# EHR Design Lab

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### 1. Introduction

#### EHR Design Lab key outputs **Digital Health UX** Workgroup **Digital Health UX Component Toolbox Projects Best Practice Community** A go-to community for those Ready to use (fully coded & UX / UI design advice designing digital health tools open-source) EHR towards work groups and their projects components Best practices | Research | **Built off of the Best Practice** Such as: "Microfrontends" **Examples** "OpenMRS Flow" Community **Active Community Discussion**

This document proposes an organizational structure, governance, and output of an EHR Design Lab.

The current 'long-term' goal of this lab is to help build two primary outcomes:

- 1. **Digital Health UX Best Practice Community:** a "go-to" community of experts involved in electronic medical record tools. A place where they can collaborate, create, and curate the best practices in the design of digital health tools.
- 2. **Digital Health UX Component Toolbox**: develop 'ready to use' (coded and open-source) components that can be used within custom digital health tools. These pre-built blocks will make it quicker to build high quality applications for healthcare, particularly in the context of work in global health.

Concurrent with these two long term goals, the EHR Design Lab will more immediately provide

3. **UI/UX support to work groups** - such as the Micro frontends work group on the appointment module project or the OpenMRS Flow Project.

# 2. Organization

EHR Design Lab  organization				
Advisory Groups	Work Group 1	Work Group 2		
Design Standards Academic Advisory Group Agencies Partners	Designers	Designers		
Clinical Testing EHR Group Implementing Design Firms Organizations	Project managers	Project managers		
O. gameation.	Developers	Developers		

The EHR Design Lab is formed of two categories of groups that work together.

- 1. **Advisory Groups**: advisory & partner groups provide high level expertise related to EHR design.
  - a. NEW section to add: **Volunteer Designers & Paid Designers**: that are connected and 'embedded' within work groups and their project.
- 2. **Work Groups**: are cross disciplinary teams that are focused on understanding, designing, building, and testing a specific project.

A work group is 'ready' when they have the necessary team members to design, develop, and test their experiment.

It is encouraged that a work group will solicit widely for participation from multiple organizations.

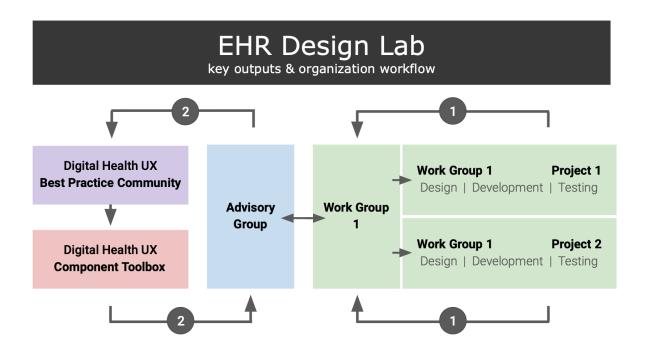
A workgroup typically will interact with other Advisory Groups (such as Technical Advisory Group, FHIR Advisory Group, etc)

# 3. First Steps

To start, the lab will focus on creating a small advisory group and partnering with its first work group.

- 1. Advisory Group: EHR Design Experts: experts in EHR design from organizations outside of OpenMRS, as well as experts from within the OpenMRS community.
- 2. Work Group: Microfrontend Squad: a cross disciplinary group focused on the day-to-day work of this experimental project to re-design the OpenMRS front end.

# 4. Operational Workflow

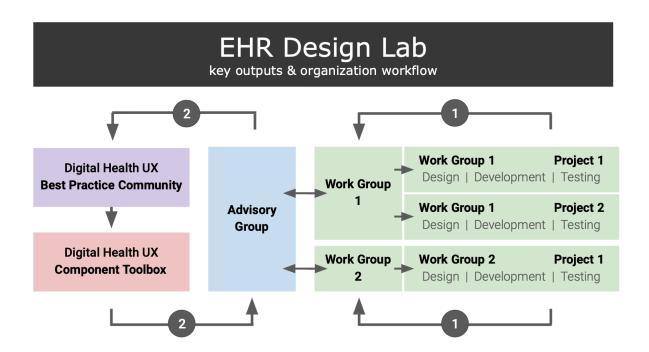


Work groups will seek advice from the EHR Design Lab Advisory Group related to UI/UX work. The work group will ultimately design, develop, and test their own projects.

Successful work from work groups will be recognized by the EHR Advisory Group, and this will help form the Best Practices Community, and the Digital Health UX Component Toolbox.

The EHR Design Lab Advisory Group self governs itself with respect to the advisory work it takes on, and how they form best practice suggestions. A more formal process of voting based on design evidence and testing will emerge with time.

## 5. Organizational Growth



#### **Multiple Projects & Multiple Workgroups**

Work groups will likely tackle multiple projects.

Multiple work groups may also form over time, to tackle specific projects.

Work groups and projects may be focused on work within the OpenMRS community, outside of OpenMRS, or both.

#### **Multiple EHR Advisory Groups**

In the future the EHR Design Advisory Group may need to form several different divisions, or areas of expertise or groupings of alignment (such as identified in the first slide under Organization). But for now one group will be made.

The second EHR Design Lab Advisory Group to be formed will likely be a 'Clinical Advisory Group' of clinicians who are interested in providing feedback.

## 6. Governance & Operations

#### 6a. Autonomy & Consultation

A critical part of the organizational structure is that each work group is autonomous. It is highly encouraged that they consult:

- 1. The EHR Design Lab Advisory Group
- 2. Other technical advisory groups (eg. FHIR Advisory Group, Concept Dictionary & Terminology Advisory Group, Technical Advisory Group, etc)
- 3. The OpenMRS Community
- 4. End users

However, in the end, the work group has autonomy in the decisions they make.

#### 6b. Skin in the Game

It is suspected that work groups will typically adopt a model of self governance where those organizations that have "skin in the game", and are participating in the work group (ie. are actively contributing resources), will have voting rights.

#### 6c. Merging with OpenMRS Core

It is also hoped that if a work group's projects are successful that the OpenMRS Community will advise integration of their work into OpenMRS Core.

Exactly who and what the process for deciding how projects from work groups may become part of OpenMRS Core is outside the scope of this document (and honestly this is still up in the air on exactly how it will happen).

### 7. The Lean Startup in Enterprise Open-Source

What the work group develops, is really designed as an experiment to validate ideas, and test work. If this succeeds, it can be incorporated into OpenMRS Core (and exactly what that process will be, remains to be sen...)

The goal is to make it easy for work groups to organically form, partner with several organizations, and test their hypothesis and validate if it works or not.

#### The hope is

- 1. **By being independent** they can generate unique hypothesis and innovations, and not be slowed down by institutional bureaucracy.
- 2. By working closely with advisory groups they will be steered in the right direction.

- 3. By **consulting with the OpenMRS community and users** they will build something people want.
- 4. By **running tests** of their hypothesis in clinical deployment environments there will be evidence proving that the project's hypothesis 'works'
- 5. This process will lead to innovation, 'validated learning', and a successful OpenMRS platform with a strong Open-Source Community.

## 8. A word on naming

The term "EHR Design Lab" is entirely a placeholder. A name still has to be selected.

This document starts to explore naming options.

## 9. Communication strategy

EHR Design Lab communication channels: link to document

#### **Document Revisions**

June 25, 2019 - Organization brainstorm: Isaac Holeman & Gregory Schmidt

July 2, 2019 - Draft vs 1: G Schmidt

July 3, 2019 - Rewrite vs 2: G Schmidt

July 3, 2019 - Feedback:

July 4, 2019 - Rewrite vs 3: G Schmidt

Link to figures used in document