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# **Implementing Community-Based Health Insurance schemes**

**Lessons from the case of Rwanda**

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## **Abstract**

Community-Based Health Insurance Schemes (CBHIs) have flourished all over the developing world. CBHI is a not-for-profit type of health insurance that has been used by poor people to protect themselves against the high costs of seeking medical care and treatment for illness. In principle, CBHI schemes are designed for people who live and work in rural areas, or in the informal sector. Most often, these people are unable to access adequate public, private, or employer-sponsored health insurance. Significantly, by reaching those who would otherwise have no financial protection against the cost of illness, CBHIs also contribute to equity in the health sector. However, many schemes do not perform well due to a number of problems related to their implementation. This study examines then the problems related to the implementation of CBHIs in the developing world. In addition, the study presents possible strategies to overcome those problems. It also draws lessons from the case of Rwanda, generally considered a success story in the implementation of CBHIs.

Methodologically, extensive literature review and informal interviews are two methods used to tackle the research questions.

The review found that the main challenges of CBHI are related to insurance risks that include adverse selection and moral hazard. There are also challenges related to the context in which CBHIs are launched such as the absence of formal insurance culture and poverty, which lead to low levels of revenues that can be mobilized from poor communities. Furthermore, the study discusses problems related to design features that hinder the performance of CBHI. Those problems include, among others, the small size of the risk pool, under pricing and the limited management capacity that exists in rural and low-income contexts.

To remedy to those problems, the literature proposes different strategies: increased and well targeted subsidies to pay for the premiums of low income populations; educational and awareness-raising programs for behavior change; mandatory enrollment to fight against adverse selection; regular training to enhance management skills; and community participation. Finally, the study draws lessons from success stories of implementation in Rwanda.

**Key words:** social protection, Social risk management, good governance, poverty and culture

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## **List of abbreviations**

APPP: Africa Power and Politics

CAAC: Cellule d'appui à l'approche contractuelle

CBHIs: Community Based Health Insurance Schemes

CEDPA: Centre for Development and Population Activities

CMAJ: Canadian Medical Association Journal.

CTAMS: Cellule d'Appui Technique aux Mutuelles de Santé

EDPRS: Economic Development and Poverty Reduction Strategy

EHP: Essential Health Package

GRAIM (Groupe de Recherche et d'Appui aux Initiatives Mutualistes)

GTZ: Deutsche Gesellschaft für Internationale Zusammenarbeit

HIV/AIDS: Human Immunodeficiency Virus Infection / Acquired Immunodeficiency Syndrome

HSSP: Health Sector Strategic Plan

ILO: International Labour Organisation

MMI : Military Medical Insurance

MINALOC: Ministry of Local Government

MoH: Ministry of Health

NGO: Non Governmental Organisation

ODI: Overseas Development Institute

ORT : Organization for Education Resources and Training

PBF : performance based financing

RAMA: La Rwandaise d'Assurance Maladie

SRM : Social Risk Management

UMASIDA : Umoja wa Matibabu Sekta Isiyo Rasmi Dar es Salaam

UNDP: United Nations Development Programme

UNICEF: United Nations International Children's Emergency Fund

WHO: World Health Organisation

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## **PART I: INTRODUCTION AND METHODS**

### **I.1 INTRODUCTION**

#### **I.1.1 Background of CBHIs in developing countries**

Thirty-five years after the Declaration of Alma-Ata<sup>1</sup>, an estimated 1.3 billion people worldwide still lack access to the most basic levels of health care. Although the right to social security and health is well established in international law, governments and international donors are still failing in their responsibility to guarantee these rights to millions of people. In poor countries, the challenge is to finance systems that will deliver that right (Appiah-Denkyira and Preker, 2005).

Throughout decades of underfunding of health systems by governments as well as donors, an important mechanism for financing health care in poor countries has been user fees. However, there is now a growing international consensus that user fees are an inequitable form of financing, an impediment to health access, and a cause of impoverishment, and that concrete measures need to be taken to abolish them. Each year, 100 million people are pushed into poverty by the need to pay for health care (Joint NGO 2008, 4).

Residents of rural communities are often unable to obtain necessary medical care outside of the main harvest season because of their inability to pay. To address the issue of health financing mechanisms – user fees – some countries like Malawi and Zambia waived user fees for the poor. Malawi initiated an Essential Health Package (EHP) in 2004 to deal with common causes of morbidity and mortality that disproportionately have an effect on the poor. Zambia abolished user fees in health for rural households in 2006. Waving user fees was seen as an efficient tool for bridging the socio-economic divide and improving health equity (Sambo 2012, ii).

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<sup>1</sup> In 1978 two United Nations organizations, the World Health Organization and UNICEF, held a joint conference at Alma Ata in the Soviet Union at which health was described as a human right to which all people were entitled (Baum Fran, 2007:34).



However, the abolition of user fees was considered by some actors in the international community as an ineffective solution. They proposed that health insurance mechanisms would close health financing gaps and benefit poor people.

Health insurance encompasses risk-sharing. It is supposed to reduce unforeseeable or even unaffordable health care costs (in the case of illness) to calculable, regularly paid premiums. But in Africa, public and private health insurance cover almost exclusively the formal sector, and therefore achieve a coverage rate of no more than 10 percent of the population. The majority of African citizens – informal sector workers and the rural population – don't have access to this kind of social protection (World Bank 1994).

As a response to the lack of social security, the negative side-effects of user fees and the persistent problems with health care financing, various types of community financing, especially for urban and rural self-employed and informal sector workers, have been recently proposed as a way forward (WHO 2001).

Community financing is defined in Dror and Preker (2002, 2) as “a generic expression used to cover a large variety of health-financing arrangements . . . micro-insurance, community health funds, mutual health organizations, rural health insurance, revolving drug funds, and community involvement in user-fee management” (Ekman 2004, 1).

Björn Ekman argues that there is strong evidence that community-based health insurance provides some financial protection by reducing out-of-pocket spending. There is also evidence of moderate strength that such schemes improve cost-recovery. However, there is weak or no evidence that schemes have an effect on the quality of care or the efficiency in which care is produced (Ibid).

According to the World Bank, a number of Community Based Health Insurance Schemes (CBHIs) are growing rapidly; however, they caution that many schemes do fail (Tabor 2005, 5). John Ataguba argues that " Many African countries, including Nigeria, Tanzania, Kenya,

Uganda, and Cameroon have community-based health insurance schemes that offer protection for the poor but are unsustainable because poor people can't contribute enough premiums to maintain the schemes," (Appiah 2012,1).

Only Rwanda and Ghana appear to have made significant progress toward providing universal health coverage through a national health insurance scheme for the majority of their citizens (Ibid.).

Accordingly, this study has been formulated to analyze the problems related to the implementation of CBHIs and to offer possible strategies to overcome those problems. The study also draws lessons from the success stories from Rwanda, a country which has successfully implemented the CBHIs at the national level

### **I.1.2 Background of Community Based Health Insurance in Rwanda**

In Rwanda, the culture of community-based health insurance systems can be traced back to the 1960s when associations like Muvandimwe<sup>2</sup> de Kibungo (1966) and Umubano mubantu<sup>3</sup> de Butare (1975) were established. However, these community-based health insurance initiatives were further developed with the reintroduction of the payment policy in 1996 (Ministry of Health 2004, 4).

In the Pre-Genocide period, the Rwandan vision for health care was supported by the Bamako Initiative<sup>4</sup> of 1988. This initiative, adopted by many Sub-Saharan nations, aimed at revitalizing

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<sup>2</sup> Muvandimwe means "A sibling". So, this association was named like that because its members considered themselves like siblings aiming at helping each other.

<sup>3</sup> "Umubano mubantu means "The good relationship among people. Those associations were initiatives of people who wanted to come together in order to cope with the out of pocket health expenditure. .

<sup>4</sup> "The Bamako Initiative is a joint World Health Organization/ United National Children's Fund (WHO/UNICEF) Initiative aimed at solving the problems in the financing of primary health care in sub-Saharan Africa. It was launched in September 1987 at a regional WHO meeting, where Mr Grant, director of UNICEF, dealt with the severe economic crises facing sub-Saharan Africa, the negative effects of adjustment programmes on health, and the reluctance of donors to continue to fund recurrent costs of primary health care programmes. The Bamako Initiative was then taken as a means of increasing access to essential drugs through community participation in revolving drug funds . ). By late 1994, the BI was implemented in 33 countries, 28 of which were in Sub-Saharan Africa, five were in Peru, Vietnam, Yemen, Cambodia and Myanmar.( Jakab & Krishnan 2013,21)

health care strategies and strengthening equity in access to health care via decentralization to the local levels (Kayonga 2007, 1).

Following the Bamako Initiative, Rwanda decentralized the management and district-level care strategy with the development of provincial-level health offices for health system management.

Although progress was made towards decentralizing management to the province-level, and even further to the district-level, this progress was disrupted by the 1994 genocide against the Tutsi (Ibid). As a consequence, Rwanda became an impoverished country with a largely destroyed health infrastructure dependent on international assistance for the provision of health services.

With the advent of peace, the government began rebuilding the health system with focus on decentralizing management, building infrastructure, and strengthening communities' role in managing and co-financing health-care. In an attempt to increase utilization rates, the government abolished user fees between 1994 and 1996, making health care free to all.

However, this system lacked accountability mechanisms. It creates weak incentives for service providers to reach rural and poor populations; it was also under-resourced and poorly managed system which negatively affected quality and availability of healthcare (ibid)

To address that situation, the government re-instituted user-fees in 1996 to supplement the budget and improve the system. This led to a fast drop in utilization of health care services and to increasingly deteriorating health outcomes. By 1999 health care utilization had dropped to 0.2 consultations per person per year from a national average of 0.2 in 1997, well below the WHO recommendation of 1 health consultation per person per year, and fewer than 10% of the population had health insurance (Schneider and Diop 2001, iii). This sharp drop in health service use, combined with growing concerns about rising poverty, poor health outcome indicators, and a worrisome HIV prevalence among all population groups, motivated the Rwandan government to develop a Community-Based Health Insurance (CBHI) system. This CBHI, known as "*Mutuelles de sante*" was an attempt to increase the use of healthcare services especially for poor people from the informal sector, expand health coverage, improve resource mobilization,

improve community participation, and strengthen management capacities of health services (ibid).

In 1999 the Rwandan government through its Ministry of health, in partnership with the local population, initiated 54 CBHI pilot programs, which were implemented in 3 districts: Kabutare, Kabgayi and Byumba. After the pilot program, the CBHIs were scaled up to the whole country; they are now operating in all 30 districts that make up Rwanda (Sebatware 2011, 17).

### **Organization and management of CBHI in Rwanda**

Community based health insurance schemes in Rwanda, commonly called “*Mutuelles de santé*”, function in conjunction with the small number of private insurance companies in Rwanda, as well as two other government and employer based insurance programs known as Rwanda Health Insurance Scheme (*La Rwandaise d’Assurance Maladie* or RAMA) and Military Medical Insurance (MMI). RAMA is a health insurance scheme for public servants and individuals working in the formal sector and their dependents. The premium under this scheme is shared by both the employer and the employee. MMI provides health insurance for members of the Rwanda Defense Force and their dependents while private health insurance covers mainly self-employed and private company employees (MoH 2010, 5). *Mutuelles de santé* insure people from the informal sector, who are not insured by any other insurance. These are autonomous establishments that are managed by their members. The regulations and rules governing the schemes program and its functioning are adopted by insured members.

The following organizational structure demonstrates how “*Mutuelles de santé*” is highly decentralized (see Figure 1), relying on existing community-based health structures at the district and local levels to provide a majority of management and administration of services, with only top-level policy and administration coordinated by the central government.

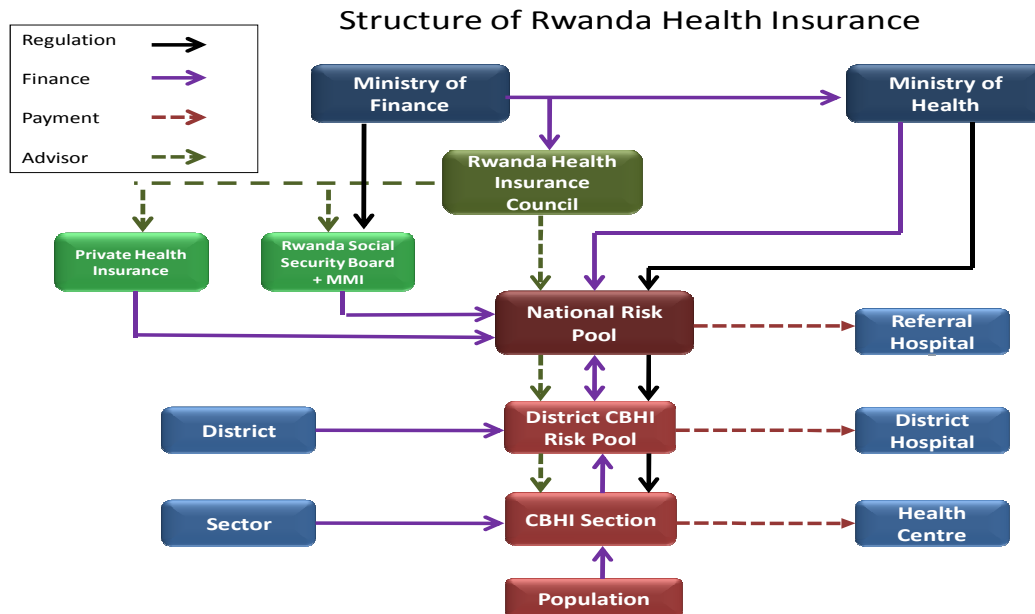


Figure 1: New Structure of Rwanda Health Insurance System

Source: Ministry of Health (2010, 15).

According to the Ministry of Health policy, CBHI are coordinated at the district level, where each of the 30 districts of Rwanda hosts a “*Fonds de Mutuelle de Santé*”. These are managed by a director, appointed by Order of the Minister in charge of health. At each health center at sector level<sup>5</sup> is a CBHI section, which includes an implementation unit, which is managed by an administrator. In every village, cell and sector, there is a mobilization committee for CBHI, consisting of members elected by the population for a two year renewable mandate (MoH 2010, 7). The mobilization committee is also responsible for collecting contributions and sensitizing the population; it also participates in the management of CBHI at sector and district levels.

<sup>5</sup> A Sector: is A third level administrative subdivision made of many cells and then villages and is under District

At the national level, the services offered – at the reference hospitals – are paid for from the National Risk Pool. At the sector level, services provided –at the health centre –are financed through membership contributions of the population enrolled. While at the district level, financing is composed of funds from a variety of sources: district, the *Mutuelle* sections and transfers from the Risk Pool and other partners. The National Risk Pool is mainly funded by the Government, through cross-subsidization with other insurance schemes.

Furthermore, contributions are made on an annual basis and have to be made three months before. This avoids self-selection problems, especially for sick persons. This system takes into account the low purchasing power of the great majority of the Rwandan population through subsidies provided by the government and development partners.

It should be noted that whenever an enrolled member obtains health services, he or she pays 10% (*ticket modérateur*) of medical care costs. This is meant to control for moral hazards, which may arise due to overusing of health services (Ibid, 6-7). In addition, for any household to be entitled to benefits, all household members have to fully pay their premiums.

Although, community based health insurance is voluntary, the current law on community based health insurance specifies that every person who resides in Rwanda, who is not insured under any other health insurance schemes, must join community based health insurance schemes<sup>6</sup>.

At the beginning –during the pilot phase –the annual premium fees for enrolment was fixed to RWF 2, 500 (almost US \$ 4) per family (Sebatware 2010, 16-17). In case of sickness people should visit the nearest public, or church-owned- health centers for treatment.

After realizing success in the pilot CBHI in improving access to health services and preventing financial risks, these schemes have become very popular such that community and political

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<sup>6</sup> See Law N° 62/2007 of 30/12/2007, related to the establishment, organization, functioning and management of community based health insurance. Available at <http://www.cbhirwanda.org.rw/documents/Mutuelle%20Law.pdf> (accessed on 27 January 2013 ).

authorities tried to scale them up at national level. In 2007, the annual subscription was then raised to RWF 1000 (around US \$ 1.8)<sup>7</sup> per person per household per year. This increase was made so as to raise internal resource mobilisation for sustainability of community based health insurance and to improve health services provision and expanding basic package of curative services (Sebatware 2010, 17).

Various studies have demonstrated that a contribution system based on the relative revenues of their members will increase equity and strengthen the financing of the CBHI System in Rwanda. At the same time, a contribution system raises domestic resources and reduces dependence on external financing. Besides ensuring financial sustainability, the premiums extend members' medical service access to all hospitals, including private hospital and pharmacies and enlarge the package for Universal coverage (Ibid, 19).

Consequently, it been decided that a system of stratification by dividing members into 3 categories based on Ubudehe<sup>8</sup> criteria should be introduced. The lowest contribution group will comprise the first and second Ubudehe category. The middle contribution group will consist of the third and fourth Ubudehe category, and the highest contribution group will consist of the fifth and sixth Ubudehe category (MOH 2010, 11). For CBHI contribution group 1, an annual premium of RWF 2,000 will be paid. As this group is comprised of the most vulnerable and poor, it is envisaged that their contributions will be paid by a third party, either the Government or development partners. Contribution group 2 will be expected to pay RWF 3,000 per person; and group 3 will pay RWF 7,000 per person (Ibid).

It should also be noted that all those changes in premiums took place because Rwanda wanted to shelve its old policy of voluntary participation and flat rate premiums, in favor of a new compulsory community-based insurance scheme in which premiums paid by citizens will be stratified and more directly based upon ability to pay. According to Rwanda's minister of health Dr. Agnes Binagwaho, "The voluntary, flat-rate scheme was never meant to be permanent."

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<sup>7</sup> The exchange rate (RWF) in 2007 was 1 \$ US = RWF 555.50

<sup>8</sup> Ubudehe is a community-based targeting mechanism that categorizes the Rwandan population according to their revenues and vulnerability

Rather, it was adopted for simplicity's sake when the government first introduced the concepts of health insurance and prepayments in 1996 (Vogel 2011, 1). Binagwaho added that, "What people were paying and will be paying is still far lower than what they're using. It's not fair for government to give subsidies at the same time for those who can pay and those who cannot pay. We are going to put the system in danger." (ibid, 1)

As Rwandans are now familiar with the concept of prepayment for health care, the country must regularly adjust premium levels to keep the system financially sustainable. This is emphasized by the minister of health when she argued that the government will still have the same responsibilities for people living in extreme poverty and will continue to subsidize their premiums through block grants to administrative districts (Ibid, 2).

## **I.2 RESEARCH FOCUS AND QUESTIONS**

Given the limited time allocated to this study, I am unable to explore CBHIs in all developing countries. The main focus will be given to the case of Rwanda; however, the research will be compared to findings from other countries of the developing world, where necessary.

The study focuses on the CBHIs in Rwanda for a number of reasons. Most importantly, the country has scaled up coverage of CBHIs from just around 35% in 2006 to almost 85% in 2008. Such rapid growth and coverage is unprecedented in the history of CBHIs (Mladovsky and Mossialos, 2006). Secondly, CBHIs in Rwanda have been accorded a central place by policy makers; this means they are integral in the country's health program. That signifies that they have strong administrative and political support for expansion and functioning. Third, the experiment has attracted so much interest to the extent that other countries are considering the Rwandan model as an alternative vehicle for health sector financing and delivery of basic health services (Shimeles 2010, 6).

These reasons led me to choose Rwanda as my case study, in order to draw lessons from its success so that it potentially serves as model for other developing countries.

The research questions are formulated as follows:



What are the known problems in implementing community-based health insurance policies in developing countries?

Why do many developing countries fail to implement CBHIs?

Which strategies help to overcome implementation problems?

What are the lessons from Rwanda's case?

The research is divided into three main parts. Part one provides the introduction and methods used to carry out this work. The second part reviews key concepts and theoretical frameworks, while the third section discusses the findings and then draws conclusions.

### **I. 3 RESEARCH METHODOLOGY**

#### **I.3.1 Literature review**

This study is purely qualitative research since it is focusing on meanings rather than measuring quantifiable phenomena (Chambliss and Schutt 2010, 196-197). This study is based on an extensive review of literature in scientific research articles, books and reports from World Bank, UNDP , WHO and national government policy & reports on implementation of CBHIs in developing countries.

Reviewing and interpreting literature within the social sciences, the study is, in my opinion, within the hermeneutical approach. In this respect, the thesis will not be founded on brute facts, but on readings of meaning, which again are influenced by both the writer's and the researcher's self interpretation, our previous experiences, knowledge, readings, culture, values and other references in our lives (Martin & McIntyre, 1994).

The selected literature for the thesis is directly related to the research question and the topic of the thesis and the findings have foundation in the literature. To further ensure a reliable and valid research, searching and selecting literature is being done systematically. The following search engines are used: Bibsys, Google Scholar, Pub Med and Academic Search Premier.

### **3. 2 Interviews**

Apart from literature review, qualitative interviews will be conducted in order to get supplementary information not found in the literature review.

The qualitative research interview seeks to describe and to understand the meanings of central themes in the life world of the subjects. There exist two forms of qualitative interviews: individual interviews, also called in depth-interview where one individual is being interviewed by the researcher; and the focus group method, which is a form of interview with several people at the same time (Bryman 2004, 318). In focus group interview, the researcher actively encourages discussion among participants on the topics of interest. In the case of this study, I will conduct both individual interviews and focus group. However given the limited financial means and time frame available, individual interviews will be limited to the managers of CBHI schemes and focus group will be held with beneficiaries in 2 health facilities. The results from interviews will help me to understand the real problems encountered by the users of CBHIs in Rwanda and to know what are the solutions or strategies to solve those problems.

## **PART II: KEY CONCEPTS AND THEORETICAL FRAMEWORK**

### **II.1 KEY CONCEPTS**

This section explains first what a CBHI is and then discusses about other relevant concepts that are related to CBHIs such as social protection, good governance, poverty and culture.

#### **II.1.1 What is Community-based health insurance**

CBHIs are called by many different names, including: micro-insurance, community health finance organizations, mutual health insurance schemes, pre-payment insurance organizations, voluntary informal sector health insurance, mutual health organizations/ associations, community health finance organizations, and community self-financing health organizations (Tabor 2005, 13). There is little to distinguish one from another, except that some terms are more commonly

used in one part of the world than another. For example, in the anglophone literature, the terms *Community Health Insurance* and *Community-Based Health Insurance* are used most frequently. Less common is the descriptor *Mutual Health Organisation*, although its French equivalent *Mutuelle de Santé* is widely employed in francophone Africa, thereby emphasizing an underlying social dynamic (Soors Werner et al. 2010, 17).

In fact, community-based health insurance (CBHI) is a not-for-profit mechanism based upon solidarity among a relatively small group of people. CBHI schemes vary a great deal in terms of who they cover, how, for what, and at what cost. The majority of CBHI schemes operate in rural areas, and their members are relatively poor. The best-known examples are the schemes in Africa known as *mutuelles de santé* (Joint NGO 2008, 10). They are deemed as “local initiative which is built on traditional coping mechanisms to provide small scale health insurance products specially designed to meet the needs of low-income households ” (Carrin et al as cited in Mugisha and Mugumya 2010, 181).

CBHI is also considered as any program managed and operated by a community-based organization, other than government or a private for-profit company, that provides risk-pooling to cover the costs (or some part thereof) of health care services. Beneficiaries are associated with, or involved in the management of community-based schemes, at least in the choice of the health services it covers. It is voluntary in nature, formed on the basis of an ethic of mutual aid, and covers a variety of benefit packages. CBHIs can be initiated by health facilities, NGOs, trade unions, local communities, local governments or cooperatives and can be owned and run by any of these organizations (Jutting in Tabor 2005, 13)

Schemes laid out by government within a roadmap towards universal coverage might maintain the principle of voluntary affiliation (in rural China) or make a deliberate choice for mandatory affiliation like in Ghana and Rwanda (Soors Werner et al. 2010, 16).

To sum up, the term community-based health insurance is used in this study to refer to any non-profit health financing scheme, which aims primarily at the informal sector and formed on the basis of an ethic of mutual aid and the collective pooling of health risks, and in which the members participate in its management.

### **II.1.2 CBHIs as social protection and social risk management instrument**

Social protection is broadly and traditionally defined as “*public interventions to assist individuals, households and communities better manage risk and provide support to the critically poor*” (Holzmann and Jørgensen 2001, 530).

However, the application of social risk management extends social protection as traditionally defined since it goes beyond public provision of risk management instrument and draws attention to informal and market-based arrangements and their effectiveness (ibid, 531).

In fact, Social protection has emerged to expand traditional social security measures protecting people within the formal structures of employment, to incorporate those people, in poverty, operating outside of formal employment structures. According to the World Bank, the informal sector constitutes up to 80% of the workforce in Africa (Coleridge 2005). The majority of people from informal sector are not covered by any kind of social security though are more exposed to risk

It should be noted that Social Risk Management (SRM) framework is based on two important assessments: (i) The poor are typically most exposed to diverse risks ranging from natural (such as earthquake and flooding) to manmade (such as war and inflation), from health (such as illness) to political risks (such as discrimination), and (ii) the poor have the fewest instruments to deal with these risks (such as access to government provided income support and market-based instruments like insurance) (Holzmann 2003).

As consequences, the poor are the most vulnerable in society as shocks are likely to have the strongest welfare consequences for them and the high vulnerability makes them risk averse and thus unable or unwilling to engage in higher risk/higher return activities. Access to SRM instruments would allow the poor more risk-taking and thus provide them with an opportunity to gradually move out of poverty (Holzmann and Jørgensen 2001).

The instruments of social protection are varied and broadly fall into the categories of social insurance and social assistance. Thus, CBHI is one of the instruments used to protect people, especially the poor from informal sector, against health risks.

There are a number of ways in which the Government can assist in the management of health risks of the poor. This includes, for example, improved provision and targeting of publicly provided health services to the poor; financing the inclusion of the poor in social or private insurance schemes; and by investing in programs that are complementary to improve health standards, such as clean drinking water, sanitation, and good nutrition, in poor regions.

There are also ways in which low income communities can improve the management of health care risks, in partnership with Central Government and other sources of care.

Those ways range from informal/individual to formal ones. In the range of informal/individual ways, households have many ways of avoiding, mitigating and coping with the financial consequences of health risks. This includes private savings, reciprocal lending, asset accumulation/sales, and changes in labor allocation, reduced consumption, and participation in a variety of formal and informal savings or mutual benefit groups. Informal insurance mechanisms, which involve reciprocal exchange through local groups, work reasonably well for some risks. Nevertheless, all of these coping mechanisms may prove insufficient to meet health costs, particularly if hospitalization is involved and illness is prolonged. (Preker et. al. 2001)

Concerning community based health insurance systems; it differs from those informal insurance or other traditional forms of reciprocal exchange. It offers ex-ante, well-defined protection with a more reliable premium, compared to traditional insurance, in which the transfers are made ex-post and the transfer amount unknown. Informal arrangements generally cover a variety of life-cycle, income and health risks, while CBHI is limited to defined health risks (Tabor 2005, 14).

Thus, CBHI is deemed to be a better tool to deal with health risks for the poor than using coping mechanisms.

### **II.1.3 CBHIs and good governance**

CBHI schemes are only able to develop because of strong political stewardship and the development of appropriate legislative frameworks, another condition not yet satisfied in many poor countries.

Several developing countries, however, have opted to introduce specific regulations with the aim of scaling up CBHI as part of their national health systems (Joint NGO 2008, 12).

For example in Rwanda, the Government has shown stewardship by stimulating improved democratic governance in the health sector; the CBHIs are therefore invited to engage in transparent and participatory decision-making. Every scheme has now a general assembly, where members are able to interact with the scheme's administrative council about needs, concerns, suggestions for improvements etc. This interaction with the local communities also appeared to have a constructive effect upon discussions and decisions concerning health at the district level

According to Carrin, the Government plays four tasks: that of adviser on the design of CBHIs, monitor of CBHI-related activities, trainer and that of co-financier. Talking about the design of CBHIs, Government should be seen to steer CBHIs in the direction of a national system of universal coverage and financial protection. Here the Government intervenes in design CBHI policy in a way that prevents the problem of adverse selection by recommending not enrolling on individual basis but rather on a family basis (Carrin 2003, 26). To be sustainable, CBHIs depend on a larger risk pools because the small schemes do not constitute a solid risk pool capable of insuring its members adequately. Thus the Government has the task to scale up the CBHI at national level in order to avoid the problem of small risk pooling. The government has also to make sure that the package offered by CBHI reflects the health care needs of the population

Next to the tasks of adviser on the design of CBHI, Government can offer to monitor the basic performance of each CBHIs, track progress across the different schemes through time, and perform comparative analysis. Monitoring should not be understood as passive, but enables Government to stimulate the establishment of CBHIs, to signal problems to existing CBHIs and to offer practical advice concerning these problems. (ibid, 27)

The results from monitoring and the promotion activities also provide a natural input into training activities that Government could organize. The scope of these training activities can cover the entire range of issues that concern the establishment and adjustment of health insurance, i.e. determination of the benefit package and of the contributions, collection of the

contributions, issues of delay in payment of contributions and non-compliance, management information systems and the establishment of health insurance development plans (ibid.)

Concerning the co-financing task, Government can play a substantial role in enabling membership of the low-income groups in CHIs. First, at the level of a CBHIs itself, Government could subsidize, partially or fully, the contributions of the poorest. These subsidies would be financed out of general taxation revenues. Government could also come to an agreement with donors, however, allowing them to reallocate part of their funds as subsidies (ibid.)

#### **II.1.4 Poverty and CBHIs**

CBHIs often target people from informal sector and who are, in most of time, poorest category of the rest of the community or nation. This section will explore the link between poverty and the success of CBHIs especially when it comes to the payment of premiums. Before exploring that implication, it is deemed necessary to define what is poverty?

Poverty can be defined in terms of material deprivation in terms of income as well as lack of access to resources, services and basic information (Ducados 2006). Further dimensions can be added such as ‘exclusion from social support networks’ (Norton et al 2001, 48); a ‘state of relative powerlessness’ (Oxfam in Green 2008, 27); and a lack of opportunities and choices (UNDP in Bush 2007). Poverty can be absolute where survival and subsistence is paramount, but relative poverty, as depicted by Townsend in 1979, is in relation to societal norms and whether people can do ‘what is socially expected of them’ (Alcock 1997, 85).

In fact, widespread absolute poverty among potential members can be a serious obstacle to the implementation of insurance. If people are struggling for survival every day, they are less willing to pay insurance premiums in advance in order to use services at a later point in time. A positive impact of health insurance on equity and access must be doubted if a large proportion of the population cannot even afford CBHI membership (Wiesmann and Jütting 2000, 15).

Social exclusion may persist even if barriers to access are reduced for part of the population, and exemption mechanisms for the poorest or sliding scales for premiums that might be a remedy are not easy to implement.

In Developing countries because of the big number of the poor, the governments are not able to assist all people in need that is why they use targeting methods to select most needy people.

In Rwanda those who cannot afford CBHI premiums are identified using community targeting. Targeting is a complex process which involves defining eligibility criteria. Mechanisms for targeting include geographic criteria, specifying categories, means tests, proxy means tests, community selection and self selection, or a combination thereof (Ellis et al. 2009).

The community targeting system, used in Rwanda, identifies and ranks households according to 6 different poverty levels using proxy indicators such as a lack of earners in the household; a disabled person in the household; the number of dependants; and land access (Crookes, 36). The range is from destitute (no land, livestock, shelter, begging to survive), to food and money rich (Republic of Rwanda 2009).

Implicit within targeting is separating out a particular group of people which can have an unintended negative impact. It can contribute to divisiveness by making differences more visible and cause further marginalization, discrimination and stigma (Ellis et al. 2009).

A person risks becoming socialized into a “dependent disabled identity” (Barnes and Mercer 2010: 114) if continually so labeled and segregated. Titmuss’ argument for universal protection is to avoid a sense of inferiority and stigma of the have nots, with the haves (Fitzpatrick 2001). It can also detract from relationships with other groups within the community who can be a source of exclusion (Green 2002).

In Rwanda, during that processes of targeting the poor to be supported “there are people who didn’t want to be seen as the poorest of the poor, so they wanted to be placed in the middle strata even though they couldn’t afford the associated premiums,” Binagwaho, the Ministry of Health, argued (Vogel 2011, 1). However, “there was a village where everybody ranked themselves among the poorest of the poor, just to pay less.” (Ibid)



Another example is from Ghana, where CBHIs are also implemented on nationwide level. The premiums for nongovernment workers “were supposed to be based on income levels, but currently each district charges a flat premium because of the difficulty of grouping people in various income levels for the different premiums,” . They opted for flate premium system because identifying the poor is a challenge “some religious people don’t want to be labeled as poor” (ibid). The mentioned examples prove that it’s a shame to be labeled as poor even when there are associated advantages.

### **II.1.5 Cultural factors**

Although no single definition of culture is universally accepted by social scientists, there is general agreement that culture is learned, shared, and transmitted from one generation to the next, and it can be seen in a group’s values, norms, practices, systems of meaning, ways of life, and other social regularities (Kreuter et al. 2003, 133). Factors such as familial roles, communication patterns, beliefs relating to personal control, individualism, collectivism, and spirituality and other individual, behavioral, and social characteristics are not inherently “cultural” but may help define culture for a given group if they have special meaning, value, identity, or symbolism to the group’s members. In such a group, these and other factors may be directly or indirectly associated with health-related behaviors and/or with acceptance and adoption of health promotion programs (ibid, 133-134)

For example in the case of health insurance, the demand of households depends not only on the quality of care offered by the health care provider, on the premium and benefit package, but also on socio-economic (as demonstrated in previous section) and cultural characteristics of households and communities.

Cultural habits in dealing with the risk of illness can influence the demand for insurance: for example, in rural Benin, people were used to put money aside for unpredictable events like marriages and funerals, but they believed that saving money for eventual health care costs meant “wishing oneself the disease” (Wiesmann and Jütting 2000, 15). Fortunately, this attitude changed after a CBHI had come into existence. Another example to illustrate how social cultural

factors pose a barrier to demand for insurance refers to some societies where people believe that to think about the consequences of one's ill-health or death is to wish oneself the same. Similarly, in some societies people interpret ill-health as the wish of gods or links it to one's fate and hence refuse any medical treatment and turn to religious head (ibid).

However, despite the negative impact of culture on the demand of health insurance, there is also a positive side when the culture of a given society encourages people to help each other when it comes to management of health risks. A society with a strong solidarity, people will not worry so much if the benefits of the premiums they paid will accrue to themselves or other community members. For example, members of the Bwamanda scheme in Ex-Zaire expressed the opinion that if they would not need health care themselves, at least they had done something good for the community by contributing to the insurance fund (Criel, 1998). The level of solidarity and mutual trust is probably higher in homogeneous, close-knit communities than in scattered and diverse populations comprising people of different ethnic origin, religion and culture (Creese and Bennett 1997). Existing, "traditional" institutions of risk-sharing and mutual help can on the one hand facilitate CBHI implementation, because health insurance may be built upon these groups, as has been done with the Engozi societies in Uganda by the Kisiizi Hospital Health Society (Musau 1999).

On the other hand, the different logic of traditional networks sometimes induces misperceptions of insurance and disappointment, because people have expectations based on their experience with traditional institutions that are not fulfilled by CBHI, e.g. that the money paid into the common fund accumulates over time and that the benefits will correspond to the contributions made (Batusa 1999). A lot of community sensitization and mobilization may be necessary in this respect. In any case, initiators and managers of health insurance schemes should pay more attention to consumer satisfaction and to people's preferences and perceptions, because these are crucial factors for successful implementation of CBHI.

## **II.2 THEORETICAL FRAMEWORK**

This section explores two theories that are, in one way or another, relevant to the success of CBHIs. The first one is social capital theory and the second one is about social mobilization theory.

### **II.2. 1 Social capital theory**

Putnam (1993), the first scholar to popularize social capital theory, argues that social capital consists of “*features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit*” (Putnam 1993, 2). He asserts that informal networks of civic engagement build social capital which in turn facilitates improved governance (ibid, 3).

Michael Woolcock takes the theory a bit farther by breaking social capital into four categories: (i) bonding social capital inhering in micro level intra-community ties; (ii) bridging social capital inhering in micro level extra-community networks; (iii) bridging social capital inhering in relations between communities and macro-level state institutions; and (iv) bonding social capital inhering in macro level social relations within public institutions (Maldovsky and Mossialos 2006, 6).

According to Woolcock and Narayan (2000, 229) social capital helps the poor to manage risk and vulnerability. Thus, CBHI which aims at managing risk and vulnerability may be well accepted by a community that possesses a high stock of social capital. A high level of social capital is associated with a high level of altruism among individuals; this makes it possible to take into consideration the well-being of other members of the group. The presence of social capital always has a positive effect on a community’s welfare. (Ibid)

Fukuyama (1995, 4) asserted that “social capital can be defined simply as the existence of a certain set of informal values or norms shared among the members of a group that permit cooperation among them”. Sobel (2002) describes social capital as circumstances in which individuals can benefit from group membership. Thus, social capital refers to social life-

networks, norms, and trust that enables households to act together more effectively to pursue shared objectives. This social capital in the community can be an asset for the breakthrough of CBHI, thus contributing to the demand for CBHI at the community level.

In this study I will apply the Woolcock's framework of social capital to CBHI literature because it brings together several theories of social capital and draws on quantitative and qualitative evidence from field studies.

### **Perception of CBHI through the lens of the social capital framework**

Several studies have demonstrated that a high social capital in the community increases the chance for the community-based health insurance to be successful (Woolcock and Narayan 2000).

The first level of social capital framework according to Woolcock which refers to micro level bonding social capital proves that schemes characterized by strong intra-community ties are more likely to experience success in CBHI than those without these ties. According to Woolcock and Narayan (ibid, 230) "strong ties" refers to the close relationship between an individual and his family, friends, ethnic group, etc. This corresponds to intra-community social capital. "Weak ties" refers to the individual's contacts outside the ethnic group or the family (other entrepreneurs, other ethnic groups, banks, etc.). This corresponds to extra-community social capital. In other words, "strong ties" refers to the interactions that exist within a particular group (closed family, friends), whereas "weak ties" refers to the interactions across multiple groups (open groups or networks) (ibid).

To demonstrate that, in his study, Hsiao (2001, 5) considers two communities. Community A has less social capital than community B. Thus, community B will have the greater potential of the establishment and success of CBHI than community A. He further concludes that community A will not be able to establish CBHI since there is a low level of social capital in that community.

Thus, there is argument that strong ties have a positive effect on CBHI by constraining adverse selection and moral hazard and increasing willingness to pay. There are also ideas that trust and solidarity bonds in the community improve the likelihood of success in CBHI.

Recently, Zhang et al. (2006, 233) explored the effect of social capital on the demand for CBHI subsidized by the Chinese government. The Government aimed at encouraging Chinese farmers in villages to join CBHI companies by subsidizing the annual allowance of each participant by 10-20 Yuan (1.25-2.50 US \$). Trust and reciprocity were used as proxies of social capital to obtain the effect of social capital on the demand (five questions on trust and five others on reciprocity). Using logistic regression, the results of such a study demonstrate that social capital measured by trust and reciprocity has a positive and significant effect on the demand for CBHI.

However, there is another argument that strong intra-group bonds actually prevent the emergence of successful CBHI (Meessen, 2002). Similitude between members is a flaw for CBHI. For example if all members undertake risky behavior, CBHI might not work properly.

There are therefore two countervailing (positive and negative) views of the effect of bonding social capital on CBHI in the literature (Maldovsky and Mossialos 2006, 13). However, the social capital framework provides an alternative, third hypothesis: communities with both strong intra-community ties (promoting solidarity) *and* extra-community networks (promoting a willingness to invest in and draw on a larger, more generalized and formal pool of resources) are probably more likely to experience greater success with CBHI than communities with one or neither types of social capital

Second level of Woolcock framework of social capital discusses about bridging social capital. Here the task is to demonstrate the effect of vertical and horizontal civil society links on CBHI. According to Preker, horizontal civil society links facilitate the enlargement of the risk pool. In the context of CBHI, enlarging the risk pool has been interpreted as a case of constructing bridging social capital (Preker et al., 2002). Establishing and strengthening links with formal financing networks is cited as an example. In Rwanda federations of smaller CBHI schemes pool part of their funds at the district level to cover care in district hospitals (Schneider, 2001). Creating horizontal links through scheme mergers in this way allows schemes to expand the risk pool while continuing to capitalize on the positive social bonds fostered by small risk groups (Davies and Carrin, 2001). Larger pools are required in order to: spread risk; actuarially correctly

assess the probability of the loss occurring and therefore maintain solvency; cross-subsidize and lower transaction costs (Schieber, 1997)

While horizontal links facilitates the enlargement of the risk pool, the vertical linkages play a great role in capacity building. Vertical linkages, in the form of support from overseas agencies, are employed by CBHI schemes to build capacity in technical areas such as financial and general management and in administration, since the necessary skills for implementing CBHI are often not available locally (Bennett, 1998). In an exploratory study comparing a successful CBHI scheme in the Philippines and a less successful one in Guatemala (Ron, 1999), one of the major success factors in the Philippines (where the scheme grew steadily over three years) may have been bridging social capital constructed through several types of vertical links. A very effective administrative structure was provided by the international NGO Organization for Education Resources and Training (ORT). The structure was developed through the built-in members' participation mechanisms within a cooperative structure, combined with the financial and moral support given by the ORT country office and ultimately the World ORT Union (ibid.)

The Guatemalan scheme, despite receiving superior technical assistance from the WHO, failed to progress after initial registration, partly because it did not develop supportive links with local social and political structures (Ibid.)

The third level of Woolcock's framework of social capital concerns macro level bridging social capital: the effect of synergy on CBHI.

There are several views on the appropriate role of the state in CBHI. Pauly (Pauly et al., 2006) has recently advocated minimal government regulation of CBHI, arguing that government subsidy causes cream skimming and adverse selection. The health system framework suggests that although CBHI is a private sector method of financing health care, the government can play a vital role in schemes' success, should it decide that CBHI is a good strategy to further its objectives. Bennett et al (Bennett, 1998) argue that if there is government failure, or no clear government policy, schemes are likely to play an important role in the delivery of health care, but issues relating their role in the broader health system are unlikely to be relevant. If government is strong, they argue that CBHI relations with the government are likely to be very

important. The following three government mechanisms for supporting community health financing have been identified: stewardship (for example regulation and monitoring); creating an enabling environment (for example the rule of law); and resource transfer (for example subsidies) (Ranson, 2002).

The fourth level refers to macro level bonding social capital: the effect of organizational integrity on CBHI. Woolcock (Woolcock, 1998) defines organizational integrity as a type of social capital. He draws on neo-Weberian theory in perceiving institutional coherence, competence and capacity as deriving from an organizational form that socialises bureaucrats. This allows Woolcock to view the effectiveness of organizations, particularly government, as a product of social relations which foster a certain set of norms.

Evans (Evans, 1996) argues that without a coherent Weberian bureaucracy (characterized by meritocratic recruitment, good salaries, sharp sanctions against violations of organizational norms and solid rewards for career-long performance) state-society synergy is possible but it will not be a force for good and will foster corruption instead.

To conclude, It should be noted that, though, social capital could significantly affect a households' decision for health insurance, up to date, there is no clear consensus on how social capital should be measured. As stated by Fukuyama, (1995) "one of the greatest weaknesses of the social capital concept is the absence of consensus on how to measure it".

## **II.2. 2 Social mobilization theory**

Social mobilization theory has been proven as effective for health promotion especially when people are reluctant to respond positively to health program. In the case of CBHI, people need to be mobilized in order to understand and to adhere to the program given the fact that most of people do not see direct benefits of health insurance (time inconsistency problem). Hence, this section develops social mobilization theory and shows how it leads to social and behavior change through effective communication.

Social mobilization is a multi-level, dynamic approach that can be initiated either top-down or bottom-up. Community is perceived in its broadest sense to include all those who have a role and responsibility in effecting change. As information is made available and understandable to both experts and lay people, broad ownership and popular support are created (Russel and Levitt-Dayal 2003, 2).

Social mobilization refers to “the use of planned actions and processes to reach, influence, and involve all stakeholders across all relevant/pertinent/involved/concerned sectors, including the national and the community level to raise awareness, change behavior, change policy, demand a particular development program, or reallocate resources or services” (Ibid, 22).

The social mobilization approach can be used in different health issues including safe motherhood, community based health insurance, family planning, HIV/AIDS prevention, girls education and so on.

A community based health insurance like any other health program, to be effective, needs a multi-pronged approach of social mobilization that encompassed communication through dialogue at multiple levels and among multiple audiences. It also requires broaden public support through community mobilization. Here Community mobilization refers to a process of problem identification and problem solving stimulated by a community itself or facilitated by others that involves local institutions, local leaders, community groups and members of the community (CEDPA 2000). Community mobilization uses deliberate, participatory processes to involve local institutions, local leaders, community groups, and members of the community to organize for collective action toward a common purpose. Community mobilization is characterized by respect for the community and its needs. (ibid)

For social mobilization to be successful and to build this base of popular support, communication needs to be a process of dialogue, information sharing, mutual understanding, and collective action. Standardized messages are used to promote a dialogue within the community as a whole (Aubel 2001).

It should also be noted that the CBHI to be sustainable needs mobilization for human and financial resources. Neil McKee (1992) lists five main approaches to mobilizing human and



financial resources: (1) political mobilization, (2) government mobilization, (3) community mobilization, (4) corporate mobilization, and (5) beneficiary mobilization. Social mobilization uses community events to attract the attention of policy makers, community members, and media representatives and motivate them to take action on a specific issue such as immunization, literacy, or family planning. Social mobilization amplifies advocacy activities, strengthens communication, and allows many more societal partners to participate in the program. To be successful a CBHI program needs to use all those approaches to mobilize human and financial resources.

Champions for change such as community health workers are concerned with building consensus and educating people to energize and empower them to take focused action. They share information and galvanize many stakeholders around an issue. The stakeholders then agree on a goal, develop key themes and messages, and exert political pressure for policy changes and increased recognition of a widely recognized problem. A sense of community is built around the issue, and more people join the movement. This bandwagon effect leads to increased resources and formation of new social norms, creating a climate that supports individual behavior change as well as social change (Russel and Levitt-Dayal 2003, 3).

To conclude, many public health and social problems in resource-poor countries require a broader approach that addresses social, cultural, and environmental factors that affect individual behavior. Broader interventions that involve community members, stakeholders, and others at multiple levels are needed because these intractable problems can only be solved through collective action. Also, in some cultures the concept of the individual does not exist or is secondary to the group or community. Thus, it is important to understand how an individual's behavior is shaped by his/her social context and to recognize the influence of local values and social norms on individual behavior (ibid 4).

Due to societal influences on individual behavior, communication should aim to effect broader social change.

## **PART III: FINDINGS AND CONCLUSION**

Although the number of CBHIs is rapidly growing, there are only a few schemes in existence in the developing countries today, and these provide coverage to less than a tenth of the developing world's population. Many of these schemes are less than a decade old; few have been rigorously evaluated; and lessons of experience are still to be acquired.

This finding section is made up of 3 themes. Theme one reviews the problems related to the implementation of CBHIs in developing countries. The second theme discusses different strategies adopted to overcome those problems. The third theme draws lessons learned from Rwanda's experiences. A set of conclusions is presented in the fourth and final section.

### **III.1 PROBLEMS RELATED TO THE IMPLEMENTATION OF CBHIs IN DEVELOPING COUNTRIES**

Many problems threaten the performance of CBHIs. Some of them are related to the insurance risk, others are linked to the scheme design while others are related to the context in which CBHI is offered.

#### **III.1.1 Problems related to Insurance risk**

Several studies on community based health insurance have reported the presence of adverse selection and moral hazard as main challenges faced by insurance companies among of others CBHI.

##### **Adverse selection**

Adverse selection is one of the major threats that hinder the implementation of CBHIs since most of them are based on voluntary membership. Atim (1998), Criel (1998), (Carrin 2003), Preket et al. (2010) pointed out that voluntary membership can make these schemes vulnerable to adverse selection. Adverse selection results when high-risk or sick individuals are more likely to buy

health insurance than the low-risk or healthy individuals (Tabor2005, 39). In the presence of adverse selection, the premiums which are fixed at the average risk in the population are not enough to cover all the claims. Hence, the financial sustainability of the scheme is jeopardized and the insurers increase the premium which may make the contract a bad deal for low-risks individuals. Consequently low-risk individuals would opt out of the scheme as the membership in the scheme is made voluntary. As this mechanism of adverse selection escalates, the premiums continue to increase and fewer people will be able to afford to pay the premium (Barr 1992, 779-780).

In fact, adverse selection has been studied extensively in the context of high-income countries. Most of the research is focused on employer or government insurance schemes. There are relatively fewer studies from low and middle income countries where adverse selection in CBHI schemes is analyzed in detail. Thus, the evidence is still mixed. Wang et al. (2006) found the presence of adverse selection in the Rural Mutual Health Care in China. Criel studied the prepayment scheme for Masisi Health District scheme in the Democratic Republic of Congo and found adverse selection among pregnant women. At the initial stage of this scheme, he found that subscription took place on an individual basis, and the insurance option was preferentially chosen by pregnant women. After the household had been fixed as unit of membership in the second year, the proportion of pregnancy related health problems among hospital admissions dropped (Criel 1998). In Rwanda, when the “Mutuelles de santé” system was introduced, a big number of subscribers were pregnant women and children under five years because they were members of low-healthy categories. An evaluation of the Community Health Fund in rural Tanzania also (cited in Musau 1999) found that 52 % of the sampled member households reported at least one person suffering from a chronic ailment.

On the other hand, Dror et al. (2005) examined the Micro Health Insurance Units in Philippines and concluded that there was no adverse selection as the morbidities among the insured and uninsured was same as concluded by De Allegri et al. (2006) for the CBHI scheme in Burkina Faso. Resende and Zeidan (2010) also did not find adverse selection in the Brazilian individual health insurance market

Most of these studies are based on cross-sectional data and therefore did not study whether the process of adverse selection changed over time.

To combat this problem some general strategies have been adapted and are presented in the next section

### **Moral hazard**

Moral hazard is another serious challenge faced by CBHIs. This problem arises because of the tendency by individuals to behave, once they are insured, in such a way as to increase the likelihood of the risk against which they have insured (Criel 1998). Moral hazard problem too has implication on financial sustainability of a scheme, but in addition, it also has implications for costs of provision of such services.

Ahuja and Jütting have proved that the moral hazard problem is of two kinds: ex ante moral hazard and ex post moral hazard problem. The former arises due to reduced care of health after joining a scheme; the latter arises due to increased demand for medical care, once insured. The good example to illustrate post moral hazard is the over-consumption of medical services. This overconsumption may be the result of the provider's behavior or due to patient's behavior (Ahuja and Jütting 2003, 13).

Indeed, on one hand there are many examples of insurance schemes that have quickly gone bankrupt because of the problem of ex-post moral hazard on the part of providers. Over prescription of services or drugs to CBHI members by doctors has been reported in several cases. For instance, at the Kisiizi Hospital Health Society in Uganda, the Chogoria Hospital Scheme in Kenya, the Atiman Health Insurance Scheme in Tanzania (Musau 1999), and has at least been suspected of the Masisi Scheme in the Democratic Republic of Congo, where part of the revenue was used as incentive payment for doctors (Creese and Bennett 1997). In Rwanda, managers from different CBHIs at District Hospitals claim that major challenges they face include over-prescription and over-charging of acts by providers, as well as the misappropriation of funds in some sections of CBHI.

In some cases, extremely high hospital admission rates suggest the prevalence of overutilization by CBHI members. The insured consumers have a tendency to go for excess utilization of health care since they do not pay the full marginal cost of provision.

For example, after the introduction of the Masisi scheme, the hospital admission rate among the insured increased dramatically, reaching 157%, five times higher than among the non-insured. In Murunda, Rwanda, the hospital admission rate among members of the “Mutualité du Kanage” was about 141% and only 6% among non-members, which means that the insured used inpatient hospital care 23 times more than the non-insured (Musau, 1998).

The figures are partly explained by the self-selection of high-risk individuals or households, and by better financial access to medically justified care; unnecessary use of services seems likely.

To distinguish *ex-post* moral hazard, presented through above examples, the *ex-ante* moral hazard refers to the possibility that preventive efforts are scaled back in response to insurance coverage (Zweifel & Manning, 2000).

When it comes to providing health insurance to the low income people through micro-insurance, the argument is that *ex ante* moral hazard is dominant and serious rather than *ex post* moral hazard. This argument is based on the fact that the poor are the most vulnerable in society and shocks are likely to have the strongest welfare consequences for them; furthermore, high vulnerability makes them risk averse and, thus, unable or unwilling to engage in higher risk/higher return activities. Once insured, the consumers –especially the poor – may reduce efforts required to keep them healthy. An example from Ghana helps shed light on the problem. Users of CBHIs declared, “*We have mosquito nets but we don’t use them. If you are insured it is easier to go to the hospital [in case of malaria] [...] Why would you spend GH¢8 on the bed net while you can take GH¢2 to go to the hospital?*” (Debebe 2012, 2). This attitude signals a potential incentive problem related to health insurance (ibid). It is important to note that *ex-ante* moral hazard is found in all kinds of insurance markets and developing countries, as well as in developed ones.

Ahuja and Jütting affirm that ex-post moral hazard is more serious than ex-ante moral hazard since it is unlikely that insured individuals would deliberately increase their chances of falling sick just because the insurer is paying the medical expenses (Ahuja, Jütting 2003, 11-12).

Also, Cutler & Zeckhauser point out that one reason not to consider ex-ante moral hazard as a serious problem is the idea that uncompensated loss of health is consequential (Cutler & Zeckhauser, 2000). Put differently, people are assumed not to take a gamble with their personal health, or that of household members.

The ex-ante moral hazard is more likely to occur in car insurance where the insured's behavior could be indulged in more risky behavior such as being less cautious in vehicle operation, staging incidents to collect insurance proceeds, or exaggerating loss or injury.

Lahkar and Sundaram-Stukel (2010, 5) believe that the moral hazard problem is more fundamental than that of adverse selection. Their belief is based on the fact that adverse selection can be eliminated if accurate information about risk characteristics is available. Since CBHI schemes serve a local clientele, it would be fair to assume that it would have a sufficiently accurate level of information about the risk features of its clients. On the other hand, moral hazard would exist even in a world with perfect information. Hence, moral hazard is a much more serious problem that CBHI schemes need to grapple with.

### **Fraud and corruption**

Apart from adverse selection and moral hazard, fraud and corruption are also among the major problems that hold back the implementation of CBHI schemes. Health insurance is subject to the risk of fraud, or deceptions intentionally practiced by patients, providers, and CBHI staff and managers, to secure unfair or unlawful gain (Tabor 2005, 39).

McCord and Osinde argue that lack of professional management can make CBHIs vulnerable to fraud. In the case of Tanzania's UMASIDA CBHI, group leaders were selected from the local communities. They were not professional managers, yet they had a great deal of financial responsibility. Several of them became frustrated with all the work involved and found

themselves tempted by the premiums. Hence, many of these groups experienced a change in leadership because of fraud (McCord and Osinde 2002).

Apart from the fraud on behalf of managers, cases of fraud on behalf of patients have been reported by the CBHIs managers at different health facilities in Rwanda. Normally, new subscribers had to wait one month before enjoying their contributions. At times, however, they did not want to respect that period and, as a result, wanted to corrupt CBHI managers in order to get treatment before the due date.

Similarly, a manager of CBHI at Muhima Hospital, also in Rwanda, claimed to refuse a bribe of 100,000 Frw (around 153\$) from a patient who wanted to pay premiums and get the medical treatment on the same day because he was seriously ill and couldn't afford the hospital bill which would come without medical insurance. This situation is also connected to the problem of time consistence when people do not think about the benefit of the medical insurance before they fall sick.

Another form of fraud comes from the patients who want to belong to the category of low income earners while they, in fact, earn more. They do that to avoid paying high premiums. However, this problem has been solved. Each section of CBHI in Rwanda has an exhaustive list of all Rwandans and the categories to which they belong to. When people want to pay premiums, the manager checks the names on the list and charges them the premiums according to their respective categories. In fact, people are involved in that kind of fraud because they are unhappy about the category to which they belong. Vincent Sinduhunga , in his article in New Times, declares that 27.3 per cent of Mutuelle de Santé users were dissatisfied with the categories in which they were placed (New Times, 2013). Accordingly, the government has ordered the revision of those categories, to make sure that everyone is classified into the right category.

### **III. 1.2 Problems related to design features**

Another category of problems that menace the performance of CBHIs arise from the way the CBHI has been developed, designed, and managed. Those problems are related to small risk

pool, high start-up cost, under pricing (due to lack of information to set prices), coverage, and weak management capacity.

CBHIs tend to be small. Theoretically, no general rules on the minimum size of a CBHI can be given because its size depends on the nature of the insured risks. However, experience suggests that very small schemes are difficult to sustain. Unlike larger insurance pools, the small membership pool of many CBHIs limits scope for risk diversification. As a result, there is a threat that a small policy base will be unacceptably volatile. Small risk pools make it prohibitively expensive to cover rare but expensive health risks (Tabor 2005, 30).

However, some other scholars argue that if the risk is extended, formal rules become necessary. This is because local knowledge and social sanctions grow weaker as the group grows larger. Then “if micro-insurance among others BHI is work well, the group must be small enough for local knowledge and social sanctions to operate efficiently. Barriers must be raised against potential bad risks, since the risk pool is too small to take in chance “(Overbye 2005, 310).

On the other hand, smallness does convey important institutional advantages. Proximity enables social control, peer pressure, reciprocity and shared social values to be used to foster accountability and ensure compliance. In CBHIs where participants know about the risk profile of others, there is scope for peer monitoring to encourage healthy lifestyles, to minimize fraud and to discourage frivolous claims. In small schemes, coordination costs are lower and participation is easier to encourage. Moreover, the spirit of CBHI voluntarism contributes to social solidarity and inclusiveness.

It should be noted that the CBHI tend to contribute to universal coverage when it comes to medical insurance. To reach this objective, it needs large risk pool to limit the scope for risk diversification and many are threaten by the problem of adverse selection since the membership is voluntary for most of CBHIs.



Apart from small risk pools, there is also a problem of meeting high Start-up Costs. CBHIs are costly to establish. They require a detailed feasibility study, dedicated staff, and creation of new procedures and protocols. All this must be accomplished before there are adequate premiums to cover administrative costs. Although participation is vital to the success of CBHIs, many are actually formed in a “top-down” manner. Managers, reporting to a sponsor NGO, government or donor agency, will have a particular CBHI insurance model in mind and will mobilize village leaders or branches representatives to “implement” that model (Tabor 2005, 31)

Under-Pricing is another problem faced by the designers of CBHI. Many CBHI schemes have problems because of initially under-pricing their operations. This reduces premiums almost directly and leads to a vicious cycle of premium increases, reduced growth and renewals, increasingly slow payments to providers, service refusals and premium increases.

At times, under-pricing arises because communities under-value insurance but also due to lack of information to set prices (Ibid, 35). This lack of information leads to CBHI to restrict benefit packages to services that are easier to price (i.e. regular primary care services), to cap coverage of hard-to-forecast health events (such as long duration hospital stays) and to negotiate payment terms with providers (such as payment per treatment) that are easier to predict.

Coverage: The benefit package should be affordable and include basic services tailored to the health care needs and preferences of the population. If the health package is not attractive to people, they will not buy medical insurance.

However, to keep benefit packages simple, CBHIs normally offer one coverage package for all households. Since the risk profiles and risk-management capacities of households differ, one-size-fits-all coverage is bound to be less than totally effective and efficient as a health-risk management device for all families. On the other hand, one of the great efficiency advantages of CBHIs over other forms of insurance (or public provision) is that they can draw on location-specific information to craft benefit packages that meet the common priorities of their members.

The mutual health organizations in Nigeria, for example, apply an innovative approach to defining the benefit package. They interview the communities to identify the ten most pressing

health problems, and concentrate their coverage on these, with the aim of improving community health as a whole (Ibid, 34).

### **Management Capacity**

A weakness in management capacity is one of the most severe problems faced by the CBHIs. The weak CBHI management capacity includes a failure to adequately manage insurance risks, unrealistic premiums, the absence of a community business culture, low controls for fraud, limited coverage (and hence high risk of adverse selection), absence of qualified staff trained in insurance, lack of marketing surveys to link products to perceived needs, limited marketing beyond the pilot phase, poor data handling and management capacities, and stiff competition from highly subsidized government hospitals and national social health insurance agencies ( McCord and Osinde 2002, Musau 1999).

In practice, many CBHIs have managers who are not well-versed in insurance, finance, or in the basics of business management. That is because CBHIs are managed on a voluntary basis and draw on existing members as elected managers.

McCord argues that weak management can lead to the rapid erosion of trust. It is one of the main reasons given for the demise of new schemes (McCord 2002). Banerjee and Duflo added that the lack of trust leads to another problem of lack of credibility on the insurance provider. Credibility is very crucial for the insurance provider because the insurance contract that the insurer enters in with the insured requires the individual who is to be insured to pay in advance. This means that the insured individual is required to trust the insurer completely. Hence lack of credibility becomes a huge problem especially when insurance companies are unable to address clearly the problem of fraud or when the nature of the products is unclear (Banerjee and Duflo 2011, 153).

Management information systems –manual or computerized –are also critical to the effective operation of a CBHI. It becomes extremely difficult to manage a program without the ability to track premium payments, utilization, and other costs. Integrating hands-on management controls

with information systems can help CBHIs cut costs and improve service. Microcare (Uganda), for example, uses a check-in desk of their own in their provider facilities to verify eligibility and track utilization. This information is fed directly into their computerized MIS system to ensure that only covered patients gain access to approved services, and that facilities do not over-bill for services (Tabor 2005, 35).

### **III.1. 3 Problems related to context.**

According to Tabor, there are different problems related to the context in which CBHI is designed and implemented, such as poverty, awareness, and covariate risk (Tabor 2005, 28). CBHIs become successful when the context in which it has been designed, and in which it is being implanted, is favorable. In case that context is not good, the design and the implementation of the scheme are also somehow negatively affected.

Severe poverty can slow down the success of a CBHI. If most people are simply struggling to survive, they will be less willing to pay insurance premiums in advance to use services at a latter point in time. In fact the poor are the most vulnerable in a society because they are the most exposed to the whole range of risks and at the same time they have the least access to appropriate risk management instruments. The poor have only recourse to coping mechanisms: they try to cope with the risk when it has already occurred (Holzmann and Jorgensen 2001).

According to the patients from different Health centers in Rwanda, lack of money was the most frequent reason for non-subscribers not to join the insurance scheme. A non-subscriber met at Gihogwe Health center (in Rwanda) would say, “We are not refusing to pay, but we can’t afford to”. The manager of that health center also confirms that since the increase of premiums, the number of subscribers has reduced considerably.

Normally the Government of Rwanda pays premiums for the poorest people of the community. The person is identified in the community and classified as poorest of the poor in Ubudehe categories, Still, the number of people who cannot afford the premiums keeps increasing.

Besides money, payment modalities can also present problems. If the annual premium must be paid in a lump sum (instead of payments spread out over the year), households find it more difficult to pay. According to Morestin & Ridde, in Burkina Faso, for instance, the households stressed that a single payment is more problematic in rural areas, where it is hard to obtain credit. Another element is the time at which the payment is due. Incomes of workers in the informal or agricultural sectors vary over the course of the year. In Ghana, households in Nkoranza complained that the premium is due at a time of year when their financial situation is poor. In Rwanda, the premium must be paid at the start of the civil year, when families also have to pay school fees (Morestin & Ridde 2009, 2).

Apart from the problems related to poverty, there is also another problem of awareness. There is an argument that most of the time the poor do not understand the concept of insurance very well. It is true that insurance is unlike most transactions that the poor are used to. It is something that you pay for, hoping that you will never need to make use of it (Banerjee and Dulfo 2012, 152).

Cultural norms and values also play a role. If people see disease as a punishment for evil behavior, they will not join a CBHI. In some parts of rural Benin, for example, saving money for a disease was seen to be “wishing oneself the disease” (Tabor 2005, 29).

Tabor also argues that under-insurance, or the choice of an individual to buy less insurance than is needed or could be afforded, can occur when people don't understand the benefits that insurance can bring. Drop-out rates can be very high in cases where individuals feel that the benefits should correspond to the contributions they have made (i.e. savings concepts) (Ibid, 28).

The problem of time inconsistency can also be related to this problem of awareness. When deciding whether or not to buy insurance, we need to do the thinking in the present (when we pay the premium), but the payout, if any, would take place in the future. Thus it is difficult to take a decision to buy insurance when you do not have a problem, in that time, one does not see the benefit of insurance (Banerjee and Dulfo 2012, 154).

The Minister of Health in Rwanda also argued that to convince people to pay in advance is a process. That insurance was not in the culture or the mentality, let alone more complex schemes (Vogel 2011). Thus, cultural habits in dealing with the risk of illness can influence negatively the demand for insurance.

Covariate Risk is another problem that CBHI's are especially facing because of their small size and limited geographical focus. In practice, an individual's health is not independent of their neighbors and this is especially the case where regions are prone to natural disasters or epidemics (Tabor 2005, 30). Holzmann and Jørgensen argue that the informal risk management instruments among other CBHI tend to break down when facing highly covariate or macro-type risks because such disastrous events reduce rapidly the financial reserves of the scheme ( Holzmann and Jørgensen 2001, 539).

A malaria epidemic in southwestern Uganda cost the Kisiizi Hospital Health Society around 8.5 million Ugandan shilling (about 6,500 US\$). As a consequence, from January to December 1998 no more than 64% of treatment expenditures were covered by the scheme's revenues – without the epidemic the cost recovery rate would have amounted to nearly 90% (McGaugh 1999). Though no formal public-private partnership contract had been signed with the Ministry of Health, the ministry has implicitly accepted responsibility for losses due to epidemics and has reimbursed the associated expenses to the scheme (Musau 1999), acting as a public reinsurance agency (Jütting 2000, 12).

To address all those implementation problems of CBHI, a number of strategies has been put in place.

### **III.2 POSSIBLE STRATEGIES**

Given the complexity of the above presented problems, there unfortunately exists no panacea for conquering all of them. It is important to grasp that the context and particularity of systems would play an important role in determining what sort of strategy will be applicable to which problems. However, based on the literature reviewed and interviews, some best practices can be

shared here. In the first part of the discussion, possible strategies that can be used for tackling the problems related to insurance risks are presented. The second part will thus be devoted to strategies for dealing with the problems related to design features. It is important to note however that some of the strategies may be appropriate for solving the problems related to contextual considerations such as poverty, awareness and covariate risk.

### **III.2.1 Strategies to combat challenges related to insurance risks**

#### **Adverse selection**

As Fitzpatrick (ed.) (2006, 750) asserts, an insurance company severely threatened by adverse selection and moral hazard will not be willing to provide insurance service. This will eventually lead the insurance market to function inefficiently. However, since adverse selection is a sort of 'before insurance transaction problem,' Fitzpatrick argues that a possible method to avert it would be for insurers to demand a medical examination or extend the waiting period (ibid, 880). Such a method may in part assist the insurer to identify high-risk and low-risk groups. Additionally, insurers could offer different policies to the volunteer customers, such as charging higher premium to cover more risk and lower premium to cover limited risk and hope that customers will self-select themselves into appropriate premiums. This strategy however would not be as effective in practice as it appears in theory because a high likelihood that 'bad risks' will still not be compelled to insure for more if they deem it possible to ensure for less still exists.

The ultimate solution may thus still be government involvement in mandating enrollment so as to limit the possibility of 'low risks' opting out of the system. As Barr (1992:752) asserts, making membership compulsory will not only prevent low-risk from opting out of the pooling equilibrium but will also allow for a larger risk pooling. This compulsory enrollment imposed in CBHI may be compared to the risk sharing solution in systems with full coverage and compulsory membership such as Norway where national insurance –premiums are paid through taxes.

Mandatory enrolment can completely avoid the problem of adverse selection. It has been implemented in Ghana and Rwanda. The current Minister of Health in Rwanda stressed that

they made CBHI compulsory because the voluntary, flat-rate scheme was never meant to be permanent ( Vogel 2011, 1).

When mandatory enrolment is not an option other measures can be taken. Group enrolment is one such measure to reduce the risk of adverse selection. If group enrolment is properly enforced, adverse selection can be reduced as it will ensure that all group members, sick and healthy, enroll. However, group enrolment may not entirely eliminate adverse selection as high-risk groups may be more attracted to voluntary CBHI (e.g. households with many members with a chronic illness may enroll more).

Banerjee and Duflo (2011, 50) supporting that idea of group enrollment asserts that, the trick is to start from a large pool of people who came together for some other reason than health-employees of a large firm, microcredit clients, card-carrying communists...and try to insure all of them. At first glance, this strategy seems flawless but critical review will prove that it is not as adequate as it appears. For example, since it takes micro credit clients as a starting point, it might be easy to assume that it will cover everyone but as is usually the case, the poor of the poor usually do not have access to micro finance opportunities.

It is in this light that this study argues that government involvement might be inevitable in terms of premium subsidy for the poor and then reduce the small risk pooling cause by the adverse selection. This is what Banerjee and Duflo seem to suggest when they argue, "...on the other hand, the poor clearly bear unacceptable risk... but for the time being, the government should pay a part of insurance premiums for the poor. There is already evidence that this could work..." (Banerjee and Duflo 2011, 154 &155). Premium subsidy is then a mechanism that can mitigate adverse selection. This is because premium subsidy by reducing the cost of buying health insurance attracts individuals with low risks (Selden 1999). However, in the case of targeted subsidy, the impact on adverse selection is not clear. After subsidy if high-risk individuals from the targeted group enroll more than others, adverse selection will increase. However, if high-risk individuals are already enrolled from this group and the subsidy encourages the low-risk individuals to enroll, adverse selection will reduce. Also, CBHI schemes can introduce cross-subsidization (the rich households pay a higher premium) as a means to bridge this financial gap

(ibid). This is the strategy that is being implemented by CBHI in Rwanda. With Ubudehe categories each household pays according to their level of income. Then the Government in partnership with donors pays for the poorest of the poor.

Technical inputs for the design, management and monitoring of voluntary CBHI schemes are also essential to save these schemes from problems of adverse selection.

It is also important to note that the degree of formality or in other words the organization of a system (whether formal or informal) influences the degree to which adverse selection is experienced. In mutual trust based systems such as community based health insurance systems, people are able to trust each other on a personal basis and in this regard may thus give more accurate information and chances of cheating are reduced in that the opportunity might simply be unavailable as everyone knows almost everyone

### **Moral Hazard**

Just like adverse selection, moral hazard problem is a serious problem in insurance. In the previous sections, it has been shown that there exist two sorts of moral hazard: the ex-ante moral hazard and the post-moral hazard. To limit the ex-ante moral hazard which implies the reduction of care of health after joining a scheme, Debebe et al. (2012, 12) proposes educational and awareness-raising programs as a way of redressing the balance of prevention versus treatment. Jütting also buys into the idea of Debebe and argues that strong community participation can facilitate health education and sensitization of members in order to promote healthy behavior and the use of preventive services, as the members share a common interest in keeping the costs of health care low (Jütting 2000, 13). For example, the members of a self-governed CBHI comprising several villages in Benin realized that many cases of sickness and a considerable amount of health care costs reimbursed by the scheme originated from one distinct village. In consequence, CBHI members of that village and the local nurse organized sensitization sessions on water hygiene and vaccination (Garba and Cyr 1998). Members of the Kisiizi Hospital Health Society in Uganda cited health education on preventive medicine as one of the main benefits of the scheme (Musau 1999).



Tabor (2005, 38) asserts that the introduction of incomplete coverage, such as through co-payments, seems a more cost-effective strategy to neutralize perverse incentives. However, there is another argument that a potential solution to encourage preventive action in a low-income community is not through co-payments or deductibles as it is suggested to deal with ex-post moral hazard but through a group contract designed to induce peer monitoring by limiting the number of claims.

On the other hand, to fight against Post-moral hazard which refers to unnecessary use of health care services (intended overconsumption) once insured, Tabor suggests the use of pre-selected providers as a strategy but also co-payment (ibid). For example CBHI in Rwanda, to limit the overuse they implemented a co-payment policy requiring ten percent of the health care cost at the hospital level. Another viable method in view of Barr (1993, 780) is to limit insurance coverage to only particular types of treatment such as orthopedic operations and dentist service. It is argued that in this way, insurers can for example increase premiums depending on the type of cover sought as well as providing deductibles where the customer is to pay a certain first amount of the any claim or basically just that the client pays a certain percentage of the claim. Although a workable solution, this strategy risks discouraging demand for treatment instead of curtailing moral hazard only and in this regard should be implemented with great caution.

Barr (ibid, 780) further argues that the alternative would be for insurers to influence the supply side by restricting treatment to certain providers. These providers would then have to face competition to retain insurers approved status. Given that this too may not curtail moral hazard as treatment providers may primarily concerned with their image there by effecting measures that do not adequately deal with the needs of clients.

In Rwanda, the manager of CBHI at Muhima district Hospital revealed that to limit overuse of health service by CBHI insured, they impose controlled referral system. Access to secondary and tertiary level care requires an authorized referral from the lower level health provider. For that manager of CBHI at Muhima district Hospital, a regulated referral mechanism discourages frivolous use of more expensive hospital services. Under this system, health centers play a

gatekeeper function for district hospital utilization and district hospitals on their part play a gatekeeper function for tertiary hospital utilization.

## **Fraud**

To fight against fraud, a number of strategies have been pointed out by different authors. Tabor recommends a high level of community participation (Tabor 2005, 40). The degree of community participation in the design and running of the CBHI can vary widely and is usually greater if funds are owned and managed by the members themselves than if schemes are run by health facilities. If members can identify themselves with “their” schemes because they control the funds and have decision-making power, they will tend less to unnecessary use of health care services.

Another way of fighting against fraud refers to a proper record keeping and accounting. For example the CBHI known as “mutuelles de santé” in Rwanda has a system of MIS (management of Information System) that helps to keep all information about the members. In addition, all health facilities at sector level have a patient register, a membership register, a financial ledger and a receipt book for cash received. They are required to generate a daily and a monthly status report, summarizing all transactions of the fund. Initial signs are that the record keeping procedures have helped to reduce fraud.

To avoid fraud and abuses, the system is being strengthened continuously through various initiatives, including computerization of *mutuelle* management and membership cards with photographs of the cardholder.

Also, providers have to deny service to the uninsured, to bill only for services rendered, and to render only those services that are truly required. Patients, staff and providers need to know that there will be sanctions for fraudulent claims.

### **III. 2. 2 Possible strategies for Design feature problems**

The main problems related to design features, discussed in previous section, are small risk pools, high start-up costs, under pricing due to lack of information to set prices and weak management capacity.

To limit those challenges, this section discusses about possible strategies. To start with small risk pools, CBHI's cope successfully with the problems posed by small membership pools in a number of ways. To avoid excessive financial instability, program coverage focuses on a smaller number of more "predictable" health risks. Financial risk is shared between the program beneficiaries (through co-payments) and providers (through capitation payments). Faced with volatile costs, premiums are regularly adjusted by member consent (Tabor 2005, 31).

Tabor also argues that cooperation amongst CBHIs, which involves sharing premiums and benefit payout obligations, is another way in which risk pools can be enlarged. This can take the form of establishing partnerships between a CBHI and a formal, regulated insurer. It can involve the use of guarantee funds (by some of the largest networks of CBHIs) and the buildup of technical reserves. In several countries, networks of CBHIs have been formed to help pool risks, to interface with government, and to share technical information and training. In some cases, CBHI have been integrated into existing micro-finance networks, with the savings pools of the micro-finance institution used to offset a certain portion of the insurance risk (Ibid).

Concerning the high start-up costs, one of the ways of reducing high start up costs (and expanding risk pools) is to develop regional bodies that can provide technical support to new CBHIs. For example, the GRAIM (Groupe de Recherche et d'Appui aux Initiatives Mutualistes) in the Thies region of Senegal has evolved into a forum for supporting the coordination of 21 mutual health schemes. The GRAIM provides leadership advice and capacity building services in scheme design, financial management and administrative systems, in addition to training mutual health committees. The GRAIM has also become an active proponent of CBHIs and represents regional schemes in negotiations with Government and health providers (Tabor 2005,

32). Participatory processes sometimes substitute for more methodical, higher-cost, start-up processes. CBHI scheme in Rwanda serve a good example when it comes to the use of participatory methods in order to save the costs. There are volunteer health community workers, four health workers by each village, who are involved in sensitization and collecting premiums. There are also committees of users who provide support in management.

Regarding the problem of under pricing, the main solution to this is to price predictably. The designers and managers of CBHIs should take into consideration the extensiveness of the benefits package, the size of co-payments, and the availability of other sources of co-financing (i.e. donor or government subsidies) because all those factors have an influence on the size of the premium. CBHIs should regularly adjust premiums as more information on actual costs and market penetration becomes available.

Concerning the problem of management capacity, the regular training both in management and book keeping, but also in pricing of health risks seems to be a good solution to overcome deficiency in management. McCord argues that the relative success of the Zimbabwean and South African medical aid societies is related to their regular training programs which have produced large numbers of highly skilled management, who are able to price health risks fairly accurately and maintain proper accounts (McCord 2001). Also, integrating hands-on management controls with information systems can help CBHIs cut costs and improve service. Microcare (Uganda), for example, use a check-in desk of their own in their provider facilities to verify eligibility and track utilization. This information is fed directly into their computerized MIS system to ensure that only covered patients gain access to approved services and that facilities do not over-bill for services (McCord 2002).

Apart from capacity building of CBHI managers and information management, the management incentives have also an important influence on the operation of CBHIs. If remuneration is independent of the size of the risk pool, management may have insufficient incentives to engage in marketing or awareness building. Where remuneration is linked to recruiting new members, policy holder renewals may suffer, causing attrition rates to rise. In recognition of the importance

of aligning incentives with desired results, CBHIs have structured remuneration and staff performance monitoring systems to reward staff for increasing the size of the risk pool, educating members, and delivering good quality service (Tabor 2005, 36).

### **III. 2. 3 Possible strategies to overcome challenges related to contextual consideration**

As earlier discussed the problems related to context include poverty, awareness and coveriate risk and they deplete the implimentation of CBHI.

Tabor points out that to respond to the problem of poverty, the use of co-payments to reduce the up-front cost of insurance and cross-subsidization (by members, donors and governments) are amongst the other ways that CBHIs make health insurance affordable even in very poor communities (Tabor 2005, 28). According to him there are many CBHIs that have a solidarity fund that is financed by a small premium mark-up and is used to subsidize membership by the very poor. For example, in South Borgou, Benin there are two mutual health organizations that have established solidarity funds to pay premiums for handicapped, elderly and destitute persons. There is also the example of a mutual health organization in Senegal in which members pay the premium for street children (Ibid).

Some CBHIs have a sliding-scale for premiums based on income, and other CBHIs have a savings-scheme that allows households to set aside small amounts over time to pay their premium costs. For example, in Rwanda, the population is classified into different categories according to their revenues (income) and the premiums for CBHI are paid accordingly. Also, in Rwanda, the system of Tontine<sup>9</sup> helped many poor people to pay their premiums.

When mutuals first started in Rwanda, 7% of household paid their premium through tontine system (Morestin & Ridde 2009, 4). In the following years, the mutuals signed agreements with credit cooperatives so that the latter would make loans in the amount of the annual premium (ibid)

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<sup>9</sup> Tontine : System in which a group of people create a pool into which everyone deposits the same amount on fixed dates and from which, at every date of deposit, one participant is designated to receive all the deposits.

However this strategy is not directed at households who are permanently without money, but rather to those who are moderately poor and able to pay the premium, although not all at once.

As another proposed solution, scheduling premium collection at the right time of the year can help improve access to the poor, especially when their incomes are highly seasonal. According to a study in the region of Thiès (Senegal), households in the poorest quintile use primarily harvest earnings to pay the premium. If a lump-sum payment is required, it must at least be after the harvest. Households in the Nouna district of Burkina Faso have recently requested that memberships in mutuals be paid in this period. However, a study in Guinea-Conakry points out that even at harvest time, some are too poor to gather together the necessary sum (ibid, 5)

CBHIs also can make health care more accessible to the poor by addressing a number of the non-financial barriers that deter/discourage poor households from joining. This includes bringing health service providers to remote villages and helping to change the attitude of providers to the treatment of the poor.

Regarding awareness problem, the CBHI must offer a good benefit package in order to make it attractive even for those who have reticence about medical insurance. The solution is to provide coverage for a mix of hospitalization and primary health care services-this helps make the insurance service more desirable to target beneficiaries since all are likely to make some use of the scheme during the course of a year. Clients must fully understand what they are buying before premiums are paid if they are to be expected to renew their coverage. Research has shown that when clients do not understand what they are buying, they will perceive that they are not getting their money's worth because they were unable to access the health care that they expected (McCord 2001).

Also public education can in partly solve the problem of awareness because it has been shown that the CBHIs that have encouraged effective communications and client education are rewarded by a high level of member participation and low dropout rates.

To respond to covariant risk, there is a need for partnerships, either with donors or government. Some of the ways in which CBHIs have succeeded in managing covariant risk is to include

policy limits on total payouts and to exclude categories of diseases or chronic conditions likely to pose large covariant risk.

First-dollar coverage policies are sometimes used to ensure that the cost of treatment beyond a specified amount is either born by the Government or by the policy holder. Often governments (and/or their development partners) provide implicit reinsurance to CBHIs for losses incurred during periods of substantial covariate risk. For example, a malaria epidemic in southwestern Uganda cost the Kisiizi Hospital Health Society about 8.5 million Uganda Shilling (\$6,500) (McCord and Osinde 2002). As a result, in 1998, no more than 64% of the Societies expenditures could be covered by their premiums. The Ministry of Health accepted responsibility for the costs due to the epidemic, and although no formal reinsurance agreement was in place, reimbursed the scheme for their losses (ibid).

### **III. 3 LESSONS TO LEARN FROM RWANDA**

Rwanda has come a very long way since the terrible events of 1994, rebuilding out of the ruins of conflict to create a forward-looking country that nevertheless continues to face a number of challenges. Landlocked and densely populated, Rwanda is one of the world's poorest nations but also it is the only country in sub-Saharan Africa to successfully integrate bottom-up and top-down financing (pooling, more specifically) arrangements – community based health insurance (CBHI) known as “Mutuelles de santé” working in concert with a government led financing effort that, together, are building a national health financing system that is tailored to the specific requirements of the country.

In fact, Rwanda's mutuelle health insurance scheme has been consistently served as a model of how community health insurance can be scaled up to achieve large scale improvements in access and health outcomes. For example, over the first decade, national Mutuelle de Santé in Rwanda covered more than 90% of the population, has reduced out-of-pocket spending for health from 28% to 12% of total health expenditure, and increased service use to 1.8 contacts per year (Makaka et al. 2012, 1)

However, the role of the mutuelle scheme in achieving recent health improvements in Rwanda has often been exaggerated without consideration of other vital factors. This section then discusses different factors that contribute to the success of CBHI in Rwanda

### **III.3.1 comprehensive health financing policy**

The development of CBHI is a key part of the Rwandan success story because it is embedded within a comprehensive health financing policy that differentiates Rwanda's experience from other, less successful CBHI experiences.

#### **Box 1. CBHI (Mutuelle) experience in Rwanda and other African Countries.**

*Rwanda's experience with mutuelle development shares similarities with other African countries that have been leaders in community-based health insurance (CBHI), such as Ghana and Senegal.*

*However, the three country experiences differ in the types of community-based health financing schemes, the policy context, the modes of intervention, and the patterns of interaction of key actors. They are also differentiated by how they combine intervention modes to provide a supportive environment for CBHI development. Senegal, Ghana and Rwanda have all made the extension of social protection through mutuelles a cornerstone of their revised poverty reduction strategies. But the major difference among them is that Senegal has not yet demonstrated the political will and leadership to put in place an institutional framework for scaling-up of mutuelles. Community initiatives continue to emerge with support from NGOs and external partners, but with no support from the central government or local government units. Consequently, no formal relations exist yet between mutuelles and traditional health financing mechanisms in Senegal.*

*The Rwandan institutional and political experience is very different from the laissez-faire approach that continues to prevail in Senegal, and the directive and top-down approach of Ghana. The political will and leadership in Rwanda has remained strong in the promotion of mutuelles, as currently in Ghana. But strengthening community participation in the health sector was among the original objectives of the mutuelle policy initiative in an environment in which political and decentralization reforms promoted empowerment and participation. Thus, Rwandan actors and promoters of CBHI remained mindful of maintaining a balance between a top-down approach of state intervention and a bottom-approach for ensuring of state intervention and a bottom-approach for ensuring that mutuelles were well rooted at cell, sector, and district levels.*

Source: Health Financing Task Force Discussion Paper: Policy Crossroads for Mutuelles



It is important to acknowledge the improvements in access to health care that have come about as the result of a process of carefully orchestrated health financing strategy that includes: fiscal and managerial decentralization and increased government spending on health (government budget allocated to health has risen from 8.2% 2005, to around 10.2% for 2009-2010 (WHO 2010), and increased external funding for health, with a substantial amount used to support the CBHI-based mechanism rather than to finance parallel systems. Finally, the introduction of strategic purchasing of health services under the label of “performance based financing” (PBF<sup>10</sup>) as a national policy has brought about a fundamental change in the way that health facilities and their staff are motivated to strive for greater quality and efficiency (Ministry of Health 2010).

Also, while the network of mutual health insurance schemes known as *mutuelles* is at the core of the Rwandan success story, it is the linking of the different levels (community, district, and national) in a coherent and complementary manner, and the establishment of a bottom-up mechanism that pools resources under a national strategy and provides mechanisms for cross subsidization that makes them so effective.

### **III.3.2 Good leadership and decentralization of health sector**

Strong and committed leadership, vision and accountability mechanisms at all levels are vital to successful CBHI in Rwanda.

In order to be successful in implementing any kind of large scale scheme, there must be a clear vision and related policy objectives set forth by the government. Then, under the leadership of the Rwandan Government, the program to establish an effective national system of health insurance was made a core government priority agenda in Vision 20/20, Economic Development and Poverty Reduction Strategy (EDPRS) and Health Sector Strategic Plan (HSSP) (WHO 2013, 4). Also, the success of *mutuelles* is in part a result of government ability to enforce local implementation through fiscal and managerial decentralization.

The government of Rwanda has tried to decentralize all implementation of health care policy, with the central government responsible for stewardship activities only (e.g., including policy

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<sup>10</sup> Performance based financing, or ‘pay-4-performance’ or ‘output based aid’ as it is generally referred to, consists of a family of various methods and approaches that all aim, through differing levels of intervention, at linking incentives to performance by Louis Rusa

development, capacity building, monitoring and evaluation, and resource mobilization). Risk pooling for mutuelles is managed at both the central and district levels. The central level manages subsidy funds obtained through non-mutuelle insurance funds, charitable organizations, NGOs, development partners, and the Government of Rwanda. This national solidarity fund channels subsidies down to the district mutuelle solidarity funds as well as to tertiary hospitals for care of mutuelle members who are referred by district hospitals (Kayonga 2007, 4). The reality is that the Rwanda success story is due the way the government has used the resources available to it to increase coverage and boost performance.

According to the interview with the manager of CBHI “mutuelles de santé” in district of Nyarugenge in Rwanda, the job of district is to ensure that there is an equitable and efficient use of resources at the local level. The district government oversees a network of what are relatively autonomous facilities, comprised of district hospitals and health centers, that are either public, government assisted, not-for-profit (mostly faith based), or private institutions. The district government also oversees the network of autonomous mutuelle branches within the districts and manages a district pool that covers costs for first level referral hospital visits for the mutuelle members. Being closer to the people, the district is better positioned to identify and address needs more efficiently and effectively

The sector level CBHI facilitates the recruitment of members through mobilization of the population to subscribe to CBHI by enhancing the capacities of mobilization committees in villages, cells and sectors

He added that the communities form the base of the bottom-up pillar of the Rwanda health system architecture. In order to get community input, the district governments make decisions in consultation with various community committees. The communities also play a key role in the management of the facilities through participation on the hospital boards, while elected community representatives manage the mutuelle branches.

Another aspect of good leadership is how the Ministry of Health in Rwanda improves capacity building, monitoring and evaluation of CBHI sections. Ministry of Health has different technical

units such as the “Cellule d’Appui Technique aux Mutuelles de Santé” (CTAMS) that support the district and sub-district levels in managing and monitoring the mutuelles, and the “Cellule d’appui à l’approche contractuelle” (CAAC) that supports the service purchasing related to PBF. These support units are made up of experts from a range of disciplines including policy and planning, health economics, human resources and institutional development, monitoring and evaluation (WHO 2013, 1). In addition, information is compiled using information technology, notably electronic health records and national reporting systems. At the district and national levels, health centers use technologically advanced health-surveillance systems.

This technical support comes to resolve the mentioned problem of weak management that normally hinders the good implementation of CBHI.

It is also important to note that Rwanda has proved strong political commitment and leadership to attain universal coverage by paying premiums for indigents under CBHI. It has also made the enrollment to CBHI mandatory to all Rwandan without any other medical insurance. A patient I met at Muhima District Hospital revealed that without mandatory enrollment many people would not have joined the CBHI schemes, just because of bad understanding of benefits of medical insurance. Most of them they don’t see direct benefits as they think they might not fall sick during the whole year.

In brief, it should be noted that the commitment of very powerful national leadership to effective implementation and accountability at local level has driven success in Rwanda: other countries may have differing capacities to take advantage of these lessons

### **III.3.3 Cultural factor**

Another success factor is related to cultural factors: CBHI in Rwanda is one of the home grown solutions<sup>11</sup> initiated by Rwandan government. A defining characteristic of these initiatives is their roots in the local community. Typically they have taken the form of small community based mechanisms or pre-payment systems set up and managed by local health facilities. The

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<sup>11</sup> Development strategies that are grounded in Rwandan tradition

importance of local ownership was recognized when the government began to focus on ways to meet the challenge of how to pay for health back in 1999 (Diop et al. 2007, 24). Thus, from the outset, Rwanda's health financing strategy was designed to build on existing strengths.

According to ODI study, there are socio-cultural and political institutions and practices in Rwanda's history, which in the past served the purpose of promoting social and political order, and whose abandonment in the pursuit of modernity contributed significantly to the destabilization of society and the country's politics. These include: *ubudehe mu kurwanya ubukene* (collective action to combat poverty), *gacaca* (informal conflict settlement arrangements), *imihigo* (competitive performance contracts and accountability mechanisms), *itorero ry'igihugu*, (cultural mentoring and leadership training) and *umuganda* (communal work). All those social cultural practices have been revived in modern way and now help the country to solve different problems among of others medical insurance for people from informal sector.

Two of those cultural practices: Ubudehe and Imihigo are largely contributing to the success of CBHI in Rwanda (Chambers & Golooba-Mutebi 2012, 43). The same study proves that the *ubudehe* initiative is akin to a longstanding tradition of mutual self-help within local communities. In one of its most widespread forms, farming households help each other with land clearing, planting and, eventually bringing in the harvest. In its official form it has, among other things, facilitated the implementation of national poverty eradication initiatives. Implementation starts with classification of poor people, thereby enabling the poorest and most vulnerable households to be identified by their fellow villagers. In this way they become the priority recipients of any support available from the government or its development partners, including payment of *mutuelle* subscriptions. Inclusion of payment for *mutuelle* has helped extend *mutuelle* coverage to poor households that would otherwise not have the capacity to pay for themselves (ibid, 44)

Another cultural practice that helped the Rwandan government to implement CBHI successfully is “Imihigo<sup>12</sup>” (performance contracts). In the local policy environment the annual performance contracts have played an important role in efforts to improve service delivery, as they act as ‘an implementation device’ for the District Development Plans (Government of Rwanda, 2007). A manager of CBHI at Muhima district Hospital confirmed that one of the indicators of performance in the Imihigo contracts between the president and district mayors is the coverage of *mutuelles*. This reflects a strong commitment at high level for the development of *mutuelles*, but also creates the incentive for district mayors to enforce enrolment.

In fact, Imihigo are playing a great role in the success of CBHI as they include important objectives for attainment by local authorities at all levels. Among of others they include the acquisition of health care facilities, subscription to the community health insurance scheme, family planning uptake, antenatal service usage, training of CHWs, delivery under the supervision of skilled personnel, at health units. National-level prioritization and pressure for implementation have helped keep the delivery of these services high on the political agenda.

### **III.3.4 Public education or social mobilization**

The CBHI managers from Muhima district Hospital and from Gihogwe health center believe that in Rwanda, volunteer community health workers play a pivotal role in catalyzing and pushing for behavior change and in ensuring that key national and local policies are implemented at the local level right down to the village. Similar initiatives have been mostly unsuccessful elsewhere in Africa.

A number of strategies are used to ensure that efforts to improve the enrollment to “*mutuelle de santé*” schemes start at the grassroots level through on-going educational activities and where necessary, awareness campaigns designed to induce behavioral change. Public awareness campaigns have played a pivotal role in educating the population about the importance of certain

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<sup>12</sup> Annual *imihigo* performance contracts, in which the goals necessary to achieve national and local development objectives are agreed upon, are drawn up between the President of Rwanda and the district mayors and used as a mechanism to hold districts to account for progress towards these objectives

policies and practices, and consequently, in encouraging behavior change. There are community-level, multi-actor sensitization campaigns which raise awareness of different issues and which can be credited with contributing to improvement in service provision. These campaigns often have specific objectives such as increasing the number of *mutuelle* subscriptions and raising awareness with regard to a whole range of things.

In fact, other countries should take into consideration the unique and strong sense of community orientation that is essential in building CBHI in Rwanda and scaling it to the national level. As shown in previous paragraphs, in Rwanda, most of government programs have roots in the strong community-oriented culture; the *mutuelles* were built from the grassroots level up to the national level to ensure large uptake and scale up.

### **III. 3. 5 Social capital**

Social capital is also a crucial factor. The theoretical part of this study demonstrated that schemes characterized by strong intra-community ties are more likely to experience success in CBHI than those without these ties. In Rwanda, 1994 genocide against Tutsi had torn the social cohesion of Rwandan society. However, after that tragic period, the government of national unity prioritized the unit and reconciliation of all Rwandans and this objective has been achieved at great level. The restored social cohesion contributed a lot to the success of CBHI implementation in a way that people within the community initiated “mutual groups” and they set up a system where households used a savings and loan association to save enough money to join a prepayment insurance scheme. Overall villagers have embraced these associations. Poor people who previously found it difficult to pay their health insurance in one go find that the system facilitates their payment by allowing them to save gradually.

In brief, those are main lessons that have characterized the Rwandan *mutuelle* experience and distinguished it among other African *mutuelle* experiences. Despite the limitations of the *mutuelle* strategy, the country’s collective policies have helped it achieve historic gains.

However, some international commentators disproportionately underscore the *mutuelle*’s role in these achievements and oversell community insurance as a financing panacea for others to adopt

solely on its basis. It is important for all aspects of Rwanda's success to be acknowledged and studied for broader adaptation and, in particular, its increasing and strategic investments in health, strong economic performance, uniquely effective public administration, and popular buy-in to government initiatives. Indeed, these other factors are part of the reason why the mutuelle as a program has been as successful as it has.

Also, Rwanda's leadership should be lauded for their impressive accomplishments. Policymakers in countries looking to follow in their footsteps need to take the Rwanda model as a whole and look at the mutuelle program more critically to understand its relative merits and many limitations rather than simply buying the hype. Talking about limitation, the CBHI in Rwanda is criticized to be greatly subsidized by the government and development partners. Then its sustainability is questioned in case the subsidies are not available.

#### **III.4 CONCLUSION**

In many countries, new forms of risk sharing at the local level are developing. Community Based Health Insurance schemes (CBHIs) are a prominent example. They rely on pooling of resources by community members through the prepayment of premiums. This study showed that while it has been reported in the literature that such schemes can substantially reduce transaction costs and help to better protect poor people against health shocks, many of them fail because of a number of problems related to their implementation. However, throughout this study I have demonstrated that there are certain settings in which CBHIs have performed well, especially in the case of Rwanda, where more than 90% of the population is insured by the country's CBHI.

The main purpose of this research has been to study the known problems in implementing community-based health insurance policies in developing countries and the strategies that help to overcome those problems. The lessons from the case of Rwanda have been discussed in order to analyze if Rwanda can serve as a model for other developing countries which failed to implement CBHIs. Based on extensive literature review and on some informal interviews with some users and managers of the CBHI in Rwanda, I found that among the main challenges

hampering the implementation of the CBHI are problems related to insurance risk, design features and contextual considerations.

The findings suggested two main problems related to insurance risk such as adverse selection and moral hazard. Adverse selection is an important concern for any voluntary health insurance scheme since more sick individuals will join than others. In the context where a CBHI serves primarily poor populations, this problem is more severe. As solutions, the literature and interviews proposed mandatory enrolment and household-membership as opposed to individual subscription.

In addition, the introduction of cross-subsidization (the rich households pay a higher premium) has been recommended as a means to bridge the financial gap due to adverse selection. I found that this solution is being applied in Rwanda and good results are expected.

Apart from adverse selection, I have also found that moral hazard is a serious problem that slows down the performance of CBHIs. The literature showed that moral hazard is due to unjustified use of services at either the primary or the secondary level, without any real necessity—an attitude induced by the very fact of being insured and having easier access to health services. Moral hazard can be induced both by patients and by providers.

Scholars have showed that there are two kinds of moral hazards: ex-ante moral hazard due to reduced care of health after joining a scheme and the ex-post moral hazard due to overconsumption of medical services (Ahuja, Jütting 2003, 13).

In Rwanda, fraudulent use of the insurance scheme by non-members has been reported in Muhima district hospital. A number of measures have been suggested in the literature to mitigate problems caused by moral hazard. Those measures include educational awareness campaigns to enhance healthy behavior, co-payment and to limit insurance coverage to only particular types of illnesses. However, this list of measures is not exhaustive. It should also take into consideration the context of different CBHIs, as all of them are not identical.



Besides problems related to insurance risk, I found that the success of a scheme is hindered by a number of challenges related to its design features such as small risk pools, under pricing, inadequate coverage, high start-up costs and weak management. Different authors have showed that weak CBHI management capacity includes a failure to adequately manage insurance risks, unrealistic premiums, the absence of a community business culture, low controls for fraud and limited coverage (and hence high risk of adverse selection).

It also implies the absence of qualified staff trained in insurance, lack of marketing surveys to link products to perceived needs, limited marketing beyond the pilot phase, poor data handling and management capacities, and stiff competition from highly subsidized government hospitals and national social health insurance agencies (McCord and Osinde 2002, Musau 1999). To solve such problems, the literature considers that permanent training both in management and book keeping, as well as in pricing of health risks seems to be an appropriate remedy to overcome deficiency in management.

Apart from problems related to insurance risk and design features, the literature proved that there are also problems related to the context in which CBHIs are launched. Those problems, when unaddressed, slow down the performance of CBHIs. Such problems mainly include poverty, awareness problems and covariate risk.

In fact, it has been shown that health risks are a major concern for the poor but the participation in community financing schemes requires resources (like money), which the most disadvantaged groups in societies often do not possess. Furthermore, there is an awareness problem due to the absence of a formal insurance culture, and a consequent lack of trust in insurance-type arrangements whereby clients pay in advance for a service that they may or may not receive in the future.

Scholars advocate that empowering informal sector households, including the poor, to better manage their health risks, in a financially efficient and effective manner. It can be an important

part of the solution to the complex nexus of poverty and health problems. Also, the subsidization by donors and the government is another way to help the poor to access medical insurance. Client education, through awareness campaigns, can lead to behavior change and remove the poor mindset about medical insurance.

Many countries have failed to successfully implement CBHIs due to the already mentioned problems. Few others have had success in one or several specific areas, but all face several challenges. The case of Rwanda reveals progress. Caution provides that its success should not be considered as perfection; however, it does offer valuable insights in the steps Rwanda has taken in order to move towards Universal Coverage, and as such presents valuable lessons learned to inspire other countries.

As this study has attempted to show, one of the most remarkable aspects of the Rwanda success story is the way the government has used the resources available to increase coverage and boost performance. The World Health Organization has proved that that the success of the CBHI in Rwanda is in partly due to increased government spending on health. For example, the government budget allocated to health has risen from 8.2% in 2005, to around 10.2% in 2009-2010 (WHO2010).

Also, donors are delivering financial and technical assistance through the mutuelles rather than through parallel channels. The level of funding provided by donors is also substantial, with external resources exceeding 50% of Total Health Expenditure (ibid). This relative abundance of resources has of course been enormously helpful to policy makers, but it also represents one of the most important challenges: how to sustain the benefits of the system in the long term.

The study has also demonstrated that the success of the CBHI in Rwanda has been driven by the commitment of a very powerful national leadership to effective implementation and accountability at the local level. This effective implementation has been possible through participatory decentralization of community health workers (CHWs) that has brought services closer to communities and empowered them to participate in their own development.

Decentralization induced community support, which is an important factor in achieving high levels of uptake and continued enrolment in the scheme.

Members of the CBHI in Rwanda are involved in a variety of activities including overall coordination, community sensitization, encouragement and advice. In addition, CBHI success is due to the system of home grown solutions initiated by Rwandan government. This unique and original way is founded seen as a permanent solution to governance and development problems, including health problems.

CBHIs, known as “Mutuelles de santé,” are one of the home grown solutions to extend medical insurance to low income households, especially from the informal sector and rural areas. Other home grown solutions like “ubudehe” and “imihigo” have contributed immensely to the success of the CBHI in Rwanda. The ubudehe initiative allowed the classification of the Rwandan population according to their income, which helped determine the premiums they pay, according their level of incomes. The rich pay more than the poor. This helps to fill the financial gap and to increase the pooling risk. “Imihigo,” competitive performance contracts and accountability mechanisms, have pushed local leaders to increase subscription to the community health insurance scheme. They have acted as incentives for local leaders to work hard and get the population sensitized about the benefits of the CBHI and then to adhere to it massively.

All these factors combined contribute to the success of CBHIs in Rwanda. They also make it a likely model for other developing countries. However, the literature provides a warning that countries should not blindly copy schemes that have worked well in a different setting, but that they should take each case as unique. This requires unique solutions to common problems related to the implementation of CBHIs.

The problems are common but solutions must be applied according to the context in which the CBHI is launched. There is an argument that community financing schemes are no panacea for the problems that low income countries face in resource mobilization. They should be regarded as a complement to – not a substitute —strong government involvement in health care financing and risk management related to the cost of illness.

There is hope that the future will show if there are ways to overcome common failings of CBHI in many schemes. These include limited participation, low cost recovery rates and the problems of including the poorest members of society (Creese and Bennett 1997). Finally, future research should address the question of how subsidies for the poorest in a community can be designed in order to preserve the incentives for a viable management of the schemes and to achieve optimal targeting. In addition, more research is needed on other promising measures to fight social exclusion in access to social protection in low income environments.

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