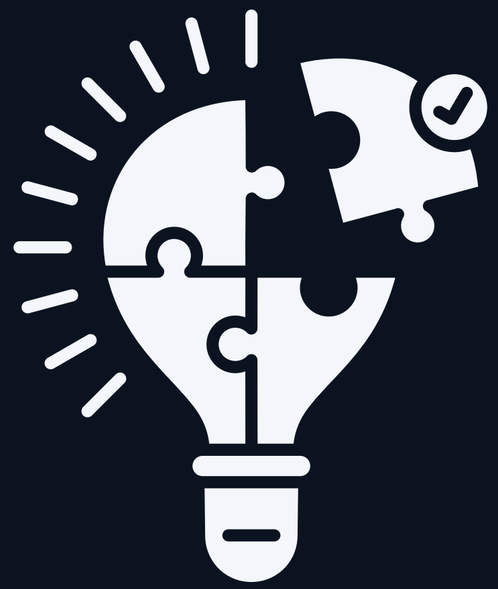
- current information systems
- Microsoft Office applications
- Electronic Health Record (EHR) Software Medscape



APPLICATION OBJECTIVES

- Reduce cognitive load and create strong signifiers
- Maintain spacial and informational consistency
- Prioritize and organize menu options (removing proximity of destructive and confirmation actions) minimize long-string identifier

SOLUTION



Through the use of beta testing, surveys and face-to-face interviews I was able to gather feedback from a select group of clinicians who served as our focus group.

I provided "clear language" interpretations of the data security measures put in place by our systems engineers, thus alleviating concerns about data breaches and patient confidentiality and managing client expectation.

Using an iterative design process, I created UI elements and workflows based on this feedback and conducted A/B usability testing to determine what elements of the interface were creating bottlenecks and adjust accordingly.

Collecting data on their current application use as well as their use of the portal, allowed me to create mental models and gain insights into their level of technical ability and determine how much instruction would be needed.

Prior to launch I designed computer-based learning modules which minimized the need for onsite training.

These learning modules were successfully used to train approximately 2 million clinicians across the province.