

# User Interface

## OUTDATED

This page is outdated, and will be replaced by the project here: [OpenMRS 2.0 UI Content](#)

## Introduction

The User Interface working group is interested in improving the OpenMRS User Interface. This effort is very closely related to the [WorkingGroup /Visualization](#) effort. The UI development, and this wiki page, are both very much a work in progress.

## Design Philosophy

- **User-centric!** OpenMRS users should be clearly defined and OpenMRS should be tailored to meet their specific needs
- **Intuitive** -
  - Navigation should be laid out cleanly and logically using easily understood language and conventional web standards so that users can quickly find the tools they need
  - Users should be able to use the tools they need with no explanation/training
- **Fast** -
  - Pages should load quickly and be responsive even in areas with poor connectivity/low bandwidth.
  - The user should be able to get what he/she wants with a minimum of mouse clicks, minimal scrolling and minimal waiting for the server
- **Customizable**
  - Parts of OpenMRS should be made easily expandable & customizable by different users within a solid, logical framework to allow it to be applicable to any health program's needs

(From Darius's email to OPENMRS-DEV 24 Feb 2008)

Hi All, I wanted to add a few editorial points to this. Some are comments on our philosophy, others are requests for your opinions:

- **Programmers are not actual users**
  - If I & others on this list like something, that's nice, but the real test is what a naïve user thinks, in an interview that is not conducted by the designer.
  - A perfect example of this is Cohort Builder. Paul and I spent a long time over many meetings arguing about the interface, until we finally came up with something that we were both really happy with. Except that most users I've met—~~from Rwandan villagers to Harvard epidemiologists~~—find it hard to use. Oops. I have been cultivating a Zen-like detachment from criticisms of my user interfaces. I recommend that everyone else do the same. 😊
- **"It's hard to get good usability without identifying the users and the common use cases" -Yaw**
  - We have done this for our PIH clinical projects, which you can see at <http://forum.openmrs.org/viewtopic.php?f=22&t=346>. We have not yet factored in a project in Peru where we're just doing deidentified collection of study data under a completely different workflow. And clearly you all on this list have other types of users and workflows. Please tell us about them.
  - Bob is doing these mockups, and many of the new feature ideas come from him. He's far better at it than any of our programmers would be, but his weakness is that he's overly informed by Lesotho, and less by other installations and use cases. That is to say: please tell us about your use cases and workflows.
- **User Interface cannot be designed by committee**
  - We want to get lots of comments and suggestions. Not every one of those will make it in.
- **We need more data**
  - We haven't done enough interviews yet. We have more scheduled, but if you would like to send along interview comments, or have us call someone and interview them for you, that would make us happy.
  - All sorts of cool user functionality is possible, and we haven't thought of 10% of it. For example Bob doesn't have an "active problem list" in any of the mockups. Or a program enrollment overview. In Haiti the only screen that nurse-midwives see is a 'pregnancy list': these mockups don't have a space for something like that. A data manager might like to see a timeline of all patient and encounter creation dates, broken down by data clerk.
  - Does anyone want to take a stab at describing new end user functionality, either in words or in mockups? I invite you to do so here: [http://openmrs.org/index.php?title=Future\\_User\\_Interface\\_Ideas](http://openmrs.org/index.php?title=Future_User_Interface_Ideas)
  - More importantly, are there major sections of functionality that don't have a space in the navigation Bob is creating? "Program enrollment overview", for example, probably shouldn't be relegated to the "Manage Programs" administrative page. Maybe it's a "report". Maybe we need to think through the Program Manager homepage...
- **Nothing is non-negotiable**
  - Just to answer your question Carl. :-)
- **User Interface should be designed for end users, and not driven by the data model or by programmer terminology**
  - One reason it's better to have a non-programmer doing UI mockups is that they're not constantly thinking about what's easy or hard to do, but just want users want.
  - Also, when we're done with this redesign, you will never see the word "voided" on a user screen again.

-Darius

# User Research

## User Interviews

We're conducting user interviews to better understand who our users are, their needs and their preferences. Here are the individual interviews so far:

- [Media:OpenMRS\\_User\\_Interview\\_Clinician1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_COO1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Data\\_Coordinator1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Data\\_Entry\\_Staff1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Data\\_Manager1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Program\\_Manager1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Researcher-Clinician1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Researcher-Clinician2.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Researcher1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Clinician2.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_Program\\_Manager2.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_implementer1.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_researcher2.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_researcher3.doc](#)
- [Media:OpenMRS\\_User\\_Interview\\_researcher4.doc](#)

Here is a chart summarizing all of the different users: [Media:OPENMRS Users Summary.doc](#)

Basically, we think right now that all of the users can be consolidated into 5 basic roles with the following primary needs:

- **Data Entry Staff** - They need to add/edit patient data as quickly and as easily as possible
- **Clinician** - They need to easily find individual patients and view a summary of their data on one screen. They also need to be able to dig deeper for more details - viewing older clinician notes and images like x-ray is very desirable.
- **Researcher** - They need to create cohorts, view aggregate numbers and to export specific data. Sometimes view individual patient data.
- **Management/support teams** - They need to run fixed reports, sometimes create cohorts and view aggregate numbers
- **Data Manager** - System maintenance. They need to keep the system working for all users, create forms & reports etc

The redesign of the UI should make it as easy as possible for all roles to accomplish their primary goals.

## User Testing

(coming)

## Design Discussions

There's been a lot of thought going into User Interface design. Unfortunately, none of it was previously well documented here. For some discussion from a while back, go [here](#)

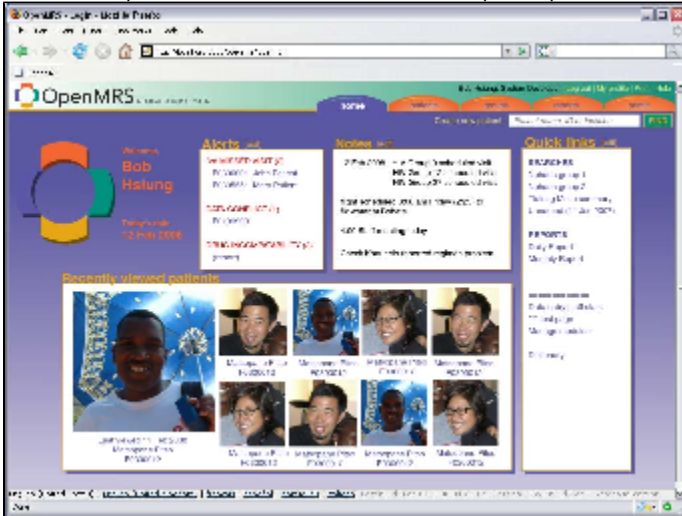
Here is a link to a zip file containing a round of mockups from 08 Feb 2008. [OpenMRS\\_redesign\\_mockups\\_08feb2008.zip](#)

Very nice designs Bob. There are some interface enhancements in usability forum: <http://forum.openmrs.org/viewforum.php?f=22> -Ben 13:53, 13 February 2008 (CST)

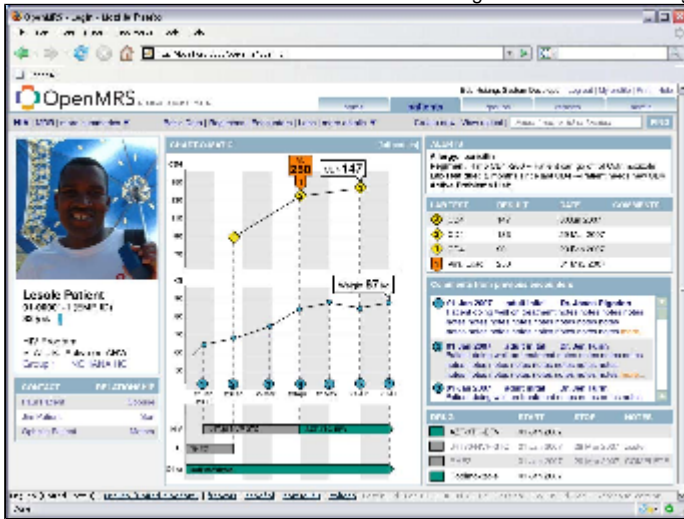
We showed the previous round of mockups to Paul English. He said he thought they looked really good & made some recommendations which are reflected in this new set of mockups of 15 Feb 2008. Most notably, the side patient dashboard has been completely removed. More images were added as well as a 'home' page which is necessary because of the top tabbed menu change. Basic Data entry page has been greatly simplified. [OpenMRS\\_redesign\\_mockups\\_15feb2008.zip](#)

...and here's the latest round of mockups. The tabbed menus have been refined - they do not change when viewing patient data as in the previous version. Instead, there is a rich submenu that includes the simple search as a popup widget. The patient summaries and visualizations have been simplified. A "most recent patients viewed" screen has been added. [OpenMRS\\_redesign\\_mockups\\_22feb2008.zip](#) Bhsiung 16:00, 22 February 2008 (EST)

Here is a sample from the most recent batch of mockups. It represents a customized start page for a user. (pictures changed for legal reasons)



Here's a quick alternate color scheme for the UI that's more along the lines of the existing one. Since it'll all be in CSS, the colors will be very easy to



customize.

Here is another batch of mockups. The major changes in this set are that the top tabs have been reduced to just four - Home, Patients, Groups & Admin. The Patients area hasn't changed much other than taking some emphasis away from the pictures and removing the Recently Viewed page as it's redundant w/ the Home page.

Under the Groups tab, we've added a page detailing a scheme for data export. Since Reports are really just nicely formatted exports, they seemed to conceptually belong under there as well.

Also under the groups tab, it seemed to make sense to make Group Summary pages - analogous to the patient summary pages. We're not sure what the requirements would be of these summary pages - they're just an idea.

Lastly, we're showing the first pass at an Admin screen. It's really not much different than the existing one. We're just showing how we might create a little bit of structure to subdivide the different areas so that people will have a better idea of where to add things w/ their modules.

[Media:OpenMRS\\_mockups7\\_28Feb2008.zip](#) Bhsiung 17:30, 28 February 2008 (EST)


[UI meeting notes 29feb2008](#)


In this revision, we've tried to address all of the issues brought up in the 2/29 meeting. We've given everything the blue/gray scheme that everyone prefers. We tailored the home page specifically for clinicians. The group (cohort) builder has been refined. Now the basic search is extremely simple and results are shown on the fly. The advanced search combines a lot of features which will be useful for more sophisticated users. We added an idea for a key indicators chart which would be useful for program managers. [Media:Openmrs\\_mockups8\\_11mar2008.zip](#) Bhsiung 12:02, 11 March 2008 (EDT)

## Ideas and Future Work

[Future User Interface Ideas](#)

## Attachments

File 	Modified
JPEG File Home_20feb2008.jpg Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
File OpenMRS_mockups7_28Feb2008.zip Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
File Openmrs_mockups8_11mar2008.zip Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
File OpenMRS_redesign_mockups_08feb2008.zip Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
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File OpenMRS_redesign_mockups_22feb2008.zip Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
Microsoft Word 97 Document OpenMRS_User_Interview_Clinician1.doc Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
Microsoft Word 97 Document OpenMRS_User_Interview_Clinician2.doc Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
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Microsoft Word 97 Document OPENMRS_Users_Summary.doc Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence
JPEG File UI_mockup_Alt_color_scheme.jpg Added by UWC, the Universal Wiki Converter	2010-08-18 by confluence

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