The West Africa Ebola Outbreak originated in Guinea in February 2014. Crippling the country’s health system, the virus spread rapidly, claiming over 2,500 lives, including at least 100 health workers. The Ministry of Health in Guinea is now focused on recovering and rebuilding its health system, and officials are prioritizing stronger, more resilient health information systems.

IntraHealth International is working with the ministry to implement iHRIS—an open source data management software that helps countries track and manage their health workforce data—and mHero—a mobile phone communication system that uses health worker contact information from iHRIS. These tools will allow ministry officials to know more about their health workforce: who they are, where they are located, and how they can be supported.

Health systems are vital to ensuring health services reach everyone—people living in urban centers and those living in the last mile. Timely health workforce data, whether it covers details about health workers or the services they are providing, is one of the core building blocks of health systems. When used correctly, this information has the power to help governments identify and monitor gaps or deficiencies in services. Health workforce data is especially important during a health crisis like West Africa’s Ebola outbreak, because lack of information—and weak systems creating and supporting that information—greatly contributed to the rapid spread of the disease.

To be used effectively, health information systems should be a government priority. This takes strategic leadership and often internal champions advocating for health information system use. Officials in Guinea are on this track.

The Ministry of Health, in particular the Bureau of Strategy and Development, and its partners—including MEASURE Evaluation, the European
Union, RTI, eHealth Africa, Catholic Relief Services, Management Sciences for Health, UNICEF, Jhpeigo, and IntraHealth—make up the Health Information System Working Group which is developing the National Health Information System Strategic Plan for creating a strong health information system at the national and subnational level. The Ministry of Health highlights DHIS 2—an open source information system that captures data on health services and facilities—as the central component of its health information system with iHRIS, mHero, and the new health worker registry as important complementary systems.

ESTABLISHING THE HEALTH WORKER REGISTRY

As part of the development of the National Health Information System, the ministry established a subtechnical working group to oversee the development of iHRIS and the Health Worker Registry, and appointed IntraHealth as the team leader.

Prior to the Ebola outbreak, the ministry’s Directorate of Human Resources maintained an Access database to track its health workers. The database included 5,199 records for health workers but was rarely used. With support from IntraHealth, the ministry cleaned and exported data from Access into a customized version of iHRIS Manage, the component specifically for managing health workers.

One of the technical working group’s first tasks was to develop and refine its human resources data collection form. The group shared the data collection form with the Ministry of Public Service and other professional institutions for feedback to ensure the right data was being collected. This will mark the first time the Ministry has used such a form to collect standardized information on its health workforce.

Directorate of Human Resources representatives reviewing paper-based human resources reports at the Ministry of Health in Guinea

It may sound like a small detail, but refining the data collection forms provides the roadmap for building information into systems like iHRIS. The team in Guinea designed the data collection form to document comprehensive information on health workers.

In addition, the Ministry of Health and IntraHealth are defining and standardizing health worker data sets, such as job titles, cadres, and health facilities. This is important for multiple reasons: further customizing Guinea’s iHRIS, collecting data more efficiently, strengthening data quality, and
establishing a strong base of data sources and information for the Health Worker Registry.

PRIORITIZING HEALTH WORKER DATA COLLECTION

Validating data from the Access database and collecting updated information is a critical next step to ensuring Guinea’s iHRIS reflects relevant and accurate information. To do this, the Ministry of Health, IntraHealth, and the EU’s health system strengthening project, PASA (Projet d’Appui à la Sante), are working together to design a collaborative iHRIS data collection strategy, train data collectors, and thoroughly document the process so it can be replicated throughout the country.

Data collection for iHRIS is planned at the central level and the district level in the south eastern region of Guinée Forestière and at the sub-district level in the north-central region of Mamou. We hope that these preliminary tests will provide the momentum, templates, and tools for future data collection by the Ministry and partners to complete the update of the Human Resources Information System throughout Guinea.

PLANNING mHERO

In addition to setting up the iHRIS and DHIS 2 systems, the ministry is planning to pilot mHero to communicate directly with Guinea’s frontline health workers. IntraHealth is working with the ministry to sustainably integrate mHero into regular operations to fulfill the ministry’s strategic communication and information needs. IntraHealth and the Ministry are currently identifying a vision, governance structure, and team to manage mHero that is well-integrated into the overall National Health Information System structure.

A key component to moving mHero forward is demonstrating the utility of the platform and getting full buy-in and ownership from the ministry. For many of us, new technology can be seen as too painstaking to adopt in an already busy schedule. To proactively address this challenge, IntraHealth and the ministry are working with UNICEF Guinea to build off recent data collection for routine maternal and child health service statistics and define complementary tasks mHero can carry out. mHero will also be used to support awareness raising on iHRIS data collection efforts. Other partners are being sought to support the ministry in developing “use cases” to continue to prove mHero’s worth for the ministry as the communication platform becomes integrated into the health information system.

LONG TERM SOLUTIONS

While the ministry has made significant commitment in the development of a national health information system, specific institutional challenges related to health worker information need to be addressed first.

In Guinea, the Ministry of Public Service manages the recruitment, deployment, and management of the health workforce; the Ministry of Finance supports the payment of the health workforce; and the Ministry of Education manages training health workers. While the Ministry of Health conducts quality assurance and continuing professional development of this workforce, it lacks autonomy to develop and manage the health workforce. This is seen as a major challenge.

Guinea is the only West Africa Francophone country which makes health workforce decisions from a
“Division,” which is viewed as a lower level unit than the more influential government “Direction.” In fact, the Human Resources office of the Ministry of Health is led by the Ministry of Public Service. While this is common in many ministries in Guinea, this administrative structure has proven difficult ensuring a strong and well-managed health workforce. Developing the Division of Human Resources into a Direction of Human Resources is a long-term strategic move that requires advocacy beyond the internal workings of the Ministry of Health.

Though these institutional challenges, there are strong outspoken champions within the ministry that are determined to ensure steps are taken to build a resilient health system in Guinea. As part of its support to the Ministry of Health developing and deploying iHRIS with the Health Worker Registry and mHero, IntraHealth is working with the ministry to advocate for a **Direction of Human Resources** collaboratively identifying long term solutions to these challenges.

**CONTACT**

Amanda Puckett BenDor  
Digital Health and Knowledge Management Advisor;  
mHero Global Coordinator  
apuckett@intrahealth.org

This information is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of IntraHealth International and do not necessarily reflect the views of USAID or the United States Government.