MyHealth Usability Test Report

We had eight subjects in our usability testing. They are referred to by their initials to keep their anonymity.

First Subject: NP

NP is a 21 year old male college student majoring in economics. He completed our test using Mozilla Firefox.

When doing the first task, he scanned the entire home page before seeing the “Create an Account” link. When he was creating the account, he at first entered the wrong year. The calendar widget defaulted to 2011, and NP just picked the date. He saw his mistake and then proceeded to type in the correct year. Celecoxib was entered first, and it took him a while to find the correct symptom. He had to scroll through a really long list. He entered Zocor next, but the database we are using does not have Zocor, but it's other name Simvastatin. He had to re-read the scenario in order to find the correct name. While looking for “Headache” as a symptom he had to scroll through the list again, and then read off the probability for Celecoxib. The last task was similar to this, as he had to scroll through a big list to find the correct symptoms.

Second Subject: SK

SK is a 21 year old male college student majoring in Mechanical Engineering. He completed the test using Mozilla Firefox.

Creating the account caused some issues for him. The prompt says to entered an E-mail, which will also be the user name. The task gave only a user name and no e-mail. We should define clearly whether we want to have a unique user name tied to an e-mail or to just use the e-mail. SK also typed in the birthday, ignoring the calendar widget. After created the account, SK
remarked that he did not if he got the password right because there is no confirmation that the account was created successfully. When completing the tasks, he tried to enter Zocor, but it caused an error message that was just a database error. He then realized he had to enter the generic name. When scrolling through the symptoms, he stated that the highest probability should be at the top, or he should be able to organize the data how he wants. SK later commented that there is no order to the symptoms after seeing that they aren't in alphabetical order. He tried to hit the back button to add new medication, but this takes him to the same page, so he had to scroll all the way down to add a medication. He then stated that “Add Medication” should be at the top. He also did not understand what the units were for the probabilities.

**Third Subject: AT**

AT is a 21 year old male college student interested in music. He also used Mozilla Firefox. AT also had trouble creating an account.

He thought we should be more specific about making a user name or just using your e-mail address. He thought the calendar widget was nice, but that the year was too far back in time. After creating an account, he was confused as to whether he created the account successfully. AT would have liked a page that stated so. After logging in, the main screen was a point of confusion. It stated that everything looks good, and he did not understand why it said that if he had not entered anything yet. He also had issues entering the correct drug name and scrolling to find the data. When trying to add a new medication he asked if he can do another search without hitting back, and then saw that he could add a medication at the bottom. He read off the probability of rash for Celecoxib when he was looking for Simvastatin. The probabilities were confusing to him. For example, he wasn't sure whether he was supposed to be reading 0.7% or
Fourth Subject: QH

QH is a 21 year old male college student majoring in English. He was using Firefox on a PC, but usually uses a Mac so he had some trouble.

When creating a new account, he saw that there was no e-mail in the scenario and tried to make one up. I then told him to use the user name provided. He also wanted to be able to type in the birthday instead of using the calendar widget. When adding medication, he tries to use the common name, Celebrex, but the database error page comes up. He stated that it would be better if they used actual drug names. He could not find stomachache as a symptom and thought he was hard that he had to do all this scrolling. When he was looking for rash as a symptom, he just used Control-F to find it. He also stated that he wished the symptoms were listed in alphabetical order or that he could search for the symptoms individually. QH also had problems interpreting the probabilities, but he just assumed they were read as percentages.

Fifth Subject: AM

AM is a 19 year old college female involved in theater and the arts. She was also using Mozilla Firefox.

She had trouble entering the medications. She entered Celebrex first, which causes an error to show up. As Celebrex is not in our database, she has to enter the generic name, which she does correctly on the second try. After looking at symptoms, she tries to hit back to enter a new medication. This takes her to the same page she is on (the home page), until I tell her to scroll down to enter the new drug. After completing the rest of the tasks, she states that she
wished she had a website like this. AM has had several illnesses this semester and has had to take several medications. She would find a site like ours useful.

**Sixth Subject: SB**

SB is a 22 year old college female majoring in Family Science. She was using Safari to complete the tasks.

She did not run into problems that people before her had trouble with. For example, she entered the correct user name on the first try. She, like AT, had a problem with the home screen saying “Everything Looks Good” if nothing had been entered yet. After entering the medications, she had trouble finding the symptoms that we had told her to look for. She eventually just skipped onto rash (task 2), but could not find that either and skipped this task too. When she was doing these tasks, she only saw information for Celecoxib, until she scrolled for a while and found the symptoms for Simvastatin. Overall, she had to do a lot of scrolling looking for symptoms and the right medications. SB also had trouble reading off the probabilities, as one symptom was listed as 6. She stated that 6 was high. 6% probability is not very likely though.

**Seventh Subject: AL**

AL is a 22 year old female college student involved in Greek Life. She was using Safari to complete our tasks.

AL had some trouble following the directions and reading the scenarios completely. Because of this she did not provide much helpful information about our interface. She did not make an account, and since previous users had made the same account, she was able to log in. She had the same issues entering medication as other testers. She also thought that the symptoms
were weirdly group, and spent along time browsing through them and reading them aloud. There was a lot of scrolling, so AL took a while doing this. She thought bronchitis and allergies were the symptoms, not the illnesses, and since they are not listed, she could not find any of the correct symptoms.

**Eighth subject: BS**

BS is a 21 year old female college student majoring in Kinesiology and involved with Greek Life. She used Safari to complete our tasks.

BS had some issues with the aesthetics of our website. The site did not show up correctly on her browser. On the log in page, box that said “Sign In!” above entering user name was overlapping “New to MyHealth?” When she clicked on “Create an Account,” nothing happened at first, but she finally got it to go to the create an account page. There was also confusion with BS on the e-mail/user name issue. When entering medication, she tried entering the brand name, which shows an unhelpful database error. She thought using the longer name was annoying, even with auto-complete in place. BS did not want to keep scrolling to find the right symptom, so she just used Control-F (Command-F for her, since she has a Mac) to find the correct information. She did not know how to add a new medication until I told her to scroll all the way to the bottom. She also was not looking at the correct medication when reading off probabilities, and did not scroll down far enough to see the second medication.

**Post Test Results**

Our site was very polarizing to those who did our usability test. As you can see from the chart below, some found the site easier to use than others. The scale ranged from 1 (easy to use)
to 7 (hard to use). The average was 3.6, and the median was 3.5, so our interface was somewhere in the middle in terms of difficulty.

![Ease of Use](image)

The question “Did you find the design of the interface aesthetically pleasing also had a wide range of responses. This was also on a scale from 1 (pleasing) to 7 (not pleasing). The average was 3.6 and the median was 4. With this results it seems that our interface was also in the middle in terms of being aesthetically pleasing.
We also asked whether the user would use this application if launched to the public. Three users responded with “Yes”, 4 users responded “Maybe,” and one user responded “No.” Of the people who responded “Yes,” one user commented that she found it useful because she has to take a lot of medications. Another user who said yes said that they would use it if the symptoms were better categorized. The most common statement among people who said maybe was that they read the bottle or box for symptoms, or just used Google to find out about their symptoms. One user who answered “Maybe,” said they would use it if the brand names of medications were used instead of the current names we have now.

**Itemizing Problems**

Medication Names          Importance: 5          Difficulty to Fix: 5

The biggest issue seen in usability testing is entering the correct medication. Users wanted to enter the common brand name of the drugs used. The database that we are using only
uses the generic names for medications. This was a huge point of confusion and would be a problem if released to the public. People recognize the brand names more than the generic name. Also, if a drug is entered that is not in our database, there is a not so helpful error message that appears. The problem would be difficult to fix because we would have to go through the database and change the name for every medication. This includes medications that we might not know the correct name to, so we would have to conduct a lot of research to correct it.

User Name Issue Importance: 4 Difficulty to Fix: 1

When the user creates an account, they are told to enter their e-mail. It also states that the e-mail will be the user name. In our tests, we just said “Enter the user name billsmith.” On the log-in screen it asks for “User Name (Your E-mail).” This seems a little inconsistent, but could be easily fixed by just asking for e-mail only, as the user's e-mail address is their user name.

Scrolling Importance: 4 Difficulty to Fix: 4

Another common issue that caused a lot of trouble was the amount of scrolling the user had to do to find the right symptom. For one drug (Celecoxib), there are 175 symptoms. The user has to scroll through all of them to find the one they want. If there are more medications, this means more scrolling. The most common suggested solution was to include a search box so that people could search for the symptom individually, but this could add quite some time onto our project.

Probability Levels Importance: 3 Difficulty to Fix: 1

After finding the correct symptom for the correct medication, the user can read off the
probability. The probability does not have any kind of units, and this leads to confusion on how to interpret the results. If something has 0.7 under probability, some might read it as 0.7% or 70%, which is a big difference. This is an easy fix, as we just need to clarify how to interpret the results.

Placement of Add Medications Importance: 3 Difficulty to Fix: 2

This issue is related to the scrolling issue above. When a user needs to add a second or third medication, he or she has to scroll through all the symptoms to get to the “Add Medications” box. This could be a simple fix, if we either fix the scrolling issue, or we place the “Add Medications” box above the symptoms, so there is minimal scrolling.

Calendar Widget Importance: 1 Difficulty to Fix: 1

Some users stated that they would prefer to type in the birthday, or they would just type it in themselves. The Calendar Widget is preferred, because it prevents errors from entering a birth day. The one thing that could improve it is changing the default year. Currently it is set to the year 2011, so the user has to scroll far back to get to the correct year. If the default year was change to an earlier date, there would be less scrolling.

Main Page Message Importance: 2 Difficulty to Fix: 1

Some users were confused by the message on the main page after logging in. If there are no drugs entered, it states that “Everything is Good!” This message would make sense if we have entered anything as it could say you should have no symptoms. Every drug entered will have possible symptoms though, so there is no situation where “Everything is Good!” really applies.
We need to change it to a different message, which will not take much time at all.

Ordering of Symptoms: Importance: 5, Difficulty to Fix: 3

After ordering medications, there is no ordering for the symptoms. At first they seem to be an alphabetical order, but scrolling further will show that they are not. There is no logical grouping apparent. Also, if two drugs cause the same system, they will be separate listings. This could be fixed by putting the symptoms in alphabetical order. The user should be able to sort the symptoms as they see fit. This issue could also be fixed by fixing the scrolling issue above, so that the user can search for symptoms themselves.