How low cost technology can standardize and bring greater transparency to micro-insurance schemes

Swiss Center for International Health

Swiss Tropical and Public Health Institute (Swiss TPH)

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Schweizerisches Tropen- und Public Health-Institut
Institut Tropical et de Santé Publique Suisse

Associated Institute of the University of Basel

ICT4D

INNOVATE. CONNECT. TRANSFORM.

Project Background

- Context : **Health System Support Program (PASS, Sud Kivu) financed by Swiss Cooperation (SDC) and implemented by Swiss TPH and GIZ IS**
  - Revitalizing mutual health insurance scheme “Mutuelles de santé”, in collaboration with regional social protection and health authorities

- **2017 : Pilot in South Kivu, Democratic Republic of Congo - Insurance Management Information System for 8 mutuelles de santé**

- Objectives:
  - Strengthening operational processes management improvement
  - Bringing more accuracy to health insurance data => better risk monitoring
  - More transparency to contribution collection and claim management

- ICT4D link : on-line/off-line computer and phone use system to professionalize any type of health financing system including micro-insurance schemes

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IMIS History

- 2011-12: SDC funded Health Promotion and System Strengthening (HPSS) project in Tanzania (ongoing)
- IMIS: Insurance Management Information System (developed by Swiss TPH)

- Supporting district-based government health insurance models in Tanzania, now moving to regional/national

- Centralized governmental model in Nepal

- Community Based Health Insurance / mutuelles in Cameroon and recently started in Democratic Republic of Congo and in Chad

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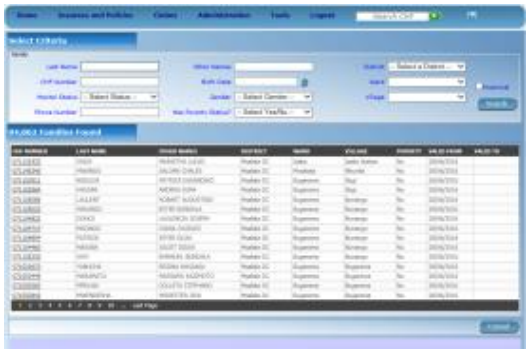
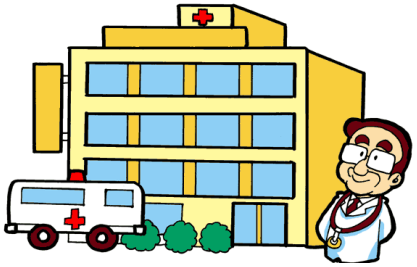
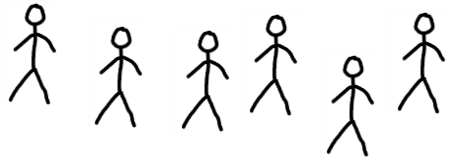
Technological support and users







- On-line or Off-line system

- Uses mobile technologies to support enrolment, renewals, client enquiry, claims and feedback processes

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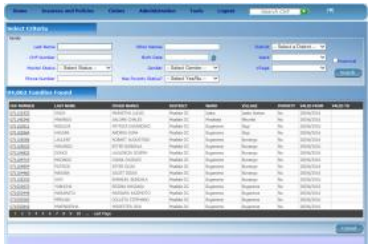
Transitioning process from IMIS to openIMIS

- The system evolved organically based on the user needs and their respective insurance schemes.
- Mostly developed by a Tanzanian company, with some add-ons from the national health insurance scheme in Nepal
- 2016: different countries' versions merged into one "Master Version"
- 2017: the software license was owned by SDC and based on individual agreements given to Cameroon, Nepal and DRC. SDC decided to release the system under an open source licence to pave the way to the openIMIS initiative
- 2018: Source code is made available on GitHub. The openIMIS Initiative is setting up an open source community based on developers and users. The software will follow a modular and interoperable system architecture.
- Co-financing agreement between Swiss and German cooperation (SDC and BMZ), GIZ has been commissioned to coordinate this transitioning process with Swiss TPH as an implementation partner.

http://openimis.org/

Dataflow within IMIS

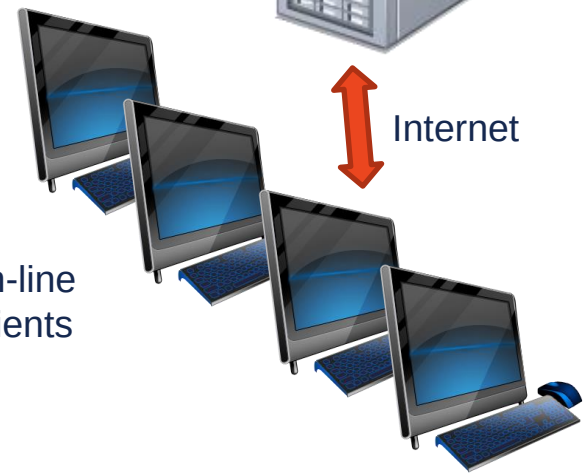


central server

Internet

mobile clients

Internet



on-line clients

physical transport

off-line clients

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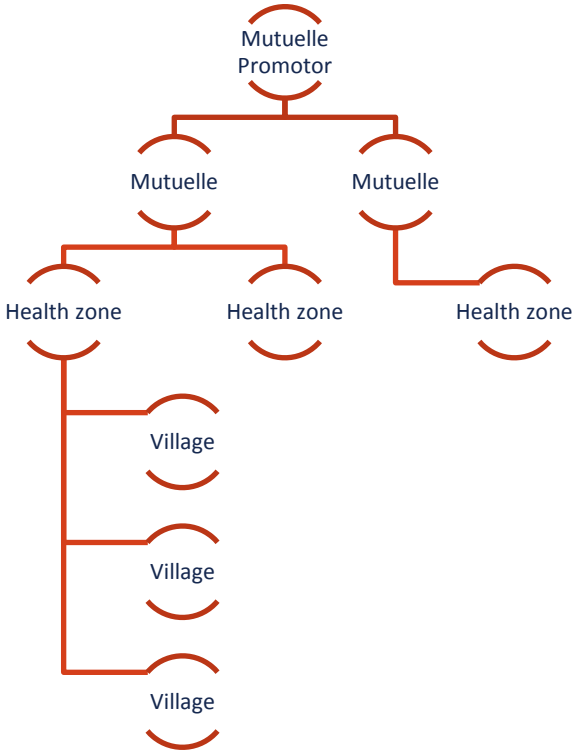
Staff support, the case of “Mutuelle de santé” in DRC, South Kivu



* Configuration : 1 Scheme Administrator
* Claim validation : 1 Medical advisor to validate claim

* Encoding data : 2 Enrolment officers

Software maintenance: Swiss TPH

Server maintenance: Cloud services provider

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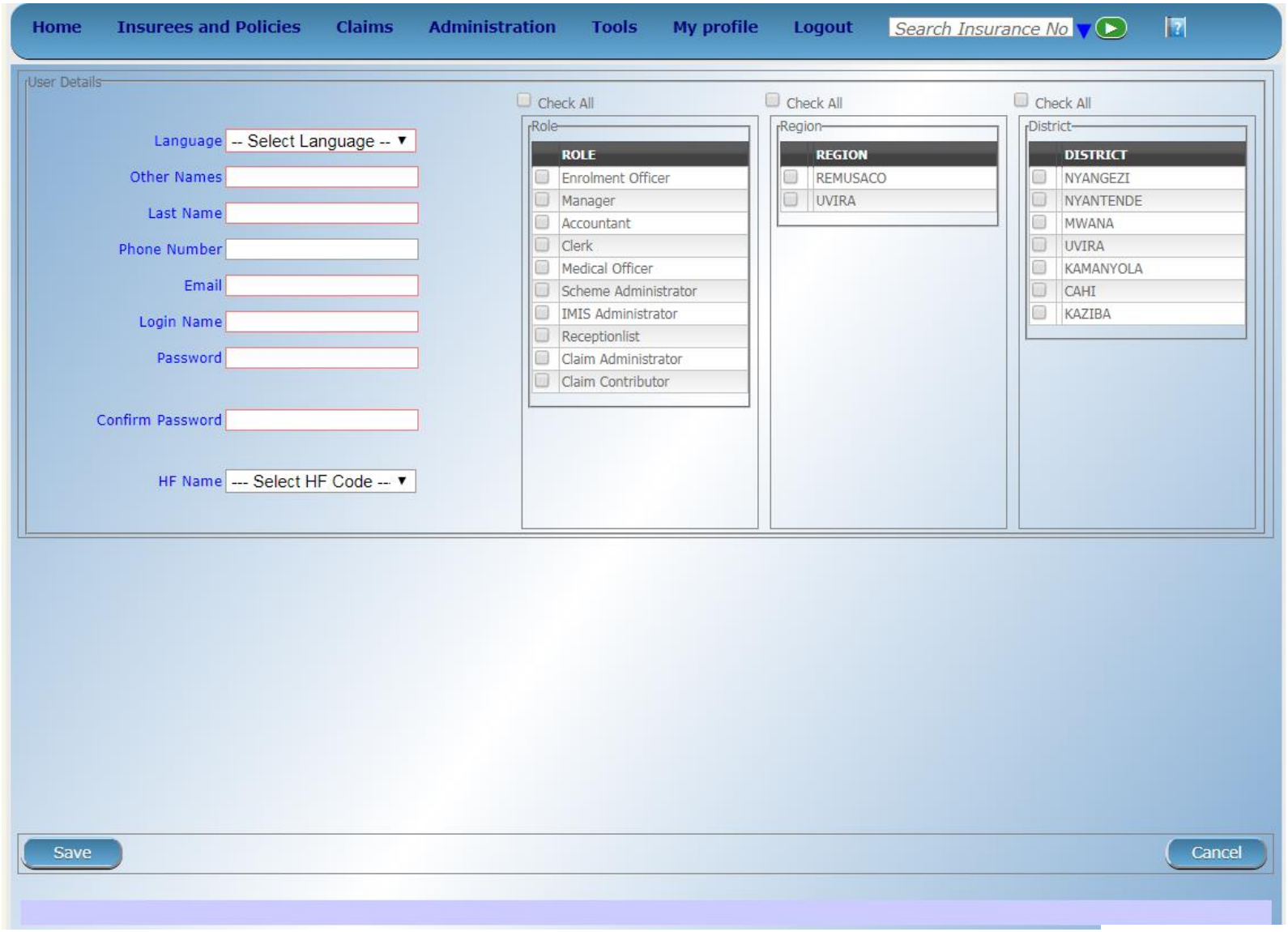
Staff support and IMIS users



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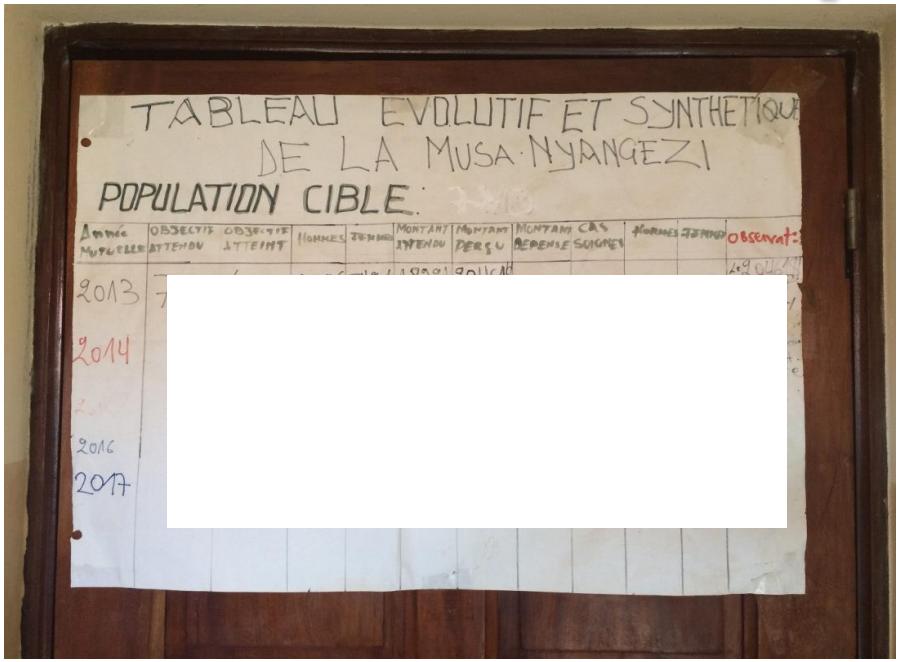
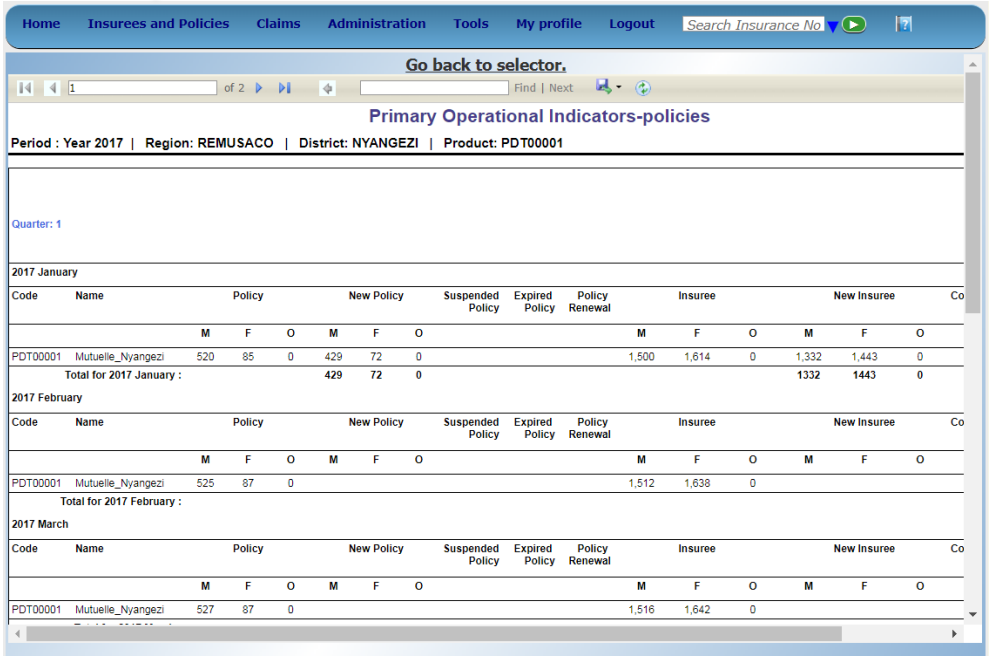
Key Successes

- Two instances are well configured and used online
- Insurance agent, Medical doctors, IMIS administrators are trained for 8 mutuelles
- 16672 insuree, 3508 families entered in the system
- 2512 policies activated
- Medical advisers tested claim management module: 346 encoded, 186 evaluated, including 40 rejected





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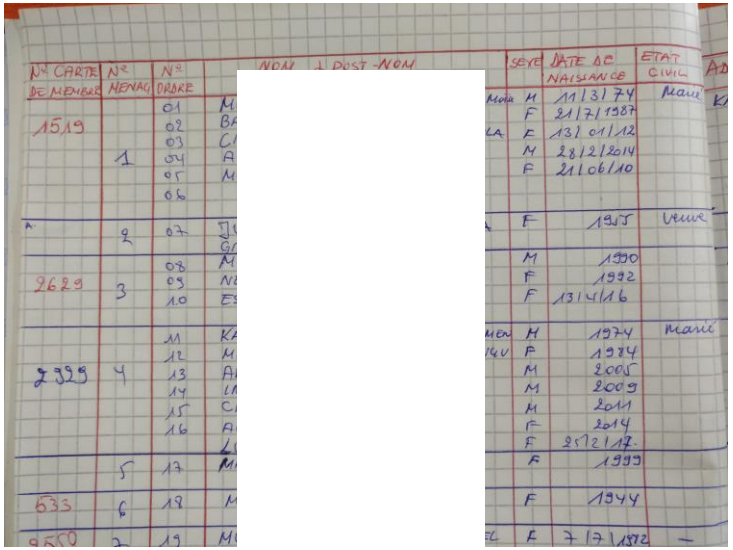
Standardizing enrolment information encoding

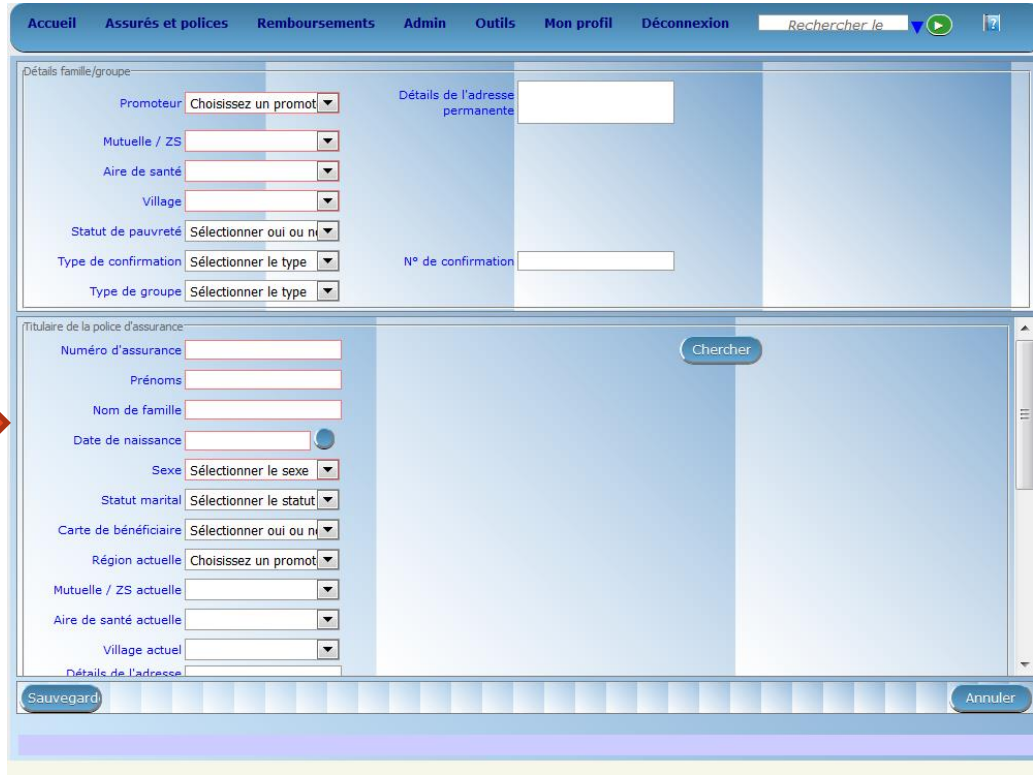
1. **Based on Enrolment agent note book 2017**



2. **Encode following mandatory information**:

- Insurance number / Surname / Family name / Date of birth. If you have only year, encode 01/06/YYYY **/** Sex
- Address / Marital status / Phone Number **/** Profession / Adherent card

3. **Report insurance number in the note book**



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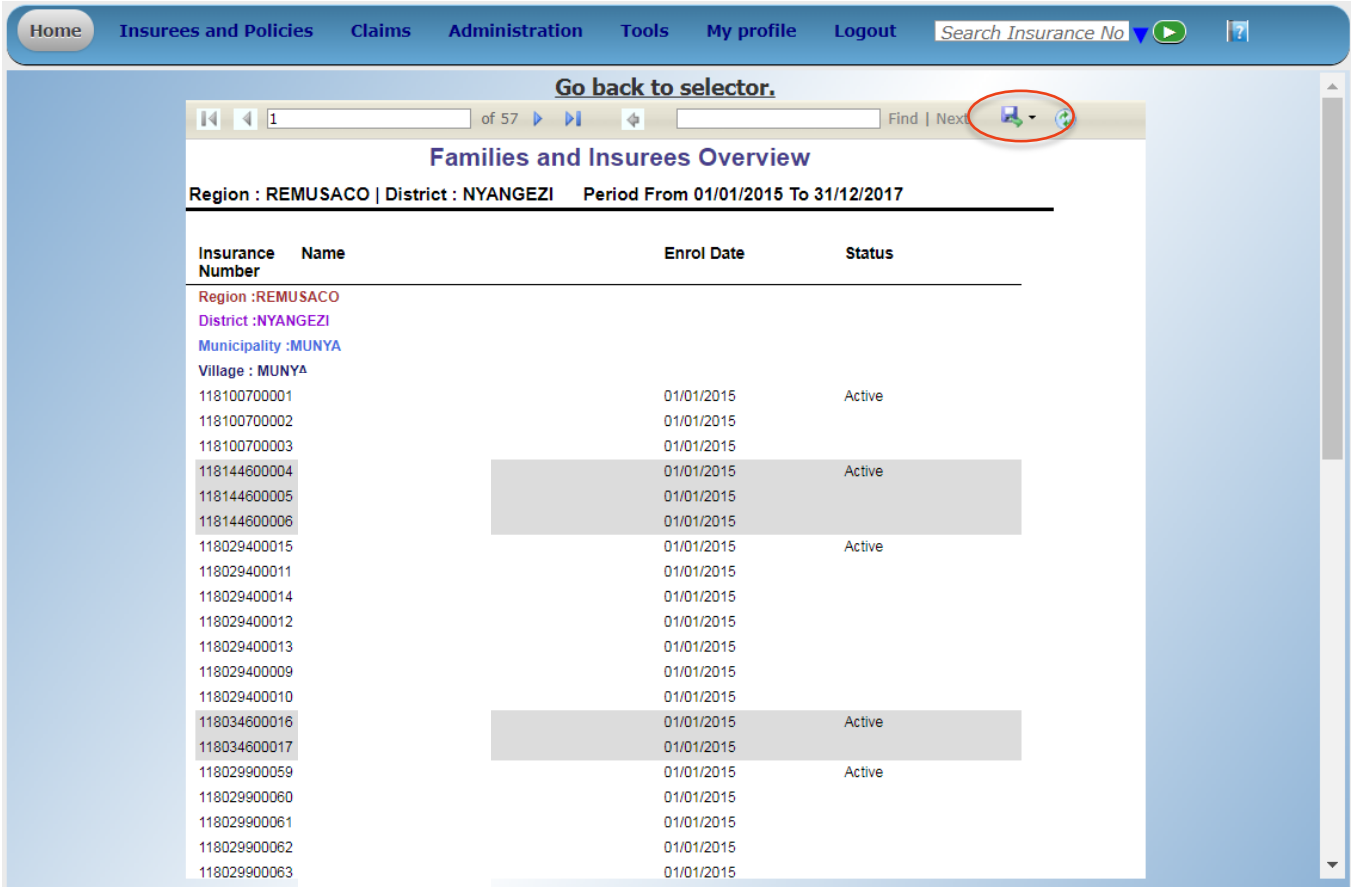
Improving identification of insurees and claim management

Today's process of identification :

- Voucher « bons de soins » are delivered by the mutuelle to allow insured members to access health facilities.

Claims can be paid to non-insured :

- lack of verification at identification process
- lack of verification at claim process



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How to improve both identification and claim management ? a standard enrolment process model with IMIS

Collect contribution

NA:DOD000860001

DODOMA

FOMU YA UANDIKISHAJI
MWANACHAMA WA CHF

008600012

Jina la Mkoa: _____

Jina la wilaya: _____

Jina la Kata: _____

Kijiji / Mtaa anapoishi: _____

Kitongoji anapoishi: _____

Jina la ukoo: _____

Majina mengine: _____

Tarehe ya kuzaliwa (TT/MM/MM): _____

Jinsia: ◯ Me ◯ Ke

Hali ya ndoa : ◯ Ameoa / Ameolewa ◯ Hajaolewa / Hajaoa ◯ Mtalaka ◯ Mjane

Mkuu wa kaya? ◯ Ndiyo ◯ Hapana

Jina la wilaya:_____

Jina la ukoo: _____

Majina mengine: _____

Tarehe ya kuzaliwa (TT/MM/MM):___/___/ 20

Tarehe (TT/MM/MM): ___/___/ 20

Jinsia: ◯ Me ◯ ke

Tarehe ya kuanza huduma (TTMM/MM):

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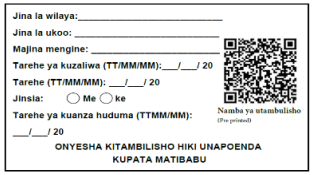

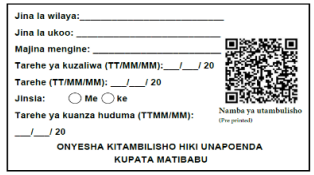

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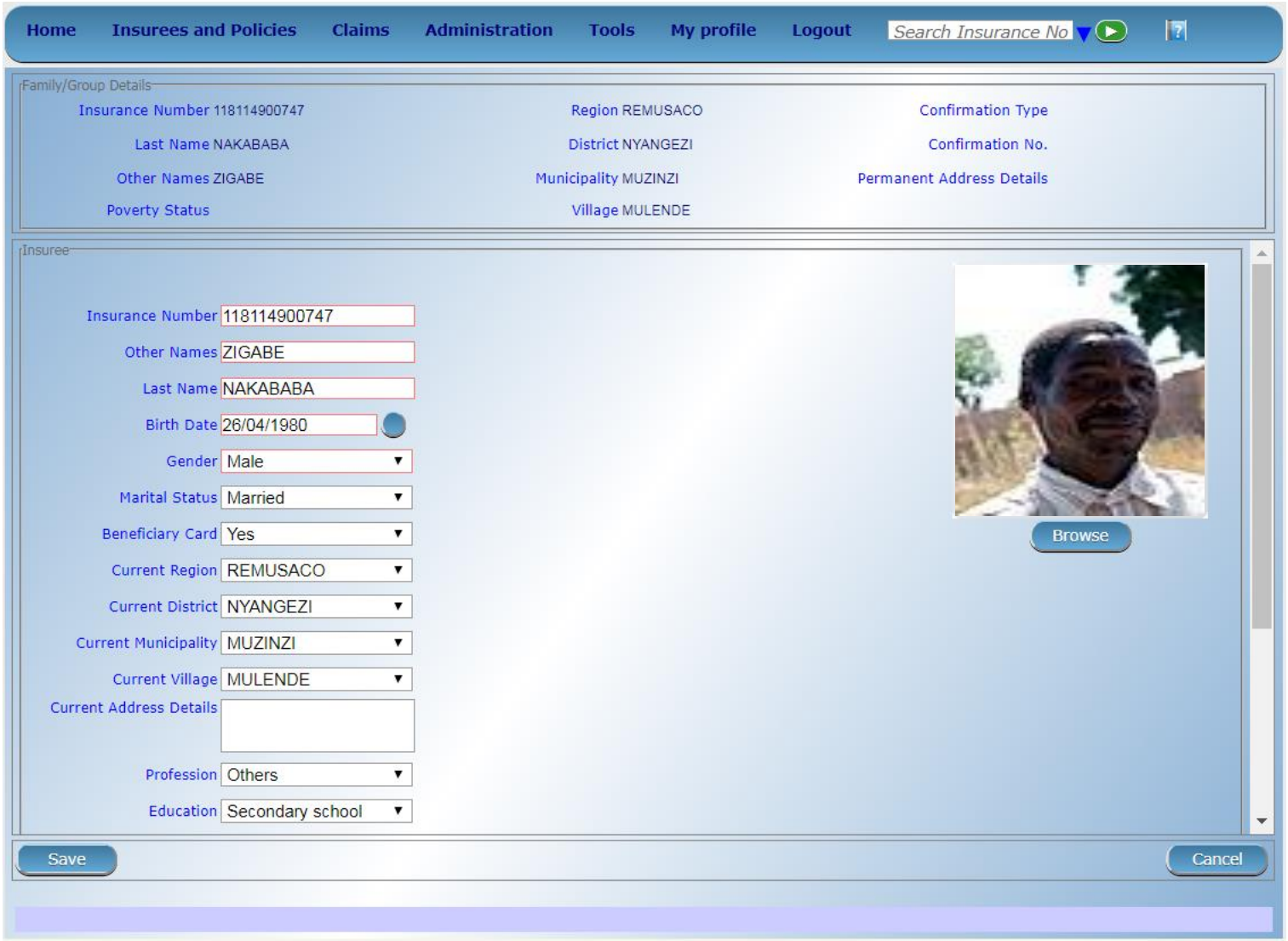
Enrolment of member



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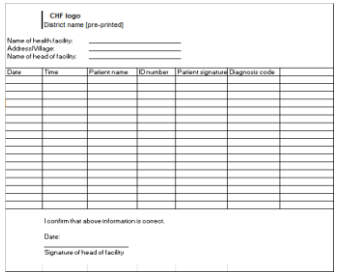
Insuree Service Utilization Process

Reception1 st registers patient in OPD/IPD register



Receptionist scans card with phone (offline & online) connectivity OK

EXPIRED

Send patient for treatment

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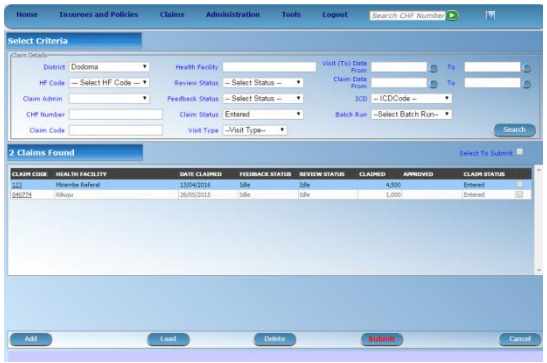
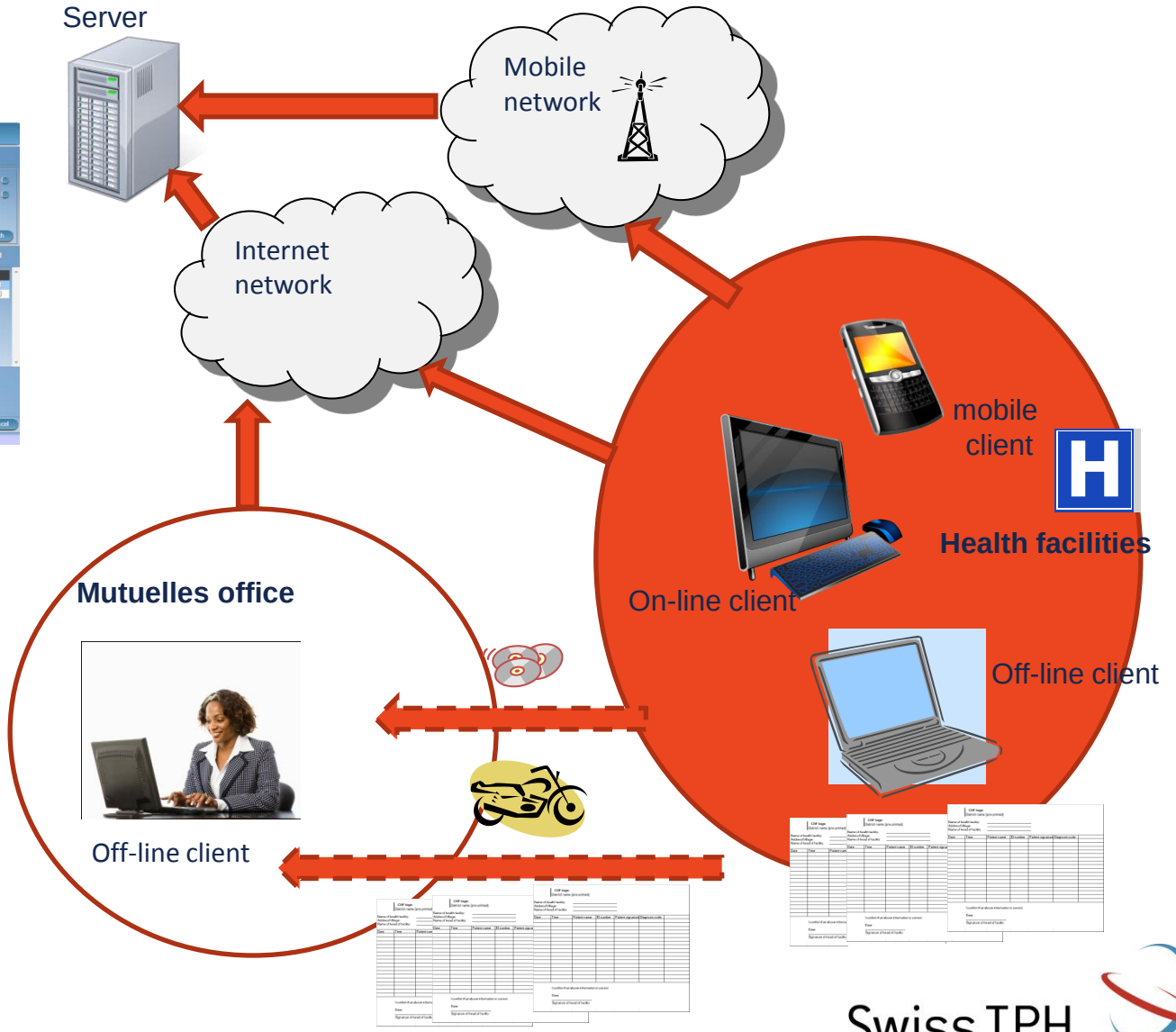
Clarifying health facilities invoicing to standardize processes



IMIS internal process of claim management



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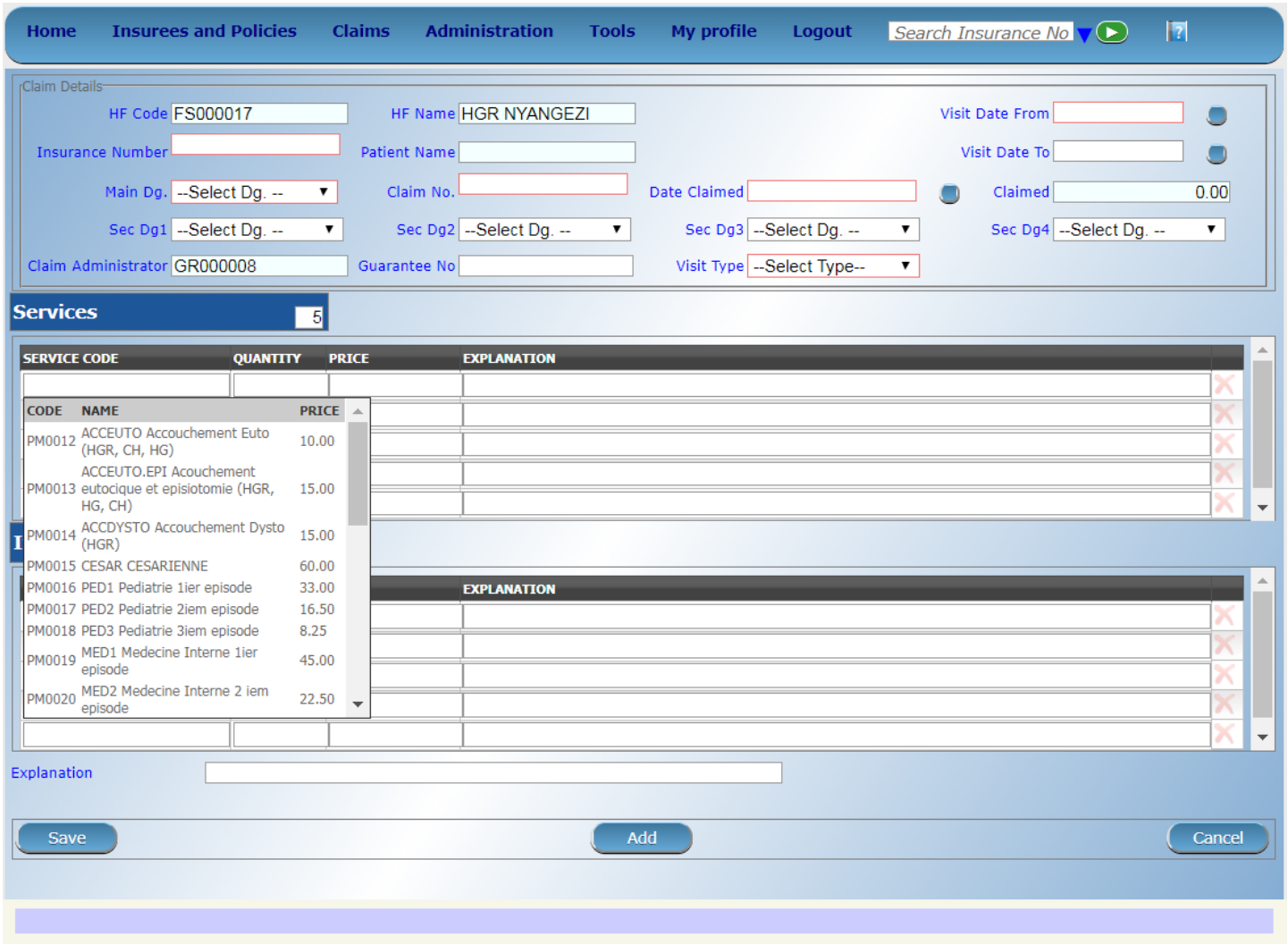
Clarifying health facilities invoicing to standardize processes



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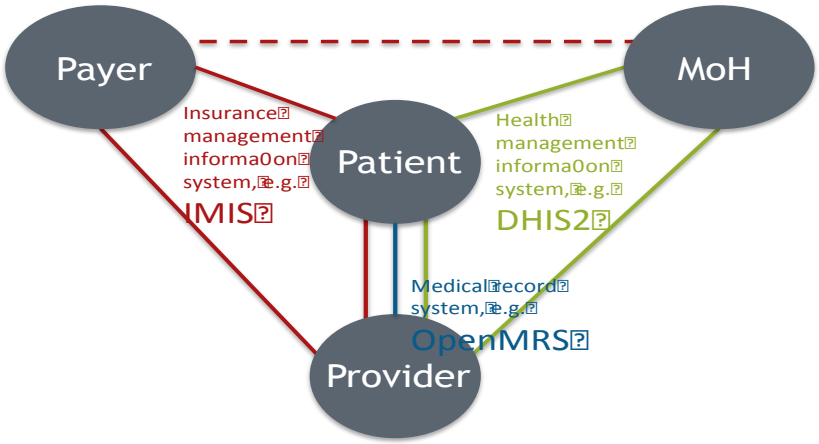
Key Issues / Challenges

- **Lack of information/standardization**: pre-existing mandatory information expected to configuration the system
- **Limited onsite support:** pilot implementation based on consultation missions without local technical coordination
- **Infrastructure and IT challenges :** internet instability
- **Identifying the knowledge house:** IMIS administrator should have a good knowledge of the insurance scheme in order to configure the système
- **The tussel for access to data:** confusion on accessing data by external actors



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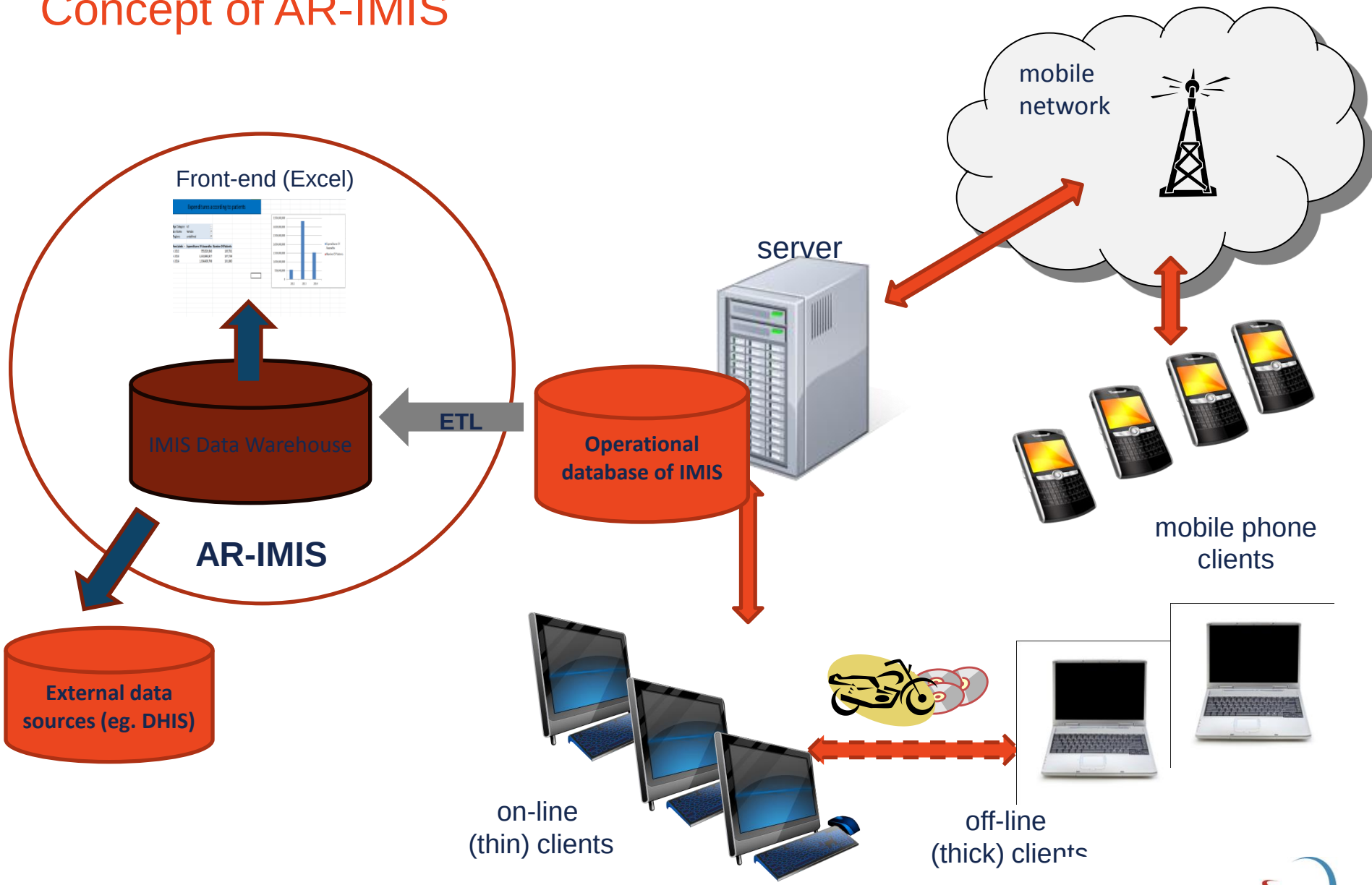
Concept of AR-IMIS



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Lessons Learned

- Applying a online based ICT solution in a remote area within a micro-insurance system is practical
- It takes time to install and encode due to internet instabilities, needs of IT training, process adaptation
- Important to explain the tool and methodology involving all stakeholders at the feasibility study stage including health facilities staff, social protection agency and health authorities.
- IMIS improves claim validation processes : effect on insurance scheme sustainability, better relation with health facilities, increasing trust both for health facilities and insured population => increase enrolment rate, in line with Universal Health Coverage
- Scaling up : network of mutuelles expressed their willingness to extend to 22 mutuelles in South Kivu (5 were piloted)
- Sustainability issues : need the frame of a long term project implementation, financial support to launch the system, lake of capacity in some mutuelles, adequate implementation of offline and online components according to internet availability
  - Recommendations done:
    - Define the most stable access to internet (use of mobile phone offline apps)
    - Capacity building for mutuelle
    - Strengthen institutional frame work

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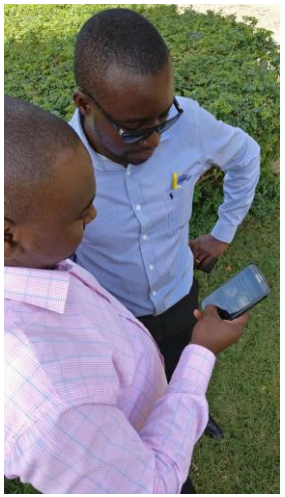
Conclusion

What do we need for IMIS:

- Defining installation modality, preferably online system
- Appropriate human resources : at least a system administrator, a medical doctor and enrollment and claim encoder(s)
- Long term project commitment, local technical coordinator to coordinate implementation



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Questions?

THANK YOU FOR YOUR ATTENTION

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