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Swiss Confederation

Federal Ministry
for Economic Cooperation
and Development

openIMIS

An open source Insurance Management Information System

Saurav Bhattarai(GIZ-S2HSP, Nepal)
Alicia Spengler (GIZ OpenIMIS, Germany)

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giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

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Background

- Goal: UHC

  - A viable way: Social Health Insurance

    - Challenge: Administrative Burden

      - Solution: Technology based MIS

        - Leverage knowledge: Open Source

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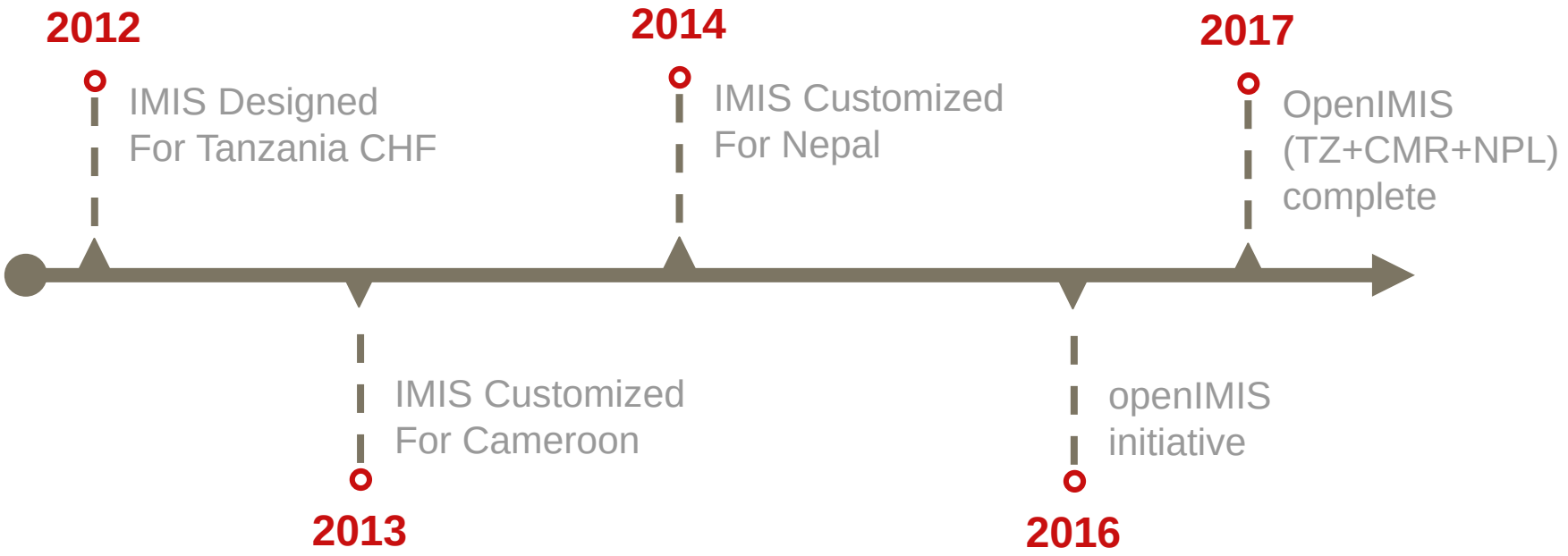
Why Insurance MIS

- Insurance processes are complicated to manage
- Claims are only paid when providing transparent and evidence based billing
- In a data focused SDG era, a unique opportunity to incentivize health data reporting
- Patient level data available
- Opportunity to have up-to-date client registry

The evolution of openIMIS



IMIS

Designed for the CHF social health protection scheme in Tanzania

- Designed and developed by: Micro Insurance Academy (MIA) + SwissTPH + Exact Software
- Funded by SDC
  - Full copyright
  - Willing to offer other countries/schemes free of cost (including source code)
  - Condition: modifications to software should be shared with other countries/implementers

Major Business Processes

- Enrollment
- Verifications
- Claim Submission
- Claims review
- Client Feedback

Need for OpenIMIS

GIZ & OpenIMIS

Partnership between SDC and GDC for OpenIMIS initiative

- Development of Master Version
- Technical design of OpenIMIS
- Transition from IMIS -> OpenIMIS, including initial development
- Support bilateral programming in countries where GDC / SDC has health as main topic
- Coordinate Community of Practice
- Develop guidelines, SOP, training formats

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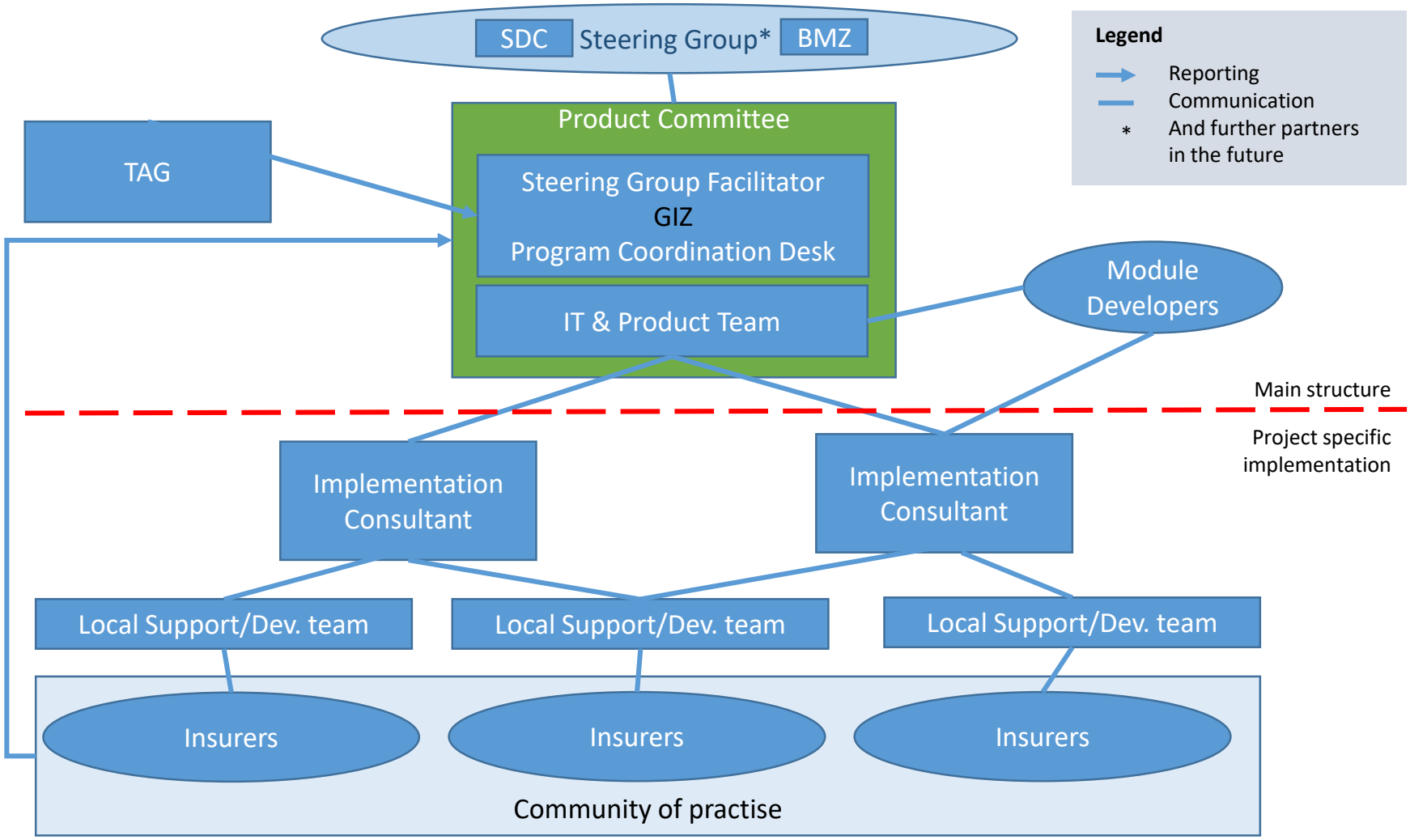
OpenIMIS Governance


SDC
Steering Group*
BMZ
Legend
Reporting
Communication
* And further partners in the future
Product Committee
TAG
Steering Group Facilitator
GIZ
Program Coordination Desk
IT & Product Team
Module Developers
Main structure
Project specific implementation
Implementation Consultant
Implementation Consultant
Local Support/Dev. team
Local Support/Dev. team
Local Support/Dev. team
Insurers
Insurers
Insurers
Community of practise

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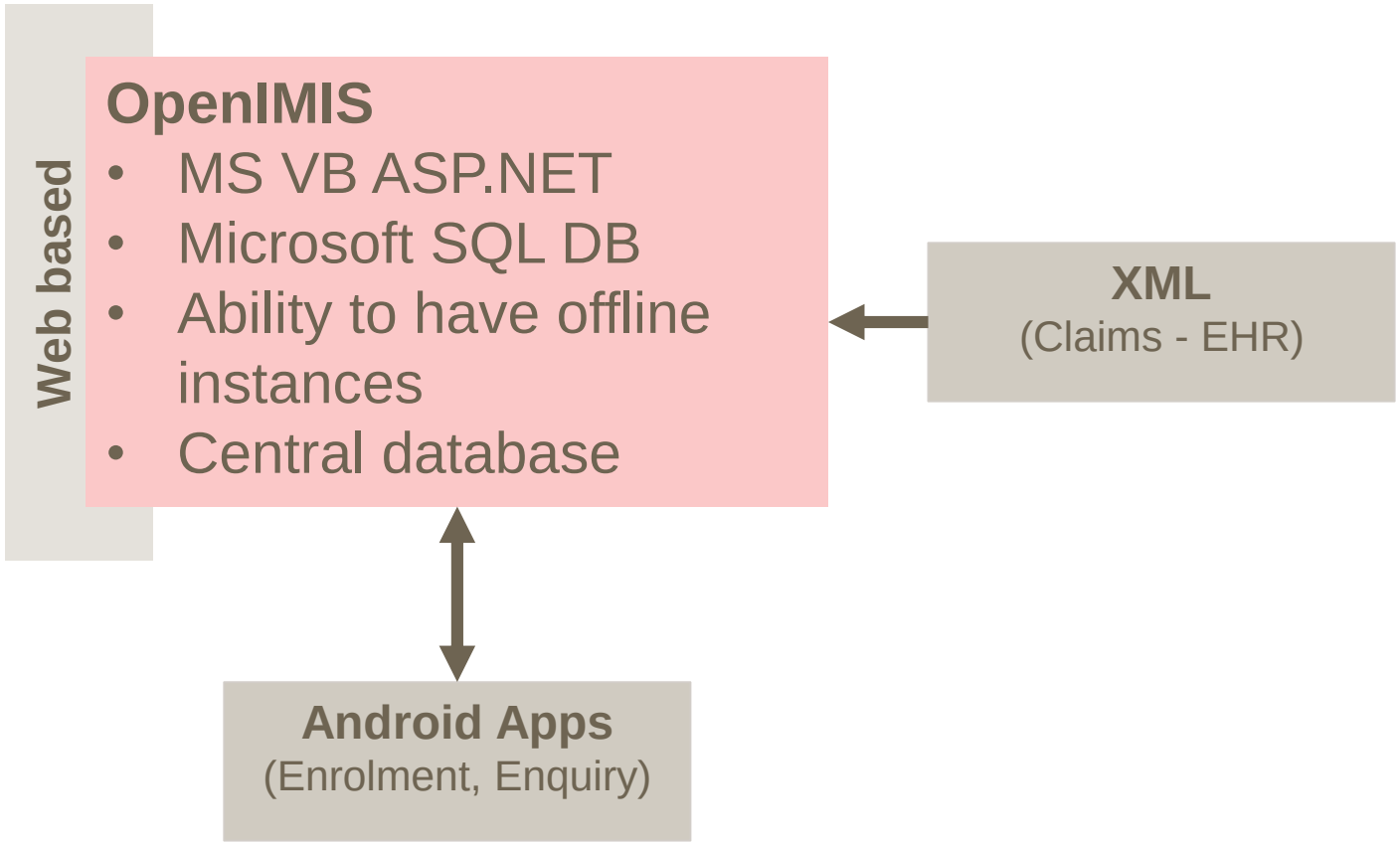
Collaboration

- Technical
  - Technical Advisory Group
  - Community of developers
- Operational
  - Country specific Implementations
  - Community of practice
  - Country specific requirements
- Financial (Steering Group)

Next Steps

- Development
  - Reengineering
  - Monolithic -> modular design
  - Integration with other tools
  - New features
- Community Setup
  - Community of developers
  - Community of users
- Implementation Toolkit

openIMIS Tech Specs



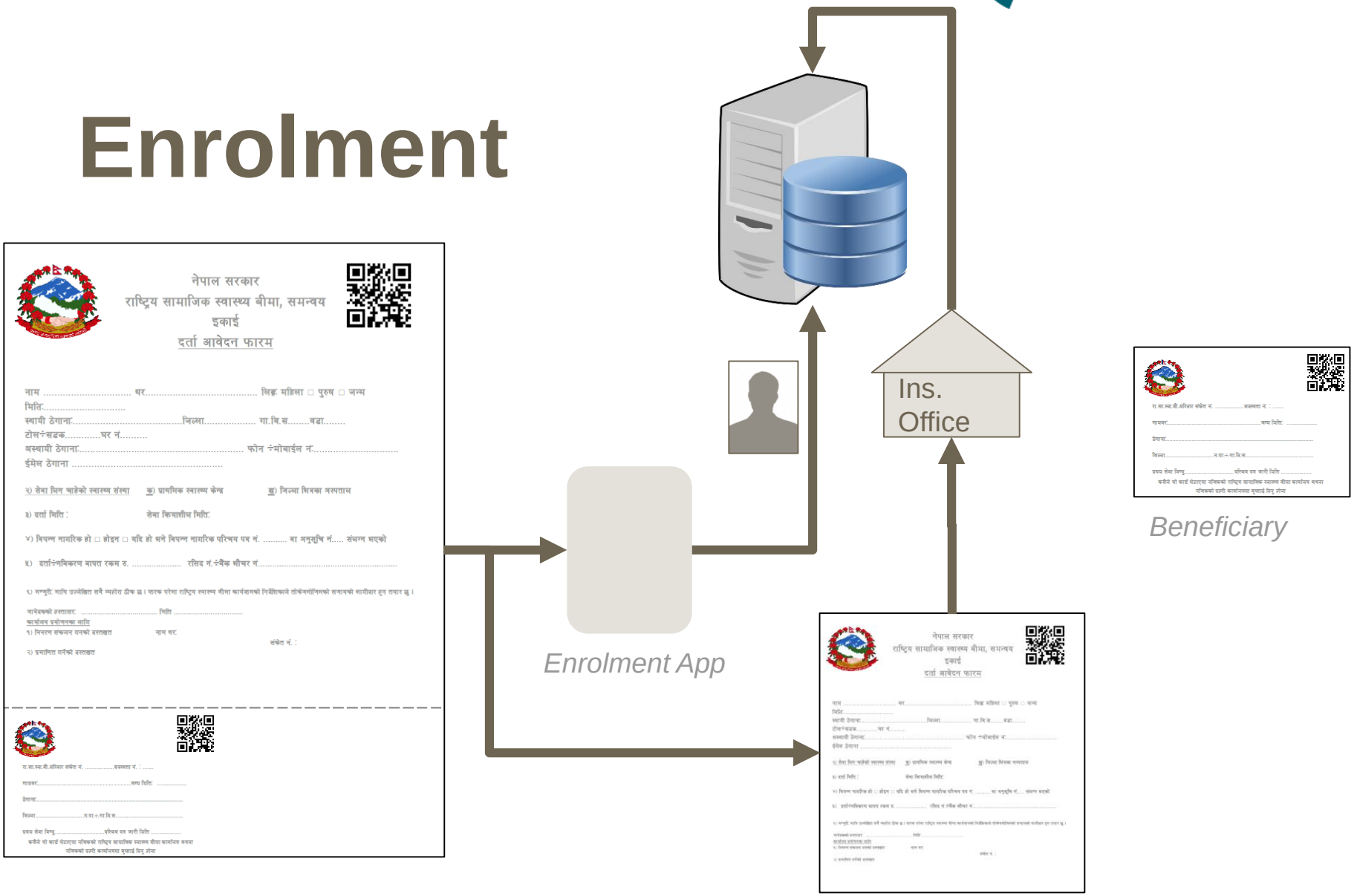
openIMIS Functions

- Scheme design
- Enrolment
- Verifications
- Claim Submission
- Claims review
- Client Feedback

Functions – Scheme Design

- Family or Single person
- Payment modalities
  - Single Payments / Installments
  - Cost sharing (Employers, Govt., etc)
- Benefit package customization
  - Services, drug availability
- Different pricelists (for different levels of facility)
- Multiple policies per beneficiary

Enrolment



नेपाल सरकार
राष्ट्रिय सामाजिक स्वास्थ्य बीमा, समन्वय
इकाई
दर्ता आवेदन फारम
Ins.
Office
Enrolment App
Beneficiary

KOICA
Korea International Cooperation Agency

Verifications

- To be done at all points of care
- Web based – enter insuree number
- Android – scan QR code

- Photo
- Remaining balance (benefit package)
- Expiry

EPSON
LQ-310
SAMSUNG
NSH Number
SHSC-Reg
16/08/2017
Technos

Claims Submission

- Typical scenario [no EHR solution]
  - Claims begin on paper (carbon copies)
  - After patient visit, facility enters it into openIMIS
  - IF EHR present -> XML Imports
- Android Application
- Web-based

- Rich dataset – Diagnosis (ICD), Services provided, Drugs/Items provided

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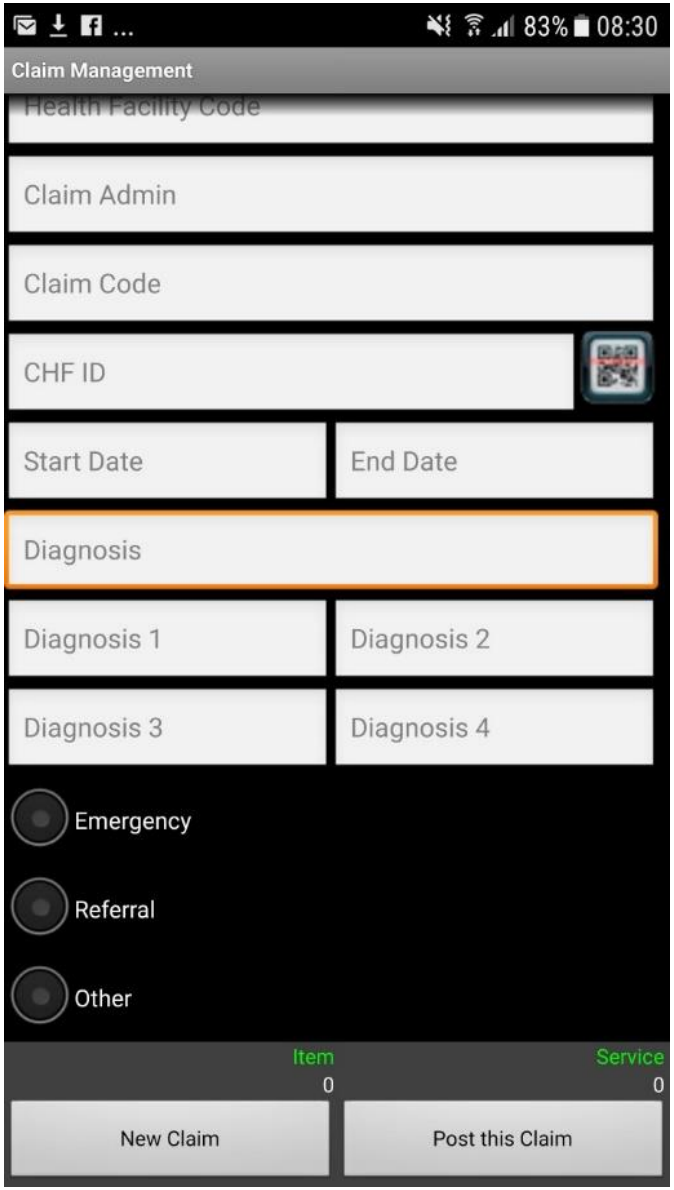

83% 08:30
Claim Management
Health Facility Code
Claim Admin
Claim Code
CHF ID
Start Date
End Date
Diagnosis
Diagnosis 1
Diagnosis 2
Diagnosis 3
Diagnosis 4
Emergency
Referral
Other
Item
0
Service
0
New Claim
Post this Claim

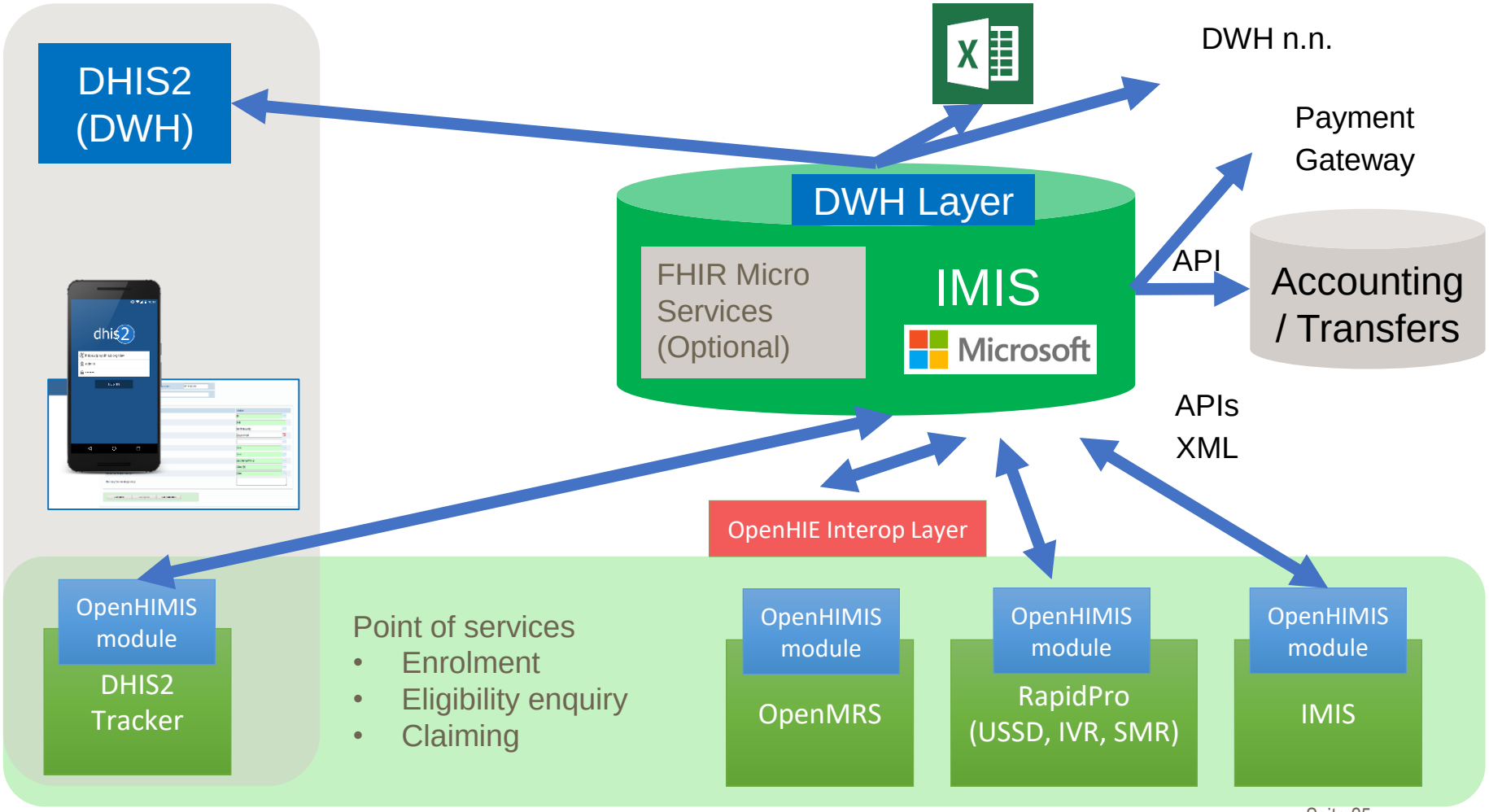
Claims Review

- Central reviewing mechanism
- Basic screening based on insuree profile and scheme definition
- Reviewers have ability to filter claims
  - By Value
  - Random sampling
  - Divergence from agreed pricing
- Payment advice based on clams review

Feedback

- Client feedback on service quality (Insurance + Health Service)
- Linked to claims
- Home visits
- Card scanning required

System architecture



Opportunities for engagement

- Module development
  - Apps
  - Claims
  - Data Warehousing
- APIs – connection with other HIS
- Reengineering the core
- Technical Advisory Group