Implementing openIMIS: Experiences from the Toumaï community in 2021

WELCOME

Welcome to the first collection of articles created through the online community of openIMIS users. This journal brings together articles exploring key subjects for those considering, or already using, the openIMIS software including: implementation processes, risk management considerations, the potential for interoperability with parallel platforms, and avenues for financing. They are drawn from the knowledge and experiences of openIMIS users, known collectively as the Toumaï community.

Toumaï means 'hope of life' in several languages used across Central Africa. It is often given as a name to newborn babies in the desert areas of Chad and Niger to bring good luck in periods of extreme heat. As the name given to the openIMIS community of users, it represents the group's ambition to promote universal access to healthcare coverage through this newly formed technology.

The openIMIS technology plays a crucial role in the administration of vast quantities of information needed to manage social protection schemes. The Toumaï community is responsible for providing information and support to health finance schemes – across a number of French-speaking countries – as they prepare for, implement, and begin operating the software. The community also provides a platform for shared learning between representatives of insurance plans from various countries. The Toumaï community is supported by the global openIMIS initiative, which provides technical and institutional support.

We hope the Toumaï community will continue to be a catalyst for realizing the wider uptake of openIMIS across Francophone countries and beyond, helping to build efficient and effective health insurance systems for everyone.

INTRODUCING openIMIS

The openIMIS software powers the health and social protection services that support millions of people around the world, by supporting healthcare insurance schemes to provide rapid, responsive, accurate, and fair services to their beneficiaries.

openIMIS enables healthcare and social protection providers to manage all aspects of their schemes including: registering members, storing beneficiary information, managing policies, submitting claims, and tracking outcomes. Initially developed for use in low- and middle-income countries, it has since been modified to suit health insurance and social protection schemes in all circumstances. The following are some of the key characteristics of openIMIS:

Free and Open-Source

Unlike commercial software packages that charge expensive license fees, openIMIS is completely free to use by any scheme, operating at any scale. The code itself is published as open-source, which means it can be adapted, built-upon, and shared without restrictions.

Community of Practice

At the heart of openIMIS is a vibrant community of users, partners, health insurance managers, developers, and academic institutions. This is a highly-active and very engaged community of practice that shares a commitment and passion for improving social protection systems. They meet every two weeks to share learning, exchange experiences, and support one another.

- 100% free to use
- Adapts to different schemes & locations
- Interoperable with other software
- Nurtured by a community of users
- Open-source code
- Conforms to international data standards

openIMIS

Communauté openIMIS
Toumaï

Advantages and Opportunities

The advantages of openIMIS include:

Open access. The source code for openIMIS is published openly for anyone to modify or adapt according to their specific needs. This encourages innovation and collaboration between developers; helping to drive rapid evolution and address emerging issues. This is a royalty free software, with an GNU AGPL v3 license, making it available for use by health insurance providers in even the poorest countries.

Paper-free processing. Healthcare insurance schemes rely on streamlined archiving and document-sharing processes to ensure efficient and effective membership and claims management. The openIMIS software allows for the creation of entirely digital healthcare insurance schemes, accessible remotely.

Secure personal data. Members can access their personal records stored on openIMIS, which helps to increase transparency and improve the performance of the healthcare service.

Streamlined management. From the initial registration of those eligible for social security healthcare through to membership renewal and beyond, openIMIS is there at every step to increase the effectiveness and efficiency of the healthcare scheme. Key features include:

- Individual beneficiaries can be dynamically linked (with family members or employers) helping to manage bespoke insurance schemes such as employee healthcare benefits.
- Photographs of beneficiaries can be taken using the mobile app, transmitted to the main database, and linked with a membership file.
- QR codes create unique links between membership cards and beneficiary accounts.
- Contributions are recorded directly in the openIMIS system providing beneficiaries with payment receipts and updated information on their benefits.
- Medical services and medicines provided to beneficiaries are recorded within openIMIS, thereby initiating a claim process and triggering a reimbursement request to the insurer.

- openIMIS includes predefined criteria to review claims submitted and deploys artificial intelligence to quickly and accurately verify applications that pass initial checks.

Challenges and Limitations

The openIMIS software was created to support healthcare systems in developing countries, however, a lack of adequate infrastructure can cause some challenges. The following are particularly important areas for consideration:

Internet access. openIMIS can be operated offline but must be brought online regularly to synchronize with, and relay data to, the server. In response, some schemes have opted to use the mobile version of openIMIS (using tablets and smartphones) for key processes including membership registration, data access, and claim submission.

Electricity supply. A reliable power source is crucial when running openIMIS on desktop computers and laptops. Using generators and power banks for mobile devices has helped to alleviate this issue for some service providers.

Technical know-how. Healthcare staff and administrators need support and training in using openIMIS to ensure optimal performance and maximum efficiency. Training programmes that include regular refresher training, together with user manuals and ongoing technical support (in-person, virtual or by telephone), help to ensure gaps in technical knowledge are quickly addressed.

openIMIS

Communauté openIMIS
Toumaï

EXPERIENCES FROM TOUMAÏ

The following guidance and practical advice for implementing the openIMIS software comes from the direct experiences of the Toumaï Community.

Planning and Preparations

When undertaking feasibility-scoping and early planning, the following key factors will help determine whether the circumstances are conducive for a successful implementation of openIMIS.

- Enabling environment for open-source. Many governments are reluctant to embrace technologies that use open-source software. Feasibility studies should consider any potential barriers to adopting open-source approaches. Project teams are encouraged to work with government agencies to address their concerns and gain support.

- Data-hosting. Many countries lack the capacity to host citizen data on secure servers. Nevertheless, many have enacted data-ownership policies that prevent the hosting of government/citizen data outside their territories. It may be necessary to host data on secure servers overseas, particularly during the implementation phase, so decisions around data-hosting need to be addressed from the outset.

- Demonstrable need. The value and necessity of an information management system needs to be understood, at all levels within implementing organization(s), for openIMIS to achieve maximum impact. Engagement and buy-in from management and staff are crucial at the implementation stage.

- User manual. A complete and up-to-date manual of procedures and specifications for the health insurance product is required, including clearly defined roles for all stakeholders. This level of clarity is vital to ensure a well-configured and widely adopted implementation of the software.

- Capacity and training. Key staff will require training in the operation and management of the software at the implementation stage. In addition, one or more dedicated administrators will be needed to manage access and input data on an

ongoing basis. It is crucial to ensure that more than one member of staff is trained and familiar with the platform, to ensure access and use is not interrupted at any time.

- Computer equipment. Implementation of openIMIS requires one dedicated computer terminal for technical management (recording operations related to health insurance benefits, generation of public health indicators, monitoring and evaluation, etc.) and another computer terminal for administrative tasks including data input and management. In circumstances where the computer terminals used also operate significant software packages (e.g. DHIS2, EMR, Sage), an evaluation of capacity will be required. Additional desktop computers, laptops, tablets or smartphones are also necessary for offline operations, see below for minimum specifications.

- Technical infrastructure. Careful consideration needs to be given to the necessary technical infrastructure surrounding an implementation of openIMIS. Requirements include:
    - ❖ A reliable electricity supply
    - ❖ A stable internet connection to input transactions online and download entries made offline
    - ❖ A mobile network coverage for communication between users (e.g. WhatsApp groups) particularly during blockages and internet outages

- Financial security. A sufficient operating budget, encompassing the overall structure using openIMIS, is essential. Ideally this will provide guaranteed funding for the initiative for a minimum of three years, allowing time for staff training, software implementation, monitoring and evaluation. Furthermore, where possible, the budget should allow for the payment of 'motivation bonuses' for users of the application, particularly during the early stages of implementation where efficiency gains are less visible or measurable.

Roles and Responsibilities

The stakeholders and actors surrounding the implementation of openIMIS will have various roles and responsibilities, as follows:

openIMIS

Communauté openIMIS
Toumaï

Government

- Ensuring the legislative environment is supportive of open-source applications and data-hosting.
- Allocating human resources within public structures using openIMIS.
- Maintaining interoperability of openIMIS with other software used at the national level.
- Providing the necessary equipment and infrastructure.

Insurance provider

- Allocating sufficient staff with the necessary skills to implement openIMIS, support, and manage users. A team of four people is recommended: IT specialist, risk assessor (with background in insurance and/or health finance), medical advisor, and monitoring and evaluation specialist.

National healthcare system/provider

- Dedicate a minimum of two staff members (per system) to operate openIMIS, plus hardware and infrastructure (i.e. computer, smartphones, electricity, internet).

Technical and financial partner

- Monitor the quality of responses provided by the system, and assess the suitability of these responses against the needs of the system.
- Provide financial support for equipment, training, accommodation, operating costs.

openIMIS

Communauté openIMIS
Toumaï

Developing a standard operating procedure

The key considerations, for principle actors and key stakeholders, to consider when defining the processes and developing a standard operating procedure (SOP) relate to the characteristics of the insurance product. These include the medical cover provided, prices, membership enrolment, contribution terms, services, co-payment, pricing, invoicing, management tools, etc.

Technical expertise

Optimal use of the openIMIS software requires specialized technical support during all stages of the implementation and throughout its operation. This will help to achieve maximum impact for the healthcare system. The technical support and expertise required is likely to include:

- In-depth initial training. Successful training programmes will need to ensure high-quality trainers and guest speakers, a carefully balanced training schedule, appropriate pedagogy, manageable trainee group sizes, sufficient infrastructure (training spaces, electricity, computer access, etc.), and appropriate teaching materials.
- Logs & record-keeping. Once established, openIMIS systems should incorporate a log book (physical or digital) to record usage, technical issues, challenges, and resolutions.
- Meetings and check-ups. Regular meetings should be scheduled for key staff to update and check-in with the technical support team. Proactive check-in sessions help to flag technical or operational issues early and ensure rapid resolution.
- Ongoing training. Regular refresher training sessions for all key staff, and training programmes for new recruits, are essential to ensure optimal use of the system throughout.
- Community support. Social media platforms (e.g. Facebook or WhatsApp) are a fast and effective way for users to share experiences and improve their own practice.

Enrolling beneficiaries

QR (quick response) codes are used to identify individuals enrolled into insurance programmes supported by openIMIS. Each user is assigned a unique number which is printed as a QR code on their membership card, at the point of enrolment. QR codes can be read by the enrolment officer or health facility staff using the openIMIS mobile app, saving time and reducing opportunities for errors. There are currently two approaches to providing membership cards to beneficiaries:

Pre-printed cards. Enrolment agents are provided membership cards with pre-printed QR codes. Beneficiary information is input into the openIMIS platform at point of enrolment – linking the member to the card and QR code – and the membership card is given to the beneficiary. This approach is fast and efficient, however, it is highly dependent on honest and professional enrolment agents.

Bespoke cards. Enrolment agents input the beneficiary information onto the openIMIS system, which generates a bespoke membership card and QR code. The cards are then posted/delivered to the members. Producing electronic cards (using chips rather than QR codes) is also possible when generating bespoke cards, however, there are significant cost implications. The bespoke approach is reliable – creating a card and code at the point of enrolment – but it takes longer for beneficiaries to receive their cards.

Hardware specifications

Minimum requirements for desktop and laptop:
Windows Server 2016
2 core CPU
8 GB RAM
100 GB Hard drive

Minimum requirements for smartphone or tablet:
Android 9
Processor 64 bit Quad core (Minimum A53, 1.0GHz)
512MB RAM
2GB storage

openIMIS

Communauté openIMIS
Toumaï

IMPLEMENTATION REQUIREMENTS

The following are some key requirements necessary for a successful and effective implementation of the openIMIS software.

Expert assessments

It is strongly recommended that experts in social protection IT systems are consulted prior to implementation of the software, to assist with feasibility and scalability assessments. Expertise from openIMIS is also freely accessible, to anyone using the software, through the online community and support services.

User analysis

It is important to fully understand roles and needs of target users (staff and administrators) of the system into which the openIMIS software will be integrated, including the necessary access rights at all levels.

Complimentary software

openIMIS automates the management of healthcare insurance systems through the computerization of data and processes. While it can accomplish key stages in the development of a computerized system, additional data-collection and analysis tools are required to realize a fully computerized management process.

Communication strategy

A carefully calibrated marketing and awareness-raising strategy needs to be in place prior to implementation. This strategy will need to consider what information beneficiaries require (e.g. policy cover, pricing, claims procedures) and how best to disseminate that information.

Common terms

It is critical to identify and resolve any differences in the terminology used by the openIMIS software and the organization/system itself. Failure to reach common terms across platforms and organizations can result in confusion and inefficiencies.

INTEROPERABILITY

A community of software developers and organizations from around the world are working together to create a vibrant ecosystem of 'digital public goods' to support the health, finance, and education sectors, among others.

The term digital public goods refers to "open source software, open data, open AI models, open standards and open content that adhere to privacy and other applicable laws and best practices, do no harm, and help attain the SDGs," according to the definition endorsed by the UN Secretary-General (Roadmap for Digital Cooperation, Report of the Secretary-General, 2020).

In the healthcare sector, a growing suite of open-source software packages has been developed with support from GIZ, World Bank, USAID, and others, to strengthen and improve healthcare services around the world. These distinct and autonomous digital technologies can be linked together and configured to rapidly exchange data between platforms, helping to streamline critical processes and avoid errors in data management. This ability for different applications to communicate and exchange information with one another is known as 'interoperability'.

Streamlining and Safeguarding Data Transfers

The component parts of any healthcare system rely on the exchange of information such as patient medical records, test results and immunization statuses. The manual transfer of information – printing records and typing the data into another system – is very time-consuming and creates numerous opportunities for human error to corrupt the dataset. A simple mistake in the data-entry process can break the link between a patient identifier and their records, leading to delays in providing healthcare or settling insurance claims. The manual transfer of data is inherently less reliable, cost ineffective, and error-prone. By contrast, transferring data between interoperable systems is fast, reliable, and cost-effective. Digital technologies that share common standards (rules governing language and data structure) can instantly transfer critical information between one another, ensuring records remain accurate and up-to-data across all parts of the healthcare system.

Interoperability with openIMIS

There are several digital public goods operating across the healthcare sector that are interoperable with openIMIS, including DHIS2 (the world's largest health information management system, founded in post-Apartheid South Africa) and OpenMRS (an open-source electronic medical record technology created by a global community of developers). For example, OpenMRS can send a hospital bill directly to openIMIS for an insurance claim to be processed and the results can then be returned directly to the hospital. Such direct links between different parts of the system helps to streamline the claims management process, thereby saving hospitals and administrators time and money.

Mediating Data Transfers

The mediation of data flows between different software packages is critically important to achieving interoperability. The Health Information Exchange Initiative (OpenHIE) defines a blueprint for national digital health information systems built from the growing ecosystem of free and open-source healthcare technologies. It specifies how software components communicate through common standards to establish shared workflows, data structures, and vocabularies.

The standardized framework used by open-source healthcare technologies is the HL7 standard for Fast Healthcare Interoperability Resources. The FHIR standards gained significant momentum as a result of the Affordable Care Act in the USA, which requires hospitals to exchange data with the health financing authorities.

Information mediators (based on software such as OpenHIM) sit within this interoperability layer, processing the data exchanges between systems to avoid software packages having to directly connect, which would introduce unnecessary complexity into the process.

Integration

Establishing any new implementation of openIMIS will require the transfer of data (for example, migrating patient records from a hospital database to openIMIS) whether or not the system takes advantage of the software's potential interoperability with other platforms.

Some users of openIMIS have adopted an 'integration' approach to data transfer that involves downloading information in a particular format (e.g. Excel spreadsheet) and importing this directly. This approach can work, however, it requires the development of bespoke adaptors (to manage the import and data-sorting) to ensure each report is generated in the correct format and discrepancies (e.g. US vs European date formats) are managed.

Economic Advantages

Interoperability brings significant economic and time-saving opportunities to organizations and institutions working across healthcare, in particular those serving developing countries. The economic advantages of adopting an open-source and interoperable system include:

- The speed and accuracy of exchanging data avoids costs of manual data-entry and dramatically minimizes the potential for introducing errors into datasets.
- Interoperable systems avoid the need for hybrid data-transfer solutions on a case-by-case basis (integration), with potentially expensive and time-consuming workflows.
- Open-source software is totally free to use and adapt.
- The global community of developers and users is highly supportive and responsive to the challenges that may arise, avoiding the need for expensive technical support arrangements.

For countries in the global south, there really isn't a viable alternative to open-source software given the costs involved with licensing and managing commercial software. Nevertheless, interoperability is never an off-the-shelf option.

Every implementation of openIMIS that interconnects with other software platforms will require investment and significant work to ensure the frameworks and standards are adapted for each specific scenario. Implementers can hit the ground running, however, by profiting from the pre-built adapters that come with openIMIS.

openIMIS

Communauté openIMIS
Toumaï

FEASIBILITY ASSESSMENTS

Implementation of openIMIS is likely to be successful in countries and contexts where a social protection scheme is in place and functioning well. Nevertheless, careful analysis of the particular circumstances is important, prior to any implementation of the technology.

This analysis should follow a series of key steps, which will help to ensure the conclusions reached are informative for decision-makers and positively influence the shape of the scheme.

STEP ONE: Review laws and regulations

The first step in a feasibility assessment should be a careful review of the relevant laws and regulations in the country (both national and local) that may restrict, or otherwise affect, the use of openIMIS. Laws that relate to data-hosting and the security of electricity supply may be of particular relevance.

STEP TWO: Research similar implementations

The next step is to research systems operating in the same (or comparable) country and circumstances. Understanding how other systems operate, how they were implemented, and the management structures in place, will provide important information to shape future decision-making. Learning lessons from past and current systems will help save resources in the long-term and reduce the risk of failure.

STEP THREE: Map social protection systems

Having established a clear understanding of the legal/regulatory landscape and learned key lessons from similar operations, the next step is to conduct a careful analysis of the social protection systems in place. This analysis should seek to understand the needs of the existing system (from an information management perspective) and any opportunities these might present. This will typically involve mapping the overall information ecosystem. The map should show the various organizations operating within the wider ecosystem and their specific roles, the interactions between different parts of the system, and the types of

information shared between different systems and entities. It is also critical to understand and map the particular conditions and rules for the implementation including organizational, political and financial rules.

STEP FOUR: Identify information gaps

Having fully mapped the social protection systems, the next step will be to overlay or combine the various business processes to be covered by openIMIS. This will help to identify any information gaps that might require modifications to the software, for example translating the software into additional languages or building new functionality. Once complete, it will be possible to draft a complete description of the structures required to manage the social protection scheme.

The steps described above will help to inform key decisions related to the structure, scope, and likely costs for the planned implementation. The openIMIS initiative can provide additional relevant information that might contribute towards building a clear understanding of the software and how it can be an effective and efficient solution to improve healthcare systems, including experiences from previous implementations. The openIMIS team can also provide evaluation grids that will help to assess the costs for an implementation, and can provide useful information on financial support available from various sources.

openIMIS

Communauté openIMIS
Toumai

FINANCING OPPORTUNITIES

Information Communication Technologies (ICTs) help health financing and social protection scheme operators to improve the efficiency of their business processes. The use of ICTs enables highly complex business processes – such as beneficiary management, service provision tracking, and claims management – to run effectively and efficiently, even in the most resource-constrained settings.

Successful implementation of openIMIS requires financial planning from the outset to ensure sufficient resources are available to support each stage. Securing the necessary long-term funding should be an integral part of the core design process, whilst careful financial planning from the outset will not only ensure the sustainability of the ICT system itself, but will also play a significant role towards ensuring the long-term viability of the scheme.

Potential sources for financial support include development banks, bilateral donors, trusts and foundations. Many current users of openIMIS have secured funding for the initial costs from German, Swiss, or Belgian bilateral cooperation, as well as through various foundations. Development banks are also likely to be very supportive of scheme operators looking to implement openIMIS, which is a well-established platform and recognised digital public good, typically in the form of development loans.

In addition to these funding sources, a mechanism to support scheme operators with these initial funding requirements has been established by the openIMIS initiative. This mechanism is known as the Catalytic Implementation Fund.

Catalytic Implementation Fund

The German Federal Ministry for Economic Cooperation and Development (BMZ) and the Swiss Department for Development and Cooperation (SDC) established the openIMIS Catalytic Implementation Fund (CIF) as a complimentary investment programme to assist operators in deploying or extending the software across their social protection schemes. As the name suggests, the fund is intended as a catalyst; a start-up financial support package to lower the entry barrier for scheme operators. The use of the Catalytic Implementation Fund requires robust sustainability measures or the continued use of openIMIS, beyond the period of support provided under the CIF.

The CIF assists operators to implement openIMIS and facilitates growth of the initiative beyond the implementation phase. It provides support for building sustainable management information systems that adapt to changing needs, integrate with parallel software solutions, and offer opportunities for growth beyond the initial target groups. The fund is not intended to provide continuous, long-term financial backing and scheme operators are expected to develop a sustainable funding plan for their continued use of the software.

Eligibility and assessment criteria

Health and other social protection scheme operators based in countries receiving development support from either Germany or Switzerland are eligible to apply. Particular consideration is given to priority countries of either BMZ or SDC.

The form and amount of funding assistance provided is decided on a case-by-case basis. Applicants will need to undertake an implementation study and needs assessment, before presenting a clear and precise plan that includes legal and/or policy frameworks and well-defined standard operating procedures. The long-term viability of a proposed scheme is a key consideration, and system operators will need to demonstrate their ability to secure further financial support from other sources.

openIMIS

Communauté openIMIS
Toumaï

ACTUARIAL STUDIES

Health finance providers need to ensure schemes are financially sustainable. Whether the income comes directly from members, from other sources (such as government donors), or a combination of both, sufficient funding needs to be available to cover claims from beneficiaries plus administrative and operational costs.

An implementation of openIMIS will typically enhance a rich database of information, ranging from beneficiary details through to the varying costs of the scheme over time. This data is fundamental to the overall scheme management and helps to ensure effective and efficient services.

Actuarial Analysis

The information held by openIMIS also provides an invaluable dataset for actuarial studies, which use historical trends and patterns to make predictions and evaluate a scheme's financial sustainability. Actuarial studies analyze operational data to offer key insights including the current financial circumstances of a scheme and financial projections based on historical data, population trends, inflation patterns, etc. These analyses look specifically at financial aspects of a scheme and are not designed to consider other important factors, such as the quality of care.

An actuarial analysis is highly dependent on the quality and quantity of the available data, particularly in relation to the utilization of services (claims). Gathering sufficient utilization data can be particularly challenging for new and recently formed schemes, even those with a high number of beneficiaries, however this should not deter schemes from conducting actuarial analyses regularly (every few years) as even small amounts of data can reveal key trends that will inform decision-making.

Historical Data

An actuarial analysis begins by exploring historical data to answer some broad questions including, but not limited to, the following:

- How many people/families are currently enrolled?

- How long have the current members been part of the scheme?
- What are the demographic and socio-economic characteristics (gender, age, geography, etc.) of the population covered by the scheme?
- What amounts have been reimbursed on average (per family/person) within the coverage period?
- What were the demographic and socio-economic characteristics of the beneficiaries for whom claims were made? Can claims be classified according to these characteristics?
- What are the administrative costs to the scheme operator?

Once gathered, the historical data provides the basis for specific analysis into, among others, the following areas:

Exposure analysis

Beneficiary data is analyzed to understand the scheme's 'level of exposure' to providing cover for beneficiaries over the course of one year. The level of exposure is not based solely on the number of beneficiaries enrolled at any time, but considers other factors including the length of time that beneficiaries have been enrolled. For example, if a beneficiary was enrolled half-way through the year, their contribution to the exposure is just 0.5. The exposure analysis also stratifies the data into various demographic aspects such as age and gender.

Claims analysis

In the claims analysis process, data from individual claims is analyzed to understand the incidence of claims, as well as the average costs per claim. This analysis includes various groupings and stratifications based on age, location, and gender of beneficiaries, as well as other health-related factors such as standard diagnoses.

Additional analysis based on the exposure and claims is also conducted to understand the relationship between the contribution collection during enrolment, funding available from other sources, and the costs of claims. This analysis is geared towards answering a

openIMIS

Communauté openIMIS
Toumaï

central question: does the scheme operator have sufficient financial resources to pay the claims submitted?

Projecting Future Costs

Findings from the analysis of historical data are combined with broader economic and health-related data to form the second part of the actuarial analysis. This stage is focused on generating a model for predicting future income and expenditure that supports decision- and policy-making; helping to ensure the long-term sustainability of the scheme. The projection model generally seeks to answer questions such as:

- What is the mix of beneficiaries likely to be in the future (age, gender, etc)?
- How are claim costs likely to increase?
- How are administrative costs likely to increase?
- What impact would increasing costs have on contributions and/or subsidies?

A projection model generally takes historic data as the 'base year' data and projects the future scenarios as a change in that base data. While designing the projection models, additional data sources are very important, especially in the context of low- and middle- income countries where many underlying factors are changing rapidly. Population data (based on census as well as other sources) that accurately estimates migration rates are important in ascertaining the future exposure of the scheme. Similarly, data derived from the wider healthcare system, indicating the changing burden of disease patterns in the country, are also addressed and included in the prediction model. Following the development of a prediction model, actuarial studies stress-test the models to understand the effect and extent of each factor on the financial sustainability of the health financing scheme.

A full actuarial study that includes an analysis of historic beneficiary, claims, and administrative cost data, together with a stress-tested projection model to predict the costs of the future, will help policy-makers to take decisions that ensures the sustainability of the scheme over time.

LOOKING FORWARD

The Toumaï community managed to implement a wide range of activities in 2021, in spite of the many challenges presented by the COVID-19 pandemic. As we move forward into 2022, the community is intent on further increasing the uptake of openIMIS by scheme operators around the world, and improving the implementation of the software in all instances.

Two key approaches underpin the strategy for 2022: 1) improve coordination across the online community, responding to the specific needs of members; and 2) strengthen in-country teams, building their capacity to improve implementation and encourage wider uptake. In particular, the community will focus attention on achieving the following key actions:

Fostering Localized Knowledge Management and Sharing

The careful curation of local experiences and knowledge – drawn from across the many countries and locations implementing openIMIS – will enable the community to build new and context-specific solutions to the challenges encountered. Operators will then be able to take into account, and respond to, the prior experiences of others in the community when developing and implementing their own systems. The knowledge gathered will be curated and shared across countries and communities to improve the overall use of the openIMIS technology for social protection.

Community and Capacity-Building

Improving the uptake of openIMIS will be achieved through the further strengthening of the Toumaï community. Capacity-building activities will provide members with updated information on the software, build their skills in implementing and adapting to local needs, and foster the community and culture of knowledge-sharing. The process will also help to develop a better understanding of the overall environment into which the software is being implemented, and the impact/influence of openIMIS in each circumstance. Members will also be supported to further promote and encourage the uptake of openIMIS by schemes and operators nationally and regionally.

We look forward to developing the Toumaï community and the openIMIS platform further over the coming years and to sharing these experiences with the wider world.

Implementing openIMIS: Experiences from the Toumaï community in 2021

Written by the Toumaï Community of openIMIS

English version edited by Gareth Benest

French version edited by Patricia Lane

April 2022