IMPLEMENTING AND SCALING IHRIS IN THE DEMOCRATIC REPUBLIC OF CONGO

Background and Purpose

The Integrated Human Resource Information System (iHRIS) is an open-source software designed to improve healthcare workforce management, planning, and oversight. Developed with support from USAID and technical contributions from platforms like Ultra Health and the WHO, iHRIS provides scalable solutions for governments, particularly in under-resourced settings. IMA World Health piloted iHRIS in the Democratic Republic of Congo (DRC) through the UK-funded Access to Primary Health Care (ASSP, 2013) project, initially in Kasai and Kasai Central, to centralise workforce data, identify skills shortages, and enhance human resources for health efficiency.

The DRC has been plagued by chronic challenges to effective health workforce management. These challenges include poor provider performance, unfair and unequal compensation, an increase in the number of "ghost" workers on state payroll, an uneven distribution of human resources for health (HRH) across health zones and health facilities, and confusing (and, in some instances, corrupt) hiring authorities and practices. The exact size of the country's health workforce remains unknown and the Government of DRC's (GoDRC) efforts to recruit and hire qualified personnel in proportion to the facilities they serve have proven largely ineffective. Moreover, existing information systems are incapable of providing accurate information related to the health workforce, including employment status, attendance, training and development, and attrition. The failure of HRH systems is driven by obsolete data systems.

Health worker strikes are frequent—leading to major disruptions in service delivery—while investments in health workers' training, including performance-based incentives, have not had the desired impact on health outcomes. To align with national priorities that improve the quality of care and move towards universal health coverage, the SEMI project continued to build on progress and lessons learned in Kasai province under the previous UK-aid funded interventions that began with the ASSP project and the ASSR (Appui au Système de Santé en RDC (Support for Health Systems in DRC)) (2019 - 2022) projects.

Functionality and Impact

iHRIS enables real-time workforce tracking, career management, and decision-making support. Key features include:

- **Workforce Tracking:** Visibility over professional categories, skills, and geographic allocation of health workers.
- **Career Management and Training:** Documentation of employee progression and training courses completed to identify skill gaps and tailor educational interventions.
- **Decision Support**: Reliable workforce data allows policymakers to respond to health crises efficiently by deploying available resources and monitoring capacity.
- **Customisable Open-Source Platform:** the platform is adaptable to DRC's specific governance and healthcare needs without additional costs.

IMA World Health's Legacy: A Decade of iHRIS Implementation

Over 10 years, IMA World Health has expanded iHRIS through three consecutive UK-funded projects—ASSP, ASSR, and SEMI:

- **ASSP:** Established the foundational database and infrastructure investments at the local level.
- **ASSR:** Focused on data quality, systematic audits, and time sheet management. There was a tremendous effort to reduce "ghost" workers, or employees on state payroll who had either retired, passed away, or left the profession without being removed from state employment records.
- **SEMI:** Introduced continuous training modules in the iHRIS system for capacity building. This was the next step in more fully understanding the imbalance of skills and gaps across the province. When decision makers know where they have plethoric staffing they can more rationally reassign workers to meet the needs of the population.

Since its launch, iHRIS has been integrated across 12 of DRC's 26 provinces. Despite limited government and partner support, pilot programmes in Kasai and Kasai Central demonstrated its effectiveness. For example, workforce audits in Kasai uncovered over 3,000 ghost workers, saving the government $720,000 USD annually. Similar payroll optimisations in Haut-Lomami and Sud-Kivu resulted in combined annual savings of $1.7 million USD.

The SEMI project supported Kasai province to focus on using iHRIS for workforce rationalization. Understanding where gaps in provider expertise exists around the province empowers the Provincial Health Office (DPS) to redeploy human resources and better meet the needs of the populations. Continuing education is also highly important for maintaining a skilled healthcare provider base and is unfortunately poorly tracked in the DRC. To address this challenge, the SEMI team worked towards customization of an iHRIS module dedicated to on-the-job training for healthcare providers, focusing on the development and collection of essential on-the-job training data.

The SEMI project successfully:

1. Supported Kasai province to produce its 6th human resources directory, detailing the province's workforce of 6,446 agents and identifying 65.7% as health professionals and 34.2% administrative staff. The directory also includes a tool for calculating performance bonuses for health zone data managers and provincial human resources management structures, offering systematic incentives that directly relate to verified improved performance.
2. Supported the Kasai DPS to complete its Provincial Human Resources Development Plan (PPDRHS) using iHRIS software, which was finalized and validated by the Ministry of Health's Technical Health Steering Committee (January 2023). The plan outlines objectives, strategic orientations, and actions for human resource development from 2023 to 2027. The SEMI provincial team worked with the 18 health zones to implement a human resource problem-solving plan based on the PPDRHS, ensuring effective workforce management in the region.
3. The SEMI team released the iHRIS reporting module, which calculates the cost of performance bonuses for data managers in health zones, the DPS, and the IPS using iHRIS data for decision-making. The calculation considers data delivery completeness, internal completeness of performance data, and internal completeness of career data. Delivery completeness measures the accuracy of providers delivery data at point of care, internal completeness verifies the exhaustiveness and accuracy of performance data, and internal completeness of career data verifies the quality of career data.

Dr. Albert and his team attended SEMI-led capacity building trainings, reinforcing their ability to manage data and deliver services to the populations relying on them.

Scaling iHRIS Nationwide

A full-scale iHRIS implementation could:

- Ensure equitable distribution of healthcare workers in facilities, in balance with population needs.
- Optimise workforce budgeting and planning to avoid deficits and more economically manage healthcare.
- Align training with actual workforce demands by integrating iHRIS with medical and nursing schools. This is critical for ensuring alignment between educational and medical structures.

"Today, in this province [Kasai], we have data on all personnel. We know which skills need to be mobilised for a given health event." **— Dr. Jean Robert Likofata, Health Workforce Senior Advisor, SEMI Project**

Challenges

- **Infrastructure Deficits:** Investments in internet connectivity, VSAT systems, solar power, and computer equipment are needed to promote consistent iHRIS use.
- **Capacity Building:** Continuous training for HR managers, IT developers, and stakeholders is essential to keep iHRIS up to date.
- **Government Commitment:** While iHRIS has been included in the 2024 state budget, long-term funding and institutional prioritisation are critical for sustainability.

Recommendations

Implement iHRIS training at more levels of the health and educational systems: This module would provide workforce data on teachers and students, helping align training programmes with national needs. In Kasai, SEMI's human resources directory informed decisions to phase out oversupplied training programmes while expanding underrepresented fields like midwifery and laboratory technology.

"If we have good, reliable data on the numbers of health workers, we can guide institutions on training needs. Maybe we don't need to train 200 professionals in an already saturated field, but we can see where nurses are more critically needed and fill those needs." **— Dr. Jean Robert Likofata**

Vision for the Future

If fully operationalized at all levels of the health system, iHRIS could revolutionise healthcare access in DRC, enabling data-driven decisions for workforce distribution, crisis response, and resource optimisation. With continued government and international support, iHRIS could serve as a model for human resource management in other low-resource settings.

Mbale Belanga, head maternity nurse at Bolonga Health Center, poses with Mbaka Bampembe and Baby Jema. Mbale was in the right place at the right time, equipped with the skills he needed to safely deliver baby Jema, underscoring the need to ensure rational staffing across all health facilities.

Services Essentiels de Santé Maternelle et Infantile en RDC

SEMI

UKaid from the British people

IMA WORLD HEALTH

SANRU