





# FACILITATING COLLABORATION TO ACCELERATE SCALE AND IMPROVE DIGITAL HEALTH GLOBAL GOODS

Moderated by Jake Watson (DIAL)
Session Presenters include Amanda BenDor (PATH), Chris
Seebregts (Jembi), Mary Jo Kochendorfer (Village Reach),
Steven Wanyee (Intellisoft) and Matt Berg (Ona)

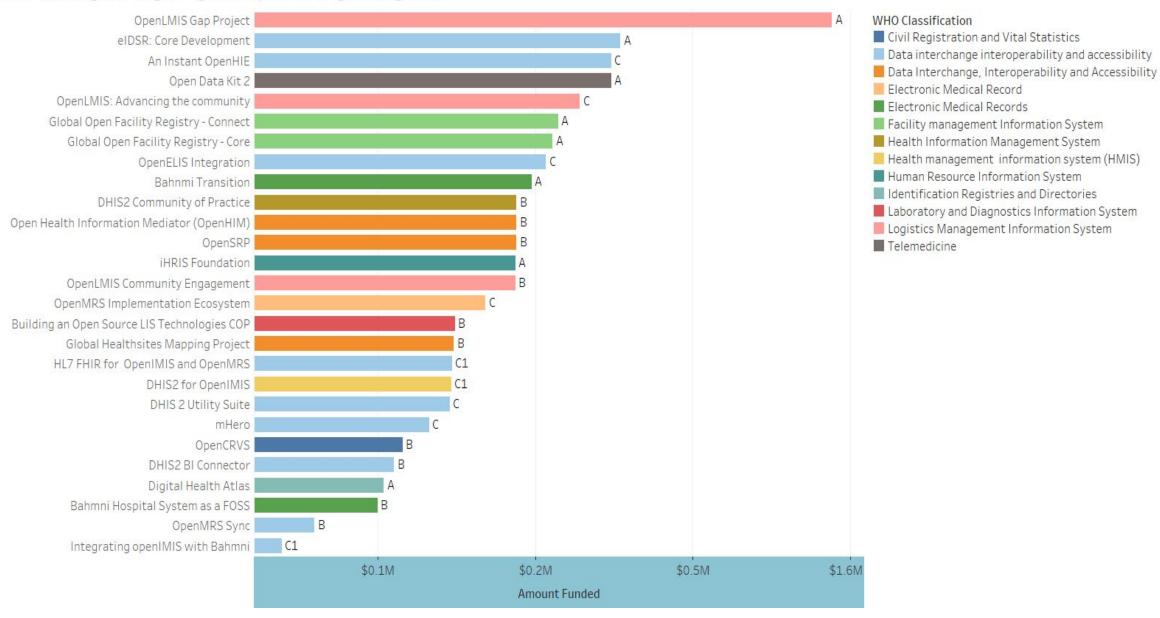


#### **Open Proposal Process**

Periodically, Digital Square holds a "open call for proposals," whereby organizations can submit concept notes for new global goods investments using Open Proposal Process.



#### Current Funding through Digital Square for global goods



Electronic Medical Record

### Bahmni

Steven Wanyee, Intellisoft Kenya

#### WHAT IS BAHMNI?



Bahmni is an easy to use, end-to-end, modular, **open source** Hospital Information System (HIS) and Electronic Medical Record (EMR) that has been built in the Global South to meet the needs of **low resource environments**.

Bahmni is a distribution of the OpenMRS medical record platform, with a user interface built from the ground up. It supports Odoo (formerly OpenERP), OpenELIS, and dcm4chee, providing an integrated robust solution. Bahmni manages patient information in a flexible fashion through the care cycle, including registration, various points-of-care, investigations, lab orders and results management, PACS and billing.

Bahmni believes in "not reinventing the wheel" and leverages existing open source products which are best of the breed for those functions.









OpenMRS for electronic medical records and patient management

**OpenERP** for inventory, billing, financial accounting

**DICOM** and **PACS** 

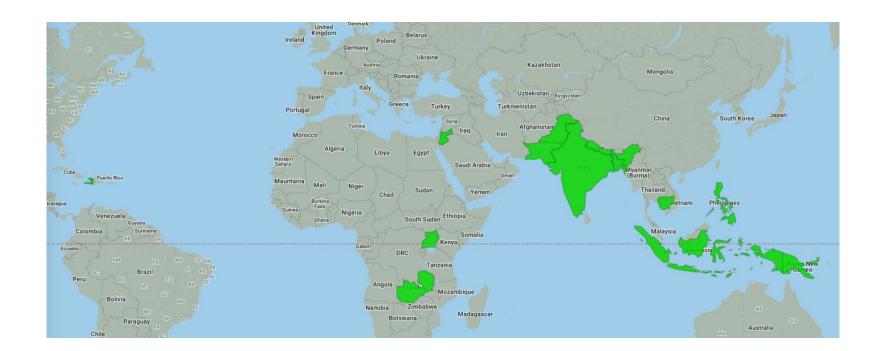
**OpenELIS** for laboratory management

#### WHAT IS BAHMNI?



Bahmni fills an important gap in the global health IT space, as it is designed to be intuitive and simple to use at the point of care, requiring minimal support. Bahmni is easy to deploy and does not require custom software development. This combination of functionality and limited need for technical implementation support has led to rapid adoption and growing interest.

To date, Bahmni has an estimated 50+ implementations in 25+ countries. Currently Bahmni is being considered by countries like Bangladesh and Tanzania for large scale rollouts in their public sector hospitals and clinics.



# OpenCRVS

Chris Seebregts, Jembi Health Systems

# Globally, CRVS systems are not delivering on their promise to extend coverage, automate processes and share data:

- Complex and costly to maintain
- Lack of flexibility when things change
- Poor quality of data including duplicates
- Low coverage in remote areas

- Poor interoperability with health/ ID
- Vital event silos
- Poor usability

• ...country after country "reinvents the wheel"





#### THE SOLUTION

Standards based, freely available open-source product that meets the CRVS needs of countries as a global good

#### **DATA ENABLED**

maximising the value of data for performance management and fast decision-making

#### **FULLY INTEROPERABLE**

with health, National ID and other eGoverment systems

#### **SAFE AND SECURE**

best-practice security protecting personal and confidential data





#### **FREELY AVAILABLE**

with no license fees or ties to software vendors

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Helio Freddy Mills

Anne Gakuba \* D.O.B.: 02.01.2018 Created: 03.01.2018

Paul Alfred Doygbe

Vork queue

#### **USER FRIENDLY**

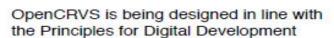
designed by and for the people it serves, and evolving with their needs and capacities

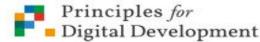
#### **ACCESSIBLE**

extending registration coverage to the hard to reach

#### **RIGHTS BASED**

empowering individuals to access their rights





#### **OPENCRVS ARCHITECTURE**







The architecture utilizes the OpenHIE architectural specification.

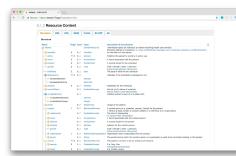
It consists of an Interoperability layer, enterprise service bus, OpenHIM, and the HEARTH tool, a FHIR data store server to capture, store and query FHIR resources.

Where necessary additional databases are setup for microservices that require additional internal information to be stored, such as user details for role based authentication and payment details.

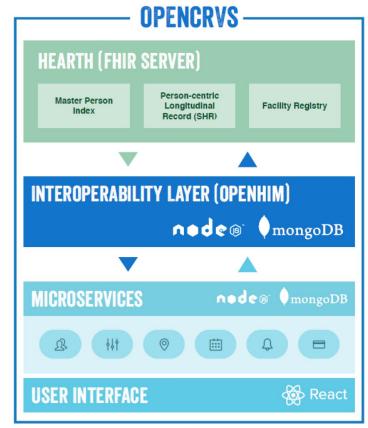
Four additional user interface systems included are an offline, mobile registration client, a registration desktop application, an administration client and a data viz dashboard, into which registration data can be aggregated with imported data from interoperable systems such as DHIS2, so that OpenCRVS statistics may be visualised.

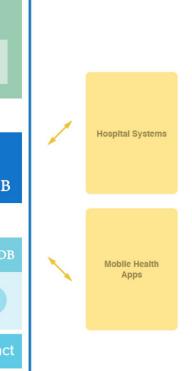
FHIR (Fast Healthcare Interoperability Resources) Specification, - an HL7 standard for exchanging healthcare information. <a href="https://www.hl7.org/fhir/">https://www.hl7.org/fhir/</a>

















# OpenLMIS

Mary Jo Kochendorfer, Village Reach

#### What is OpenLMIS?

Open source, enterprise level, electronic logistics management information system.



Configurable multi-level/program to support Country specific needs



Standards based interoperability



Requisitioning/Ordering



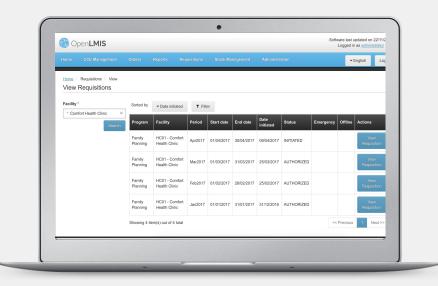
Stock/Inventory Mgmt



Fulfillment/Shipping



Cold Chain Management



Where is OpenLMIS?

OpenLMIS manages logistics processes for over **11**,000 health facilities across Africa



Increasing data quality, visibility and timeliness

Reducing stockout frequency and duration



TANZANIA & ZANZIBAR

MALAWI

MOZAMBIQUE



#### Who is in the OpenLMIS Community?

**Trusted Partners** 













































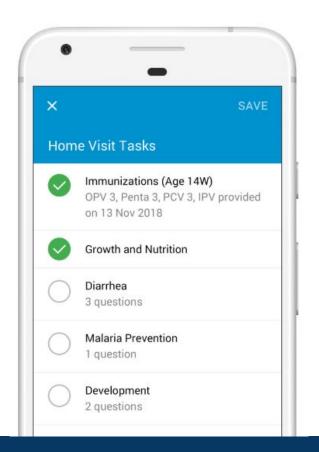


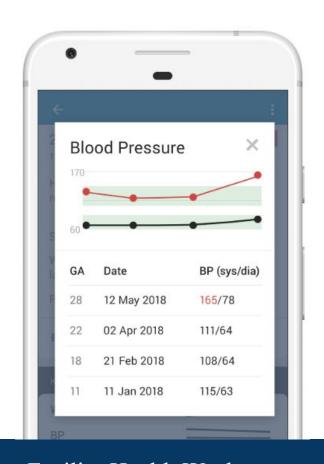
# OpenSRP

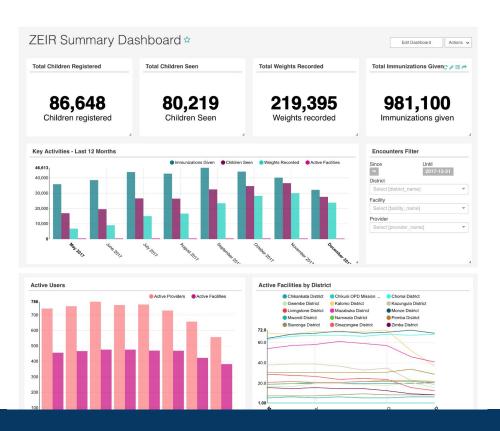
Matt Berg, Ona



#### OpenSRP: Connects FHWs to National Health Systems







Community Health Workers
Simplified app for minimal tech
experience & clinical knowledge

Facility Health Workers
Enhanced app for clinical
workflows & algorithms

Health Supervisors
Reports, dashboards, management tools, and communication tools



#### Support for all of a health worker's primary tasks



Client Identification



Client Management



Service Delivery Support



Reporting



Supply Chain Management

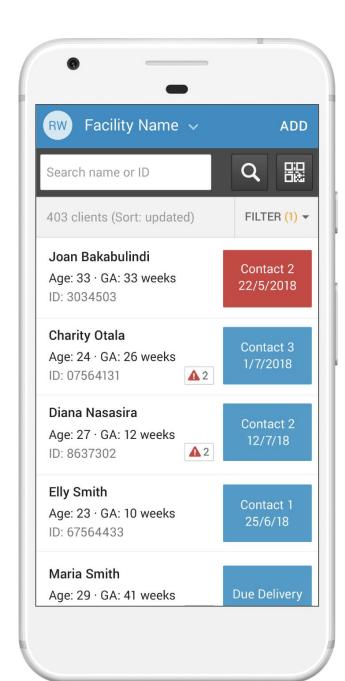


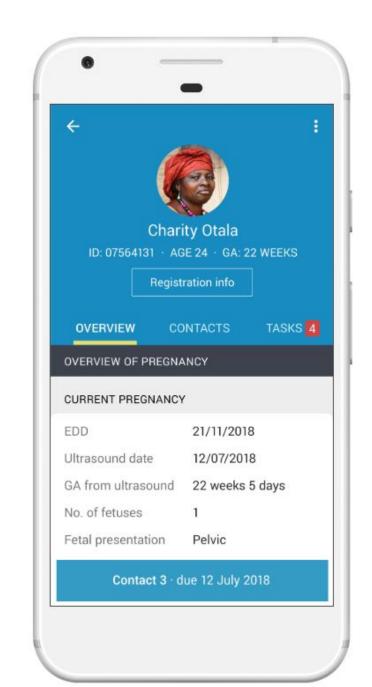
Performance Management

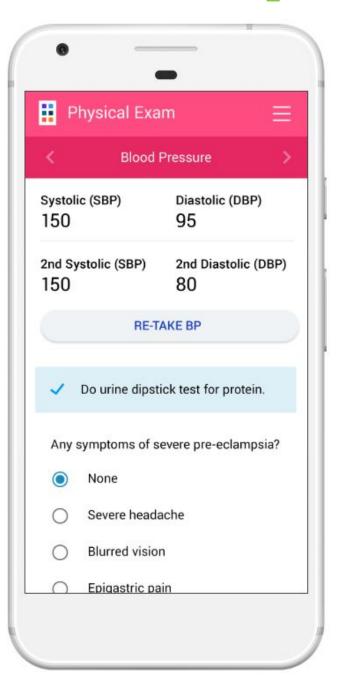


Interoperable with HMIS









#### OpenSRP Community



