ENSURING EQUITABLE ACCESS TO HEALTH SERVICES:
Introducing a Sliding-Scale Payment System
for Rwanda’s Community-Based Health Insurance System

Launched in 2009, the Integrated Health Systems Strengthening Project (IHSSP) expanded on work initiated by the HIV Performance-Based Financing project (2005 – 2009), also funded by the US Agency for International Development (USAID) and implemented by Management Sciences for Health (MSH). IHSSP’s goal was to improve the health of all Rwandans through better access to quality health services. In its five years of implementation, IHSSP improved Rwanda’s information management, health financing, human resources for health, and quality of health services, and helped decentralize the country’s health services and management.

The Universal Health Care Movement

In 1978, the Declaration of Alma-Ata sowed the first seed for the international movement toward universal health coverage. The result of the International Conference on Primary Health Care (PHC), co-sponsored by the World Health Organization (WHO) and United Nations Children’s Fund (UNICEF), the declaration was the first to outline the importance of primary health care, renounce the inequality between health care in developed and developing countries, and call to member states to guarantee their citizens’ right to quality health care.1 It has been more than 35 years since the declaration was first made, and yet each year 150 million people still face financial catastrophe because of medical costs, two-thirds of whom are subsequently pushed below the poverty line.2

To prevent medical emergencies from creating financial burdens that further weaken families and communities, the WHO advocates for its member states to guarantee

1. Report of the International Conference on Primary Health Care Alma-Ata, USSR, 6-12 September 1978
universal health coverage, which it defines as “ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.” Research has shown that the most effective way for nations to provide universal health coverage is through a shared cost structure, funding health care through either taxation or compulsory insurance programs.

Rwanda’s Journey toward Universal Health Coverage

In 1998, the Rwandan government launched an ambitious plan to become a middle-income country by 2020. Central to their strategy was universal access to health care—not a simple objective for most developed countries, let alone one emerging from conflict. The Ministry of Health’s strategy to realize universal health care is three-pronged and includes performance-based financing to incentivize improved service delivery, quality improvement initiatives, and national health insurance to defray the cost of care. To address the latter aspect of their strategy, in 2004 the ministry launched a community-based health insurance (CBHI) scheme to provide access to health care for the roughly 94 percent of Rwandans who were not enrolled in private or other government-sponsored health insurance programs.

Under the original CBHI system, the yearly total enrollment fee per person was 2,000 Rwandan Francs (RWF) ($3); individuals paid half of this fee and the government paid the remaining 1,000 RWF. The government paid the full membership fee for indigents. The insurance covered the cost of all services at health centers, less a small copayment of 200 RWF ($0.30), and 90 percent of the cost of hospital care. The system reduced the incidences of catastrophic health spending in Rwanda (see graph), however, the system lacked equity, as the rich and the poor were paying the same flat fee. Furthermore, the system was not bringing in enough revenue.

Increasing Equity through a Sliding-Scale Payment System

To improve equity within the CBHI system, while at the same time increasing the population’s financial contribution to the system, in 2009 the Integrated Health Systems Strengthening Project (IHSSP) worked side-by-side with the ministry to redesign the insurance system’s payment structure. In the revised scheme, Rwandans pay into the system on a sliding scale, based on their household assets. The highest and middle groups pay an annual fee—7,000 RWF ($10.50) and 3,000 RWF ($4.50) per person, respectively—plus a small copayment at health centers and are responsible for 10 percent of the cost of care at referral facilities. The government of Rwanda covers the enrollment fees for the 25 percent of Rwandans with the fewest assets, who are not charged for their insurance or for health services at any public facility. The government believed that this system would better distribute the financial burden so that all Rwandans could access health services, and at the same time raise sufficient funds to finance quality service delivery throughout Rwandan facilities.

4. Ke Xu, David B. Evans, Guido Carrin, Ana Mylena Aguilar-Rivera, Philip Musgrove and Timothy Evans Protecting Households From Catastrophic Health Spending Health Affairs July 2007 vol. 26 no. 4 972-983
Before the new scheme could be implemented, the ministry had to determine the financial status of each household, a difficult prospect in a country where as much as 90 percent of the labor force works in subsistence agriculture and the informal economy. The Ministry of Local Government had data on the assets held by each of the country’s 1.8 million households, but the records were all on paper. To use the information, it would need to be computerized.

In collaboration with the Ministry of Health, IHSSP designed and built a database to house the information and recruited a data entry team of 500 people who were split into two groups, each working an eight hour shift each day. The intensive process took just three months, and by January 2011, 90 percent of the data had been entered into the system and households were assigned to the lowest, middle, or highest economic bracket.

Because the management of the CBHI system is so well decentralized—there is a CBHI office in each health center in charge of enrollment for the facility’s catchment area—Rwandans enrolled in the new system rapidly. By September 2012, 90 percent of Rwandans eligible for CBHI had enrolled. Soon, Rwandans weren’t just enrolled in the health insurance plan, they were using it.

The number of outpatient consultations at all Rwandan facilities has increased by nearly 25 percent since revision of the CBHI scheme, from .73 visits per capita in 2011 to .90 in 2013. Citizens enrolled in CBHI appear to access services more frequently than the general population—Rwandans holding CBHI accessed services at health centers an average of 1.06 times per year in fiscal year 2011/12 and 1.23 times per year in fiscal year 2012/13. Correspondingly, health service delivery indicators have improved as well.

Nationwide, the percent of births occurring in health facilities increased from 85 percent in 2009 to 95 percent in 2013. Over the same time period, the percent of women who attend four standard antenatal care visits during pregnancy increased from 16 percent to 35 percent and the percent of pregnant women who attended at least one antenatal care appointment during their first trimester increased from 29 percent to 45 percent. The percent of women of reproductive age using a modern contraceptive method increased from 22 percent to 42 percent.

Furthermore, Rwanda’s health indicators have improved dramatically in recent years. According to the 2010 Rwandan Demographic and Health Survey, from 2005 to 2010, Rwanda’s under-five mortality rate was halved, dropping from 152 to 76 deaths per 1,000 live births. UNICEF estimates that this figure fell further to 55 deaths per 1,000 live births by 2012. The World Bank estimates that maternal mortality has decreased from 390 deaths per 100,000 live births in 2010 to 320 deaths per 100,000 live births in 2013. AIDS-related mortality decreased 82 percent between 2000 and 2012 and 83 percent of patients have been shown to be virologically suppressed.

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5. Rwanda Health Management Information System (R-HMIS)
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Financial Sustainability of the CBHI System

Though the financial feasibility of providing universal access to health care in low- and middle-income countries has been questioned, Rwanda’s CBHI system is moving toward financial self-sufficiency. The revision to enrollment fees resulted in a dramatic increase in premium contributions from CBHI members. In fiscal year 2010, before stratification, the system’s revenues were around 8 billion RWF, including the government’s contribution. In fiscal year 2012, enrollment premiums accounted for about 19 billion in revenue, with almost 15 billion coming directly from the population.

The Global Fund to Fight AIDS, Tuberculosis, and Malaria is the sole international donor to the system, currently funding 12 percent of the operating budget. Membership fees and payments for services generate the majority of the system’s revenue. Other funds come from the Rwandan government and private insurance companies, who are required to donate one percent of their revenue to CBHI.

The Government of Rwanda is considering several strategies to move the insurance system toward complete financial autonomy. The first approach is to raise enrollment rates among the highest income group and among young, healthy citizens who tend to pay more into the system than they consume in services. The government may also raise private insurers’ contributions to the program from one percent of their revenue to five percent, as private companies insure many of the wealthiest Rwandans, who therefore do not pay into the CBHI system. In its final months, IHSSP collaborated with other partners and the Rwandan government to assess and make recommendations to solidify the financial sustainability of CBHI. The project also supported the transition of the system’s ownership from the Ministry of Health to the Rwandan Social Security Board.

Certainly other factors are at play, but it seems that the increased use of services occurring alongside the strengthened CBHI system is having a positive impact on Rwandan’s health. Over the next several years, as the CBHI system becomes more efficient, the network of health facilities continues to grow, and services become stronger, we expect that Rwanda’s health will continue to improve.