

## OpenFDA-based Website User Testing

### Response 2

Persona: Doctor

Initials: VJP

Artemis is doing a programming challenge for 18F using FDA's OpenFDA API.

We are looking for feedback from doctors and lawyers. It will be great if we could get your feedback to make the website better.

1) Where to go: <http://demo.artemisconsultinginc.com>

2) What does the website do:

- A user can browse select drugs whose data the FDA has made available to us
- A user can browse select adverse reactions from drugs
- A user can browse select enforcement reports (voluntary or forced recalls) of drugs
- A user can see some of the interconnection between drugs and "adverse reactions", and drugs and "enforcement reports"
- A user can enforcement actions by state, and see what drugs were involved in the recall
- A user can see adverse reactions and what drugs primarily have had these reactions
- Instead of browsing the lists of drugs, adverse reactions and enforcement actions, a user can search by keyword too

---

What we are hoping you can answer for us is some (about 22-23) questions:

What I am hoping you can answer for us is some (about 22-23) questions:

1) What do you think about the way the content is organized when you site for the first time?

**Comment:** The home page is pretty clean when you first get there. The first question I had was whether to click on Drug Names in the header or put it in the search box.

**Remediation:** Move search box to the top of the page. Make Browse versus Search options clearer. Stories have been created for this.

2) Is the "design" of the site clean and modern?

**Comment:** The site is clean, but I am not sure I would call it modern. When I think of modern, I think of a few more graphics. This looks fairly plain.

**Remediation:** Send to graphics design team for a look-and-feel review.

3) Is the color scheme of the site clean and modern?

**Comment:** As you click on the various tabs on the header, the color of the FDA Graphic with the pills changes. I found that a little distracting.

**Remediation:** Send to graphics design team for a look-and-feel review.

4) Is the navigation (header / footer / search box ) intuitive?

**Comment:** The navigation seems pretty intuitive. Three of the four choices in the search category makes a lot of sense. Drug Names, Adverse Events and Drug Manufacturer All of these are things that are easy terms to search. The hard part for me to understand is what keyword would you enter if you were looking for a Enforcement Report. I probably have a hard time understanding this because I am not in the industry and don't know what to look for. Even I put in certain terms under enforcement reports, it did not produce any results. I put in the term "sterility" into the search box under

## OpenFDA-based Website User Testing

### Response 2

Persona: Doctor

Initials: VJP

Enforcement Report assuming it would find all the enforcement reports with that term in it but I don't think it produced anything.

**Remediation:** Move search box to the top of the page. Make Browse versus Search options clearer. Support auto-complete functionality. Stories have been created for this.

5) Drug labels section:

a. Did you see what you expected to see?

**Comment:** I did see what I wanted to see. However in this section I would want to see the drugs ordered by alphabetical order and not by the number of references. I also would like to see an alphabet at the top of the list so I could see a list of drugs that all start with a certain letter.

**Remediation:** Add an A-Z index on the top of all the Browse pages. Stories have been created for this.

b. Did the page load fast enough for you would see on a modern site?

**Comment:** Yes it did load fast.

c. Did you know what to do when you saw the list of drugs?

**Comment:** As long as the intent was to click on the drug, then yes, I knew what to do.

d. When you click on a specific drug, was the content you got well organized?

**Comment:** It was well organized but if there are more than one brand or generic for a certain medication and if you click on multiple drugs the previously opened version continues to stay open. Not sure if you intended it to stay open. If you end up click on many then the page starts getting pretty long.

**Remediation:** For all pages showing a list of items, add a "+" for collapsed sections, and a "-" for expanded sections for clarity. Stories have been created for this.

e. Were the visualization tools (e.g. piecharts, barcharts) that you see on the 3 drug tabs useful?

**Comment:** I didn't see any piecharts or barcharts on the 3 drug tabs? Thus I can't comment on it.

f. Is there something we can interconnect from the drug labels section to the rest of the site?

**Comment:** Not at this time

6) Adverse Events section:

a. Did you see what you expected to see?

**Comment:** I did see what I wanted to see. However in this section I debated if ordering them by alphabetical order or number of references would be more beneficial. The search bar would help find the individual adverse effects, but by ordering them by the number, it allows you to see trends as

## OpenFDA-based Website User Testing

### Response 2

Persona: Doctor

Initials: VJP

well. Alphabetical order is not as important here as compared to the drug name section where I think Alphabetical order would be preferred.

- b. Did you know what to do when you saw the list of adverse events?

**Comment:** As long as the intent was to click on the adverse event, then yes, I knew what to do.

- c. When you click on a specific adverse events, was the content you got what you expected?

**Comment:** It was well organized but if there are more than one brand or generic for a certain medication and if you click on multiple drugs the previously opened version continues to stay open. Not sure if you intended it to stay open. If you end up click on many then the page starts getting pretty long.

**Remediation:** For all pages showing a list of items, add a "+" for collapsed sections, and a "-" for expanded sections for clarity. Stories have been created for this.

- d. Were the visualization tools (e.g. piecharts, barcharts) that you see on the "Drugs" tab useful?

**Comment:** The barcharts were great in this section. One suggestion is the ability to filter the barchart by classes of medications. For example the number of adverse effects for HMG CoA Reductase Inhibitors (aka Cholesterol Medications such as Lipitor, Crestor, etc).

**Remediation:** Created stories for filter by drug class.

- e. Is there something we can interconnect the adverse events section to the rest of the site?

**Comment:** This alluded to the previous question. I would interconnect to class of medication.

#### 7) Enforcement Reports section:

- a. Did you see what you expected to see?

**Comment:** I was not expecting to see a map in this section. What is the utility in organizing Enforcement Reports by states? Is it organized by the state in which the drug is manufactured? Is it organized where the corporate headquarter of the pharmaceutical company is? Kind of confusing.

**Remediation:** Clarify options for the end-user. Offer end-user table and chart. Created stories for this.

- b. Did you know what to do when you saw the list of enforcement reports?

**Comment:** As long as the intent was to click on the specific report, then yes, I knew what to do. However, if there are 100 different Enforcement Report then this is not useful because it is too cumbersome to find the specific cause. It doesn't look like the search bar allows one to search for any of the terms that is listed in the report. For example, if I wanted to search for Enforcement Reports by a particular manufacturer the search bar will not search for that. I typed in "MedImmune" into the search bar under Enforcement Report and it did not produce any.

## OpenFDA-based Website User Testing

### Response 2

Persona: Doctor

Initials: VJP

**Remediation:** Clarify search options. Implement auto-complete functionality. Stories have been created for this.

- c. Did you know what to do when you saw the list of states in the map, and the table of states/counts?

**Comment:** Why is this organized by states?

**Remediation:** Offer options to view by state, and other filters. Stories have been created for this.

- d. Was it clear that you could hover over a state, and click on a state?

**Comment:** Yes

- e. When you click on a specific state, was the content you got well organized?

**Comment:** Yes. Once again, what is the utility of organizing adverse event in terms of states?

- f. Is there something we can interconnect from the enforcement reports section to the rest of the site?

**Comment:** Not sure at this time.

- 8) Would a Drug Manufacturers section on the website help where we show drug labels from a manufacturer, enforcement actions against a manufacturer, or adverse reactions for drugs made by a manufacturer be helpful?

**Comment:** Yes, it is helpful. However, listing these in alphabetical order would be better and perhaps an alphabet at top so you can search by letter.

**Remediation:** Offer an A-Z index on the top of the page. Stories have been created for this.

- 9) What would be useful information to add to the footer?

**Comment:** Can't think of any on the top of my head.