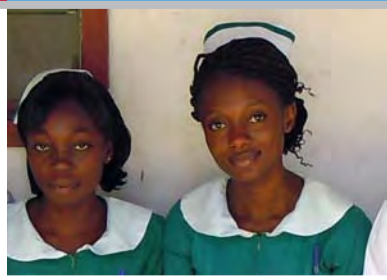
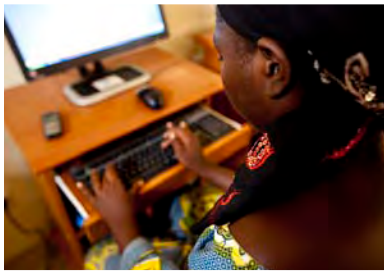
TECHNICAL BRIEF 2

CapacityPlus: Serving health workers, saving lives.

April 2012





West Africa's Regional Approach to Strengthening Health Workforce Information

Kayode Odusote, Foundation for Sustainable Health Development—Nigeria;
Carol Bales, Sarah Dwyer, and Dykki Settle, IntraHealth International

To improve the population's access to quality health care, a country needs to know how many health workers it has, what their qualifications are, where they are posted, and how many new workers are likely to join them over time. The absence of accurate, readily available health workforce information is a major impediment to effective planning and decision-making on health worker education and training, registration, deployment, and management.

A strong human resources information system (HRIS) helps health-sector leaders quickly answer the key policy questions affecting health service delivery. When quality data and effective reporting are in place, leaders can better understand the current workforce and plan for recruitment, training, and retention.

The West African Health Organization (WAHO) is implementing a regional approach to strengthening HRIS, leveraging resources from Capacity*Plus* (the USAID-funded global project uniquely focused on the health workforce needed to achieve the Millennium Development Goals), other USAID-funded projects, donors, and global organizations. This approach and Capacity*Plus*'s involvement are closely aligned with key principles of the US Government's Global Health Initiative—supporting country ownership and country-led plans, encouraging sustainability through health systems strengthening and capacity-building, and leveraging partnerships.

This technical brief provides an overview of this regional approach, highlights lessons learned, and provides recommendations for other regions and countries to adopt the approach.

Addressing West Africa's health workforce crisis

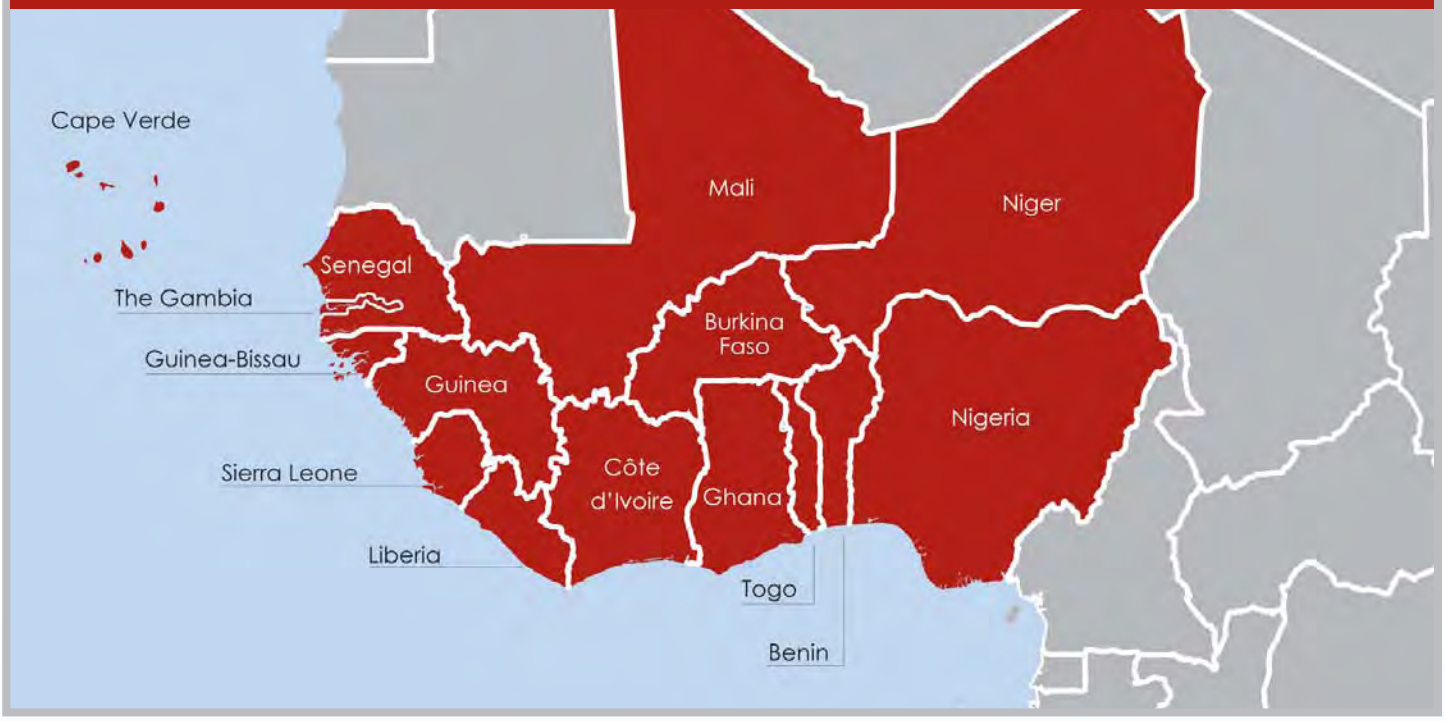
Serving all 15 countries in the Economic Community of West African States (ECOWAS), WAHO works to improve health in the region by harmonizing policies and pooling resources. Achievement of the Millennium Development Goals in the region is hindered by the health workforce crisis. The World Health Organization (2006) has cited 57 countries that do not meet the basic threshold of sufficient personnel to provide essential health care, defined as 2.3 doctors, nurses, and midwives per 1,000 people. All of the WAHO member countries (Figure 1) are among them. Simply put, there are too few health workers, and many of those who are present are inadequately educated and trained, inequitably distributed, and poorly supported.

Addressing this health workforce crisis requires reliable information on the availability and distribution of different categories of health workers. In West Africa, this information has been either inaccessible or not up-to-date. Most WAHO countries had some health workforce data linked to the Ministry of Finance's payroll database, but these did not provide the information health leaders needed in terms of availability, distribution, and skills mix. None had an HRIS that could be used for planning. Therefore WAHO sought a functional, affordable, and sustainable HRIS that could be used by all member countries and enable the regional exchange of information and aggregation of data.

USAID FROM THE AMERICAN PEOPLE

CapacityPlus Serving health workers, saving lives.

Figure 1: Member Countries of the West African Health Organization



iHRIS

The iHRIS Suite of Free, Open Source Software for the Health Workforce

iHRIS Qualify tracks health worker training, certification, and licensure.

iHRIS Manage maintains personnel deployment, performance, and attrition information.

iHRIS Plan models long-term health workforce needs.

iHRIS Retain costs retention strategies to be implemented at the district, regional, or national level.

In 2009, WAHO organized a Meeting of Directors of Human Resources Development of the Ministries of Health of the ECOWAS. Attendees agreed that the iHRIS software suite had the potential to meet current needs for HRIS in the region. Developed by the Capacity Project and now supported by Capacity*Plus* with USAID funding, iHRIS is free, open source software currently used by 12 countries around the world to track and manage health workers. There are 475,000 health worker records in the various national systems. Because the software is open source, these countries do not have to pay licensing fees and can modify it to meet their specific needs.

Fueling a regional movement

Following the 2009 meeting, WAHO partnered with the Ghana Ministry of Health to conduct a pilot of iHRIS Manage, a health workforce management information system, in Ghana's Northern Region. With only remote technical support from Capacity*Plus*, the Ministry's information technology (IT) officers customized the software. WAHO trained staff of the Human Resources Unit of the Northern Regional Health Directorate to collect and enter data and produce reports, and trained IT staff to maintain the software. In just six months, information on 2,445 health workers employed in the Northern Region was entered into the system.

Results from the Ghana pilot were presented to the directors of human resources of ECOWAS countries at a meeting in Liberia in 2010. Participants accepted the report of the pilot, which called it "a remarkable success."

The successful pilot fueled a regional movement that resulted in a high level of country buy-in and local stakeholder leadership. Through WAHO's leadership, advocacy, and support, iHRIS is now being implemented throughout Ghana and in Mali, Nigeria, Sierra Leone, and Togo. Other member countries, such as Liberia and

Making It Easier to Share Data

Regional approaches not only facilitate sharing among countries, they can support better sharing among global projects and multilateral organizations. WAHO coordinated a regional training on national health information systems given jointly by Capacity*Plus*'s iHRIS team and two "sister" open source software projects, DHIS 2 and OpenMRS.

DHIS 2 is the recognized global standard for open source disease surveillance and service statistics; OpenMRS is the most widely-adopted open source medical records system in developing countries.

Having a unique opportunity to collaborate in person, the three teams demonstrated for the first time the use of the SDMX-HD interoperability standard (supported by the World Health Organization) to share data among the systems.

This is an important step for countries to compare data such as service delivery demand (from DHIS 2) with health worker skills supply (from iHRIS). Sierra Leone offered its data as the pilot country; with its success to build on, the approach has now been implemented by joint software teams in Tanzania (Zanzibar) and Kenya, and is being extended to Botswana and Uganda.

Niger, have expressed interest in deploying the software. WAHO leads iHRIS implementation at the regional and national level, contributing funding and relying on local talent who are empowered through training and remote technical support from Capacity*Plus*.

Togo

WAHO supported the translation of iHRIS Manage into French and its customization to suit the Ministry of Health's administrative systems and processes. With funding from WAHO and the World Health Organization, the Ministry collected data on all health workers in its employ. Records on over 10,000 health workers were entered into the system. Trained IT officers of the Ministry are producing customized reports to support decision-making, such as distribution of health workers by professional category and gender.

Mali

The Ministry of Health customized the regionally-translated French version of iHRIS Manage to suit the Directorate of Human Resources. With support from WAHO and Capacity*Plus*, the Directorate piloted the software in the Sikasso district of the Sikasso region. Findings from the pilot, comprising data on over 700 health workers, showed that most of the trained skilled birth attendants were located in the primary health care (PHC) centers in the urban area. None of the PHC centers had a full complement of staff based on the country norms. The software is being rolled out to additional districts of Sikasso and will be extended to Mali's other regions and used for the daily management of health workers.

Nigeria

WAHO conducted a site survey to obtain information on the Nursing and Midwifery Council's existing paper-based information system, collected feedback from staff on the ability of iHRIS Qualify, a qualification and licensure tracking database, to meet the Council's needs, and identified challenges to implementation. The Nursing and Midwifery Council now boasts the largest iHRIS installation in the world, using a customized version of iHRIS Qualify to capture and manage information on over 240,000 nurses and midwives formerly stored in 18 manual registers.

Sierra Leone

The Ministry of Health and Sanitation is implementing iHRIS Manage to track and manage health workers. The Department of Computer Science and Engineering of the University of Dar es Salaam in Tanzania received an award from the World Health Organization to assist the Ministry with customizing and deploying the software, an example of true South-to-South collaboration.

Advantages of the regional approach

- Regionally-led implementation is less expensive and moves at a faster pace than traditional technical assistance from a global project, which usually requires more extensive travel and careful schedule planning.
- Trainings and remote support provided by a global project can be used to build regional and national capacity and empower local talent to support, customize, and implement the software.
- A growing pool of regional and local experts enables future innovation and sustainability to be done more easily at the country level.
- Countries in the region can share experiences and resources.
- Consensus among regional stakeholders ensures and enforces data and information system standards across countries in the region, so data can be aggregated at multiple levels.
- Additional funding can be mobilized locally from other donors and partners working in the region.
- Choosing an open source health workforce information system for the region avoids vendor lock-in and expensive, recurring licensing fees, and improves chances for sustainability.

How other countries and regions can adopt this approach

- Conduct a needs assessment to understand each country's current health workforce information and administrative systems and processes. Health workforce information needs are likely being addressed at a number of levels in a number of different ways. Identifying and linking these disparate activities is an important first step. Carefully consider what has already been accomplished and coordinate with other efforts in planning and taking the following steps.
- Contact the iHRIS team at hris@capacityplus.org to express interest. The team can help you get started with the software and identify organizations and donors who may be able to provide support.
- Identify an established regional body or health organization, such as WAHO, that can lead HRIS implementation at the regional and national level, provide funding, and seek technical assistance and additional resources from global projects, donors, and/or organizations.
- Formalize partnerships among local, regional, and global organizations and projects doing related work that can provide technical and/or financial support to the regional body.
- Hold high-level meetings with regional and national stakeholders, such as health workforce directors or ministers of health, to ensure ownership, create data-sharing agreements, and identify policy questions that need to be answered in reports.
- Engage stakeholders to agree on data standards prior to data collection and entry, so data can be aggregated, shared, and analyzed at the national and regional level.
- Ensure iHRIS integrates into the overall health information system architecture and can regularly share data with other systems, such as payroll databases, medical record systems, or applications that track service delivery.
- Customize iHRIS for each country's specific needs and administrative processes, keeping regional data standards in mind, to build country ownership and encourage use of data for daily management of health workers. Seek remote technical support when needed.
- Hold workshops and trainings to build regional and national capacity for iHRIS data collection, management, and use, and for providing technical support for the software and backing infrastructure.
- Link with other projects and organizations for further remote support.

Conclusion

WAHO's regional approach is an exemplary model for other countries and regions, but there are other examples of regional approaches to learn from as well. The East, Central, and Southern Africa Health Community (ECSA-HC) supports countries in its region and inspired many of them to implement iHRIS. In November 2011, ECSA-HC sponsored the 54th Conference of ECSA Health Ministers, which resulted in resolutions to form regional HRIS expert groups and support national health workforce observatories. Likewise, the Asia-Pacific Action Alliance on Human Resources for Health works to promote and support better health workforce information systems in its region.

As regional organizations find effective approaches to support their member countries' efforts, the opportunities to collaborate and share these approaches rise to the global level, such as the World Health Organization's Health Workforce Information Reference Group and global forums. There are unquestionable gains in sustainability and South-to-South sharing with regional approaches. Implementing programs can greatly leverage and sustain their successes by involving and informing appropriate regional organizations.

References

World Health Organization. 2006. The world health report 2006: Working together for health. Geneva, Switzerland: World Health Organization. http://www.who.int/whr/2006/en/ (accessed April 16, 2012).

Capacity*Plus*
IntraHealth International, Inc.

1776 I Street, NW, Suite 650
Washington, DC 20006
T +1.202.407.9425

6340 Quadrangle Drive
Suite 200
Chapel Hill, NC 27517
T +1.919.313.9100

info@capacityplus.org
www.capacityplus.org

The Capacity*Plus* Partnership

IntraHealth International — Because Health Workers Save Lives.
Abt Associates Inc.
IMA WorldHealth
LATH — Liverpool Associates in Tropical Health
TRG

Associate Partners

African Population & Health Research Center (APHRC)
Asia-Pacific Action Alliance on Human Resources for Health (AAAH)
West African Institute of Post-Graduate Management Studies (CESAG)
Partners in Population and Development (PPD)

Capacity*Plus* is the USAID-funded global project uniquely focused on the health workforce needed to achieve the Millennium Development Goals.
The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.