

Iterating and Validating Product Designs BEFORE They Go to Market

User Centered Design processes help to shape the look and feel of dbM Patient View application.

Challenge

Validate that the new product interface is helping the user navigate to patient information in a direct and easy way.

- Give the user enough information, at a glance, to know whether they need more detail on an item
- Reduce clicks and hovers
- Leverage common navigation paradigms so the system is easy to use with little to no training
- Learn from what the existing interface is and isn't doing well

Impact and Results

With an average score of **5.7 out of 6.0**, all participants felt data in the application would be correct and reliable.

All participants felt positively that they would like using the new application with an average score of **5.3 out of 6.0**

75.4

Average Satisfaction Score for the study

Note: A score of 68 is the baseline for a usable system

Approach

Created product design based on end user research visits

Scheduled Formative Usability sessions with individual dbMotion end users

Modified designs based on session feedback and task performance.

Clinical Staff Guide Design of dbMotion Patient View by Showing How They Use the Products

Challenges

Understand how actual end users leverage the existing dbMotion products.

The team wanted to explore the following questions at the start of the project:

- Who are our users – what are their frustrations? What does success look like?
- How is the product used and in what scenarios is it most most/least helpful?
- How can the product better support our users?

Impact and Results

Discovered two main user types:
Hunter/Gathers & Explorers

To support multiple workflows we created filtered views: By Category, By Date and By Encounter.

Allow users to evaluate content without clicking and to get more detailed information with a single click

dbMotion Patient View is a supplemental tool and must be designed as a helper.

Approach

Gathered internal research questions and prepared for client visits

Scheduled site visits with actual end users at client sites

Observed real-time usage of the product and interviewed users

Compiled findings and reported learnings back to the product team.

Using Accessible Design Best Practices to Improve Usability of dbMotion Patient View

Creating designs that can be accessed, understood and used by all.

Challenge

Ensure the designs of the new product are intuitive and accessible.

- Highlight abnormal results
- Ability to adjust font size
- Ensure content has appropriate contrast
- Support multiple screen sizes

Impact and Results

Abnormal results are red and underlined.

Total Cholesterol 180 mg/dL

User is able to adjust the font size and all text and images have a **minimal contrast ratio of 4.5:1**.

Incorporated flexible layouts to avoid truncating content and support variety of devices and window sizes.

dbMotion Patient View makes it easy for users to see and adjust content that best suites their needs.

Approach

Used redundant, visual cues to highlight abnormal results.

User can adjust font size to improve legibility without loss of content or functionality.

Support the Web Content Accessibility Guidelines for minimal contrast ratio.

Used responsive design approach so content displays equally well from desktop monitors to mobile devices.

Support Client and User Customization in the Design of dbMotion Patient View

Enhances user experience by allowing our clients and their users to customize the experience.

Challenge

Allow client sites to customize default view tailored to their users. Allow users to personalize selections about what they see and how information is displayed.

- Select data categories to display
- Set font size
- Adjust window size and position
- Client site can set default application

Impact and Results

Filters panel allows user to select the data that best suit their needs.

Persist font size, window size, location, and state using the appropriate monitor across program instances on a per-user basis.

Clients define the default application and can customize the icon to support training provided to their users.

dbMotion Patient View allows users to control their interaction by tailoring their display to meet their goals and needs.

Approach

Provide filtering of categories, data status and delta view.

Provide user setting to adjust font size to improve legibility without loss of content or functionality.

System maintains the size, position and state of application based on user preference.

Allow clients to select default application and customize the icon that appears in the dbMotion Hub launcher.