Partners in Health and Rwanda: value-based collaboration

Many healthcare systems in low-income sub-Saharan African countries such as Rwanda face the challenges of communicable diseases, inadequate healthcare financing and a chronic shortage of healthcare workers. At the same time, Rwanda faces an increasing challenge fighting non-communicable diseases as the country becomes more developed. In light of these issues, Partners in Health (PIH) and the Rwandan government have been implementing value-based healthcare (VBHC) reform for more than a decade. As VBHC focuses on healthcare outcomes rather than volume of services provided, this approach enables Rwanda to allocate limited resources to initiatives that can improve long-term health, such as preventative measures like vaccinations and public awareness of non-communicable diseases.
At the Millennium Summit in September 2000, 149 heads of state and government unanimously adopted the UN Millennium Declaration to reduce extreme poverty with a deadline of 2015.1 That commitment has become known as the Millennium Development Goals (MDGs). The MDGs quantified targets for addressing extreme poverty and promoting gender equality, education, environmental sustainability and basic human rights.2

While many countries in sub-Saharan Africa have faced the difficulties of building a strong healthcare system, Rwanda met unique challenges rebuilding a nation after the 1994 genocide. In the relatively short time since then, Rwanda has become one of the few African countries to have successfully met the MDGs on the reduction of maternal mortality, child mortality and combating communicable diseases such as HIV/AIDS and malaria. For example, the maternal mortality rate fell from 1,300 deaths per 100,000 live births in 1990 to 290 in 2015, below the MDG of 325.3

The introduction of the MDGs provided a key anchor in Rwanda’s success by inserting a set of targeted outcomes into the national health dialogue that domestic and international non-governmental organisation stakeholders could agree upon. Since then, better infrastructure, a stronger pipeline of qualified healthcare professionals and increased access to healthcare coverage are among the many factors that have contributed to meeting the MDGs. The reduction in the maternal mortality rate, for instance, largely occurred due to more women giving birth in healthcare facilities with properly trained professionals.4

Another key development started in 2005 when PIH was invited by the government of Rwanda to provide technical expertise to help strengthen the healthcare system—with the aim of meeting the MDG targets. PIH, founded in 1987, is a Boston, Massachusetts-based non-profit healthcare organisation focused on capacity-building and strengthening healthcare systems. PIH and its sister organisation in Rwanda, Inshuti Mu Buzima, have been partnering with Rwanda’s Ministry of Health since 2005. This partnership has not only helped expand access to care, but it has also changed how care gets delivered in Rwanda.

“Value-based care has been integral to the Rwandan healthcare system architecture,” says Dr. Neil Gupta, chief medical officer for the PIH programme in Rwanda. “Decentralisation and community-based health insurance are two important illustrations of value-based care that synergistically improve access to healthcare.”

Over the past two decades, Rwanda has adopted a healthcare development strategy based on decentralised management. Over the past two decades, Rwanda has adopted a healthcare development strategy based on decentralised management. Its healthcare strategy also included community-based health insurance schemes (CHIs). In 1999 54 CHIs were piloted across three districts. Since the pilot programme, CHI enrolment has increased from 1% to nearly 85% of the population in 2014.
The country’s nominal health budget has increased by 22.9% from 2013/14 to 2017/18. However, from 2014/15 to 2017/18 the ratio of healthcare spending by the government to the national budget fell from 10.8% to 9.2% as the country moved from a dependence on donor-dominant financing to domestic financing and, according to a Unicef study, the percentage of external financing fell from 57.2% in 2013/14 to around 15.3% in 2017/18. The annual premium for the CHIs is approximately US$5, with a 10% co-pay for services not covered. Many preventive interventions such as bed nets and vaccinations are fully covered along with treatment for HIV, tuberculosis and some cancers.

Value-based care has also included healthcare financing with the Ministry of Health’s 2001 introduction of performance-based financing that established direct links between finances, outputs and outcomes. This has been a key factor in supporting more efficient utilisation of scarce financial resources for health and rapid progress towards the health-related MDGs.

**Improving healthcare infrastructure**

The focus on value-based health service delivery is a key reason that Rwanda successfully met key health-related MDGs. Rwanda’s healthcare system utilises task-shifting, community health workers, enhanced technology infrastructure and community health assurance in order to deliver quality healthcare at a low cost. For example, with task-shifting, nurses in Rwanda have been trained to insert intrauterine devices to help with family planning. Doing so expands women’s access to family planning services, reduces the cost of going to a hospital and provides physicians with more time to focus on urgent medical needs.

Other examples of improving value include PIH providing technical support for the implementation of electronic medical records in health facilities across the country; these collect timely population health data and support decisions at the individual clinician level as well as at the district and country levels. PIH initiated electronic records for HIV/AIDS patients to track individual patient outcomes and aggregated population outcomes to help in programme design decisions. Over the past 15 years, successful treatment and prevention programmes have kept the HIV-prevalence level at a constant 3%. Efforts to maintain progress, for example, the collaboration between PIH and the government of Rwanda to expand the use of electronic records for all health facilities to build a comprehensive health facility-based disease profile, are crucial.

“PIH’s work fighting HIV/AIDS has shown that a community-based approach to antiretroviral therapy is possible in poor local contexts and impacts not only individuals but potentially stopping the HIV pandemic,” says Dr Gupta. PIH has also worked with the Ministry of Health, which sets the national health research agenda, on research that has influenced the development of data-driven policies and protocols. One example is the development and implementation of national policies and protocols around neonatology services delivered at the district hospitals outside major cities.
Task-shifting has allowed nurses and general practitioners to take on some of the work of specialist pediatricians, while technology-focused policies have increased the amount of specialised equipment available at these district facilities.

These types of initiatives, such as the use of electronic health records, can be applied in other contexts as well to improve healthcare outcomes and value. For instance, electronic health records can help ensure that healthcare professionals quickly have access to accurate information, which can reduce costly errors and unnecessary duplication of tests and other services. They can also prompt healthcare professionals to perform vital screenings such as for breast cancer and colorectal cancer.

**Capacity building**

As part of delivering value-based healthcare, PIH has developed its University of Global Health Equity (UGHE) in Kigali, Rwanda, which welcomed the inaugural student cohort in September 2015. Dr Gupta, who also teaches at the university, explained, “The idea of [the university] and the Master of Science in Global Health Delivery is to support and build localised excellence and talent in national healthcare in developing countries—and to keep the talent at home. Elements of the curriculum and methodologies such as case-based learning come from a value-based perspective.”

Lecturers from Rwanda’s Ministry of Health, Harvard Medical School, Tufts University and elsewhere taught students, mostly from Rwanda, everything from epidemiology to health finance and budget management. The first cohort graduated in May 2017, in a ceremony led by the Rwandan president, Paul Kagame.

“In just over three years, the university has grown from an idea to reality,” says UGHE vice-chancellor and professor, Agnes Binagwaho. “Globally, the pipeline of doctors, nurses and global health leaders is far too limited. But we can’t just simply train more doctors and nurses, we need clinicians and leaders who understand the reality on the ground. At UGHE we’re focused on building a generation of global health professionals with the skills to develop solutions beyond what’s possible in the classroom or the clinic.”

Construction of the university’s first residential campus began in 2016 in the rural northern district of Burera. When it is complete in 2019, the first phase will accommodate 200 students, faculty and staff with housing, food service, classrooms, labs and administrative offices, professor Binagwaho said. The university will also launch its first clinical degree in 2019, a joint Bachelor of Medicine, Bachelor of Surgery and Master of Science in Global Health Delivery degree. The university also continues to expand its Executive Education programmes through partnerships with institutions such as the Global Fund to Fight AIDS, Tuberculosis and Malaria; Gavi and George Washington University Health Workforce Institute.
These developments should help Rwanda’s healthcare system have a stronger pipeline of healthcare professionals that can continue to tackle MDG-related healthcare issues. Importantly, students not only learn in classrooms but also in rural clinical settings, as opposed to just hospitals in large cities. This type of training can better prepare healthcare professionals to be able to deliver care where it’s needed, particularly given Rwanda’s focus on community health.

Footnotes