Generative Research

A team of medical professionals was interviewed about what they considered the most useful information about a medical device or drug. This session was designed to help the project team understand the user's mental model, and what information was most important to them. When searching for medications, the subjects frequently mentioned safety concerns such as recalls, side effects, and drug interactions. They also mentioned the difficulty of distinguishing one drug from another, as many drugs are use the same ingredients to treat similar problems.

Pull Quotes

Many drugs can do the same thing, but if I can see what it looks like, get some pros and cons, safety and efficacy, that helps me.

The most up to date warnings, recalls, this information, that's the best"

There are literally thousands of devices that get approved under 510K, understandably, the problem is you have lots of devices that are relatively similar so in thinking this through, some comparison analysis would be highly useful.

One of my relatives is physical rehab doctor, vendors come in selling wheelchairs or pumps, and everyone wants to sell the latest greatest thing, with very little independent info about the device, most doctors haven't spent time dealing with these devices, it's a lot about engineering, it's not a physicians field. So often we take the info given and if it's relevant and necessary and useful for the patient they'll use it. But we need independent info about reliability, utility, particularly if we could compare it to stuff in the same category as a ready reference.

Expectancy Tests

We conducted expectancy tests in one-on-one sessions with seven users, to ensure they could process information our product was presenting, and use that information to complete tasks. The main focus was on information architecture, how to organize the vast amount of data in available to them. Test subjects were able to parse the data presented very well – collectively 91% of all tasks correctly with no hesitation or pause. Test subjects were asked to suggest what information they wished was available, and would like to see.

Test Round 1 Average Score: 92.5 out of 100

Test Round 2 Average Score: 90.2 out of 100

Pull Quotes

I can tell I'm looking at Tylenol results. I love that design. I can see they're sorted by most relevant. I would try to change with this button at the top.

I would want to know how dangerous this medicine is for children. Has this thing been recalled? Maybe an icon showing it's been recalled in the past. Maybe it has been fixed, but I want to know if it ever was. [I want] the safety rating for it.

Focus Group

A group discussion was conducted, with questions provided by a moderator. Questions focused on validating our information architecture, prioritizing the display of available data, the visibility of alerts, and how effectively they could distinguish and compare medications. Mobile and tablet designs were also shown, to inform design improvements for release two.

Suggested Changes:

In the Listing page, put the name of the drug inside the tabbed window.

Maybe de-emphasize the “No Recalls” icon a little more.

Rearrange the Interactions table to emphasize that the drugs listed interact with the top-level drug that whose information is being displayed. In the example, make it clear the drugs interact with Tylenol.

In mobile, reposition the “Recall” bar in the Results page so it is not on the side, where it can be obscured by a hand holding the phone. Perhaps add a stroke around the box for visibility.

General Points:

In the Search Results, the name of the medication could be slightly more emphasized.

Some users did not seem to find the count of Search Results useful.

Perhaps try the Results icons on the left side of the baseball card.

Consider rewording “At Risk Groups.”

For Release 2

List Recalls by number of people affected.

Show interactions only of the specific drugs I care about.

In the Recalls page, display the scale of recalls (I, II, III, Market) so users are able to put the recall level into context.

Display contact information.