The Development of Community-Based Health Insurance in Rwanda: Experiences and Lessons

March 2016

UNIVERSITY OF RWANDA
msh
The ROCKEFELLER FOUNDATION

CBHI member showing her child's health card Photo credit: Ministry of Health-Rwanda

Acknowledgments

This study was carried out by the University of Rwanda's College of Medicine and Health Sciences School of Public Health (UR-CMHS-SPH) and Management Sciences for Health (MSH) with leadership from the Ministry of Health (MOH). The Rockefeller Foundation provided support to MSH to lead the study and the work of UR-CMHS-SPH was funded through a sub-grant from MSH.

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The study is one of a set of three pieces of work supported by The Rockefeller Foundation to help strengthen the Community Based Health Insurance (CBHI) program in Rwanda:

- The development and implementation of a financial modeling tool to assist the local and national offices with predicting and reporting their revenues and expenses.
- The analysis of the 2013 household survey of CBHI enrollees and uninsured households in Rwanda. Descriptions and results of this study are presented in a separate report.
- An analysis of lessons learned during the development of CBHI in Rwanda (presented in this report).

Recommended citation: *Kalisa I, Musange S, Collins D, Saya U and Kunda T. The Development of Community-Based Health Insurance in Rwanda - Experiences and Lessons. July, 2015. University of Rwanda College of Medicine and Health Sciences - School of Public Health, Kigali, Rwanda and Management Sciences for Health, Medford, MA, USA .*

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Acronyms

CBHI	Community Based Health Insurance
CPA	Comprehensive Package of Activities
CTAMS	*Cellule Technique d'Appui aux Mutuelles de Santé*
DGPHFIS	General Directorate of Planning, Health Financing, and Information Systems
DHS	Demographic and Health Survey
EICV	*Enquete Intégrale sur les Conditions de Vie*
FY	Fiscal Year
HFU	Health Financing Unit
MDG	Millennium Development Goal
MMI	Military Medical Insurance
MOH	Ministry of Health
MSH	Management Sciences for Health
MPA	Minimum Package of Activities
UR-CMHS-SPH	University of Rwanda's College of Medicine and Health Sciences School of Public Health
PPS	Prepayment Schemes
RAMA	Rwanda Medical Insurance Scheme
RSSB	Rwanda Social Security Board
RWF	Rwandan Francs
UHC	Universal Health Care
USAID	US Agency for International Development
USD	US Dollars
WHO	World Health Organization

Executive Summary

Rwanda has been recognized as having the most successful community-based health insurance (CBHI) scheme in sub-Saharan Africa and, indeed, one of the most successful in the world. In a few years the country went from having 7 percent of the informal sector population covered to 74 percent in 2013. This study attempts to document the development of this national CBHI program in the hope that it will provide some lessons for other countries.

CBHI is much debated as a way of tackling the challenge of providing access to health care for the poor in developing countries without worsening their economic situation. Proponents argue that CBHI schemes can be effective for reaching a large number of poor people who would otherwise have no financial protection against the cost of illness, especially in countries where national insurance schemes do not exist and/or where public health care funding is insufficient. They also maintain that schemes can take into account the views of the poor, who can be involved in decision-making. Opponents argue, however, that the risk pool is often too small, that adverse selection problems arise, that the schemes are heavily dependent on subsidies, that financial and managerial difficulties arise, and that the overall sustainability is not assured.

The country has developed a scheme that is based on a strong partnership between the government and the communities who are highly involved in its oversight. It has different levels of shared risk pools, subsidizes the poor, aims to minimize adverse selection, works hard to establish and maintain good financial and management systems, and is committed to sustainability. The Rwandan CBHI scheme is best described as a national community-based health insurance program.

Although Rwanda is different from other countries, the lessons and challenges explored here are relevant to most countries, poor or wealthy. These are summarized below.

Length of time needed. It takes time to build a successful CBHI scheme and it is necessary to identify and address issues and challenges that will occur over time. The need for strong political and popular support and commitment will continue for as long as the scheme exists.

Role of government. Strong and consistent governmental political and operational leadership and support are needed from the highest levels down to the local levels, especially in the early stages. This includes having an integrated approach and cooperation across national governmental departments and between national and local governments under the leadership of the Presidency. The creation of a separate government management unit is important.

Communities and NGOs. Strong demand and support from communities and related organizations is essential. Building on a culture of working together, such as mutual help systems, is important.

Partners. Important support can be provided by development partners over the course of the design and implementation but it is necessary that this be initiated, designed, coordinated, and managed by the government to ensure that it is well integrated. Such support can be both in the form of technical assistance and financing.

Sensitization. It is essential to have strong, coordinated, and continuous efforts to inform and educate the people on the role and importance of social health insurance.

Research. Research is a valuable and necessary element of designing and developing a CBHI program. Key areas are gathering and analyzing data before, during, and after pilots. And periodic operations research is essential, especially prior to any changes in the scheme, such as increases in premiums. Particular focus should be made on getting member reactions.

Policies, regulations, plans, and reports. Governments must develop clear policies, regulations, and guidelines that provide standard instructions and guidance for all those involved in a CBHI scheme.

Performance-based financing (PBF). PBF is an important complement to a CBHI scheme, providing incentives to improve service provision. While CBHI helps to create access (demand), PBF helps to improve supply.

Premiums and copayments. Premiums and copayments much be set very carefully and must take into account the willingness and ability to pay of prospective members. Stratification of premiums according to ability to pay is good for equity but, especially in the early stages,

simplicity of the structure is also important. Copayments must not be so high that they discourage necessary use. The system for exempting the poor for payment of both premium and copayment is crucial to ensure that they can and do use the services. Copayments should be flat or capped—having a hospital copayment as a percentage of the total bill with no cap can result in a charge that a patient may not be able to afford. Close attention should be paid to the charging of copayments to ensure that it is fairly and properly implemented. This is especially necessary if the copayment is collected and retained by the facility and is not recorded in the records of the CBHI scheme.

Access to health care. Care must be taken to ensure that a comprehensive package of services is available to the members and that the quality of care is satisfactory.

Risk management. The scheme must have ways to control *adverse selection*. These include encouraging or ensuring whole family membership, having waiting periods for new members before they can use the services, and sensitization of people who feel that do not need to join because there is a low chance of them falling ill. It is also important to use copayments to try to prevent *moral hazard* although, as noted above, care must be used with the design of such a system and it will not prevent moral hazard for any members who are exempt from copayments. The use of a referral system helps in terms of controlling unnecessary use of hospital services. Both of these risks should be subject to regular review.

Provider payments and incentives. Using a capitation basis for paying for health center services will remove the risk of over-billing and will reduce scheme administrative costs. Using some form of bundling of services, such as case-based payments, will help to achieve the same outcomes at the hospital level. However, a strong system to monitor the quality of care is of paramount importance.

Financial management. Proper financial management systems are absolutely critical. Insurance scheme funding is often subject to fraud and mismanagement because the premium funding is often not paid out immediately and expenditures are not directly related to income. Good reporting systems that reconcile premiums with membership figures and that provide comparable information on claims are essential.

Financial solvency and sustainability. In any developing country it is not likely that a scheme that includes the informal sector and the poor will be self-financing. Subsidies from the government and support from donors is likely. However these should be carefully planned so as not to create too much dependency. While there are limitations on how much members can pay it is important to eventually have one pool for all citizens so the better-off can subsidize the less well-off. It is also essential that principles of cost-effectiveness and efficiency are applied, both for the operation of the scheme and for the health services that the scheme is helping to fund.

Finally it is important to reflect that the goals of maximizing health revenue and maximizing participation in CBHI in a developing country are generally mutually exclusive. Ensuring access to all citizens, as espoused in the principles of universal health coverage, is, and should remain the priority.

Introduction

In many countries, millions of people still suffer because they cannot access necessary health care or because paying for health care results in severe financial hardship or pushes them into poverty [1]. Globally, about 150 million people face catastrophic health expenditures every year and 100 million fall into poverty after paying for health care [2].

Over the last decade, the World Health Organization (WHO) has called for all health systems to move towards universal health coverage (UHC), defined as the access to adequate and affordable health care for all. For more than a century now, many high- and middle-income countries have achieved universal coverage by introducing different financing mechanisms such as tax-based financing and/or social health insurance schemes. However, low-income countries have made little progress in this regard [3]. In many of these countries, one of the biggest challenges is to cover people outside the formal employment sector (particularly poor and vulnerable families) who often constitute the majority of the population [4]. So, providing health coverage for the informal sector is an essential step in a country's path towards UHC.

Community-based health insurance (CBHI) has been identified as an alternative financial mechanism to cover the informal sector [5]. It has the potential to provide financial protection and to increase utilization of health services, and to mobilize additional resources for health [6]. However, after twenty years of implementation experience of CBHI, several low-income countries still face tremendous challenges in initiating, sustaining, or scaling-up CBHI [3]. Many of the existing CBHI schemes have enrolled only a small proportion of the population, reducing their ability to broaden coverage in terms of population and services provided. The small size of their risk pools has also limited their financial protection. Additionally, their grassroots nature often exposed them to lack of professional management, political support, or public funding to subsidize the very poor; and their voluntary participation lead to adverse selection, threatening their sustainability [6].

Yet, in Rwanda, CBHI has been a success story and has played a major role in the move towards UHC [7]. The country has expanded its health insurance coverage from less than 7

percent of the population in 2003 [7] to 74 percent coverage in 2013 [8]. More than a decade of implementation and refinement of the CBHI policy in Rwanda has provided an ideal learning environment to draw lessons that may also benefit other countries.

The main purpose of this report is to document the development of CBHI in Rwanda from its beginnings in the 1960s to 2010, when the program was almost fully scaled up. To bring the analysis up to date we add a description of the system as implemented since the 2011 policy revision and analyze some challenges that the program has experienced in 2013 and 2014.

Background

Rwanda is one of the smaller countries in Africa and, like many countries, has a unique history and culture. The country covers 26,338 square km and has a resident population of 11,262,564, with a population density of 445 (NISR projection 2015). The land is fertile throughout the whole country but the land available for farming is limited due to the high population density, making population growth a key policy. The country is divided into 5 provinces and 30 districts (
Figure 1). Decentralization of government is limited which means that national policies and procedures can be implemented without many delays or bottlenecks.

Rwanda has benefited from steady economic growth since 2007/08; however, the economy remains vulnerable to external shocks and local factors.[1] The poverty headcount ratio declined from 56.7 percent in 2005/06 to 44.9 percent in 2010/11 with poverty reduction particularly in rural areas, where the rate fell from 61.9 percent to 48.7 percent. The Gini coefficient of national income equality fell from 0.52 in 2005/06 to 0.49 in 2010/11. It is clear that during this period, the greatest part of the Rwandan population has shared in the benefits of growth. Nevertheless, persistent inequality between men and women in accessing economic resources remains one of the main challenges in addressing rural poverty [9].

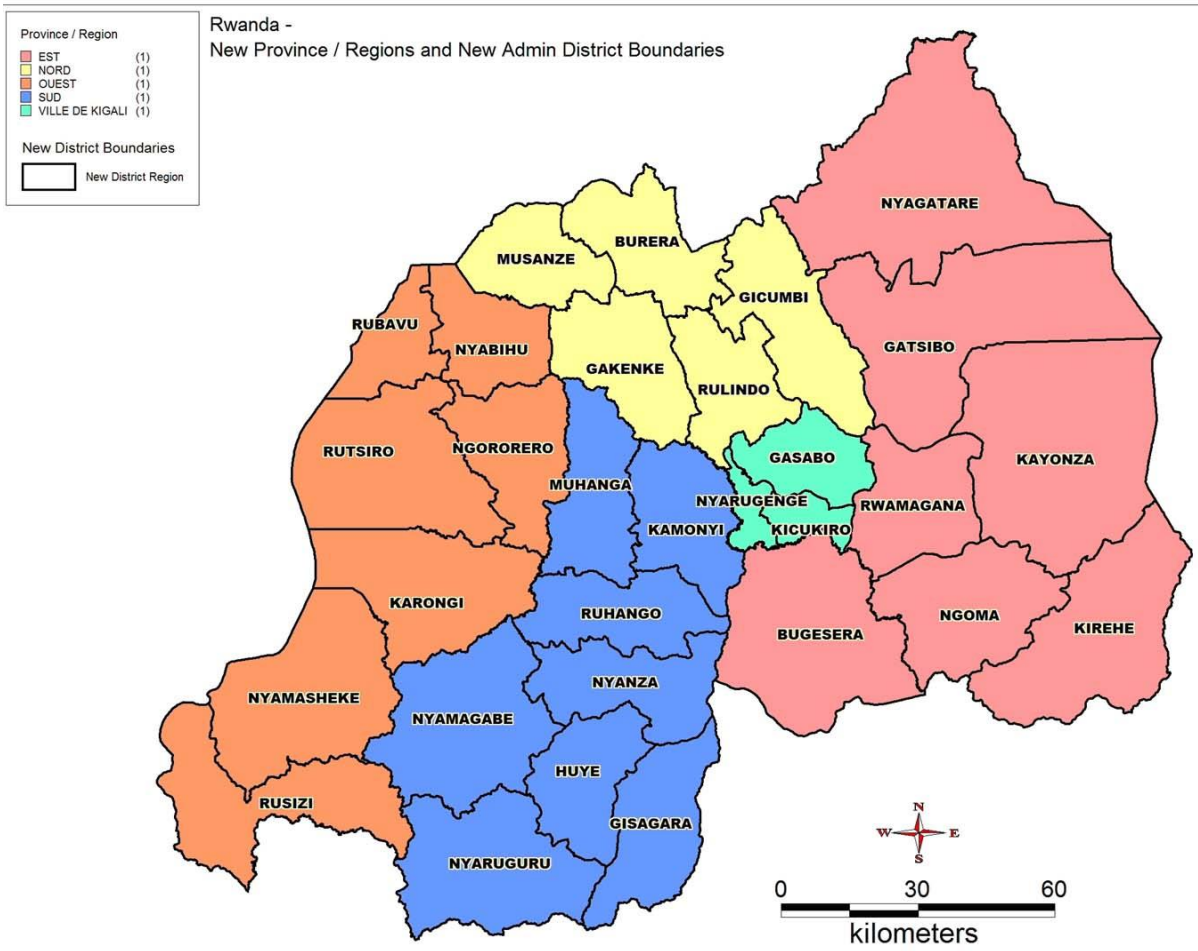
[1] This and the next two paragraphs were taken from the Health Financing Sustainability Policy, MOH, March 2015 [9].

Population growth stabilized and the country has achieved most of the health-related Millennium Development Goals (MDG) especially MDGs 4 and 5 [9]. Maternal mortality decreased from 750/100,000 in 2005 to 210/100,000 in 2015, under-five mortality was reduced from 152/1000 live births in 2005 to 50/1000 live births in 2015, and infant mortality fell from 86 to 32/1000 live births. The fertility rate declined from 6.1 in 2005 to 4.2 in 2015. Over the same period, the percentage of children who were stunted fell from 51 percent to 38 percent [10]. In education, more children attended school with enrolment in primary school reaching 96.5 percent. Access to improved sources of water increased to 73 percent. Electrification has been expanded to cover 18 percent of households in 2012 (population census, 2012) from 3 percent in 2006 [9].

While making significant strides in improving Rwanda's health status, the health sector remains heavily dependent on increasingly volatile and decreasing external funding. Although the public health budget increased significantly from 8.2 percent in 2005 to 15.5 percent in 2012/13, external assistance is still estimated to be roughly 61 percent of total spending on health. To sustain the achievements of the health system, there is a critical need to mobilize public and private sector resources and to improve efficiency allocation and use of existing resources. CBHI is one of the key pillars of health financing in Rwanda and its continued success is vital to the future of health care [9].

The principles of solidarity and working together have long been part of Rwandan culture but the need to rebuild and maintain those principles has been critical after the genocide in 1994.

Figure 1: Map of Rwandan provinces and districts



Methodology

This report focuses on documenting the Rwanda's experience in implementing CBHI from the 1960s to 2014. It uses a combination of different methods:

1) Desk review of key documents and relevant materials such as past and current studies on CBHI, CBHI's guidelines, policy, and strategic documents;
2) Results from the key informant interviews conducted in 2014;
3) Recent studies on CBHI including results from the households survey conducted in 2013 among CBHI members and uninsured population together.

The development of community-based health insurance in Rwanda

This section describes the phased of the development of CBHI in Rwanda from its initiation in the 1960's to nearly nationwide coverage by 2013/14. It is based on the above-mentioned desk review. A summary of the critical events is provided in Annex 1.

Initial development of CBHI (1966-1993)

After independence, Rwanda like most African countries provided free publicly funded health services. However, following the global crisis of 1970s, the International Monetary Fund and the World Bank imposed the reduction of public spending in most African states as part of structural adjustment programs which seriously damaged the provision and quality of health care. In the 1980s, user fees were introduced in public-health facilities as part of the Bamako initiative. Difficulties in paying those fees were experienced by many people who were unable to access services, and facilities, therefore, were under-resourced.

During these years CBHI programs were developed in the form of associations with specific health goals or mutual health organizations like *Muvandimwe* association and *Umubano Mu Bantu* association.[2] Created in 1966 in the former province of Kibungo, *Muvandimwe* association was the first form of health insurance in Rwanda. With 4,016 members, the scheme was managed at the "commune" level and was deemed to be successful.[3] Members had access to any type of health facility (including hospital) and were reimbursed based on invoices. The *Umubano Mu Bantu* association, created in 1975 in the former province of Butare, had 460 members who were covered only for hospitalization services provided at *Hopital Universitaire de Butare*. These two types of associations also covered non-health related risks such as wedding or funeral expenses [11].

[2] These two associations also included other risks such as marriage and funeral expenses [11].

[3] Until 2001, communes represented what are called districts today.

Later on, prepayment schemes were implemented in different areas of the country such as in Gikore (1986), Rukoma sake (1987), Murunda (1988), Rukoma (1991), Gakoma (1991), and Kayove (1991). These organizations were mainly aimed at reimbursing members' health care costs (drugs, health center services or ambulance transfer, and to a limited extent district hospital services) [12]. Most of these schemes were initiated and managed by faith-based health care providers to cover their operating costs [13]. The development of such schemes benefitted from a Decree of 15th April 1958 which governed all mutual insurance associations including health associations, accident associations, associations of disabled persons, death associations, social security associations, and education associations [12].

Emergency period (1994-1996)

The genocide in 1994 left the country completely devastated, resulting in shortages of human resources for health and in the destruction of the health infrastructure. Most of the community risk sharing schemes described above ceased to exist [12] and, during the humanitarian assistance period after the genocide, the government of Rwanda with the support of donors provided free public health care services [5].

During this period the government also encouraged solidarity mechanisms. The National Health policy of 1995 set the grounds for the development and implementation of CBHI schemes by encouraging the population to develop mutual aid societies and health insurance schemes to improve equity, access, and cost recovery.

Reintroduction of user fees (1996-1999)

In 1996, with the decreases in humanitarian assistance, the MOH reintroduced pre-genocide level user fees in public and mission facilities [13]. Even though exemption policy was in place allowing free health for indigents, utilization of health services decreased from 0.3 to 0.25 annual consultations per capita between 1997 and 1999. These low levels of utilization (well below WHO standards), raised grave concerns about the population's financial access to health care [5].

Piloting and expansion of prepayment schemes (1999-2003)

The low and falling health care utilization levels, combined with rising poverty issues, a high burden of communicable diseases, poor health outcomes, and a decrease in international assistance raised awareness of the urgent need for increased financing. The call for local alternative financing methods in the 1995 National Health Policy was seen as even more urgent [5], [13]. In January 1999, the MOH, with technical support from the United States Agency for International Development (USAID), started testing prepayment schemes (PPS) in three health districts. The objective was to improve financial access and the use of health care services, while at the same time strengthening the financial capacity of health facilities by mobilizing additional resources. An important aspect was also to have community participation in the development and management of these prepayment schemes [13], [14].

The development of the pilots benefited from the prior existence of the Decree of 15th April 1958 that governed all mutual insurance associations, and which despite its obsolescence and its general character could be used to oversee their organization and operation [12].

Description of the pilot experience

Design and organization of pilot testing prepayment schemes

During the preparatory phase of the pilots, the Ministry of Health (MOH) created a national steering committee, which was headed by the Director of Health Care and included other representatives from MOH central and regional levels. The role of the committee was to oversee the development and implementation process of the pilot phase. Due to limited data availability on household income, assets, and spending behavior at the district level, the committee selected three pilot (Byumba, Kabutare, and Kabgayi) and two control (Bugesera and Kibungo) districts out of the 38 health districts in the country [5]. The three pilot districts were selected based on the extent of their health infrastructure, the demand for technical support from the population to develop and implement CBHI, and the political will of district authorities to pilot the project.[4] Organizational and management features and modalities were

[4] In other words there were selected as districts with a greater chance of success than some others.

discussed between the MOH and community and health care representatives. Before obtaining association status as their legal base in accordance with the Rwandan law, the MOH supported the constitution of PPS through an official letter based on the 1995 National Health Policy [13].

In late May 1999, several sensitization and awareness campaigns were conducted in conjunction with local authorities, using radio spots, newspaper articles, and community and church meetings to inform the population about the introduction of PPS in their communities [13]. On July 1, 1999, 54 PPS were formed in total, covering 54 public health centers and their catchment communities and the three district hospitals (one per pilot district). Each PPS had its by-laws, which described the objectives and operation of the schemes. Every PPS was headed by an executive bureau elected in a general assembly of community members and comprised a president, vice-president, secretary, and treasurer. At the health center level, each PPS entered into formal agreement with a health center. [5] At the district level, all PPS were grouped into a Federation with a bureau elected from PPS members' representatives in general assembly. This bureau was comprised of a president, vice-president, secretary, deputy-secretary, treasurer, and the medical director of the district hospital. Each Federation signed a contract with the district hospital. Schemes were co-managed by providers and the population (Kabgayi and Byumba) and in Kabutare, they were managed directly by the population [13], [15]. Most facilities were generally reasonably well staffed initially and had equipment and supplies, but increasing utilization put some pressure on resources, and staffing was increased at some health centers.

Pilots' health financing

- Revenue collection

In the pilot districts members paid an annual premium of RWF 2,500 per household (up to seven persons) and a copayment of Rwandan Francs (RWF) 100 per episode of care at the health center.[6] The membership fee per family represented 8 percent of household annual

[5] The head of the health center was automatically the vice-president.

[6] Household included two adults and all children up to the age of 18 living in the same household. Other household members need to enroll in a group or individual category. 5. Households with up to seven members pay 2,500 francs per household per year. Individual enrollment costs 2,000 francs per year, and enrollment in a group for eight and more individuals costs 530

income (average annual income per capita in rural area was 94 USD). The premium was paid to the CBHI affiliated with the health center that covered the community where the family lived [15].

Not everybody could pay the premium and some could not pay at one time. To help address these problems each PPS could provide free coverage to 5 percent of its beneficiaries who were indigent from its own resources (including the interest generated by placing members' premium income in banks). Also, certain NGOs such as CARITAS, which had long been providing coverage to indigents through health care providers, paid the premiums for indigents, widows, and orphans. Loan schemes were other sources of funding. For example, loans from *Banques populaires* were quite innovative as they allowed individuals, households, groups or associations to obtain loans at low interest rates for a twelve month period based on the moral guarantee of the administrative authority only. [7] These arrangements resulted from negotiations between the government and *Banques Populaires de Rwanda* [15], [16]. In some other cases, households that did not have the RWF 2,500 at the time of collection joined *tontines* of five families. Over five weeks, each household would pay RWF 500 per week as an installment towards the total fee. Households were considered enrolled once they had contributed RWF 2,500 [5].

Each PPS bureau disbursed monthly one-twelfth of its accumulated premium fund, 85 percent of which were paid to the health center as capitation payment, 10 percent to the district federation, while 5 percent was retained to cover the scheme's administrative costs. The district federation reimbursed the district hospital services provided to members [5]. Since the premium revenue varied each month, the funding available for services and scheme administration also varied. However, at the facility levels the staff salaries and medicines were still provided by the government so the share of the premium revenue was available to cover any existing funding gaps, to help cover the costs of increased utilization and to improve services. Under these circumstances, there was little or no risk of the scheme failing financially.

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francs per person per year. Premiums were slightly higher in Kabgayi due to the larger hospital coverage (household—2,600 francs, individual— 2,200 francs, and group enrollment per person—550 francs).

[7] Banques populaires branches are established in all communes of Rwanda

In terms of risk pooling, the members' risks were shared within the communities of each health center catchment area, whereas for district hospital care, members' risks were shared at the district level [11].

- Provider payment

PPS managers opted for a monthly capitation payment for beneficiaries at the health center (determined by the size of their membership pool), while hospitals were paid a negotiated per-episode fee for cesarean sections, malaria, and pediatrics cases, and a fee-for-service for other physician consultations and overnight stay [11].

- Copayments

Members paid a 100 RWF[8] copayment at each health center visit, the aim of which was to discourage moral hazard behavior. There was no copayment at the hospital for patients who were referred to the hospital by the health center.

- Benefits package

The three districts offered the same benefit package at the health center level. After a one-month waiting period, members were entitled to all services and drugs provided at their affiliated public or government-assisted health center, ambulance transfer to the district hospital, and a limited package at the district hospital. The hospital package included cesarean sections, non-surgical pediatric, and malaria cases in Kabgayi hospital; in Kabutare and Byumba hospitals, overnight stays, physician consultations, and cesarean sections were included. A referral form from the health center was requested by the scheme to cover hospital services [13] since the health centers are supposed to play the gatekeeper function for accessing complementary package of services at the district hospital.

Preliminary results of the pilots

Enrollment in PPS

Table 1 below shows that in the first year a total of 88,303 people were enrolled which was 7.9 percent of the total population of the three districts. Enrollment was much higher in Byumba (10.6 percent) than in the other two districts (6.0 percent and 6.1 percent).

[8] 30 US cents at that time.

Table 1: Community-based health insurance in Rwanda, July 1999-June 2000

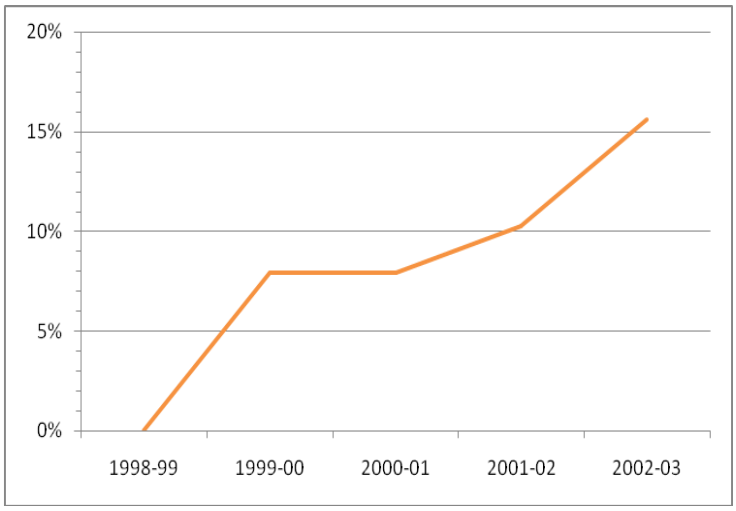
	Pilot districts with CBHI			
Indicator	*Byumba*	*Kabagayi*	*Kabutare*	*All 3 districts*
All prepayment schemes (status on 6/30/2000)				
Total number of PPS	21	17	16	54
Total target population in districts	459,329	368,020	288,160	1,115,509
Total population enrolled	48,837	21,903	17,563	88,303
Average number of members per PPS	2,326	1,288	1,098	1,635
First year average PPS enrollment rate	10.6%	6.0%	6.1%	7.9%

Source: Schneider and Diop, 2004 [5]

After the pilot phase in September 2000, these PPS continued to be supported by USAID [17]. In 2000/01, the average membership rate remained at 7.9 percent, but it then increased in subsequent years (to 10.3 percent in 2000/02 and to 15.6 percent in 2002/03) (Figure 2) [15].[9] Despite these increases the great majority of the population was still not enrolled in the pilots. Although the large majority of nonmembers interviewed in a household survey in 2000 said they would like to become members, three-fourths of them had serious doubts that they would afford the RWF 2,500 to pay the annual fee for their family. This raised concerns about the ability of the schemes to improve equity of access to care if vulnerable people were not subsidized [5].

[9] In 2000, the population in the three districts was estimated at 1, 113,755. In subsequent years, this population was adjusted using an annual population growth rate of 2.9%. However, the number of enrollees continued to increase (90, 795 in 2000-01, 121, 279 in 2001-02 and 189, 646 in 2002-03.

Figure 2: Trends in enrollment rate in the three pilot districts, 1998-2003[10]



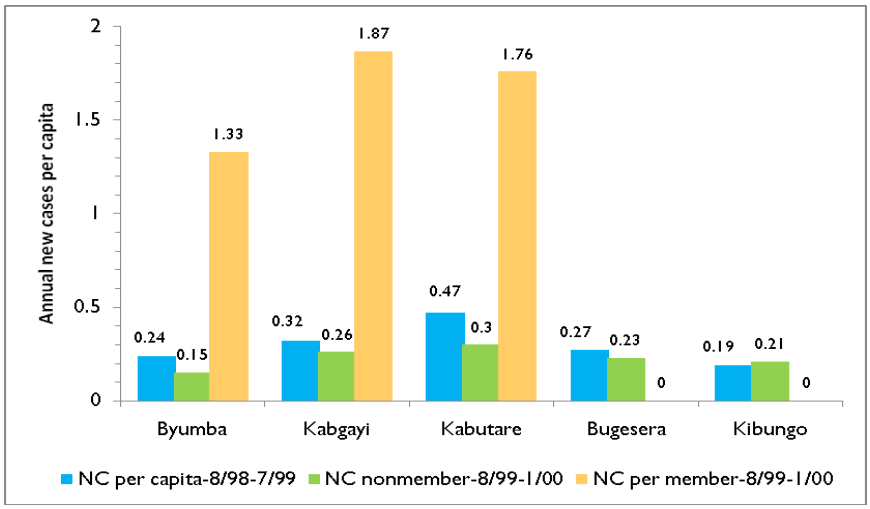
Source: Adapted from Musango and al, 2004 [15]

Utilization of health care services

In the months after the implementation of the three pilots the utilization rates of services, or new consultations, increased significantly for the newly-insured but fell for the people who remained uninsured (Figure 3). For example, in Byumba District the utilization rate for new cases for uninsured persons fell from 0.24 per capita in 1998/99 to 0.15 per capita in 1999/00. However, the utilization rate for newly-insured persons increased to 1.33 new cases per capita in 1999/00. No significant increase during that period was noted in the two control districts.

[10] This concerns only the three pilot districts. However, an inventory of existing *mutuelles de santé* in the country showed that in 1998, there was already another *mutuelle de santé* in Ruhondo with 5.130 members in the former Ruhengeri province. [11]

Figure 3: Annual new consultation cases per capita in health centers



Source: Schneider and al., 2000 [13]

Quality of care

During the first year of piloting, PPS organized several general assemblies where members and health center representatives met to discuss issues related in particular to the quality of care provided. These discussions created greater awareness among members about their rights as consumers. Consequently, several health centers in Byumba and Kabgayi districts added trained nurses which resulted in and helped deal with the increased PPS membership, quality of care delivered, and health service utilization levels [18]. In the three pilot districts, the contractual mechanism in place between health facilities and PPS fostered a certain accountability to provide quality of care, especially where the bureau teams were dynamic.

Cost recovery in health centers

Compared to the year before the introduction of the pilots the overall cost recovery rates increased in pilot health centers from 68 to 75 percent in Byumba, from 61 to 71 percent in Kabgayi, and from 61 to 67 percent in Kabutare. In the two control districts the cost recovery rates fell over the same period. PPS contributed to higher cost recovery in health centers when membership rates were large enough and where health centers operated efficiently, resulting in lower costs [18].

Impact of the PPS in the three selected districts

In 2000, a survey of 2,518 households was conducted in the three pilot districts by USAID in collaboration with the Rwandan National Population Office. The survey was designed to provide information on the impact of prepayment schemes on households' enrollment and health care seeking behavior, as well as the on related financial implications. The study used the same sampling frame as the 2000 Rwandan Demographic and Health Survey (DHS). Households were randomly selected in the three districts from the DHS sample cells. The sample was representative to the district level. Findings suggested that the probability of enrolling in PPS was equal among all income groups and was determined by households' distance from the health center, exposure to radio awareness campaigns, family size (households with five or more members were more likely to join than smaller households), education status of the household head, and residence. Kabgayi and Byumba residents were more likely to enroll in PPS than those in Kabutare, which was deemed to be because Kabgayi and Byumba had intensive awareness and information campaigns on PPS during the first year, whereas Kabutare did not.

The probability of service utilization was found to be determined mainly by geographic access to the health facility and by health status, and not by patients' gender, age, and income level. Evaluations of these schemes also revealed their success in significantly improving financial access of their members to services, especially for women, children, and the poor. Also the insured experiences reduced out-of-pocket payments per episode of illness compared with the uninsured. However, a key finding was that people in the lowest income quartile were still far less likely to seek care than those in the highest quartile [5].

Based on a report on the first year of piloting a number of lessons and recommendations emerged:

- Although the MOH spearheaded the prepayment pilot, the practical realization of the schemes was the result of a close collaboration with many community members from different backgrounds.
- Awareness campaigns are crucial in community gatherings, radio and TV shows, radio spots, newspaper articles, and other public settings. Local political, administrative,

religious, health sector representatives, and experienced prepayment plan leaders should head and support these awareness campaigns to enhance current and new enrollment and foster the discussion with the rural population.

- The existing and new schemes must go through continuous organizational strengthening, which is part of the capacity-building process.
- There is a need for the improved collection and availability of reliable utilization, cost, and financial data in the health sector to provide evidence for decision-making.
- Several service delivery issues need to be resolved, such as the contents of the benefits package, including the introduction of additional services for a higher premium.
- The capitation provider payment system for health centers should be retained as it is easy to administer and provides the right kinds of incentives.
- The MOH should consider harmonizing hospital provider payments by using a monthly capitation amount or a method that "bundles" services to the hospital, depending on the package covered.
- The contents of the benefits package should be reviewed regularly and the MOH districts, hospitals and health centers must fulfill their obligations to the schemes, ensuing that they have the necessary qualified staff, equipment, medicines, and supplies.

Expansion phase (2004-2010)

This phase is characterized by the expansion of CBHI and its institutionalization in all the 30 districts of the country.

Following the initiation of the three pilot schemes and the positive evaluation in 2000, several other schemes were initiated in the country. In 2001, a further 10 branches (*CBHI section de mutuelle*) were set up in the former health districts of Bugesera and another 10 in Ruli (in the former province of Kigali) as well as others that were set up in other provinces [7]. [11,12] By 2003,

[11] Called "sections" in French, but since this does not translate well into English, the word branch is being used.

[12] With the roll-out the name of the program became Community-Based Health Insurance (CBHI) instead of the term PPS used to describe the pilots.

the total number of sections had reached 88. These schemes mostly followed the design of the pilots but there were some variations.

In 2004, to capitalize on the initial phase of experimentation and adaptation of the pilot schemes, the government of Rwanda developed a national policy on the development of CBHI across the country to meet the growing demand for equitable access to quality services for the population, especially those living in rural areas and the informal sector in general [19]. This policy was intended partly to standardize CBHI across the country, but until the full implementation of this policy in 2006, there continued to be variation and flexibility in scheme design across districts.

The roll-out of CBHI nationwide did not wait until the implementation of the policy and the number of branches continued to expand. By 2004 schemes were present in all districts and by 2007 all 403 health centers and their catchment areas were covered (Table 2). In just four years, from 2003 to 2007, the number of branches increased from 88 to 403 and the membership increased from 7 percent to 74 percent of the target population. On average, each *mutuelle* at the district level was linked to 13 branches [7].

Table 2: Expansion of CBHI organizations in Rwanda, 2003-2007

	2003	2004	2005	2006 (**)	2007
Number of health centers	347	353	366	382	403
Number of CBHI branches	88	226	354	392	403
Number of "Mutuelles" at the district level	*	*	*	30	30
Target population	7,934,929	8,157,555	8,376,993	8,607,399	8,779,577
Number of CBHI beneficiaries	555,445	2,202,539	3,685,876	6,283,401	6,496,887
Membership rate (%) in CBHI	7%	27%	44%	73%	74%
Reference date	End of December	End of December	End of December	End of November	End of August

Source: Adapted from Country Status Report on Health and Poverty. September 2010 [7]

*Notes: * In 2006, the territorial administration of the country was reviewed as part of the decentralization process reducing the provinces from 12 to 4 and the City of Kigali, the districts from 106 to 30, sectors from 1,545 to 416, cells from 9,165 to 2,148, while villages (Imidugudu) were created. Whereas CBHI were developed in only 4 former provinces in 2001, in 2004 theses schemes were present in all provinces of the country.*
*** For 2006, the table shows more CBHI branches than health centers. The reason for this is that the health centers counted in the table are the health centers that have health information system codes from the MOH. This means that for 2006 there are ten health centers that were operational but did not yet have a code.*

Between 2005 and 2007, only 49 new CBHI branches were established. Yet, in the same period, the population coverage increased by 29 percentage points. This remarkable growth could not be attributed exclusively to the opening of new branches alone. In fact, it was in 2006 that the policy of subsidizing the expansion of the CBHI benefit package at district and national referral hospitals through the risk pooling mechanisms of the national solidarity fund and the district solidarity funds and the policy of subsidizing the very poor and other vulnerable people by the government supported by the Global Fund were effectively implemented.[13] The Global Fund alone, through CTAMS and PACFA, was already financing 11 percent of the population in 2006. [20] Other development partners such as US cooperation (USAID), German cooperation (GTZ), Belgian cooperation (CTB), International Labour Organization (ILOSTEP), Swiss cooperation, the European Union, World Bank, WHO,UNICEF, CARITAS, Compassion International and other local NGOs also provided funding later on [16], [20].

In April 2006, the MOH issued three ministerial instructions [14] to implement the 2004 policy which changed the nature of CBHI from a series of district-level schemes with no risk pooling above that level to a national scheme with pooling at all levels.

- No. 20/14 of 04/04/2006 establishing the National Solidarity Fund for Health and Solidarity Fund for Health Districts (Pooling Risk).
- No. 20/15 of 04/04/2006 determining the responsibilities of Administrative Proceedings of Mutual Health in Rwanda.
- No. 20/17 of 24/04/2006 on the management of funds provided by the project Assuring Access to Quality Care / GF for vulnerable people.

During 2006, the government decided to move to compulsory family membership for the entire Rwandan population to enforce risk sharing and limit adverse selection into the scheme. Each district determined their annual premiums which ranged from 3,000 RWF per family in rural areas to RWF 11,500 per family per year in Kigali. Copayments also varied across the branches, ranging in 2006 from RWF 100 to RWF 300 per health center visit and from 10 percent to 15 percent of the total bill in hospitals [14].

[13] After a successful proposal application on health systems strengthening (US$ 29 million) over five years.

From September 2006, a new standard premium was determined by the MOH to be applied across the country from October 2006 and not later than 31 January 2007. This new contribution amount was set at RWF 1,000 per person per year. The whole family had to be covered. Copayments were also standardized; from January 2007 the branches were told to set a flat copayment fee of RWF 200 at the health center and 10 percent of the total bills at the hospitals [14]. The costs of care for vulnerable groups and the poor would be covered by government and the Global Fund.

The cost of the service package was estimated at RWF 1,000 per person per year at the health center level and RWF 1,000 at the hospital level, for a total of RWF 2,000.[14] It was felt that the public could not pay more than RWF 1,000 per person per year which could cover the health center package of services. The other RWF 1,000 for the hospital package would be covered from the "Pooling Risk" which would be funded by the national government and donors. The government paid the full premium for indigents [19].

It is only in 2008 that law No. 62/2007 of 30/12/2007 that established the organization, functions, and management of CBHI and described the membership rules, package of services, provider payment options, and financing mechanisms was promulgated. The same law also determined that other health insurances companies (including private insurances) operating in Rwanda had to contribute 1 percent of their monthly income to the national pooling risk. [21] From 2008 to 2010, CBHI coverage continued to increase—rising from 74 percent in 2007 to 85 percent in 2008, 86 percent in 2009, and 91 percent in 2010.[15] With an estimated 6 percent of the total population covered under other insurance schemes, such as the Rwanda Medical Insurance Scheme (RAMA), military medical insurance (MMI) etc., that meant that 91 percent of the total population was covered in 2010.

It is important to note that in 2006, the government of Rwanda also introduced a performance-based financing system in public health facilities to increase utilization of health services by

[14] The premium was estimated at RWF 1,000 at the health center based on average cost RWF 1,188 per new case and the CBHI target population of 95 percent of population and of 0.75 contacts per inhabitant per year.

[15] These figures were derived from *mutuelle* reports which have subsequently been questioned as perhaps being based on weak population data. The DHS and EICV surveys of 2010 indicate lower levels of membership.

motivating healthcare providers with incentive payments for a set of predefined services. The national scaling up of PBF was phased in between 2006 and 2008 to allow the implementation of a rigorous impact evaluation of the program. In 2008, the program was scaled up in all public health facilities after significant positive impacts on the quantity and quality of targeted maternal and child health outcomes.

Consolidation phase (2011-2014)

This phase was marked by several policy revisions made to ensure universal coverage of the population, strengthen management capacity of the CBHI scheme, and ensure sustainability of the scheme.

Although the reported CBHI enrollment rate had continued to increase, it was recognized that there was a need and potential for further improvements in terms of equity and fairness of CBHI contributions since the premiums were flat fee and were not based on households' ability to pay. It was also noted that coverage had not been uniform across districts, with 2009 coverage ranging from 55 percent in Huye to 98 percent in Rulindo, Karongi, and Nyanza, with a reported national average of 86 percent. In addition, the following challenges needed to be addressed: lack of clear criteria for the identification of the poor which limited their access to free care, insufficient funds at both district and national pooling risks level, weak pooling mechanism, insufficient number of CBHI staff and their limited management capabilities, possible abuse at different levels in the system (beneficiaries as well as providers), risk management, and financial viability of CBHI [20], [22].

Consequently, a new CBHI policy was written in 2010 and implemented in July 2011 with the primary goal of providing the population with universal and equitable access to quality health services. The policy was intended to create more equity by having wealthier members pay higher premiums than poorer members (as opposed to the previous premiums which were the same for everybody) and also to generate more revenue for the scheme, which was heavily subsidized. Moreover, the policy was aimed at improving the implementation and management of CBHI, expanding the benefit package, and ensuring the scheme's financial viability.

Below we highlight the main changes of the policy:

Creation of CBHI members' socioeconomic categories and related premiums

Based on the socioeconomic classification developed by the Ministry of Local Government, known as *ubudehe* classification (see Annex 2 for the criteria used to identify destitute people using the *ubudehe* approach), the MOH defined a new CBHI member categories and related premiums as follows: [16,17]

Table 3: CBHI categories and corresponding premiums per person[18]

		Annual individual amount per Category	
***Ubudehe* categories**	**Corresponding CBHI categories**	**RWF**	**USD[19]**
1&2	1 (fully subsidized by government and development partners) ~24% of the total population	2,000	2.76
3&4	2 ~ 66 % of the total population	3,000	4.14
5&6	3 ~4% of the total population	7,000	9.65

Source: Adapted from Community-based health insurance annual report, 2012 [8]

Between 2006 and 2010, each member had to pay RWF 1,000 (with another RWF 1,000 paid by the government and donors) with a copayment of RWF 200 at the health center and 10 percent of total bill at the hospital level; except for the indigents who were exempted.

Under the new policy, premiums have been increased to ensure the financial sustainability of the scheme. Hence, premiums of CBHI Category 1 are RWF 2,000 per member and are fully subsidized by the government and development partners. Also, no copayment is charged to this category at the point of care. CBHI Category 2 members pay RWF 3,000 per member and CBHI Category 3 members pay RWF 7,000. The same copayments defined in 2006 still apply for CBHI Category 2 and 3 members (i.e., RWF 200 at the health center and 10 percent of

[16] *Ubudehe* is a process at the village-level for community decision-making. *Ubudehe* incorporates what is essentially a "poverty-mapping" process, which has a systematic methodology and allocates each household to one of six ordinal income and poverty-related categories differentiated by well-defined qualitative criteria. This classification is used in all social protection programs including health. See Annex 1 for the criteria used for identifying destitute people using the *ubudehe* approach.

[17] The *ubudehe* categories were aggregated into three CBHI broad categories (1=people living in abject poverty & the very poor, 2=Poor & Resourceful poor and 3= Food rich & Money rich).

[18] The 2010 MOH Policy document does not provide other details of premiums, such as limits on numbers of family members covered or additional premiums for extra family members.

[19] Using exchange rate of 725 RWF to 1 USD at 22 June 2015 (National Bank of Rwanda).

total bill at the hospital level.)[20] Membership is still on a family basis although there is no special family package with some form of discount to encourage family membership.

Increasing access to public health care facilities

In addition, CBHI beneficiaries are now allowed to access care anywhere in the country (called patient roaming system) and not only in health facilities located in their district of residence or of registration. Prior to the introduction of the new policy this feature was very limited in its implementation [8]. [21]

Strengthen CBHI management capacity

Also, additional staff were recruited and trained at the CBHI's district and section offices on the new procedures manual emphasizing administrative, technical, and financial management aspects of the scheme (see section on CBHI management for more details) [8].

[20] However, the hospital tariffs increased by around 20% in 2012 which meant that the hospital copayments also increased.
[21] Patient roaming system is defined as the right of any registered CBHI member to access care at any health facility across the country - not restricted, as before, to the district where they register or live.

Organization, financing, and management of CBHI in Rwanda

This section describes the CBHI's organizational structure and management bodies as implemented since 2011. In addition, it provides a summary of its financing, health care benefits, and utilization.

Table 4 summarizes the CBHI structure, benefit packages, and financing sources.

CBHI structure and management

Structure

CBHI is highly decentralized and structured around the district. Unlike CBHI schemes that are the property of their members and are set in place and autonomously managed by them, Rwanda's CBHI is a health insurance scheme based on a partnership between the National and Local Government (through districts) and the community. Thus, there are 30 *mutuelles* that possess legal status. Each *mutuelle* is composed of as many CBHI branches as the number of health centers. In total, there are 479 branches covering 479 health centers. [7]

Table 4: CBHI structure, benefit package, and financing

CBHI structure	Public health care delivery system	Benefit packages	Financing sources
National Pooling risk	Tertiary hospitals (5)	Government defined Tertiary package of activities for patients referred by District hospitals	▪ Government ▪ Social health insurance (RAMA, MMI) ▪ Private health insurance ▪ Development partners ▪ CBHI district pooling risks (10% of the 45% coming from CBHI branches)
CBHI at the District or *Mutuelle* (30)	District Hospitals (42)	Government defined "Complementary package of activities (C-section, treatment of complicated cases) for patients referred by primary health centers	▪ National pooling risks ▪ CBHI branches (45% of members' contributions) ▪ Government ▪ Development partners
CBHI branches (479)	Health centers (479)	Government defined "minimum package of activities." This includes complete and integrated services such as curative, preventive, promotional, and rehabilitation services	▪ Members contributions ▪ Subsidies for the poor and other vulnerable people from Government & Development partners

Source: Adapted from CBHI Policy 2010 [22]

Management

CBHI is managed by several voluntary committees established at different levels: [22]

- At the national level, CBHI is regulated and managed by the General Directorate of Planning, Health financing, and Information Systems (DGPHFIS) at MOH after being managed since 2005 by a dedicated technical CBHI support unit known as CTAMS (*Cellule Technique d'Appui aux Mutuelles de Santé*) under the same Ministry. The DGPHFIS provides support for the development of CBHI, facilitates experience sharing between districts, and improves policies and strategies. The DGPHFIS is also responsible for gathering CBHI-related data, conducting operational research, and training and disseminating of good practices. DGPHFIS has sixteen staff members in charge of CBHI (1 Head of National

[22] This information is prior to the implementation of the current plan to move CBHI under the Rwandan Social Security Board (RSSB). CBHI will be effectively under RSSB management starting July 2015

pooling risk, 5 health insurance expert, 2 supervisors, 1 data manager, 1 Global Fund-CBHI project manager, 1 accountant, and 5 invoice auditors).

- At the district level, each *mutuelle* has two governance bodies: a CBHI board of directors and a CBHI directorate. The CBHI board of directors is composed of seven persons: led by a representative from the district social commission (chairman of the board) appointed by the MOH, the director of the CBHI (who is in charge of the board secretariat. He/she attends the board meetings, but does not have the right to vote), two representatives of the CBHI section at the district level (the CBHI managers do not have the right to vote, and do not attend meetings about any case related to them), two health facility representatives, a representative of the community health workers' cooperatives within the district, a representative of faith-based organizations at the district level, and a representative of the administrative sectors. The mandate of the board of directors is for two renewable years. The CBHI board of directors oversees the management and monitoring of CBHI operations. The CBHI directorate has four members: a director, officer in charge of mobilization, sensitization and monitoring, an accountant, a district hospital invoice auditor. The CBHI directorate oversees the coordination, monitoring, and evaluation of all district CBHI activities.

- At the section level, CBHI has an administrative and financial management committee composed of: a chairman, a vice-chairman, a secretary, and two advisors from the sector served by the health center under a contract with the CBHI section. In addition, there is the CBHI section office that is comprised of: a manager, accountant, officer in charge of invoice verification and stock management. The CBHI section manager is responsible for the coordination and the management of all daily activities carried out at the section level. CBHI branches are responsible for the enrolment of members. There are also mobilization committees that are composed of: a chairman, vice-chairman, secretary and two advisors. Members are elected by the general population at the village, cell, and sector levels. Their main role is to inform the population about CBHI enrollment.

CBHI health care benefits

CBHI beneficiaries are entitled to defined healthcare services provided at each level of the public health care delivery system.[23] This excludes the country's private health care facilities. Healthcare benefits covered include:

- At the health center level: all medical services specified in the minimum package of activities as defined by the MOH and ambulance bills. For CBHI members these services are paid by CBHI branches;
- At the district hospital level, the CBHI at district level (district-level pooling risk) pays for the complementary package of activities and ambulance bills;
- At the referral hospital level, the services provided under the tertiary package of activities as well as ambulance bills are covered by the national pooling risk.

Except in the case of emergency as determined by the attending physician, hospital services are covered only for members who have been referred by lower health facility level. CBHI members can also get access to care in a health facility that does not have a contract with their respective CBHI section (commonly known as patient roaming system), when for instance they fall sick while traveling. However, patients have to comply with cases' referral rule. CBHI members from other districts pay a flat fee of RWF 200 per health center visit, which represents a copayment and is deducted from the CBHI bills.

CBHI membership and financing

Membership

With the national roll-out of CBHI, coverage expanded from less than 7 percent of the CBHI target population in 2003 to 74 percent in 2013.[24]

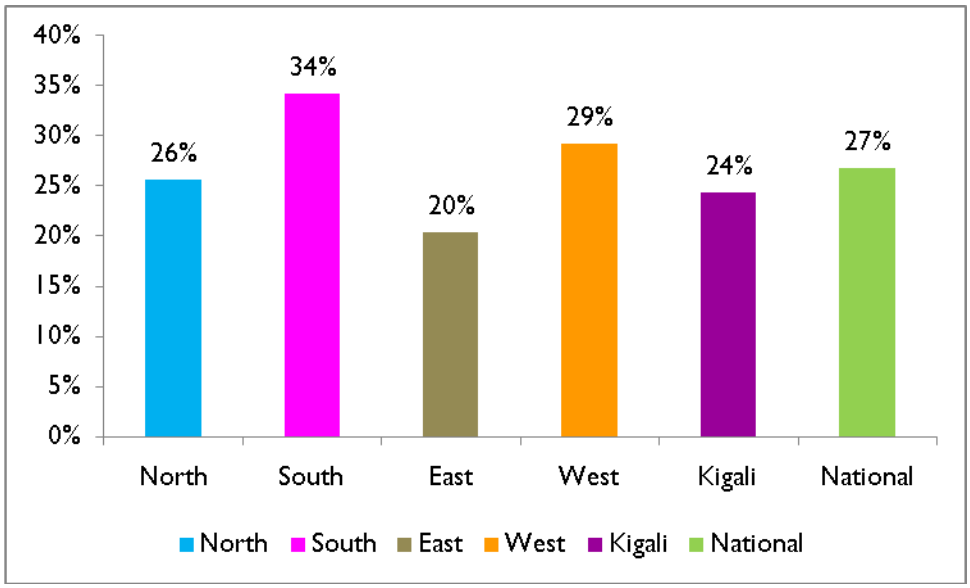
In 2012/13, CBHI category 1 members averaged 27.2 percent of total membership, CBHI Category 2 and 3 members 72.5 percent and 0.3 percent, respectively. Category 1 membership

[23] Beneficiaries are only covered for services provided by public providers

[24] The membership target populations used by the districts have reportedly been the estimated total population less the estimated number of people insured under other schemes,

also varied significantly across the provinces, ranging from 20 percent in East Province to 34 percent in South Province (Figure 4) (2012/13).

Figure 4: Proportion of CBHI's contributions for category 1 members relative to total contributions, 2012-13



Source: MOH annual report, 2012-2013

At the end of each CBHI year, CBHI branches transfer 60 percent of their surplus to District pooling risk to compensate CBHI branches that were not able to pay health center's bills and 20 percent to National pooling risks to compensate *mutuelle de District* that were not able to pay district hospitals' bills.

Premiums

As described previously (Table 3), there are three levels of premiums. Category 1 member premiums are paid by the government and Category 2 and 3 member premiums are paid directly by the members to their respective CBHI branches. Payment is due at the beginning of the Rwandan fiscal year (July-June) and covers membership during the entire year. There is flexibility for the collection of premiums whereby households can pay by installments. If a person joins in the first month (July), there is no waiting period. However, a one-month waiting period is applied to those who join after that month.

In the 2013 CBHI household survey 67 percent of the Category 2 households surveyed said that the payment of premiums was "not easy at all," and 22 percent said they would not re-enroll in CBHI next year, mostly because they could not afford the premiums and/or copayments. Ability to pay copayments was also identified as an issue, but less so, with 15 percent of Category 2 households saying payment was "not easy at all" and 21 percent that it was "not that easy."

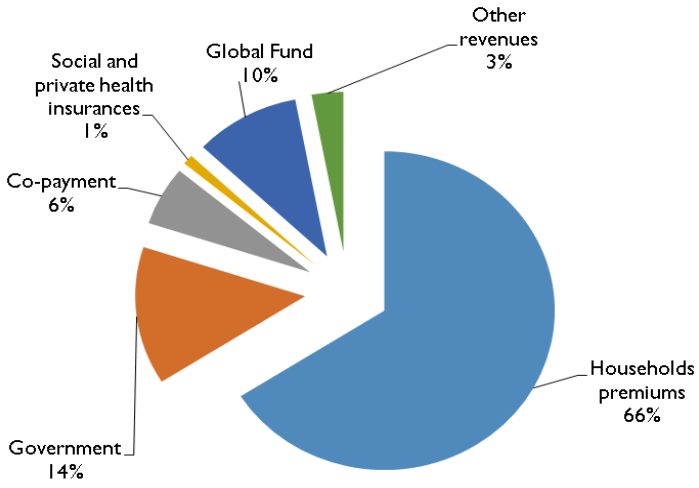
Copayments

A flat copayment fee (RWF 200) for each visit is applied at the health center level and 10 percent of the total hospital bill is collected from the patient as copayment (CBHI Category I patients are exempted). Copayments are collected at the health center level by CBHI branches and retained by the section to help cover CBHI administration costs. Hospital copayments are collected and retained by the hospital.

Revenue

The scheme's revenue depends heavily on the premiums. Based on 2012/13 data CBHI was predominantly funded by member premiums, followed by the government and the Global Fund (Figure 5). Patient copayments came to 6 percent of total revenue. As stated earlier, other insurance companies have been mandated by law to provide 1 percent of their monthly income to CBHI since 2008. [21] However, this only amounts to 1 percent of total CBHI revenue. Premium revenues vary across branches and districts in line with variations in membership numbers and the socioeconomic level of the population.

Figure 5: CBHI: Sources of revenues, 2012-2013



Source: MOH annual report, 2012-2013

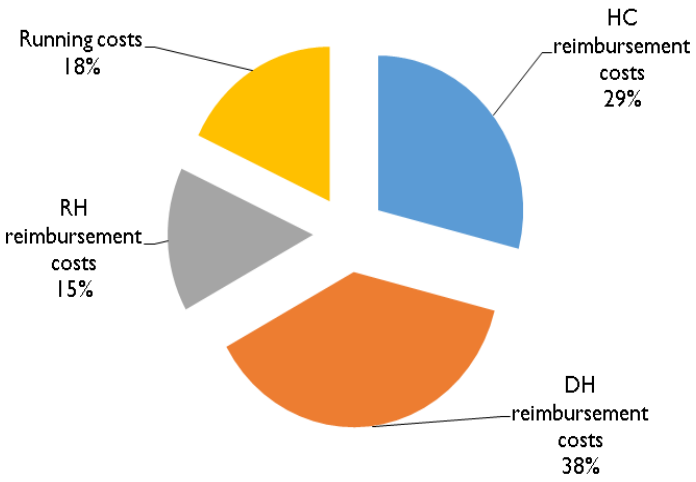
The revenue from premiums is split with 55 percent retained at the health center level for health center claims and 45 percent sent to the district to cover hospital claims. Of that 45 percent, 10 percent is sent to the national level to cover referral hospital claims and the rest is used to reimburse direct hospital claims. Health center copayments are intended to cover the CBHI scheme operating costs but generally some of the premium revenue covers these costs as well. Premium revenues vary across branch and districts in line with variations in membership numbers and the socioeconomic level of the population.

CBHI expenditures

Based on 2012/13 figures, the main CBHI expenditure is for health care costs (82 percent) made up of 38 percent going to the district hospitals, 29 percent to health centers, and 15 percent to referral hospitals (Figure 6). CBHI management costs are 18 percent of total costs.[25]

[25] These figures presumably exclude hospital copayments made by patients.

Figure 6: CBHI Expenditures, 2012-2013



Source: MOH annual report, 2012-2013

Pooling, surpluses, and shortfalls

In the current CBHI scheme the risks are pooled at different levels: section, district and national. In 2012/13, the CBHI branches were able to cover all expenses (health center claims, CBHI running costs, and the transfers of 45 percent of premiums to the district pool). However, some district level pools experienced difficulties covering their expenses. In fact, a total shortfall of RWF 1.9 billion was incurred in 16 districts, while 14 other districts had surpluses. Overall, there was a net shortfall of RWF 887.1 million across all the districts. Cross district reimbursement may still be an issue that needs to be addressed especially in the light of the new policy allowing patient roaming services. The financing shortfalls have been covered by contributions from government and partners although it can take considerable time before that funding arrives at the CBHI.

Service utilization

In 2012/13 the annual per capita utilization rate for CBHI members was 1.23 at the section (health center) level and 0.18 at the district hospital level. In total these are slightly higher than the WHO recommended minimum average of 1.0 [8].

Perceptions of key informants about CBHI in Rwanda

To supplement the information gathered from document review we conducted a series of qualitative assessments through interviews with persons who were involved in the development and implementation of the CBHI policy. The results of the interviews are described in detail in Annex 3 and are summarized here. Notable comments were as follows:

- **Design**
    - The presence of RAMA, the health insurance scheme for civil servants, and the fact that the rest of the population was unable to afford health services, was a major reason for the development of CBHI.
    - The CBHI policy directions were led by the Government's leadership and commitment.
    - Research was not perceived as a key factor in the policy directions taken but was helpful in evaluating policies once they had been implemented.
    - The involvement of local government for sensitization was important, along with the availability of low-interest loans to cover the cost of premiums in some districts.
- **Positive results**
    - CBHI has improved access to health services at all levels; health services are utilized much more and medicines are now much more available. The higher use of health services has resulted in healthier and better-off families.
    - CBHI has lowered members' health care costs and reduced catastrophic patient costs.
- **Access and equity concerns**
    - People do not find the new premiums affordable, especially those with big families.

- Hospital copayments are sometimes high and people cannot afford hospital treatment for that reason.
- Many people still do not understand the principle of risk-sharing and do not renew membership because they did not get sick in the prior year. Some argued that CBHI is only for people who often get sick like children and pregnant women.
- Some people have experienced poor quality of care (e.g., lack of staff or medicines) and believe that it is better to pay cash for services as the services are faster and better. Frequent drug stock-outs and a limited number of drugs available at the health facility meant that members were sometimes sent to buy drugs at private pharmacies at high cost.
- Geographic access to health services remains an issue in some remote places (due to mountains or rivers). People who live in those areas prefer not to buy health insurance as they believe they will never benefit from it.
- Some families had enrolment difficulties, for example where family members live outside their homes or cross borders to work.

- **Management concerns**
  - Poor systems and management are common concerns and reflect on service, financial issues, and sustainability. Some of these are the lack of a database of CBHI members, undetected forgery of membership cards, delays in health facility reimbursements, undetected overbilling, and fund management.
  - Politicians and local leaders sometimes use their powers to abuse CBHI, such as requesting CBHI section staff to issue membership cards to people before their premiums are paid.
  - The strong political commitment to the wellbeing of the population and the reduction of poverty will mean that CBHI will be sustained. Factors include the

general high regard for CBHI, the availability of banking systems, and the presence of various community initiatives to support vulnerable families' economic development.

- The planned move of CBHI management from the MOH to RSSB is a good opportunity for CBHI sustainability as it will allow the MOH to focus on quality health care services delivery and RSSB to use its expertise to improve CBHI management.

Key achievements and challenges

Achieving national coverage

The government started the program in 1999 with pilot health insurance schemes in three districts. Due to the issues of financial access to services (due to poverty and user fees), the culture of solidarity, and the strong support and leadership of government at all levels; these pilot schemes demonstrated that CBHI was feasible (See Table 1 and Figure 2). Other districts adopted similar schemes from 2001 through 2005 by which time CBHI schemes existed in 354 of the 366 (99 percent) health centers and their communities. Membership increased from 7 percent of the target populations in 88 branches in 2003 to 74 percent of the target population in all branches in 2013.

The main reasons for the successful expansion were as follows:

- There was a broad level of awareness of the poverty, health needs, and problems of access to health care.
- It built on community solidarity and mutual aid values that are embedded in Rwandan culture.
- There was awareness of previous small mutual health insurance schemes in some areas, although many healthy people did not see the value of insurance.
- The Government led the development and implementation of three pilots which provided valuable experience and lessons.
- The donors facilitated the pilot schemes and provided support and technical assistance through technical working groups organized and led by the MOH.
- Civil society was very influential and supporting, with key roles played by religious leaders.

- National and local government led, encouraged, facilitated, and monitored the process and developed and issued policies and laws.
- The MOH played a key role as policy initiator and champion, often participating in official launches of the schemes and stressing the importance of CBHI in the fight against poverty.
- The Ministry of Local government provided support as part of its development and implementation of government decentralization and the creation of socioeconomic grouping. For instance CBHI coverage is included in the annual performance contracts of district mayors with the government (locally known as *Imihigo*). This has created the incentive for district mayors to enforce enrolment.
- The Ministry of Finance provided funding to cover premiums for the poor.
- Local government in some districts worked with the *Banque Populaire Rwanda* to provide soft loans to households to help pay premiums.
- The MOH also worked hard to strengthen the management capacity of the schemes through training and the development of management tools and by setting up a dedicated Technical Support Unit (CTAMS);
- There was a heavy emphasis on informing and educating the people, many of whom believed that insurance is only for people who are ill. Messages from all levels of government were aligned and different media approaches were used.
- The MOH marshalled resources from other government agencies and international donors to support the program and, in particular, finance coverage for the poor.

Improving access and equity in health care utilization

It was recognized by the Government that quality of care is an important element for the successful implementation of a health insurance scheme. Contractual mechanism between health facilities and the scheme has been used to hold the facilities accountable for quality of

care. It is also essential that these health facilities can provide a comprehensive package of services (laboratory tests, medicines, etc.) before implementing the health insurance scheme. The government has also worked hard to improve the geographic accessibility to health facilities by constructing and rehabilitating health facilities and distributing ambulances in district hospitals.

Over the past years there was also a substantial increase in numbers, in quality and in deployment of staff at health centers and district hospitals. Since 2005 a number of reforms and new initiatives have taken place in human resources for health ranging from decentralization of the management of human resources to bonding contracts for young medical professionals, upgrading A2 nurses to A1, and training various specialists. In addition, Rwanda has adopted a performance-based financing approach to improve the quality of care by rewarding public health facilities for good performance (health care providers receive in turn bonuses on top of their salaries). This approach has been scaled-up nationwide since 2008.

Results from a household survey conducted among CBHI beneficiaries in 2013 [24] showed that overall, the CBHI in Rwanda improves the access to health services for the population. About 78 percent of the households enrolled in CBHI (all CBHI categories) indicate that CBHI covers most of their health care needs (including access to medicines). Also most members do not have to delay seeking care when needed. The key informant interviews support this finding. In 2012/13 the annual per capita utilization rate for CBHI members was 1.23 visits at the branch (health centre) level and 0.18 at the district hospital level. In total these increased significantly from the 0.25 visits per capita recorded in 1999 and are higher than the WHO recommended average of 1.0. It is important to note, however that the combination of PBF with CBHI may have increased the utilization and quality of maternal and child health services in particular.

Over the past 15 years, the country has observed dramatic improvements in key maternal and child health indicators (Table 5). The growth of CBHI, along with reproductive health, immunization, malaria, TB and HIV/AIDS, performance-based financing, community health and quality assurance programs, have all significantly contributed to dramatic improvements in key health indicators.

Table 5: Progress on maternal and child health indicators - 2000 to 2015

Maternal and Child health indicator	DHS 2000	DHS 2005	DHS 2010	DHS 2014-15
Neonatal mortality rate (per 1000 births)	44	37	27	20
Infant mortality rate (per 1000 births)	107	86	50	32
Under five mortality (per 1000 births)	196	152	76	50
% of children 12-23 months fully vaccinated	75	80	90	93
Maternal mortality ratio	1071	750	476	210
% of births attended by skilled health personnel	27	28	69	91
Antenatal care coverage (at least 1 visit)	92	94	98	99
Unmet need for family planning	36	39	21	19
Women 15-49 using modern contraceptive method	6	10	45	48
Contraceptive prevalence rate	-	17	52	53

According to the household survey, CBHI has also been able to guarantee considerable equity in terms of utilisation of health services. Findings showed that the poorest 20 percent of the CBHI members account for about 20 percent of visits to a public outpatient facility while the richest 20 percent account for about 23 percent of the visits. A similar pattern is seen for inpatient admissions where the poorest 20 percent of the CBHI members account for about 19 percent of admissions compared to 23 percent by the richest 20 percent. However, one area where utilization does not appear to be equitable in public hospital outpatient visits, where the richest 40 percent of the CBHI members account for over 65 percent of visits compared to 25 percent of visits by the bottom 40 percent.

Improving financial protection

Ensuring access to health services for the poor has been a feature of Rwandan government and society for many years. Following the 1994 genocide, for example, there was a policy allowing free health care for the poor in public health facilities. Free coverage of indigents was included in the pilot schemes introduced in 1999: each scheme could fund the premiums for up to 5 percent of its beneficiaries who were indigent. This could be funded from its own resources including the interest generated by placing members' dues in banks. Also, foreign governments and NGOs such as CARITAS, which had long been providing coverage to indigents through health care providers, continued their support for indigents, widows, and orphans through

funding their premiums. These practices provided the basis of experience that led to the development of the policy of providing coverage to indigents and vulnerable people through national guarantee fund and the district solidarity funds set up in 2006 by the government with the support of the Global Fund [7].

After the introduction of the flat premium fee in 2006, it was appreciated that CBHI expenditures were somewhat regressive in that poorer members paid a higher proportion of their incomes on premiums. However, the flat fee system had the advantage of administrative and operational simplicity. CBHI was well established by 2010 but since it was still not financially solvent or sustainable without donor assistance, it became necessary to try to generate more premium revenue. The new premiums introduced in 2011 were less regressive than before in that the CBHI category 3 household pays RWF 7,000 per person, CBHI Category 2 RWF 3,000 per person and CBHI Category 1 RWF 2,000 per person. Nevertheless, they are still to some extent regressive. The results of the household survey showed that the poorest 20 percent of CBHI Category 2 households pay about 0.4 percent of their income in premiums whereas the richest 20 percent pay about 0.08 percent of their income. As shown in the same study, around 20 percent of the CBHI Category 2 members reported that they would not reenroll in the next year mainly due to unaffordability of premiums. Many CBHI Category 2 households said they have to use personal savings and sell household items to finance the premiums. It was also commented in the key informant interviews that people with big families are especially affected.

While the CBHI categorization has been very helpful in addressing the health needs of the very poor and indigent, some households in CBHI Category 1 are richer than expected, while some in CBHI Category 2 are poorer than expected [24].[26] This indicates that the CBHI categorization may not be entirely appropriate, especially in terms of the *Ubudehe* Category III group, which is defined as "poor" (Annex 2) but which is not included in Category 1 (free)

[26] Authors arrived at this by using the reported CBHI categorisation of households in the survey and compared that with the per capita income of CBHI category 2 members. CBHI category 2 members are scattered in each quintile.

under CBHI. [27] It may not just be an issue of cost since the key informant interviews noted the categorization was sometimes unfair with some people in Category 1 being better-off than some in Category 2.

It is worth noting that CBHI has been able to guarantee increased financial protection for the population. Impoverishment due to out-of-pocket payments is negligible and catastrophic health spending headcounts decreased considerably from 12 percent in 2000 [25] to close to nothing in 2013 [24]. However, these payments are still regressive among CBHI Category 2 members as the poorest 20 percent of CBHI Category 2 households pay over 0.25 percent of their income out-of-pocket for health services compared to the richest 20 percent that pay about 0.11 percent. These regressive payments might be attributable to flat copayment fees and the 10 percent coinsurance rate.

Risk management

Risk management is crucial for the sustainability of health insurance scheme. While introduction of health insurance aims at improving access to care, often they are exposed to major risks which if not addressed can lead to the scheme's bankruptcy. These risks have also been considered in the Rwandan CBHI.

Adverse selection

Any voluntary health insurance system is likely to have a problem of adverse selection, where people who are most likely to join are either already ill or who believe they are at a greater risk of falling ill [26]. Conversely, people who feel healthy and have less risk of falling ill are less likely to join. The CBHI policy in Rwanda tried to control this by insisting on family adhesion and by applying a one month waiting period for new members who join after the first month. It is important to continue to try to persuade people who feel that they do not need to join because there is a low chance of them falling ill since it is necessary to have as large a risk pool as possible and to maximize premium revenue. To our knowledge, there is no evidence

[27] The country has already started to revisit the *ubudehe* classification

showing whether these strategies have been successful in preventing or reducing adverse selection in the country.

Moral hazard

The CBHI system has a copayment system to reduce the moral hazard of unnecessary visits. At the health center level this currently amounts to RWF 200 per person per visit and at the hospital level it is 10 percent of the total hospital bill. Category 1 patients are supposed to be exempt from these copayments so there is a possibility of excessive utilization for that group. Referrals are required for patients to attend hospitals (except for emergencies) and this should also reduce the risk of moral hazard unless there is collusion with health center staff. Excessive use by people exempt from paying the copayment does not seem to be an issue since the 2013 household survey indicates that utilization of services is around the same or less for the poorest 20 percent (exempt) compared with the richest 20 percent. Nevertheless, this type of information should be collected and analyzed routinely as overuse of services is a common problem and carries a high cost.

Provider payments and incentives

Both the health centers and hospitals submit itemized, fee-for-service bills to the CBHI branches and district offices for reimbursement. At the hospital level, these bills can have as many as 20 items (consultation, hospitalization, tests, procedures, medicines, and medical supplies). Since many hospitals do not have sufficient financing, there may be some pressure to over-prescribe services or to over-bill. Overbilling has been reported in some districts. But as there does not appear to be any benefit to hospital staff, this seems unlikely to be widespread. There are also often long delays in the reimbursement of CBHI bills. The current provider payment mechanism combined with the limited capacities of control and management of CBHI schemes is a major risk for the financial sustainability of the scheme.

The 1999 pilots paid the health centers on a capitation basis and the evaluation report of the pilots recommended that that system be adopted for national policy. It also recommended that hospital services be bundled for billing purposes so that the billing would be less prone to error

and easier and less costly to audit and reimburse. The MOH has been considering these recommendations over the last two years.

Member fraud and abuse

Since it is the providers who are paid for providing medical care to members, the opportunities for member fraud and abuse are limited. In the key informant interviews it was noted that sometimes there is pressure for people to get membership before payment. These situations happen when there are weak checks. This can be dangerous to the scheme if the scale of the behaviors becomes extensive and unchecked. The experience with the CBHI policy in Rwanda has been that all the members of the CBHI scheme carry a CBHI card with a recently taken photo. In addition, before a CBHI member receives the CBHI card, the member has to produce photocopy of national ID card that is checked and manually recorded in the register and kept at the CBHI section at the health center.

Financial management

It has been recognized for a long time that the financial management systems at the section and the district levels were weak. One area that needed strengthening was financial planning, estimating if there would be sufficient income to cover the costs and, if not, how much extra funding would be needed and when would it be needed. Another weakness was slowness of financial reporting to the CTAMS. With assistance from one donor a financial management system was put into place and training was conducted. Planning and reporting became much easier, faster, and timely. The facilities also have interesting and useful information on claims that should be analyzed and used more often, in particular those hospitals that prepare their claims electronically.

While improvements have been made in financial management, CBHI will benefit furthermore from the strong management and audit systems of the Rwanda Social Security Board (RSSB). This illustrates the importance of good accounting and financial management.

Financial Solvency and Sustainability

The government has had concerns about the solvency of the CBHI scheme for some time and has had to cover its debts on several occasions. The government has been very successful in advocating and using donor funding. But as donor contributions are decreasing, it has been actively examining sustainable long term financing strategies. Although the country has experienced good economic growth, many people are not yet in a position to cover all their health care costs, or to pay the premiums needed to cover those costs. Analysis has shown that the scheme is currently not self-sustaining, since, on average, claim costs have exceeded the effective premiums during at least the last two CBHI years (FY 2012/13 and 2013/14) [23].

Nevertheless, respondents to the key informant interviews affirmed that several opportunities exist for its sustainability including the strong political commitment to the wellbeing of the population and the reduction of poverty, the general high regard for CBHI, the availability of banking systems, and the presence of various community initiatives to support vulnerable families' economic development. In addition, they believe that the government decision to move CBHI management from the MOH to RSSB[28] will allow the MOH to focus on quality health care services delivery and RSSB to use its expertise to improve CBHI management. To accompany this change, the government mandated a study in April 2014 to look at key challenges of the scheme and necessary steps to assure its financial sustainability.

[28] Resolutions 31 of the 11th leadership retreat of March 08-10, 2014 and Cabinet meeting decisions of 28.03.2014.

Key lessons learned

Community-based health insurance is much debated as a way of tackling the challenge of providing access health care for the poor in developing countries without worsening their economic situation. Proponents argue that CBHI schemes can be effective in reaching a large number of poor people who would otherwise have no financial protection against the cost of illness, especially in countries where national insurance schemes do not exist and/or where public health care funding is insufficient. Schemes can take into account the views of the poor, who can be involved in decision-making. Opponents argue, however that the risk pool is often too small, that adverse selection problems arise, that the schemes are heavily dependent on subsidies, that financial and managerial difficulties arise, and that the overall sustainability is not assured.

The Rwandan CBHI is one of the most successful in Africa. The country has developed a scheme that is based on a strong partnership between the government and the communities who are highly involved in the oversight of the schemes. It has different levels of shared risk pools, subsidizes the poor, aims to minimize adverse selection, works hard to establish and maintain good financial and management systems, and is committed to sustainability. The Rwandan CBHI scheme is best described as a national community-based health insurance program.

This document has sought to identify the lessons that have been learned in Rwanda and the challenges that it has faced and continues to face. Although Rwanda is different from other countries, these lessons and challenges that are summarized below are relevant to most countries, poor or wealthy.

Length of time needed

Rwanda's development of CBHI is now in its fourth phase. The first three have been (1) political commitment and piloting; (2) expansion of independent, district-level schemes across the country; and (3) consolidation into a national scheme and standardization. This fourth phase

is focusing, among other things, on increasing domestic financing and sustainability and fine-tuning for greater equity, and this will lead into the hand-over to RSSB. At the same time, as is shown in this document, the government will have to further analyze and solve the recent disparity in enrollment figures.

It takes time to build a successful CBHI scheme and it will be necessary to identify and address issues and challenges that will occur over time. The need for strong political and popular support and commitment will continue for as long as the scheme exists.

Role of government. Strong and consistent government political and operational leadership and support are needed from the highest levels down to the local levels, especially in the early stages. This includes having an integrated approach and cooperation across national governments departments and between national and local governments under the leadership of the Presidency. The creation of a separate government management unit is important.

Communities and NGOs. Strong demand and support from communities and related organizations is essential. Building on a culture of working together, such as mutual help systems, is important.

Partners. Important support can be provided by development partners over the course of the design and implementation but it is necessary that this be initiated, designed, coordinated, and managed by the government to ensure that it is well integrated. Such support can be both in the form of technical assistance and financing.

Sensitization. It is essential to have strong, coordinated and continuous efforts to inform and educate the people on the role and importance of social health insurance.

Research. Research is a valuable and necessary element of designing and developing a CBHI program. Key areas are gathering and analyzing data before, during and after pilots. And periodic operation research is essential, especially prior to any changes in the scheme, such as increases in premiums. Particular focus should be made on household and member surveys to get the opinions of members and uninsured families.

Policies, regulations, plans and reports. Governments must develop clear policies, regulations, and guidelines that provide standard instructions and guidance for all those involved in a CBHI scheme.

Performance-based financing. PBF is an important complement to a CBHI scheme, providing incentives to improve the service provision. While CBHI helps to create access (demand), PBF helps to improve supply.

Premiums and copayments. Premiums and copayments much be set very carefully and must take into account the willingness and ability to pay of the prospective members. Stratification of premiums according to ability to pay is good for equity but, especially in the early stages, the simplicity of the structure is also important. Copayments must not so high that they discourage necessary use. A system for exempting the poor for payment of both premium and copayment is crucial to ensure that they can and do use the services. Copayments should be flat or capped; having a hospital copayment as a percentage of the total bill with no cap can result in charges that a patient may not be able to afford.

Access to health care. Care must be taken to ensure that a comprehensive package of services is available to the members and that the quality of care is satisfactory.

Risk management. Three major areas of risk for CBHI are adverse selection, moral hazard and the risk of epidemics and other disasters that place an unexpected and high cost on the scheme.

The scheme must have ways to control *adverse selection*. These include encouraging or ensuring whole family membership, waiting periods for new members before they can use the services, sensitization of people who feel that do not need to join because there is a low chance of them falling ill. It is also important to use copayments to try to prevent *moral hazard* although, as noted above, care must be used with the design and it may be difficult for members who are exempt from copayments. The use of a referral system helps in terms of controlling unnecessary use of hospital services. Both of these risks should be subject to regular review. Attention should be paid to insuring outlier risks, which in the case of disease outbreaks and epidemics could be a huge cost, and consideration should be given to external reinsurance.

Provider payments and incentives

Using a capitation basis for paying for health center services would remove the risk of over-billing and will reduce scheme administrative costs. Using some form of bundling of health services, such as the use of case-based payments, can help to achieve the same things at the hospital level. However, strong system to monitor the quality of care is of paramount importance.

Financial management

Proper financial management systems are absolutely critical. Insurance scheme funding is often subject to fraud and mismanagement because the premium funding is often not paid out immediately and the expenditures are not directly related to the income. Good reporting systems that reconcile premiums with membership figures and which provide comparable information on claims are essential.

Financial solvency and sustainability.

In any developing country, it is not likely that a scheme which includes the informal sector and the poor will be self-financing. Subsidies from the government and support from donors is likely. However these should be carefully planned so as not to create too much dependency. While there are limitations on how much members can pay it is important to eventually have one pool for all citizens so that the better-off can subsidize the less well-off. It is also essential that principles of cost-effectiveness and efficiency should be applied, both for the operations of the scheme but also for the health services that the scheme is helping to fund.

Finally it is important to reflect that the goals of maximizing health revenue and maximizing participation in community-based health insurance in a developing country are generally mutually exclusive. Ensuring access to all citizens, as espoused in the principles of universal health coverage, is, and should remain the priority.

Conclusion

Implementation of CBHI in sub-Saharan Africa has been disappointing to date, but experience in Rwanda suggests that CBHI is a possible path to achieve universal coverage. Four major phases marked its development: (1) political commitment and piloting; (2) expansion of independent, district-level schemes across the country; (3) consolidation into a national scheme and standardization; and (4) ensuring the scheme sustainability.

The development of CBHI in Rwanda has benefited from the strong and high level political commitment towards the well-being of the population. It has also required a coordinated development and implementation of Government-led policies, regulations and guidelines in collaboration with development partners, strong administrative support, high involvement of local authorities, religious leaders, and beneficiaries in the scheme design and management, continuous education and sensitization efforts on the role and importance of health insurance, adequate financial management system, and financial assistance to subsidize the poor.

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Annexes

Annex 1. Summary of critical events

The critical events in the development of CBHI are summarized in the following table.

Date	Event	Effect
Pre-1994	Adoption of the Bamako initiative in the 1980s	Most health services funded by user fees
1994	Genocide	Public health system collapses
1995	Humanitarian assistance	Most health services are supported or provided by international agencies
1995	National Health Policy 1995	Encourages the development of mutual aid societies
1996 - 1999	Decrease in humanitarian assistance	Reintroduction of user fees at public health facilities. Health service utilization falls very low
1999	MOH pilots prepayment	Three pilot prepayment schemes are piloted with help from USAID
2000	USAID evaluation of pilots	Pilots appear to be successful and valuable lessons are learned
2000-2005	Expansion of prepayment schemes	With encouragement from the government more districts start their own prepayment schemes covering public health centers and district hospitals. By 2005 most health centers are covered by schemes and membership increased from 7 percent in 2003 to 44 percent in 2005. Premiums, copayments, and packages differ
2004	National CBHI Policy developed	Policy aimed at consolidating schemes into one national CBHI scheme. Each district still setting its own premiums and copayments
2006	National CBHI Policy implemented through ministerial instructions	Family membership of CBHI made compulsory. Pooling system established for districts. Administrative procedures, quality of care, and protection for the poor measures established. Population covered reached 73%. New standard premiums (RWF 1,000 per year per

		member and matching RWF 1,000 from government), and copayments (flat copayment fee at health centers and10% of bills at hospitals) are implemented. Premiums for the poor are paid by donations from NGOs and from a Global Fund grant. Pooling contributions established. Performance-based financing established.
2008	New law governing CBHI (law N° 62/2007 of 30/12/2007)	Establishment of organization, functions and management of CBHI and described the membership rules, package of services, provider payment options, and financing mechanisms. Membership of a health insurance in Rwanda is compulsory by law
2010	Membership peaked	Membership reaches 91% of the target population. Recognition of some equity challenges.
2011	New CBHI Policy implemented	Membership voluntary. New graduated premiums based on income (higher for middle and upper income groups – free for poor). Copayments free for poor. Copayments did not change for other income groups. Patient roaming introduced.
2012 - 2014	Membership falls	Membership fell from 91% of the target population in 2010 to 73% in 2013/14.
2014	Drop in enrolment and financial sustainability issues	Government decision to move CBHI management from the MOH to RSSB

Annex 2: Household classification criteria

The following criteria were used for identifying destitute people using the *ubudehe* approach

Population group	Characteristics
Abatindi nyakujya "people living in abject poverty" Category I	This group of people own no property, live out of begging and assistance of other people, and consider that death would be a relief.
Abatindi "very poor people" Category II	These people are homeless and lack food. Access to food is not easy but they can work for other people to survive. They are poorly clothed and own no land or livestock.
Abakene (Poor) Category III	These people depend on food deficit in nutrients, own a small portion of land, have low production and their children cannot afford secondary education.
Abakene bifashije "less poor people" Category IV	These people own a portion of land, some livestock, and a bicycle and produce an average quantity of food; their children can attend secondary school and they face lesser difficulties accessing health care.
Abakungu – Jumba "Rich people because they have food" Category V	This group of people own large areas of land, can afford a balanced diet, and live in decent homes. They employ other people, own livestock, and their children can easily attend university.
Abakire "Rich people because they have money" Category VI	This group comprises people who own a bank account, can access bank loans, own a beautiful house, a car, livestock, fertile lands, sufficient food and have permanent employees.

Source: Ministry of Public administration and Social Protection, "Ubudehe" program, Kigali, Rwanda.

Annex 3 Key informant interview details

Perceptions of key informants about CBHI in Rwanda

This section reports the results of a qualitative assessment conducted in May 2014 by the University of Rwanda's College of Medicine and Health Sciences School of Public Health [31]. In total, 10 people were interviewed based on their professional position over the period of 1999-2014 which allowed them to either contribute to or observe the CBHI policy development and implementation processes. Six interviews were conducted with stakeholders at the central level, three of whom were medical doctors (one was a senior member of the Health Commission of the Rwandan Senate, and two were CBHI officers in the MOH). Additional interviews were conducted at the district level with one CBHI officer and one district representative in each of the two selected districts (Burera and Bugesera). These districts were selected based on their health insurance coverage as reported in the 2010 DHS. Burera District (93.2 percent of the population insured) was randomly selected among the top ten districts with the highest health insurance coverage while Bugesera District (62.6 percent of the population insured) was randomly selected among the bottom ten districts with the lowest health insurance coverage. [29]

The original report included a summary of challenges, lessons learned, and recommendations. These are not described below as they are based on the answers provided by the respondents which are shown in the narrative. The challenges and lessons learned are included in the main analysis sections of this document.

- ***Perceptions of key informants about events that resulted in CBHI being on the policy agenda***

All participants reported that the low health care utilization and the existence of other health insurance schemes especially RAMA for civil servants led policy makers to start thinking about how to reduce financial barriers to access of care for the informal sector. CBHI has been

[29] Originally, 17 stakeholders were identified but only 10 were available at the time of the interviews.

introduced as part of the government of Rwanda's efforts to reduce poverty by making health care affordable to all Rwandans.

"All people recognized the importance of the health insurance RAMA, as most of the decision makers are covered through it. This has helped to push them in developing CBHI." (KII 3)

❖ ***Opinions of participants about the contribution of research in CBHI implementation***

Study participants were also requested to give their opinions about the contribution of research during the implementation of CBHI in Rwanda. Respondents indicated that research did not contribute much in the initial development of CBHI. Policy changes were driven instead by the government's strong leadership and commitment to provide access to health care services, especially for the poor. However, some respondents acknowledged the contribution of research in the later phase of implementation in the form of evaluations of CBHI policies' benefits and challenges.

> *"Honestly, I do not think that there were researches that influenced policy makers' perceptions. Even the initiation of the pilot phase in 1999-2000 was not influenced by research findings in any form. What mutuelles (CBHI) have benefited from is a great deal of leadership. It is only in the recent years that we have seen the benefit of Mutuelles health insurance that people started writing about it. So, research in the beginning was not an influencing factor At that time, it was more of policy makers' leadership taking a stand saying it is the only way to break financial barriers."* [KII 6]

❖ ***Perceptions of respondents about CBHI benefits to its members***

On questions related to the benefits of being a CBHI member, all participants in the study reported that CBHI offers access to the Government-defined health service packages (including drugs and ambulance services) provided at all levels of the public health care system (provided a transfer authorization has been obtained for referrals); except for cosmetic and plastic surgery. In addition, CBHI lowers members' health care costs.

❖ ***CBHI Impact on health care utilization and financial protection***

Regarding participants' perceptions of the impact of CBHI, all interviewees reported that CBHI had a positive impact on health service utilization. Many of the respondents said that health centers and hospitals are currently highly utilized compared to the period when CBHI was not yet in place. In fact, before CBHI, many health centers couldn't purchase drugs or equipment needed.

> *"Before CBHI, you could find one or two nurses in health centers because there were no patients and no funds to support activities. But now, there are many patients. Health facilities are now able to equip themselves, hire more staff; this has enabled health centers to function more effectively." (KII 5)*

Some participants also reported that CBHI has reduced catastrophic expenditures due to illness and lowered expenses to access health care even at the hospital level. By giving access to care, CBHI has also contributed to Rwanda's economic development. According these participants, CBHI is perceived as a contributing factor to the country's poverty reduction.

> *"Before the establishment of CBHI, health care was so costly, you could find people in need of health services obliged to sell their properties such as cows and material assets to access such services. This practice robbed people of crucial income for development purposes." (KII5)*

> *"… People are not getting sick and die in their home because of lack of care, they are getting care and by getting care they get healthier and by getting healthier they are working and by working they take their children to school and increase in their economic development." (KII 6)*

A few respondents said that CBHI's impact on health services utilization varies across socioeconomic status; in particular when it comes to hospital care (transfer to hospital). The bill at the hospital is sometimes high, and the copayment, which is 10 percent of the hospital bill, can also be high. Even though people have a health insurance, they can't afford hospital treatment because of the copayment.

❖ ***Perceptions of participants on factors facilitating CBHI enrollment***

In order to be enrolled in the CBHI, there are some factors that facilitate the exercise according to respondents:

Local government involvement: manifested by the extensive sensitization through face-to-face meetings and the media to some extent.

In order to ensure that all members pay their respective premiums, people are organized into *Ibimina* allowing families to mobilize resources together from either their personal savings or borrowing from a Savings and Credit Cooperative at low rates of interest.

Effective management of members' premiums: demonstrated by the availability of good services in health facilities including drugs, ambulances, and skilled human resources.

❖ ***Perceptions of participants about barriers to CBHI enrollment***

In this study, one of the objectives was to find out the factors that hinder people from enrolling in CBHI. Many respondents said that the principle of sharing risks is still not well understood by the population. For example, some people refuse to renew their CBHI membership because they did not use health care the previous year.

Another big factor hindering enrollment is the lack of financial resources. According to respondents, premiums set for them according to *ubudehe* categorization are much higher than their capacity to pay. Even those who can afford payment of premiums cannot afford to pay for passport photographs to put in their *mutuelle* membership card.

According to one respondent, there are also other people with big families who can't afford to pay premiums for each member of their family.[30]

> *"Some families with many members say eight to ten choose not to pay health insurance premiums owing to the large amount that is not within their financial means." (KII 2)*

[30] The premium is per individual and

A small number of respondents also argued that some clients do not pay the premiums because of the poor quality of care they had received. They believe that they would get better quality of care if they pay cash. In addition to poor quality of care, some participants mentioned also frequent drug stock-outs and a limited number of drugs at the health facility leading CBHI members to be sent to buy drugs at private pharmacies at high cost.

> *"Quality of care is low, no drugs, no doctor to consult you when you have a CBHI coverage; but when you have cash you receive quality of care, you are also given immediate attention…"(KII 3)*

Geographic accessibility is also an issue in some places where there are steep hills and long distances between homes and health centers. People residing in those areas choose do not buy health insurance because they believe they would never benefit from it.

A small number of staff in charge of CBHI at the sector level has been also cited as a barrier. There is only two CBHI staff at the sector level.

The lack of a database of CBHI adherents at the district level makes planning a difficult exercise. As a result, often false members with forged membership cards access health services.

Other factors mentioned were family issues such as domestic violence, single mothers, polygamy, crop damage. Also some families had enrolment difficulties, for example where family members live outside their homes or cross borders to work.

❖ ***Participants opinions about challenges encountered during CBHI Implementation***

Most of the respondents said that the main challenge encountered during CBHI implementation in the beginning was that the population did not well understand the importance of paying for health insurance before they fell sick. Some argued that CBHI is for people who often get sick, like children and pregnant women. At some point, people who had previously enrolled in CBHI were reluctant to renew their membership because they had not fallen sick during the previous year.

"People were saying, if I didn't get sick last year, why should I pay considering that I didn't use my health premium?" [KII 1]

"Their lack of understanding of risks prevalence is still very high which makes continuous sensitization of the population a very tedious exercise." [KII 2]

Another challenge is related to the management of CBHI and financial instability. According to respondents, most CBHI staff lack experience which in turn lead to delays in payment of health facilities and overbilling by some health facilities.

Lastly, respondents mentioned challenges related to the implementation of the CBHI policy of 2011 introducing payment of premiums according to socioeconomic categories based on *ubudehe*. According to participants, there were many complaints from families related to under- or over-estimation of household socioeconomic levels resulting into wrong categorization.

❖ ***Participants' perceptions about CBHI sustainability***

Stakeholders who participated in interviews on CBHI indicated that CBHI sustainability is feasible if every stakeholder plays its role such as sensitizing the population, sound management of premiums, and providing quality services. However, currently there are some constraints that are affecting the sustainability of CBHI.

The constraint most cited was poor management of CBHI funds:

"Management capacity is weak ... the CBHI staff should be trained to acquire skills to prevent overbilling..." [KII 7]

".... instead of using electronic means to provide services, they still use paper files. This practice tends to encourage fraud." (KII 3)

Other respondents mentioned political constraints resulting from politicians and local leaders who use their powers to abuse CBHI. For instance, some political leaders may request CBHI section staff to issue membership cards to people before their premiums are paid or effective in order to increase enrollment rates in their Districts as it is one of the indicators in mayor's performance contracts known as "IMIHIGO."

❖ ***Participants' perceptions about existing opportunities for CBHI sustainability***

When asked about opportunities for CBHI sustainability, respondents indicated that the political commitment to the wellbeing of population and poverty reduction projects were opportunities that can help achieve CBHI sustainability. For instance, participants mentioned the high rates of CBHI enrollment, the availability of banking system across the country and of various community initiatives to support vulnerable families' economic development such as *ibimina*, women associations and cooperatives.

> *"The government of Rwanda's strong political commitment is an additional opportunity to CBHI sustainability. This is demonstrated by the payment of subsidies to cover the very poor." [KII 7]*

> *"The large clientele of CBHI is another opportunity that if well taken advantage of will help build a strong public health insurance system in Rwanda." [KII 4]*

Two respondents said that they believe that the decision to move the CBHI management from the MOH to RSSB is a big opportunity for CBHI sustainability as it is going to allow the MOH to focus on quality health care services delivery and RSSB to use its expertise to manage health insurance which would help solve CBHI financial management issues among other things. They felt that it would help CBHI to be more efficient.

> *"Having transferred the management of CBHI to RSSB can be a great opportunity considering that RSSB is less influenced by politicians." [KII 3]*