Technical Roadmap

What is the OpenMRS Technical Roadmap?
The Technical OpenMRS Roadmap is a set of milestones for our Platform, Reference Application, community-sponsored modules, and related tasks that help us meet the needs of our implementations.

For information about how the roadmap milestones are chosen and prioritized, see the Technical Roadmap Planning page.

For details of recent releases and release notes, see Releases.

Milestones

2021 Goal Brainstorming

Process Ideas:
Structure based on resources: What Implementers are doing and have near-ready, what we can reasonably expect from volunteers

Talk: Can we create a Label in Talk that anyone can apply to conversations that should inform our technical roadmap?

Actual Tech Priorities (Ideas):

- **Platform QA**: Some regressions - need more automation to catch in advance, esp. build into PR pipeline
  - Automation +++: Get platform to point where enough is automated so have confidence in quality and release more frequently
- **Simplifying Deployment**
- **Support for timezones** across the Platform (and beyond, see also about HFE here.)
- **FHIR**
  - Support for FHIR Group through maybe a new Core Group entity replacing Cohort (see Slack discussion here.)
- **Metadata Sharing**: a solution that meets majority of needs (if Iniz, maybe expand and handle a few additional use cases; come up with something that’s better than our old tech for metadata sharing)
- **Integration**: Clarify actionable things we can do to better integrate into other Digital Health tools that are typically found around an EMR like OpenMRS.
- **I18n**: Fully internationalizing metadata concepts (but is this really a priority, pain point?)
  - Support for i18n of metadata in Core (see for example this thread.)
- **Download & Run**: Easier to use without getting bogged down in details - something non-tech end user can work with. Standalone hasn’t advanced in a while - needs love for feature updates or different approach or make useable again (e.g. some Mac versions no longer running). People using Standalone in production b/c simple to manage, came up with backups automation approach. So easy to download, click and it runs. Using tech that’s already available on users’ computers.
- **Sync**: Most implementations not connected to single server; most combine, do analysis later. Is this a priority for implementers now?
- **Patient Lists**: FHIR-based patient lists proposal from Ampath
- **Library dependencies between modules** (not high priority because so time consuming, and there are (ugly) workarounds)
- **Decision Support**: Some meaningful step (e.g. with simpler ETL solution: flattened data, generates table, SQL, extrapolate from that). Feels we are waiting for AES to eventually address.

Platform 2.5 (Q1 2021) - Theme: TBD

TBD.

Reference Application 2.12 (Date TBD) - Theme: TBD

TBD

Release Calendar

How to update this calendar

List View

<table>
<thead>
<tr>
<th>Team Calendars</th>
</tr>
</thead>
</table>
### Reference Application Someday

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Status</th>
<th>Point of Contact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Order Entry UI</td>
<td>Add some sort of user interface for doing order entry.</td>
<td></td>
<td>Daniel Kayiwa</td>
<td>We could polish up the order entry module, or do an OWA from scratch. Whichever we find easier.</td>
</tr>
<tr>
<td>Add Patient Flags Module</td>
<td></td>
<td>NOT DONE</td>
<td></td>
<td>Still under development</td>
</tr>
<tr>
<td>Responsive ability to the clinician facing dashboard</td>
<td><a href="#">RA-1285</a> - Getting issue details...</td>
<td>Accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core and modules to advertise capabilities that can be configured and manipulated</td>
<td><a href="#">RA-1292</a> - Getting issue details...</td>
<td>NOT DONE</td>
<td></td>
<td>Not started</td>
</tr>
<tr>
<td>MPI enhancements to Registration App and Registration Core</td>
<td>Production quality integration with OpenEMPI using HL7 v3 PIX/PDQ messaging standards</td>
<td>IN PROGRESS</td>
<td>NathaeIF Hyppolite</td>
<td>Discussion on talk.</td>
</tr>
<tr>
<td>Pre-built Reporting Tools</td>
<td>This includes the ability to do several things.</td>
<td>IN PROGRESS</td>
<td>Mike Seaton</td>
<td>Patient summary module does not provide adequate configuration and doesn't work in Ref App.</td>
</tr>
<tr>
<td></td>
<td>1. Run a report for a patient directly form the patient dashboard.</td>
<td></td>
<td></td>
<td>27-March: We could include Reporting REST documentation that Darius Jazayeri and the Andela team have done.</td>
</tr>
<tr>
<td>OCL subscription module</td>
<td>Using KenyaEMR as a use case, create a tool for subscribing an OpenMRS instance to a dictionary (e.g. the CIEL dictionary)</td>
<td>BETA</td>
<td>Nicholas Ingosi and Rafa? Korytkowski</td>
<td></td>
</tr>
<tr>
<td>Retrospective data entry</td>
<td>Basic support for retrospective data entry within the Reference Application</td>
<td>NOT STARTED</td>
<td></td>
<td>Needs a user centric story - add to existing ticket</td>
</tr>
</tbody>
</table>
## OpenMRS Web Framework

From discussions in #MOZ15, we would like for the OpenMRS Platform to evolve toward providing a web framework that allows developers to add functionality using standard development tools (e.g., HTML5 + JavaScript against REST services, AngularJS apps, OWA, ...).

### IN DESIGN

Burke Mamlin

- Ranking REST tickets on 5 Aug design call.
- Burke Mamlin and Darius Jazayeri discussed 24-July-2015 and Darius will make a Talk topic to move this forward.
- Bahmni technical deep dive scheduled for 4 June Developers Forum.
- 17 June design forum will discuss progress (coordinating various efforts). As well as look at how to make REST services more robust. Darius still working w/ Bahmni on fundamental pieces of their web framework to pull into OpenMRS (will talk about this on future call).
- 25 June dev forum on REST web services: how to substantially improve them w/ Burke Mamlin & Darius Jazayeri.

### Vertical Packaging

OpenMRS has a lot of flexibility and extensibility with a central concept dictionary, RBAC, forms, reports, modules, and apps; however, it's not always easy to know which metadata goes with which functionality. The goal of vertical packaging is to define best practices for managing and relating all of the components (metadata & behavior) that work together to solve a particular problem within OpenMRS. Eventually, we envision a way that someone could easily add the MDRTB package to their OpenMRS implementation to begin treating MDRTB patients... or upgrade their Oncology package, etc.

### IN DESIGN

Rafal Korytkowski

- Need to look at the design we had and see if we can get it in 2.3
- Burke Mamlin to share first draft of metadata mapping design on Talk.
- First step will be to add ability to map metadata, 22 June design forum
- Discussed on 20 May design forum.

## Condition List

Manage & view patient problems (e.g., on the patient dashboard and integrated with diagnosis capture)

**EA-40** - Getting issue details... [STATUS]

See also: **RA-209** - Getting issue details... [STATUS]

- **RA-580** - Getting issue details... [STATUS]

### DONE

Daniel Kayiwa

- See Condition List board

Ravinder Kumar

- Daniel took a look at condition list to see what we need to do to get the API in 2.3 and believes if we do not get volunteers on admin sprint then condition list will not be ready...
- 13 April WIP given on design call
- 1 June design forum to define how encounter diagnoses should work with conditions (and condition list).
- Talked w/ Bahmni BA (Saranya) about use cases and requirements on 15 June design forum

## Basic Order Entry for meds and tests

Basic ordering of meds and tests "out of the box" in Reference Application.

### STALLED

## Ad Hoc Analysis tool (v1)

Incorporate new cohort definition tool.

**RA-261** - Getting issue details... [STATUS]

### STALLED

## Concept Management Improvements

Allow for concept merging and easier browsing through concepts and references terms without losing frame of reference.

### NOT DONE

Burke Mamlin

- Needs discussion and design
- Would like input from implementations, PIH (Mark, Mike, Dave) AMPATH, Kenya EMR, BAMI/JSS
- Need to reach out for inputs!
- Kiran has started helping with this

## Improvement s to Permissions (technical implementation)

Avoid giving all API privileges to users

**RA-341** - Getting issue details... [STATUS]

### NOT DONE

### Provider Management

Would include provider types and ability to retire the old provider management module. Will remove ULI library module once provider management is in the core.

### NOT DONE
## Platform Someday

<table>
<thead>
<tr>
<th>Feature</th>
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<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous Patients</td>
<td>Support for unnamed John Doe patients</td>
<td>NOT DONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RA-62 - Getting issue details...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Patients</td>
<td>Support for tagging &amp; recognizing test/fake patients, so they can be ignored within reports.</td>
<td>NOT DONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RA-65 - Getting issue details...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Encounter</td>
<td>Record the entire clinical transaction piece-by-piece as part of a Session, as opposed to via a Form.</td>
<td></td>
<td>Is this still relevant?</td>
</tr>
<tr>
<td>Patient Lists</td>
<td>e.g. &quot;My Patients&quot;, &quot;Inpatients on Service XYZ&quot;, etc. (Related to RA-202.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Enrollments</td>
<td>v1: capturing this data; v2: drive available forms/actions based on program state</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>