

# Integrating Health Financing into the OpenHIE Architecture

openIMIS

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## Introduction: What is OpenHIE?

Open Health Information Exchange (OpenHIE) is a global community of practice that builds interoperable data standards so that Health Information Systems can talk to one another. OpenHIE's mission is to improve the health of the underserved through collaborative development and by supporting open, country-driven, large-scale health information sharing architectures.

The OpenHIE community supports interoperability by creating a reusable architectural framework that introduces a service oriented approach, maximally leverages health information standards, enables flexible implementation by country partners, and supports interchangeability of individual components.

OpenHIE is an architectural approach and a set of reference tools to support the objective of "Sharing Data to Improve Health Outcomes".

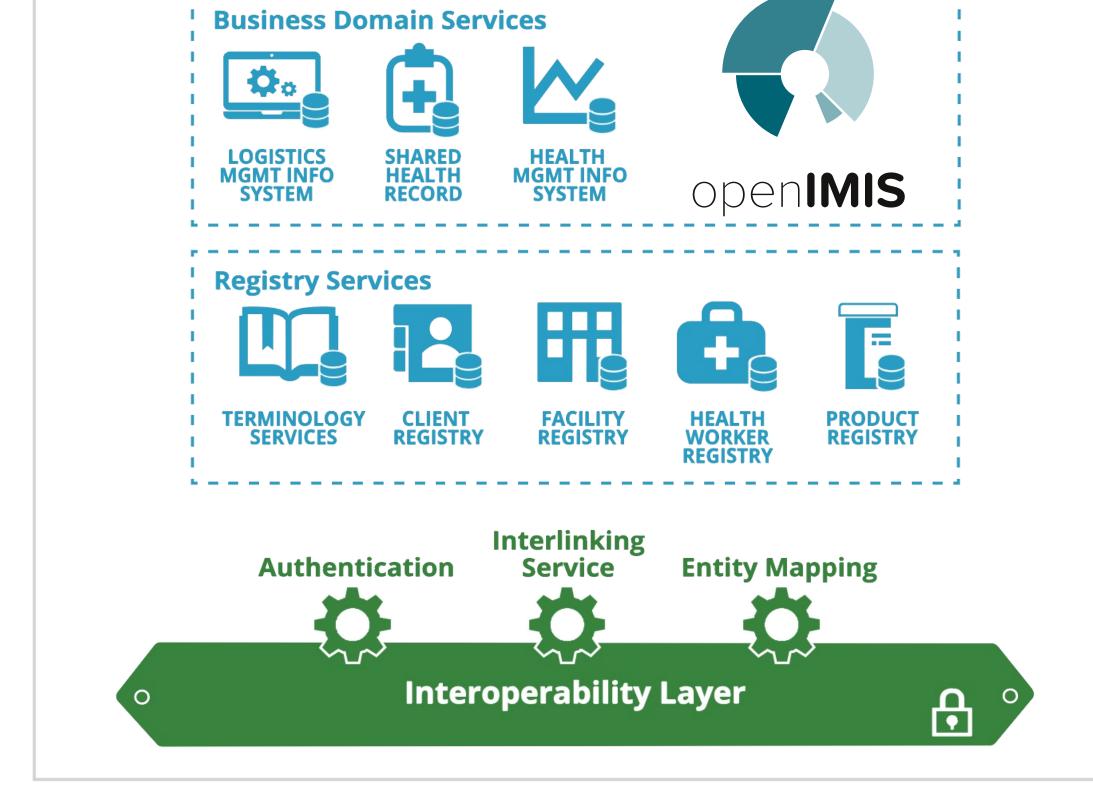
#### What is openIMIS?

- open source software for improving health financing operations by digitalizing the link between patients, providers and payers
- based on a community of developers, users and implementers
- joint mission to increase and improve universal health coverage (UHC)

OpenHIE Component Layer

Interoperability Services Layer

Point of Service



Mobile

**System** 



Medical

Record



Info System



System

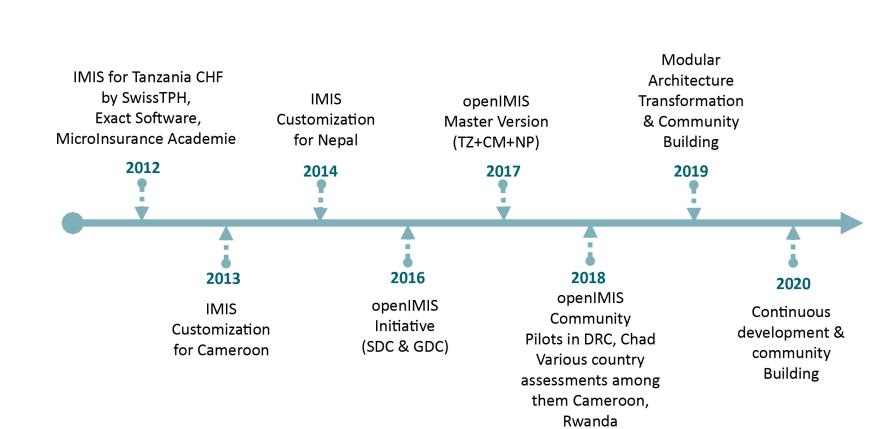
**System** 

cy Logistics Mgmt

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Info System

# Origins of openIMIS



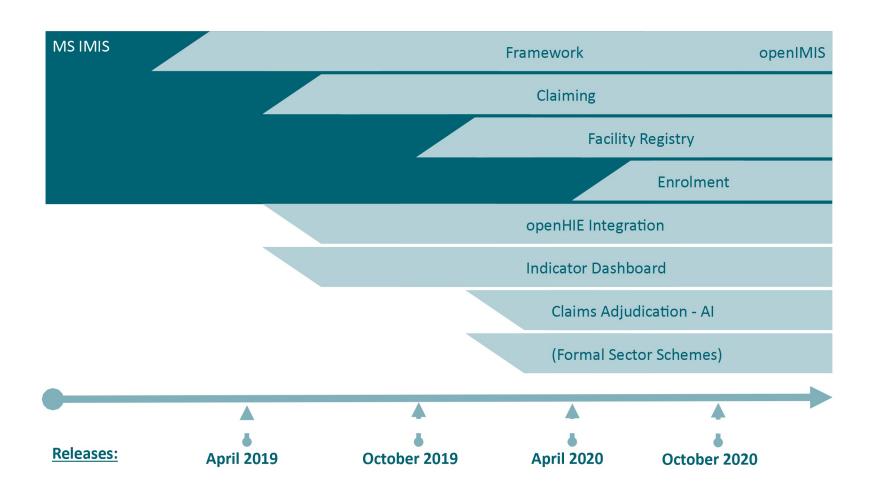
# **Methodology: Community Effort**

As part of the overall software development investments into the openIMIS technology stack, global good developers were invited to propose development projects that would introduce openIMIS interoperability with other global goods from the OpenHIE architecture. In a co-creation process that was managed by the Digital Square platform, three proposals were selected and funded to develop an integration of openIMIS with DHIS2, OpenMRS and BAHMNI on the basis of the HL7 FHIR interoperability standard. The three teams were integrated into the openIMIS developers committee to enable a seamless integration into the openIMIS roadmap and release cycle. In addition, the openIMIS community has been working with the OpenHIE community to ensure that data exchange processes and requirements meet the needs of healthcare financing communities, and to develop and adapt OpenHIE workflows to incorporate health finance data sharing use cases and country needs.

#### Results

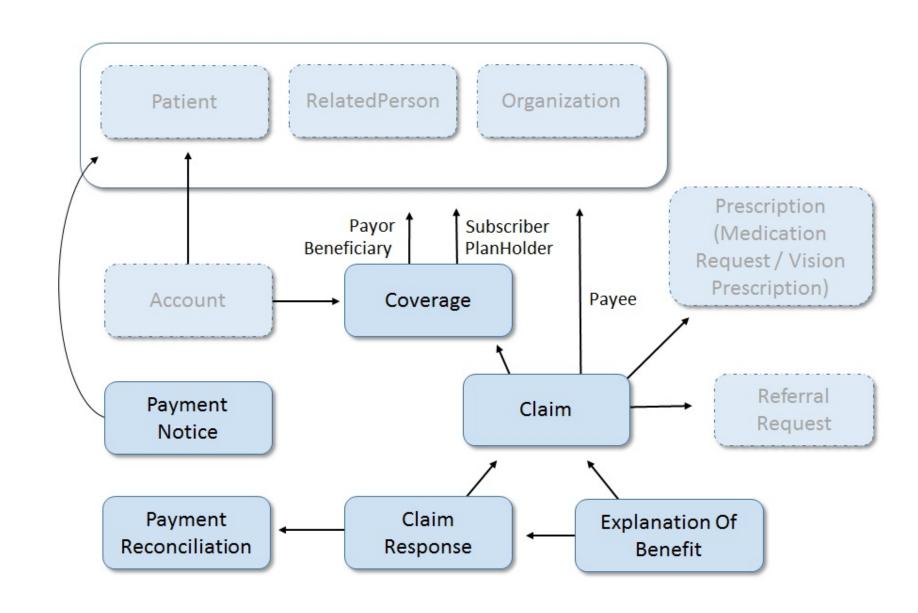
openIMIS now possesses a set of HL7 FHIR compatible APIs that allow the exchange of patient and claim data with other information systems in the health sector. The standards-based approach also opens up opportunities for supporting a range of HIE workflows and interacting with other HIE components and registries (e.g. Shared Health Record, Client Registry, Facility Registry), as well as a move towards openIMIS in the role of a health financing for UHC OpenHIE reference technology.

# Roadmap of openIMIS

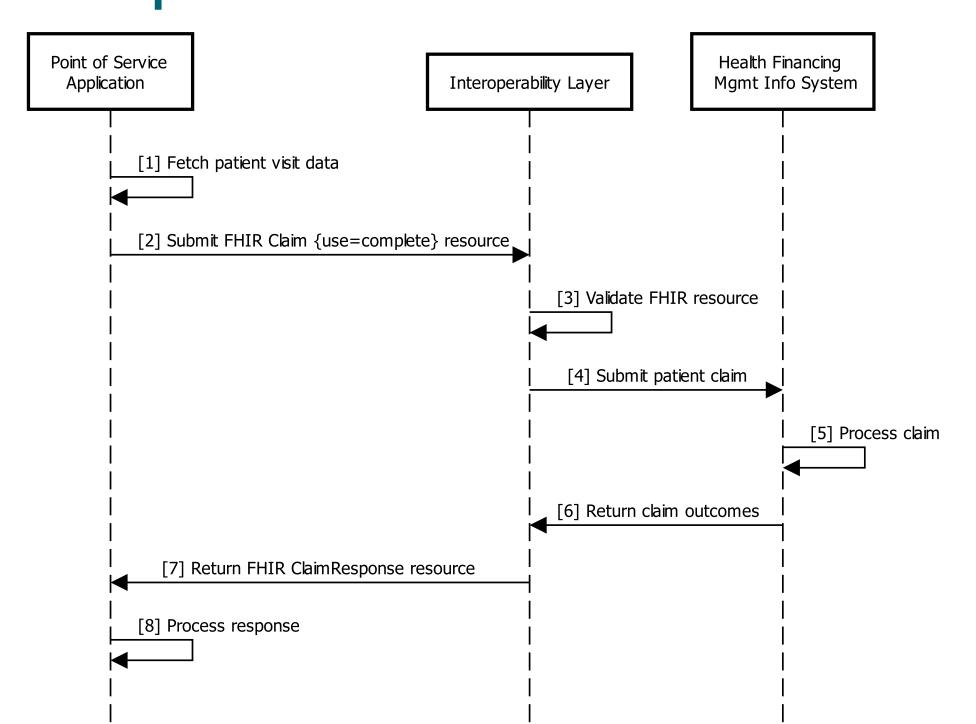


# Methodology: Use of FHIR standard

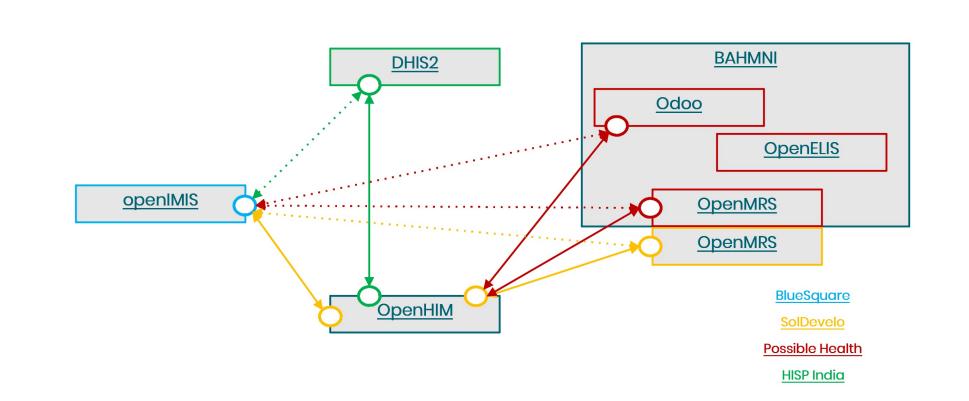
Finance Interactions



### **Example: Claim Submission**



#### Integration into OpenHIE



#### **Supported Workflows**

#### **Beneficiary Enrolment**

- Check Enrolment Status
- Enrol Beneficiary

#### Claim Submission

- Check Beneficiary Validity
- Ceck Beneficiary Balance / Treatment Options
- Preauthorization of Claims
- Track Status of Claim
- Submit Claim

#### **Indicator Submission**

- Indicator Reporting
- Patient Level Indicator Reporting

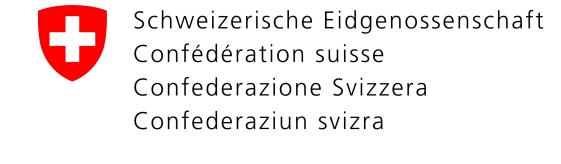
# **Outlook: Future Workflows**

# **Client Registry Interaction**

- Beneficiary enrolment
- Beneficiary verification
- Register dependant(s)
- Death notifications

#### Terminology Services & Product Registry

# Facility Registry



for Economic Cooperation

and Development

















