Product Dashboard: Vision, Roadmap, & Projects

Our Product Vision & Top 3 Strategic Directions

We work together in a global fight to improve health care. Tech is one tool we use to bring better care to patients, the providers who care for them, and the organizations who steward health resources. This means the tech we develop together must have Great Tooling + Great Documentation to unlock scale to: Ensure patients get the right, timely, and appropriate care; Provide health workers with timely, accurate, and complete information; and, Give organizations data to improve the efficiency and quality of care delivery.

To achieve this vision, we need Strategic Directions to guide us now and in the future 5 years. Our top 3 Strategic Directions are:

- Our Product Vision & Top 3 Strategic Directions
- Product Roadmap
  - CARE: Pt Care & User Experience (via O3 - better data quality through better Point-of-Care UX)
  - CONFIGURATION & Deployment:
  - COMMUNICATION:
    - Data Exchange
    - Maintenance & Core Support

This Product Dashboard is a dynamic, changing space that is open to feedback. The intent is a home-base where anyone, especially day-to-day implementers interested in the OMRS roadmap, can see at a glance some key initiatives going on around the OpenMRS community: what’s happening, who's putting resources in, what needs more support, and where there are specific opportunities to contribute support/investment.

Short Link to this page: om.rs/productdashboard

We are working on a clearer process for this. For now: project contributors are encouraged to update this page, though responsibility for ensuring this is a fair, up-to-date reflection of current community work rests with the OMRS Director of Product. Reach out to Grace Potma; we’d love to hear from you and better understand your initiative so we can broadcast your amazing work! We also regularly review this page in the OMRS Technical Action and Strategy & Operations Committees, to help everyone be on a similar page about key work moving our community forward closer to our strategic priorities.

Product Roadmap

All of these items are:

- being conducted in a public community process, with involvement & investment from 2+ Organizations
- being shared with /omrs/5 facilitators, and are receiving some degree of dedicated support from OpenMRS Inc
- likely to provide wide community value (i.e. fit under the definition of “Shared Assets” for community)

To suggest an item for the Community Product Roadmap, simply contact Director of Product Grace Potma (grace@openmrs.org) - we'd love to hear about your priorities and current focus areas.

Skip to: CARE Skip to: CONFIG (& Deploymt) Skip to: COMMUNICATION (Data Exchange) Skip to: MAINTENANCE

<table>
<thead>
<tr>
<th>CARE: Pt Care &amp; User Experience (via O3 - better data quality through better Point-of-Care UX)</th>
<th>Done</th>
<th>Now</th>
<th>Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configurable Lab Results table view</td>
<td>Configurable extension to show labs of interest in a table (timeline) view. (e.g. “Just HIV-Related Labs”)</td>
<td>O3 Lab Orders, Lab Order Templates</td>
<td>Implement Patient Flags, &amp; Tasks</td>
</tr>
<tr>
<td>Status:</td>
<td>Status:</td>
<td>Initial designs here; we would like to get these done. First legs to support decision support. Prelim work by Palladium. Contact: JJ. Timeline: ~Q4 2022</td>
<td></td>
</tr>
<tr>
<td>AMPATH</td>
<td>ITCH</td>
<td>AMPATH</td>
<td></td>
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<tr>
<td>MEKOM</td>
<td>UCSF-TAP</td>
<td>MEKOM</td>
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<tr>
<td>ICAP-ETHIOPIA</td>
<td>UCSF-TAP</td>
<td>ICAP-ETHIOPIA</td>
<td></td>
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<tr>
<td>UCSF-TAP</td>
<td>PILOT</td>
<td>UCSF-TAP</td>
<td></td>
</tr>
</tbody>
</table>
**Basic HTML Form Entry (HFE) Form Support in 3.x**
Workflow to allow users to open HFE forms within a 3.x workflow.
- **MEKOM**
- **ICRC**
- (+ input from PIH)

**3.x Address Hierarchy Component**
- **ICAP-ETHIOPIA**
- **UCSF-TAP**

**Clinical Views**
Ability to add specialized program- or condition-specific views. Ideally, able to update config easily to add more - e.g. represent clinical view w/ JSON structure.
- **AMPATH**
- **PIH**
- **UCSF**

**i18n Date Picker: Ethiopian Calendar + more**
- **ICAP-ETHIOPIA**
- **UCSF-TAP**

**Field Discovery: UX and Product field research**
In-person shadowing and interviewing end-users at large to small sites, including ecosystem of lab/pharm/billing where relevant

**Point of Care:**
- **AMPATH** (6 sites)

**Retrospective Data Entry:**
- **PALLADIUM** (2 sites)

**Ampath 3.x Pilot (Kenya):** 3.0 Go-Live with Clinician Workflows at large HIV Outpatient Clinic (Started Feb 2022)
- **AMPATH**

**Theming 3.x**
- **PIH**
- **AMPATH**

(Some input from UCSF)

**Queues & Clinic Dashboards**
A 'snapshot' of active visits and patient priority levels. Goal is to improve clinic workflows / service delivery queues, and team communication, starting with Outpatient clinic workflows.

**3.x Pilot Uganda: Cervical Cancer, MCH, Family Health, October 2022**
- **METS**
- **UCSF-TAP**

**3.x-ized KenyaEMR ~October 2022**
- **PALLADIUM**

**Merging the O3 Monorepos for better DevX**
- **OPEN**

**Offline EMR Use (No Internet/Power Loss)**
- **OPEN**

**In-form Appointment Date Checker**
Endpoint convention in OMRS to connect (e.g. "on this day, how many appointments already booked?")

**Registration App Re-Do**
Reg page is one of first apps new users/devs look at, and it's not meeting requirements or code expectations. Need to re-design, re-architect, & confirm requirements - eg to prevent pt duplicates, handle site- or org-specific field requirements & allow enable-whens, accept mini-apps like address hierarchy, handle National ID or Insurance system integration...

**Status:**
- **NOT STARTED**

**Orgs:**
- **MEKOM**
- **ICRC**

**Embedding Allergies/Conditions etc in Form Workflows**
- **IN DESIGN**

**Lead:**
- **OHR/UCSF**
- **OPEN**

Use case & design input from: TBC (new)
**Generic Encounter Widget**

Reuseable version of a common widget, powered by config that's easily editable (e.g. if you want to change columns & data shown in a table)

**Status:** DONE

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**3.0.0 Demo Launch**

Q3 Goal – end to end outpatient workflow launched online for public use & experimentation. Includes:

- Offline Mode for Mobile/Community Health Workers: view patient charts offline
- Lab Results with charts & interactive viewing
- Drug Ordering
- Patient Lists (create lists and add patients to lists)
- Full featured outpatient chart (e.g. Medication History, Immunizations, past Visit Notes view, and more)

**Status:** DONE

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**Adopted Carbon Design**

Updated 3.x Frontend to use 3rd party design system. Result: Faster design & development outputs.

**Status:** DONE

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**Share Frontend Widgets with Plug-and-Play Architecture**

Microfrontend framework completed; enables implementers to re-use others' frontend features.

**Status:**

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**3.x Guide for Developers**

Step by step guide to the new Design System & Microfrontend architecture. Will help Devs implement 3.x for their org, or contribute to Squad.

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**Appointment Management**

For Facilities: Configure what appointments are provided, and how they can schedule pts. stats, lists.

For Providers: Create, edit, update, scheduling decision support, cancel. Handling Mother-Child / multiple appointments smoothly.

**Status:**

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**Interactive Forms: Embedding Orders, Conditions...**

e.g. Starting an Order within a Form Workflow. Forms/notes become the centering piece for teams - we need to figure out how to represent not just data collection, but also embed widgets into the process (so that user doesn’t have to click around the EMR to find the information they need while also trying to do a form).

**Status:**

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**Rules Engine**

(e.g. for Workflow State management; Clinical Decision Support)

**Status:**

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**Autosave a Form Draft**

**Status:**

---

**Print**

Ability to print things from the EMR, e.g. HIV Clinical Summary

**Status:**

---

**Patient Lists: Automated (Cohort Builder)**

(1) Query for patients who meet a certain criteria, and (2) automated adding/removing of patients from this list (so it's automatically maintained).

E.g. "show me all Patients who missed med pick up..."

E.g. "show me all Patients who missed their appointment..."

+ Actions on that list (e.g. change patient status)

(Interested: Ampath, UCSF)

**Status:**

---

**Referrals**

3.x UI to send and receive referrals.

**Status:**

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<table>
<thead>
<tr>
<th>Feature</th>
<th>MEKOM</th>
<th>ICRC</th>
<th>Status</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Sessions / Group Visit Management</td>
<td></td>
<td></td>
<td>IN DEV</td>
<td>SEPT '22</td>
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<tr>
<td>3.x feature for Group Sessions</td>
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<td></td>
<td>IN DEV</td>
<td>SEPT '22</td>
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<tr>
<td>Visit Management</td>
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<tr>
<td>Mental Health group sessions</td>
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<tr>
<td>Aka Bulk Data Entry</td>
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<td>Line List style</td>
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<tr>
<td>Tabular data entry view</td>
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<tr>
<td>Offline Mode for CHWs/Outreach</td>
<td>AMPATH</td>
<td>MEKOM</td>
<td>IN DEV</td>
<td>SEPT '22</td>
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<tr>
<td>Registration</td>
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<td>Forms ready for field use offline</td>
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<tr>
<td>Medication Dispensing</td>
<td>UCSF-TAP</td>
<td>PIH</td>
<td>IN DEV</td>
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<tr>
<td>2.x &amp; 3.x UI to enable</td>
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<td>Pharmacists to mark drugs</td>
<td>UCSF-TAP</td>
<td>PIH</td>
<td>IN DEV</td>
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<td>and fully or partially</td>
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<td>dispensed</td>
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<td>Designs</td>
<td>UCSF-TAP</td>
<td>PIH</td>
<td>IN DEV</td>
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<tr>
<td>OpenMRS Reporting UI</td>
<td>J&amp;J GPH</td>
<td>SOLDEVELO</td>
<td>NOT STARTED</td>
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<td>Create a UI that would be able</td>
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<td>to run an existing report</td>
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<td>with parameters (if applicable)</td>
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<td>select the output format</td>
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<td>and download it</td>
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<td>High Risk Patient Package</td>
<td>AMPATH</td>
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<td>IDEATION</td>
<td>SEEKING</td>
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<td>Package for collaborative care</td>
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<td>for higher-risk HIV patients</td>
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<tr>
<td>NCD Use Cases &amp; Design Research</td>
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<tr>
<td>User Research, Designs, &amp; Testing to validate and prepare EMR for NCD care context. E.g. NCD-specific widgets and sections of Patient Chart, NCD Peer Support.</td>
<td>AMPATH</td>
<td></td>
<td>IDEATION</td>
<td>SEEKING</td>
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<tr>
<td>High Risk Patient Package</td>
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</tbody>
</table>
### 3.x Performance Enhancements

| MEKOM | ICRC |

**Status:**

- IN DEV
- SEEKING

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### CONFIGURATION (& Deployment):

**Faster Deployment**

| Fellow | PIH |

#### Iniz support for OCL & Dictionary Manager work

- FELLOWS
- MEKOM
- PIH

#### Copy & Customize a CIEL Concept

Able to re-use a CIEL (or other curated) concept instead of re-creating it manually: copy it and make the non-breaking changes you needed (e.g. change answers, add translations, etc).

- FELLOWS
- BROWN

#### OCL Module: Multi-language support

Updating translations for concept updates or new subscriptions that have many languages.

- FELLOWS
- BROWN

Input from: UCSF, MSF

#### Dictionary Manager webapp (aka OCL for OpenMRS)

MVP live for production use. See: Intro video; and demo video.

- FELLOWS
- OCL
- MSF
- PIH
- REGENSTRIEF
- BROWN

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### Reactify & Carbonize O3 Form Builder

- GSOC
- UCSF-TAP

#### Community Feature Release Pipeline

- PILOT

Using OCL/Dictionary Manager to manage all PIH concepts

- PIH
- REGENSTRIEF

**Status:**

- FINAL UAT

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### Form Engine Harmonization: Angular /OHRI Shared React form engine

Update comparison doc; add fx to OHRI form engine; align on 1. RelApp currently rendering forms using the Ampath form engine. **blocker** for using new builder in RelApp. Could we add config in meantime to choose which eng you want? Or new extension for Form display?

- UCSF-TAP

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### Use mappings in a form instead of the concept UUIDs

Goal: Demo a form that’s defined and rendered through mappings (not UUIDs). Eg if a country maps to OHRI concepts. Need ability to map.

- PILOT

Using OCL/Dictionary Manager to manage all UgandaEMR concepts

- METS
- REGENSTRIEF

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### 3.x Form Builder: UgandaEMR pilot

Easier way of generating forms, via UI. Provide label names + connect pre-defined concepts -> generates JSON file. Finding way to deploy JSON file (Hx of using XML).

- PILOT

- METS

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### Iniz support for Reports

Interested: PIH

- OPEN
<table>
<thead>
<tr>
<th>Lighter Deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simpler deployment packaging (3.x RefApp will use a much lighter-weight set of modules)</td>
</tr>
<tr>
<td>MEKOM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCL Module Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bug fixes related to error messages</td>
</tr>
<tr>
<td>INTELLISOFT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Designs for Implementer Tool: EMR Setup UI for Non-Tech folks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designs to enable: Non-tech users can set up a 3.x EMR in a friendly, no-code UI, similar to designing a website.</td>
</tr>
<tr>
<td>AMPATH</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMR Packages: Tech Definition &amp; Schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>A way to add content (forms, concepts, custom widgets etc) to easily add new program areas to your EMR (e.g. Maternity Package)</td>
</tr>
<tr>
<td>Input from:</td>
</tr>
<tr>
<td>REGENSTRIEF</td>
</tr>
<tr>
<td>Status: IN DESIGN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCL OpenMRS Import feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>An answer to “How do I get my legacy metadata into OCL?”</td>
</tr>
<tr>
<td>Input from:</td>
</tr>
<tr>
<td>REGENSTRIEF</td>
</tr>
<tr>
<td>Status: IN DEV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCL Module: Diff Check workflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Here’s what will change” UX/UI when subscribing.</td>
</tr>
<tr>
<td>Input from:</td>
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<tr>
<td>INTELLISOFT</td>
</tr>
<tr>
<td>Status: IN DEV</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OCL Module: Automated tests for different data types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input from:</td>
</tr>
<tr>
<td>FELLOWS</td>
</tr>
<tr>
<td>Status: IN DEV</td>
</tr>
</tbody>
</table>

| COMMUNICATION: Data Exchange |
### FHIR Gaps Review
Using 3.x RefApp, check for areas where REST API is being used where FHIR either could be used or needs support (Done, **Doc Here**)

- UW ITECH
- BROWN

### FHIM Module Upgrade
Added support for Immunizations.
Note: The FHIM Module already enables the export of OpenMRS data into FHIR format, to help integrate with other systems use FHIR.

- BROWN
- UW ITECH
- MEKOM
- ICRC

### DHIS2 Connector Module
Posts aggregate data from OpenMRS to DHIS2, and gives implementers a User Interface for an easier-to-set-up OMRS to DHIS2 pipeline, that doesn’t need manual code fixes every time there’s a change to reporting indicators. Fixed so this can work in production systems, added automatic data sending, and added support for custom period types.

- GSOC
- MOSS

### Scale-ready ETL Pipeline to FHIR-based tools: Ampath pilot of Analytics Engine.

- GOOGLE
- AMPATH

### Mapping OpenMRS Order statuses to FHIM
Send a case report from OMRS system to a central repo.

- UCSF
- REGENSTrief
- BROWN

### Send data to Central Repository for Case Based Surveillance
Send a case report from OMRS system to a central repo.

- UCSF
  (Jembi for mediators)

### Lab Viral Load Data Exchange
Based off of FHIM IG. Proof of concept completed. More to be done for full data exchange of lab request and case report.

- UCSF
  (Jembi for mediators)

### FHIM Implementation Guide (IG) - Supporting OHIE Facility Registry IG
Goal: Finish & genericize the ITECH FHIM IGs built for Labs, Lab Workflows, and Facility Registries

- BROWN
- UW ITECH
- IN DEV

### Support for OpenMRS Attributes
Support things we don’t currently support in OMRS data model - e.g. pt phone numbers (current support is fragile)

- OPEN
  (Interested: Brown, UW ITECH)

### Odoo integration for Physical Rehabilitation
e.g. Creation of prosthesis and financial/patient billing

- MEKOM
- ICRC

### Odoo for Pharmacy

- MEKOM

### Odoo integration for Billing

- MEKOM
- ICRC

### Odoo integration for Bed Management

- MEKOM
- ICRC

### FHIM API Support for Terminology Services
Currently dependent on REST API for all things concept or terminology related

Needed for 3.x dynamic patient list queries to be entirely FHIM based.

3.x test results depend on hybrid of FHIM & REST due to this.

- OPEN
  (Interested: Brown, UW ITECH)
Lab Exchange
Get iSantePlus lab exchange module to work in OMRS-core (connects to id & facility mgmt to i.d. right pt and right facility) (using FHIR-based workflows)

DB Sync

Dockerizing development and deployment of OpenMRS
Best practices for OMRS development and deployment. Key to enabling Packages vision and CI.

Support Referral Orders

Improve Demo Data Module performance implications
Currently the DD Module causes slow startup times because of how patients are being created & data loaded. Idea: Generate the data once in it's own docker container instead of generating every time we start an instance.

Event Bus
Event bus so that when things happen, they trigger a new process(es) to start. (e.g., patient finishes visit, needs to be moved from one Service Delivery Queue to another) - see OHRI example outlined here re Patient State vs Workflow State

Interested: Ampath, UCSF?

Access Control List support

Maintenance & Core Support
(Make it possible for implementers to build their features)
API to get obs for Concept Trees
E.g. for Lab Filters/hierarchies. Method to get set of obs based on a concept tree.

Actively being used in the new Lab Trees feature!

Data Model to support Service Delivery Queues
Support for dynamic vs static lists of patients.

Order Templates
Order Template Modelling E.g. Common Rx's

Audit Log for Views & Updates
We have no auditing around views. Updates: if a form is filled out multiple times, we'd only have information on the first time and the most recent update. Large project. (e.g. auditing work stagnant) There are workarounds, eg Statistics Module, or by configuring the server to log URLs requests (Tomcat or the entry proxy)

Order Sets
Support for Sets of anything that's order-able (e.g. COVID assessment set can contain Meds, Labs, Referrals...)

Thorough Test Coverage: Live OpenMRS QA Dashboard
Automated Workflow Tests applied throughout products

RefApp 2.12 Release
38 of 42 modules updated. Includes the SPA module that unlocks Microfrontend capability.

Timeline estimates (e.g. Q1/Q2/H1/H2 etc) are subject to dynamically changing resources in our opensource community. They refer to 2021, and the calendar year timeline, with Q1 ending when April begins.