Process Document

Research
What is the behavior(s) you are trying to capture? What are your users physically doing?

My users are sifting through documents, in either electronic or paper form, to better understand a patient’s current state of health. I am trying to capture my user’s learning process, which includes the following behavior:

- Scanning vitals to understand patient characteristics;
- Scanning physiological data over the course of one week or more in search of anomaly patterns;
- Viewing and annotating physiological data at a granular level.
Challenges

**Challenge 1**
Health professionals have varying levels of technological sophistication and familiarity.

**Challenge 2**
Health professionals have different approaches to understanding a patient’s health, and may prefer to focus on one aspect versus another.

**Challenge 3**
The interface may be more or less useful depending on the context of the patient visit.

**Solution 1**
Our interface will preserve established conventions for displaying medical data and implement assumptions that limit the number of decisions the users need to make.

**Solution 2**
Our interface will only provide a snapshot of a patient’s health, and will focus only on a few metrics that are generally agreed upon by professionals for cursory examinations of patient health.

**Solution 3**
Pre-existing conditions, specialist consultations, in-patient care, and other health visit contexts likely require more specialized interfaces. We will focus the app on out-patient primary care.
Objective 1
To accelerate and facilitate the process of examining patient data.

Objective 2
To introduce new information for health professionals to take into account during out-patient primary care visits.

How will this be a successful user experience?
It will be designed around the user, with iterations based on usability feedback.

How will this be a successful design?
It will follow patterns already present in popular EMR software, and will adopt colors and typography that are consistent with medical settings.
Who will use this? How will they use it? How if at all, will it change their behavior or the behavior of whomever is around them? What is the need for this? What do they currently do?

My users are doctors or nurses who deliver out-patient primary care. They will use it as the first-pass examination of a patient’s health data. It will allow them to spend less time trying to assess a patient’s health, and to make more informed recommendations based on a larger body of available data. The need stems from doctors needing to deal with an increasing amount of patient data made available by wearable devices. Currently, there is no framework for examining wearable data in the context of out-patient primary care visits.
Where will you find this UI?

On the internet through a secure URL.
What are the screen size(s) for this? 
Indicate the pixel size(s).

Desktop: 1280px by 800px
Create a set of three personas* for different users.

<table>
<thead>
<tr>
<th>Persona 1</th>
<th>Alice</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>25-40</td>
</tr>
<tr>
<td>Hobby</td>
<td>15-25</td>
</tr>
<tr>
<td>Familiarity with Technology</td>
<td>High</td>
</tr>
</tbody>
</table>

*Personas are fictional characters created to represent the different user types that might use your site, brand, or product.

Alice is a young nurse practitioner who is very in touch with modern technologies and comfortable with adopting new interfaces.
Create a set of three personas for different users.

John

<table>
<thead>
<tr>
<th>AGE</th>
<th>Hobby</th>
<th>Familiarity with Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-50</td>
<td>15-25</td>
<td>Med</td>
</tr>
</tbody>
</table>

John is a primary care professional with solid technology experience. He is not in tune with the latest and greatest technologies, but can use EMR software and websites comfortably.
Create a set of three personas for different users.

Mary

<table>
<thead>
<tr>
<th>AGE</th>
<th>Hobby</th>
<th>Familiarity with Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-75</td>
<td>Reading, Writing</td>
<td>Low</td>
</tr>
</tbody>
</table>

Mary is uncomfortable with technology. She prefers interacting with paper records than with EMR systems, and finds little use for the Internet other than to occasionally check her e-mail.
Write a scenario that describes what a user would do with the app. This scenario will then be used to create user flow and app screens. Use simple directions.

Alice has an appointment with a patient:
1. She launches the patient’s healthviz profile page on her web browser.
2. She examines the patients vitals from the last one or two visits.
3. She glances at a summary view of the patient’s physiological data.
4. She delves into the details of the patient’s physiological data examining anomalies and reading/recording notes.
Create a user flow for one of your personas.
What type of experience do you want to provide for your user?

We want the interface to instill users with a sense of comfort, confidence, and control. Health professionals will feel comfortable absorbing high-level views of their patients’ information through easy-to-understand summary views. They will also feel confident through the interface’s rich and detailed data sources. Finally, their ability to navigate the data at varying levels of granularity, as well as to annotate the data with personal notes will give them a sense of control that they need to perform their duties.

The interface will be a pleasant experience for health professionals, and a welcome respite from the typically cumbersome and unappealing EMR interfaces.