

# Kickoff meeting openIMIS Tender 3

4 February 2021



# Reminder (included in the proposal)

- 1. The tender's stated goal is "An Open Imis version free of legacy .NET code". In our suggested scoping we will make this a priority;
- 2. The limited budget means we will not be able to migrate the full scope of the .NET version of the software "as is". We will not be able to answer all the needs expressed by the instance in Nepal either;
- 3. We will cover all 3 packages but be specific on what parts of the packages we can deliver and which we consider out of scope;
- 4. For each iteration of WP2, we will focus on the core functionalities (e.g. standard packages for admin or reports). More specific needs will be considered as out of scope and will have to be supported by custom modules development (made possible by the new architecture);
- 5. Adding the FHIR API is challenging within the 240 days limit. We propose to provide a GraphQL API, on top of which a FHIR API can be built. We suggest this be covered in a subsequent tender or by other interested stakeholders.

## WP 1 - Architecture Design & Migration Strategy

Based on our current knowledge of the architecture, data models and business processes, we estimate this will be sufficient to detail:

- the exact scope for all remaining modules that remain to be migrated;
- our strategy for the setup of an API that will provide an efficient environment for the subsequent development of a FHIR API; and
- our strategy for the migration to a PostgreSQL database and the exact scope of our support to the migration of legacy databases.

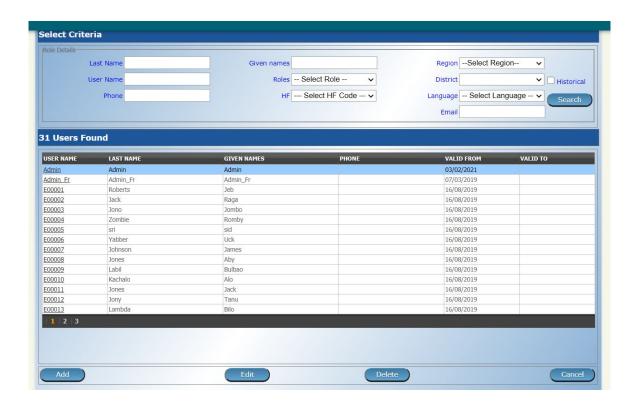
# 1. Migrate the remaining functionalities of the legacy code base into modules under the new architecture

Our priority is to deliver a fully functional .NET-free openIMIS software package within the timeline defined in the ToRs. In order to do so, we will

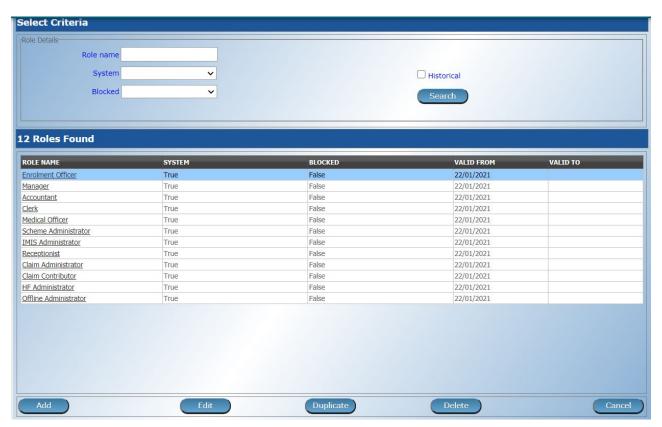
- Restrict the migration to the legacy code base, without taking into account local hacks;
- Migrate all remaining modules with a focus on key functionalities leaving more specific requirements to custom modules development;
- Wherever existing open-source solutions can be used this will be preferred to developing openIMIS-specific solutions.

### User Management - Users

User rights/roles/profiles are currently complex - we will provide a classic and widely approved RBAC (Role-based access control) system



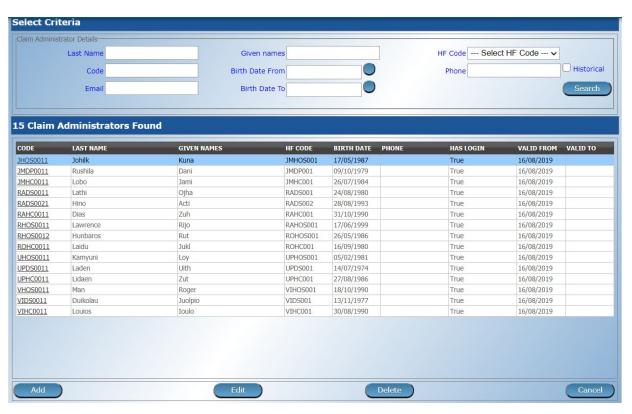
## User Management - Users profiles



## User Management - Enrollment officers



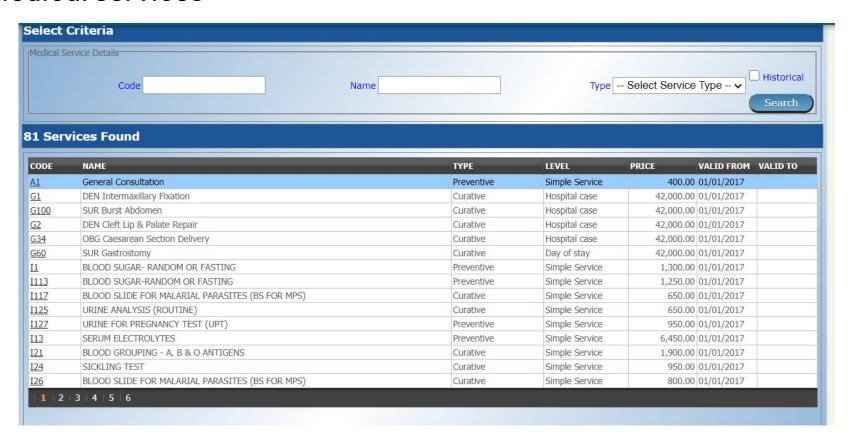
## User Management - Claim administrators



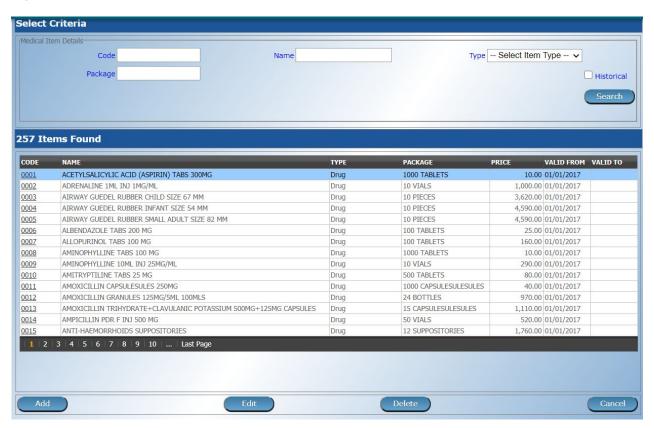
## User Management - Compatibility

- Impact on legacy code and Gateway module
- Scheduled first as risk-based approach

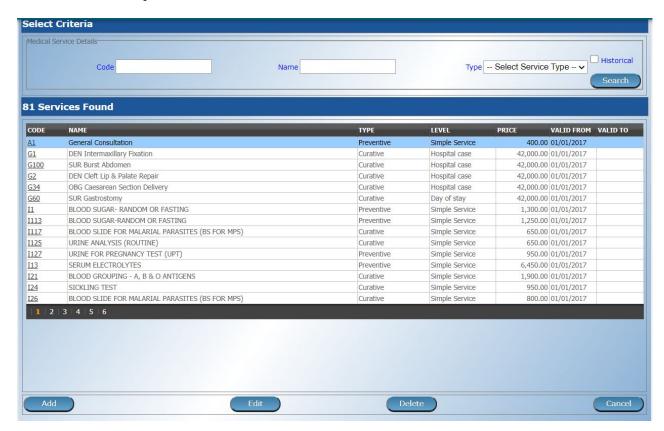
#### Medical services



#### Medical items



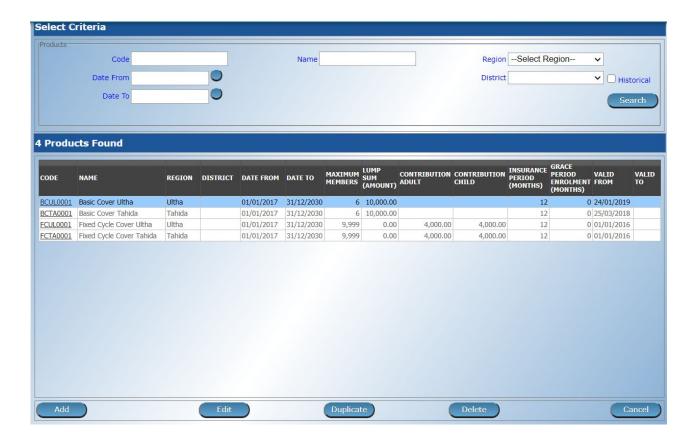
#### Medical services price list

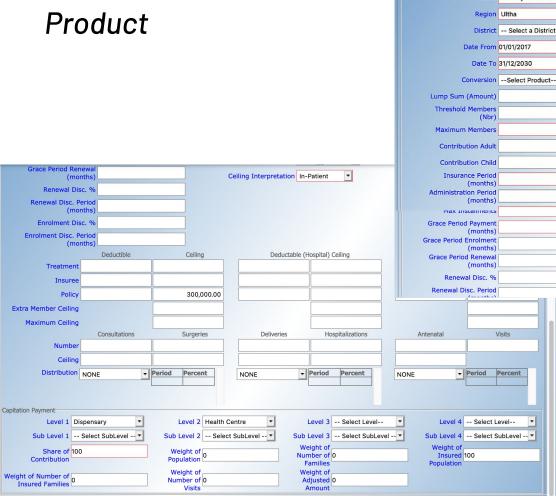


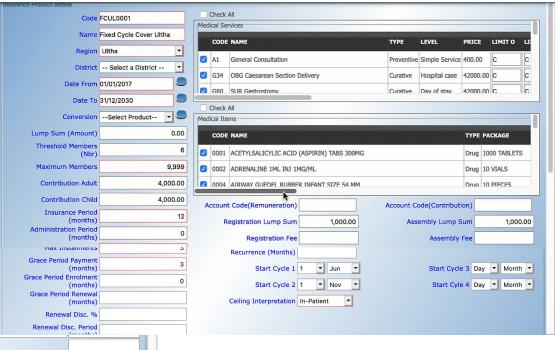
#### Medical items price list



#### **Product**



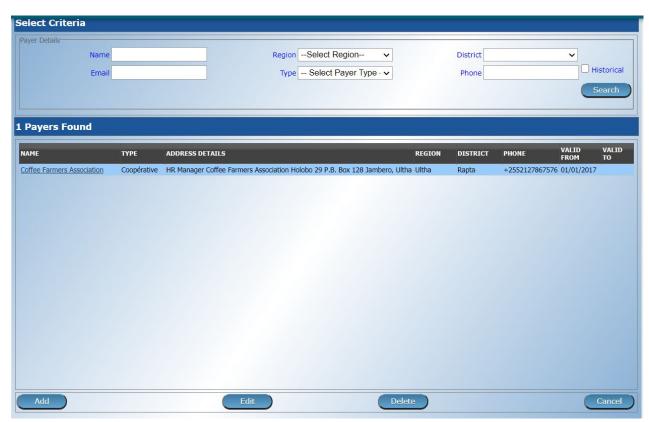




## Payers & Funding

Implement the administration screens for payers & tools, including a generic payment system.

Tanzania hack will not be migrated, a simple more common payment rule will be proposed as a base, and countries will be able to adapt to their local needs



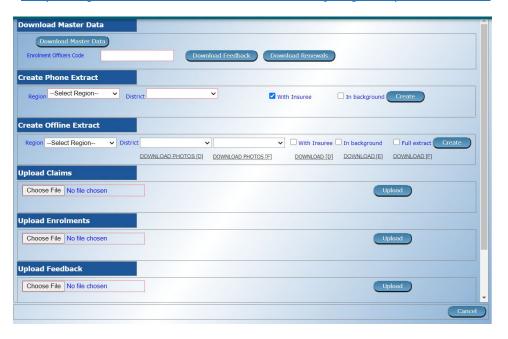
#### Key user utilities

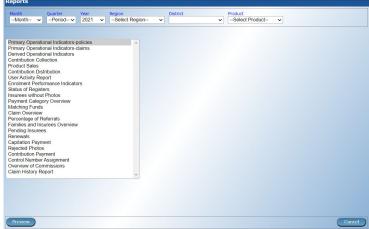
Allow users to update/reset their passwords, integrate authentication into the "new" architecture (versus being delegated to the legacy system)

change Password	
Current Password	
New Password	
Confirm Password	
300000000000000000000000000000000000000	
Save	Cancel

### Key system admin utilities

Import/Export of data, generation of reports and various output needed for a good administration of the system. This will be accounted for through a Django admin and a standard reporting package like <a href="https://github.com/burke-software/django-report-builder">https://github.com/burke-software/django-report-builder</a> to provide the tools to create reports





Initial order of priority and calendar:

- 1. User management 1 June 2021\*
- 2. Medical services/items 1 July 2021\*
- 3. Medical services/items price lists 1 August 2021\*
- 4. Product 1 October 2021\*
- 5. Payers & Funding 1 November 2021\*
- 6. Key user utilities 1 December 2021\*
- 7. Key system admin utilities 1 February 2022\*

# 2. In close co-operation with the software maintenance project, define change requests for changes that are necessary in the legacy system to allow for a smooth transition

Bluesquare understands that a support to legacy systems is key for a smooth transition to the new software architecture. However, providing in-depth support is very challenging within the 240 days limit. We propose to allocate 5 days to define key change requests in cooperation with the software maintenance project. Once these days are completed contractual extensions will be discussed should additional work be required/requested by the community.

3. Equip the new modules with HL7 FHIR compliant APIs for interoperability with the OpenHIE ecosystem, also allowing the extraction of bulk data.

The development of a HL7 FHIR compliant API is challenging within the 240 days limit. Instead, we propose to set up a GraphQL API that will facilitate the subsequent development of FHIR compliant API.

Included in each module

# 4. Communicate gaps in the HL7 FHIR definitions to the FHIR working-groups and propose additions.

As discussed above, we suggest that this be the focus of another tender. However we will provide a clear documentation of the GraphQL API and provide recommendations for subsequent FHIR compliant API development.

#### 0 days

5. Migrate the database layer from MS SQL Server to PostgreSQL and provide adequate mechanisms for data migrations of legacy data into the new structures.

All usage of MS SQL specific code (SQL dialect, stored procedures, etc) will be removed from the new architecture: the installation package of the new modular openIMIS will include a PostgreSQL database.

We will dedicate a total of 10 days for the support of legacy data migration to the new PostgreSQL database. With this limited number of days, we will provide a strategy for a smooth transition of the legacy data to the new PostgreSQL database but won't be able to provide an in-depth support of this migration. We will leverage the past SwissTPH efforts to set up tools for the data scheme creation and migration of legacy data to the PostgreSQL database.

## WP 3 - Community Support and Capacity Building

For the community support - much like Work Package 1 - Bluesquare will propose a set pool of days that will allow some flexibility in the approach. Once these days are completed contractual extensions will be discussed should additional work be required/requested by the community.

# Thank you!



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