In the context of inadequate public expenditure in the health sector, many countries have installed cost recovery systems, such as user fees, as a supplementary financing approach for health care services. This practice has raised concerns over equity and access to health care for the poor, and the search for complementary financing solutions continues. One response has been a rapidly growing phenomenon in some developing countries: community-based health financing (CBHF).

CBHF schemes are not a new phenomenon. Such schemes have been around for a long time and in some cases have evolved out of traditional risk pooling mechanisms (such as the tontine in West Africa). A 1997 review identified 81 documented CBHF schemes from throughout the world, with the majority in sub-Saharan Africa and Asia (Bennett et al. 1998). Today, they number in the hundreds, if not thousands. Recently there has been increased interest in CBHF; for example, the Commission on Macroeconomics and Health recommended that user payments increasingly be channeled through CBHF schemes (World Health Organization 2001). Communities and governments also seem to be increasingly focused upon CBHF schemes. In Ghana the number of CBHF schemes in the country grew from four to 159 in just over two years, and national health financing policy in both Ghana and Tanzania is promoting a key role for CBHF.

This document aims to answer basic questions on CBHF that might be posed by policymakers and technical assistance providers interested in this topic. The questions and answers are not designed to provide a detailed guide for scheme managers on how to set up CBHF schemes; rather they aim to provide to decision makers in ministries of health and finance, international organizations, and non-governmental organizations a broad outline of how schemes are set up and how they operate, and an overview of their advantages and limitations. Moreover, although CBHF schemes are a type of insurance, this document does not try to cover insurance theory. The bibliography at the end of this paper provides additional resources that readers should consult to learn more about the detailed steps in setting up a CBHF scheme, or about insurance theory.

The text draws upon the extensive field experience the Partners for Health Reformplus project (PHRplus) has with CBHF schemes. While much of this field experience is from sub-Saharan Africa, particularly West Africa, the lessons learned from these countries may be applicable to other regions of the world.
What are community-based health financing schemes?

While varying in detail from country to country and scheme to scheme, CBHF schemes share the goal of finding ways for communities to meet their health financing needs through pooled revenue collection and resource allocation decisions made by the community. CBHF schemes are a form of insurance: they allow members to pay small premiums on a regular basis to offset the risk of needing to pay large health care fees upon falling sick. However, unlike many insurance schemes, CBHF schemes are typically based on the concepts of mutual aid and social solidarity.

CBHF schemes may develop around geographical entities (villages or districts), trade or professional groupings (such as trade unions or agricultural cooperatives), or health care facilities. CBHF schemes are typically designed by and for people in the informal and rural sectors who are unable to get adequate public, private, or employer-sponsored health insurance. Membership in a scheme is voluntary.

CBHF schemes are always not-for-profit. Sometimes they are registered, formal entities; in other circumstances they may operate quite informally. They usually depend upon members to help manage and run the scheme, but the level of member participation differs substantially among schemes.

Definitions

1. What are community-based health financing schemes?

   “CBHF schemes are known by different names in different countries: Schemes are called mutual health organizations, or MHOs, in Anglophone West Africa, mutuelles de santé in Francophone West Africa, and igualas médicas in the Dominican Republic.”

   CBHF schemes may develop around geographical entities (villages or districts), trade or professional groupings (such as trade unions or agricultural cooperatives), or health care facilities. CBHF schemes are typically designed by and for people in the informal and rural sectors who are unable to get adequate public, private, or employer-sponsored health insurance. Membership in a scheme is voluntary.

   CBHF schemes are always not-for-profit. Sometimes they are registered, formal entities; in other circumstances they may operate quite informally. They usually depend upon members to help manage and run the scheme, but the level of member participation differs substantially among schemes.

2. What led to the development of CBHF schemes?

   CBHF schemes are not a new concept, though they are an increasingly popular one in developing countries. The current social health insurance systems in Germany, Japan, and Korea have grown out of small-scale community-based schemes that would meet the definition of CBHF given above. Similarly the “Friendly Societies,” of which there were about 27,000 in the United Kingdom at the end of the nineteenth century, also operated much like today’s CBHF schemes. In West Africa traditional solidarity mechanisms, similar to CBHF schemes, have existed for many years.

   There are a number of reasons behind the growth of interest in CBHF schemes in low-income countries, including:

   ▲ The widespread imposition or increase in user fees for government health care services that occurred during the 1980s and 1990s in many low-income countries, particularly in sub-Saharan Africa;

   ▲ The increasing recognition of the significant scale of use of private sector providers, even in relatively poor communities;

   ▲ The collapse of government health care services in certain countries, particularly those (such as the Democratic Republic of the Congo) that have faced prolonged conflict and limited governance structures;

   ▲ The difficulties faced in expanding formal health insurance coverage to people who are outside of formal sector employment.

   Different CBHF schemes have grown from different rationales. Some CBHF schemes may help protect members against the cost of user fees
associated with care in the public sector, as does the Community Health Fund scheme in Tanzania. Others primarily provide risk pooling for the fees associated with the use of private sector providers, as in the Self-Employed Women’s Association scheme in India. Others, such as the Bwamanda scheme in the Congo, try to use community resources to replace non-existent government budgets.

In general CBHF schemes operate somewhat independently from government. Thus CBHF schemes may be a particularly appealing option in contexts where government capacity is very limited, or there is limited trust in government. However, as schemes become established it is critical that their relationship with government is clarified.

Box 1: Glossary of Terms Related to Community-Based Health Financing

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CBHF/CBHI</strong></td>
<td>A non-profit type of health insurance for the informal sector, formed on the basis of an ethic of mutual aid and the collective pooling of health risks, in which members generally participate in the management of the scheme.</td>
</tr>
<tr>
<td><strong>Co-payment</strong></td>
<td>Out-of-pocket charge paid by an uninsured individual at the time of seeking care.</td>
</tr>
<tr>
<td><strong>Cost sharing</strong></td>
<td>Any of several mechanisms whereby costs are shared by more than one payer, such as users, employers, government, insurer. Sometimes the term is used specifically to refer to mechanisms whereby users of government services share costs with government.</td>
</tr>
<tr>
<td><strong>Micro-insurance</strong></td>
<td>Voluntary and contributory schemes for the community handling small-scale cash flows to address community risks. May encompass a variety of different types of risks, including the risk of health care expenditures.</td>
</tr>
<tr>
<td><strong>Mutuelles de santé/mutual health organizations</strong></td>
<td>Term used within the West Africa region to describe CBHF schemes.</td>
</tr>
<tr>
<td><strong>Out-of-pocket spending</strong></td>
<td>Fee paid by the user of health services directly to the provider at the time of service delivery and borne directly by the patient. Fees include cost sharing (and user fees) and informal payments to health care providers.</td>
</tr>
<tr>
<td><strong>Payment-in-kind</strong></td>
<td>Payment for health (or other) services that are not in the form of cash but commodities (such as crops) or labor.</td>
</tr>
<tr>
<td><strong>Prepayment</strong></td>
<td>Payment made in advance that guarantees eligibility to receive a service when needed, at reduced or zero additional cost. Sometimes this term is used in a manner synonymous to CBHF, but it may also refer to prepayment for an individual or household without risk pooling between households.</td>
</tr>
<tr>
<td><strong>Premium</strong></td>
<td>Amount of money paid to an insurer on a regular basis in return for health care coverage for a specified period of time. Also sometimes called “dues” or “contribution.”</td>
</tr>
<tr>
<td><strong>Reinsurance</strong></td>
<td>Whereby the first (or direct) insurer contracts a second insurer to share in the risks that the direct insurer has assumed on behalf of its members or beneficiaries. It is generally accepted as sound practice to reinsure a scheme against sudden catastrophic or extraordinary liabilities that the scheme may be unable to meet.</td>
</tr>
<tr>
<td><strong>Risk pooling</strong></td>
<td>The formation of a group so that individual risks can be shared among many people. Each actor facing possible large losses (such as health expenditures) contributes a small premium payment to a common pool, to be used to compensate whichever of them actually suffers the loss.</td>
</tr>
<tr>
<td><strong>User fees/user charges</strong></td>
<td>Out-of-pocket payment made at the time of using health care services.</td>
</tr>
</tbody>
</table>
How can CBHF contribute to better health?

CBHF can help to improve financial access, utilization, resource mobilization, and quality of health care services through cooperative, community efforts. The most obvious effect of CBHF schemes is to reduce how much people pay for health care when they seek care. Lower out-of-pocket spending per health event can lead to more frequent utilization of health care services and less delay in seeking care (see Box 2). Furthermore, members of CBHF schemes are unlikely to need to borrow and go into debt in order to cover health care costs.

Box 2: The Benefits of CBHF in Rwanda

In 1999, the Rwandan Ministry of Health instituted a CBHF pilot test in three districts. In order to collect lessons for policy development, the Ministry collaborated with the Partnerships for Health Reform project (PHR) to conduct an impact evaluation with baseline surveys and follow-up surveys after one year of implementation. These studies investigated the impact of the CBHF schemes on members’ utilization of services and service delivery.

Utilization of health services

▲ CBHF members were up to four times more likely to enter the modern health system when sick than non-members. New case consultation rates for scheme members ranged from 1.2 to 1.6 consultations per annum per capita, compared to rates of 0.2 to 0.3 for non-members and the population in control districts.

Cost of health care

▲ The value of drugs consumed per consultation by CBHF members was, on average, lower than that for non-members. This most likely reflects the fact that members seek care earlier than non-members and thus require fewer drugs.

Resource mobilization and cost recovery

▲ On a per capita basis, members contributed twice what non-members do to primary health care centers, significantly boosting cost recovery and resource mobilization for centers with large membership pools.

Participation, solidarity, and democratic development

▲ As part of the CBHF management structure, regular assemblies of scheme managers, community members, and health center staff were held, contributing to the development of democratic decision-making processes in the health sector.

CBHF schemes may have helped contribute to social solidarity by developing risk-pooling mechanisms across different population groups; this may be a critical contribution in post-conflict Rwanda.

Capacity development

▲ The training that was conducted as part of the development of the CBHF schemes helped build financial management capacity in communities and among health care providers.

Sources: Schneider et al. (2000), Schneider and Diop (2001), Schneider et al. (2001).
How can CBHF schemes improve financial access to health care?

Studies have shown that for some, particularly poorer groups, having to pay even low-level fees when seeking care can create a barrier to health care. CBHF schemes can reduce such financial barriers. Usually fees paid by members when seeking care are reduced to zero or an affordable co-payment. Instead people pay small amounts on a regular and predictable schedule. By removing the financial barriers at the time of need, people are more likely to seek health care services (see Box 2).

The way in which premiums are paid to schemes can be adjusted to reflect local conditions. For example, some CBHF schemes collect on an annual basis, when potential members have some cash available: For many near-subsistence farmers, cash is on hand only at harvest time. Being able to pay at that time enables these farmers to join CBHF schemes.

Another way in which CBHF schemes improve financial access is their ability to negotiate lower rates for services from providers, thereby enabling members to get more for their money.

Do CBHF schemes cover only primary care services or both primary care and hospital care?

Different CBHF schemes cover different levels of care depending on the needs and preferences of the scheme members, their ability to pay, and the availability of services in the area. Many scheme members want the scheme to cover all aspects of health care, but this is sometimes both impossible and undesirable. Schemes that promise an extensive package of services will need to set higher premiums that may deter people from joining and increase the risk of the scheme collapsing due to insufficient membership (and funds).

A scheme may want to “start small,” and add services gradually as the scheme grows. Many CBHF schemes favor primary health care in their benefits packages and provide limited coverage for hospital care. Others start by providing hospital services and extend into certain primary care services. If schemes cover hospitalization alone, then it is likely that only a small percentage of their members will access this benefit. Adding primary care services to the benefits package may be beneficial in terms of demonstrating the advantages of scheme membership.

Availability of health care (particularly hospital care) is also an issue; some schemes are too remote from any hospital, or desired services are simply not offered at the local hospital. In such cases, CBHF schemes may contract with regional- or national-level hospitals and include transportation costs to those hospitals in their benefits packages.

A common list of services offered by a CBHF scheme includes: regular office visits, reproductive health care (pre- and postnatal care, childbirth [simple and sometimes complicated], and increasingly family planning), medicines, ambulance services, hospitalization (usually with certain limitations), laboratory tests, vaccinations, and general information and education on health issues.

Benefits packages are usually determined in conjunction with the local community based on needs, priorities, and ability to pay. Some schemes identify the top 10 priority health problems and concentrate services in those areas. In other CBHF schemes, the services offered are determined by the services available to the community. At all times, it is important to keep in mind that many CBHF scheme members will not be able to support large payments for an expanded list of services.
By including priority services like maternal and child health in the benefits covered, CBHF schemes can reduce barriers to care and promote the use of these priority services. A growing number of schemes do incorporate maternal and child health services into the benefits package. For example, the large majority of CBHF schemes in Senegal offer pre- and postnatal care, deliveries, and family planning as part of the benefits package. Sometimes, however, such priority services are excluded from benefits packages as they are provided free in the public sector. This is the case in Ghana, for example, where family planning services are largely excluded from benefits packages.

Box 3 summarizes evidence from Rwanda on the impact of CBHF on the utilization of maternal and child health services. There is only limited data available from other schemes on how the inclusion of services in benefits packages affects utilization, but anecdotal evidence suggests that, in general, inclusion of such services in the benefits package does tend to lead to increased utilization of the services concerned.

**Box 3: CBHF and Priority Services**

**Maternal and Child Health Services**

▲ In Rwanda, household survey findings revealed use of preventive services for women and children was four times higher for CBHF members than non-members.

▲ In Rwanda, pregnant CBHF members were up to 65 percent more likely than pregnant non-members to seek care at a modern health care provider. Non-members were almost twice as likely to deliver without any assistance, and they made far fewer multiple prenatal care visits.

**HIV/AIDS Services**

▲ HIV/AIDS services covered by CBHF schemes in sub-Saharan Africa vary: most schemes do not offer HIV/AIDS services aside from preventive care including information, education, and communication (IEC) and outreach activities. A survey of 10 schemes in Senegal found that none covered HIV/AIDS services. In Ghana, six of the eight schemes surveyed did include HIV services, but these focused predominantly on preventive care.

Sources: Anie et al. (2001); Hsi et al. (2002); Schneider and Diop (2001).

---

1 This phenomenon is known in the insurance literature as adverse selection. It may occur not only in relation to HIV/AIDS but in any situation where certain individuals have greater need for services than others, and are aware of their greater need.
What actually happens in practice to CBHF schemes in contexts with high HIV/AIDS prevalence is not well documented or understood, but there are some pointers that suggest that the scenario described above may not materialize. In many communities, relatively limited services for people living with HIV/AIDS are available, and at this time it is extremely uncommon in low-income countries for antiretroviral therapy to be available. Although it is well documented that the health care costs for HIV-positive patients are higher on average than the health costs for HIV-negative patients, the difference may not be extreme. Furthermore, because many CBHF schemes are motivated by promoting the welfare of the community and are underpinned by notions of social solidarity, it is likely to be undesirable for a CBHF scheme to exclude HIV-positive people. In many contexts in rural Africa, the majority of the population are unaware of their HIV status, local testing capacity is extremely limited, and it would be ethically unacceptable for the scheme to require testing. Finally, a couple schemes have been identified that were initiated by and primarily serve HIV-positive people. While the financial situation of these schemes has not been properly documented, an argument could be made that strong ties of solidarity among the HIV-positive members is of overriding importance to the success of the scheme.

Furthermore, there have been some positive results with addressing HIV/AIDS through CBHF schemes thus far (see Box 3). Some schemes offer voluntary counseling and testing; some focus on promoting HIV/AIDS prevention through health education. Some CBHF schemes exclude from coverage any long-term or chronic illnesses like HIV/AIDS for sustainability reasons, but just as many offer limited coverage of HIV/AIDS complications. And some CBHF schemes offer referral services for members with HIV/AIDS.

It is also possible that CBHF schemes could be an effective mechanism through which to channel external funds, such as those from the Global Fund to Fight AIDS, Tuberculosis and Malaria, to provide care to HIV-positive people.

How does CBHF expand popular participation in the health sector?

Generally the organizational structures and methods of governance of CBHF schemes encourage popular participation. In many schemes, members have a chance to participate in scheme management on a regular basis through annual general assemblies, group meetings, and the election of officials. In schemes with which PHRplus works in West Africa, scheme managers are encouraged to present financial and activity reports in a non-technical manner at general assembly meetings. Control committees, made up of members, have auditing powers, and there is public discussion of benefits packages, dues, and financial management issues.

This kind of popular participation in managerial functions and scheme governance enables CBHF schemes to reflect more accurately the wishes of their members. For example, member participation in schemes may lead to the evolution of benefits packages so that they better meet the needs of members. If there is true popular participation in schemes then the schemes may become a forum for communication between stakeholders in the health sector such as providers, government, and the community.

In practice the degree to which CBHF schemes promote popular participation varies considerably, reflecting how and why the scheme was set up, and the existing degree of social solidarity and social capital in the community. Although it may take longer to develop a CBHF scheme hand-in-hand with the community, PHRplus experience suggests that this initial investment is central to the sustained success of the scheme.

Some proponents of CBHF schemes have viewed them not only as a mechanism to promote popular participation in the health sector but also as a means to encourage democratic development at the grassroots level. While there is no clear empirical evidence to demonstrate that this occurs, it would seem likely that the processes used to develop and operate CBHF schemes do enhance capacity at the community level to manage development initiatives and engage in political dialogue.
9 Do the very poor join CBHF schemes (and how can they be encouraged to do so)?

A common critique of CBHF schemes is that they leave the poor behind. Certainly evidence, to the extent that it is available, suggests that CBHF schemes are most successful among the rural “middle class.” However, in many low-income countries rural populations overall are poor and the rural “middle class” is certainly part of the majority poor.

What are the barriers to membership in CBHF schemes for the very poor? Sometimes even relatively modest premiums can be too high for the poorest to pay, simply to defray the possibility of future health care costs. Furthermore, very few schemes allow payment-in-kind due to the complexity of managing such payments, so cash-poor households are likely to be excluded. Finally it is well known that generally the poorest face other significant barriers to accessing care, in terms of both geographic access and provider attitudes to treating the very poor.

There are a number of strategies that CBHF schemes can use to encourage the poorest to join. To improve financial accessibility, governments, and philanthropic organizations can subsidize premiums for the very poor. In the PHR pilot in Rwanda, a church subsidized membership for about 3000 widows and orphans. Many CBHF schemes have “solidarity funds” whereby small mark-ups on premiums are used to provide low-cost or free membership to the very poor. In such cases, schemes determine a percentage of total membership, such as 5 percent, that will be reserved for indigents and be paid for out of this fund. Some CBHF schemes have sliding scales for premiums based on income, but this can be difficult to implement in rural and informal settings. Others CBHF schemes have savings schemes embedded in them that enable households to set aside small amounts over a period of time in order to pay their premium. Including CBHF schemes as part of micro-credit organizations that support income-generating opportunities for the poor, or redesigning benefits packages to allow for smaller premiums may also make CBHF schemes more accessible for the poorest. Finally, it has been suggested that CBHF schemes might provide a mechanism through which external donors subsidies (such as those associated with a Poverty Reduction Strategy Paper) could be channeled to target the very poor.

Many of the strategies to improve financial accessibility for the poor require that CBHF schemes identify the poorest residents in the community (who are entitled to subsidized membership). CBHF schemes are close to the community and made up of community members and therefore may be well placed to identify the poorest households. Nonetheless this is a complex task, and there has been no evaluation of how well CBHF schemes actually perform this function.

CBHF schemes can also potentially address some of the non-financial barriers deterring poorest households from joining. For example, revenue from the scheme could be used to support outreach services to remote, poorer villages, and contracts established by schemes with providers can emphasize the importance of providing quality, courteous care to all scheme members.
Operational Issues

What does it take to set up CBHF schemes?

It takes time and patience to set up CBHF schemes. It is crucial to ensure community education, information, and democratic participation in scheme design, the development of benefits packages and setting of premiums, and the establishment of operational procedures.

Box 4 shows the steps that PHRplus advisors typically use in West Africa when they are working with a nascent CBHF scheme. While these guidelines are not a guaranteed roadmap to success, PHRplus experience suggests that by following this process, CBHF initiators are more likely to form sustainable and strong CBHF schemes. While many CBHF schemes have set up their organizations in this manner, it is by no means a “one-size-fits-all” procedure. These steps can and should vary from country to country and region to region.

Full participation of the community is essential. Typically this starts by informing the population on how CBHF schemes work. In order to operate as full members in the scheme, the community must understand the rights and responsibilities of membership. By establishing the scheme in a democratic process, the groundwork is laid for later interactions to take place. To help the population make informed decisions about setting up a scheme, a feasibility study is usually conducted and data from the study are presented and discussed. Based on these data, various options for benefits packages and premiums are calculated.

As Box 4 indicates, coordinating the necessary groundwork for a successful CBHF scheme frequently requires substantial technical inputs from outside of the community. When there is a relatively slow rate of growth of CBHF schemes, technical support might be provided through a small technical assistance pool, but as growth of the CBHF movement accelerates this is likely to become increasingly difficult. The intensity of technical assistance required to support nascent CBHF schemes has raised concerns about how rapidly such schemes can be rolled out and how sustainable they are. Increasingly, however, regional support units are developing that provide a more systematic and institutionalized approach to technical assistance. This is the case in both Senegal and Ghana as typified by the GRAIM in the Thies region of Senegal (see Box 5). External partners can play an important role in creating local capacity to provide technical assistance to CBHF schemes.

Box 4: Steps to Set Up CBHF Schemes in West and Central Africa

The step-by-step procedure used by PHRplus regional technical advisors and their community partners in West Africa to set up CBHF schemes is as follows:

1. Inform and educate the population on the concept of CBHF schemes.
2. Establish a working group in the community to oversee the process of starting a CBHF scheme.
3. Conduct a feasibility study with technical assistance providers and the CBHF scheme working group.
4. Establish several benefits package options.
5. Disseminate the results of the feasibility study to the target population.
6. Convene a general assembly to agree on the benefits package, premiums, and operational modalities.
7. Require a waiting period before members can begin to use the CBHF scheme.
8. Strengthen the CBHF scheme during the waiting period (membership campaign, member education, provider contracts).
Box 5: The Role of the GRAIM

The GRAIM (Groupe de Recherche et d’Appui aux Initiatives Mutualistes) is a regional professional body that supports the development of CBHF schemes and builds regional management capacity in the Thiès region of Senegal. Initially a steering committee from which the CBHF movement could draw management experience, the GRAIM has grown into a forum for support, exchange of ideas and experience, and coordination to 21 CBHF schemes (17 schemes are currently functioning; four schemes are still in the development phase). Over the next five years, the GRAIM anticipates supporting up to 40 CBHF schemes, covering a quarter of the Thiès region.

The GRAIM currently provides leaders and proponents of these CBHF schemes with advice and capacity building in scheme design, financial management, and administration systems, in addition to training for decentralized committees. Activities include, for example, training for managers, and developing member registers, provider agreements, letters of guarantee, and fiscal ledgers. In addition to promoting the development of CBHF schemes, the GRAIM carries out research on CBHF schemes and how to improve management and sustainability. Such research includes general feasibility studies and special topics such as the need for social reinsurance.

The value of the GRAIM’s work is evident in the Thiès region, where it has become a well known and respected ambassador and proponent for CBHF in the region; it represents regional scheme interests in negotiations with international development organizations, service providers, the government, and donors. An agreement between the regional hospital in Thiès and the GRAIM has helped improve quality of care for the surrounding population and led to more interest in CBHF membership. The GRAIM serves as an important link in building local capacity. It helps structure technical assistance and serves to orient external partners (such as PHRplus) toward areas where the assistance needs are greatest and external skills most useful.

Are CBHF schemes sustainable, and what promotes scheme sustainability?

Sustainability of a CBHF scheme means that it has the capacity to keep operating over time. There are many dimensions to sustainability including political, social, managerial, and financial. Sustainability has been one of the persistent concerns about CBHF schemes: volunteer labor (upon which schemes depend for management and administration) may not be available or reliable, financial sustainability may be fragile, and, in some contexts, schemes may be susceptible to predatory or unstable political environments. Unfortunately there is very little empirical evidence from which to draw conclusions about scheme sustainability. While several schemes in West and Central Africa and in Asia have lasted long enough to seem fully sustainable, it is likely that there have also been many failed schemes that have never been documented.

Scheme financial sustainability does not require that the scheme fully cover the costs of health care services; schemes may be predicated upon continuing government or donor subsidy. For the many CBHF schemes that cover relatively poor households, ongoing government subsidies, either to the schemes or government health services in the area, appears critical for both sustainability and equity. Nonetheless financial sustainability does require that, over time, schemes at least balance their expenditures and their incomes.

Recent analysis of CBHF schemes has led to a number of valuable lessons on how to improve prospects for sustainability. It seems that the biggest roadblocks to sustainability are specific scheme design flaws, inexperienced management, inadequate dues collection, and the lack of institutional development.

Training and technical assistance may help overcome some of these problems. For example, CBHF scheme managers need to define realistic benefits packages and premium rates; data from
feasibility studies can help to inform these decisions. CBHF managers also need skills in the use of information systems to manage data, and in accounting and bookkeeping practices, including more accurate systems for collecting premiums. The effective implementation of risk management techniques (see question 14) is also important.

Additionally, CBHF schemes are only sustainable if they are able to retain their members and recruit new ones. CBHF scheme initiators need to market and communicate the value of CBHF schemes to the public on a continual basis. Contracting with multiple and better providers, and promoting good quality care, will attract new members. Monitoring and evaluation of schemes is also a way for CBHF administrators to pinpoint and solve problems before they become major issues.

Finally, some have argued that even with the best possible management, small CBHF schemes (say with fewer than 500 members) are particularly vulnerable to failure due to the financial volatility associated with the small size of their risk pools. Accordingly, increasing attention is now being paid to reinsuring schemes (that is, the insuring of CBHF schemes themselves by larger insurance providers) or developing larger risk pools for certain more expensive services.

Do CBHF schemes absorb a lot of money in administrative costs?

CBHF schemes have sometimes been criticized for having high administrative costs. It is clear that, compared to a system of user fees, any form of health insurance involves higher administrative costs. Insurance schemes, including CBHF schemes, need to create and operate systems to collect dues, handle claims, manage the risk pool, and manage overall finances. CBHF schemes with which PHR plus works in West and Central Africa typically spend 5-10 percent of their total annual expenditures on administration. In Rwanda the pilot CBHF schemes spent approximately 7 percent of their total annual expenditure on administration. These figures compare well with the U.S. health insurance industry, where 12 percent of revenue typical goes to administrative expenses (Diamond 1992).

However, it should be recognized that frequently many administrative functions in CBHF schemes are performed by volunteer labor and therefore are not factored into the above estimates. Heavy reliance on volunteers within CBHF schemes may reduce costs but, as noted above, may raise issues regarding sustainability.

The level of administrative costs also will be affected by factors such as the size of the scheme, how streamlined administrative and operational systems are, the frequency of dues collection, the nature of provider payment systems, and the form of organization operating the scheme. Larger schemes are likely to benefit from economies of scale: they can spread their relatively fixed administrative costs over a larger membership group and consequently administrative costs will most probably constitute a smaller fraction of overall expenditure.

All CBHF schemes require a number of supporting administrative and operational systems such as identification systems for scheme members, membership databases, and financial management systems; the better designed these systems are, the lower administrative costs will ultimately be. Premium collection can be a particularly burdensome administrative task, especially if the scheme suffers from problems of late and non-payment of dues. The more frequently premiums have to be paid, the greater the associated administrative costs are. The way in which health care providers are paid by the scheme will also significantly affect administrative costs. Provider payment systems that are based on complex fee schedules are the most administratively difficult: scheme managers need to verify individual claims and compute payments for each invoice submitted. In contrast, capitation-based payment systems, whereby the scheme pays a lump sum per year for each person registered with a provider, are likely to result in lower administrative costs. Many CBHF schemes, particularly those with which PHR plus works, use a capitation system to pay providers.

2 For more information on administrative and management systems for CBHF schemes see Cripps et al. (2000).
Sometimes CBHF schemes are run by organizations such as micro-credit or micro-insurance groups that already manage complex financial transactions with their members/beneficiaries. For example, the health insurance component of the Self-Employed Women’s Association scheme in Gujarat, India, grew out of a micro-credit organization. For such organizations the additional administrative costs of starting a CBHF scheme are likely to be lower than for an organization set up to manage CBHF alone.

Ultimately the administrative systems put in place (and the amount spent on administration) need to reflect the goals and size of the scheme. For example, complex systems for identifying members and managing risk pools are likely to be inappropriate for schemes that only cover a small fraction of health care costs and are primarily focused at the primary care level. In contrast, schemes that provide insurance against a wide range of expensive hospital services probably require more complex administrative systems in order to function well.

### 13 What are typical premiums and co-payments for CBHF schemes?

Premiums and co-payments depend on the individual circumstances of the CBHF scheme and are set by the scheme members. When PHRplus works with community members to help establish a CBHF scheme, local technical assistance staff provide estimates for how much would have to be charged for different benefits packages in order to recover health service costs and administrative costs. The community then needs to discuss and decide which combination of premiums and benefits package is both affordable to community members and offers a sufficiently attractive benefits package. Schemes may or may not choose to incorporate co-payments into their design. Co-payments are usually included when there is a concern that the provision of insurance coverage might result in excessive, unnecessary use of health care services.

As premiums, co-payments, and benefits packages are all decided upon locally, there is considerable variation across schemes in how they are set. Box 6 presents premiums and benefits packages for a selection of schemes in West Africa. For all five of the schemes listed, at least some of the providers under the scheme are subsidized, either by government or by faith-based organizations. This implies that the premiums presented in Box 6 do not constitute full cost recovery.

### 14 How do CBHF schemes manage risk?

In order to manage risk the CBHF scheme must try to increase the predictability of both costs and revenues so that shortfalls do not occur. In traditional large insurance schemes, group size increases the ability of the insurer to predict outlier, or extreme, costs and thus to plan for and manage them. In small groups, such as most CBHF schemes, unpredictable costs are much more likely to occur, thus increasing the need for reserve funds and other risk management strategies.

One of the main strategies used to manage revenues is the financial reserve fund. Most CBHF schemes try to reserve a portion of the revenue received from members to provide a fund from which to pay unexpected costs. The difficulty of predicting health care costs increases when there is little information about new enrollees. New enrollees may increase their use of health services when they join a plan if they have not previously had access to health insurance. For these reasons, most CBHF plans require a waiting period during which the members pay premiums but are not yet eligible for benefits. This risk management strategy increases the funds available to pay for unpredictable utilization by new members. These reserves may be invested and earn interest in order to increase revenue to the CBHF. Schemes also need to have clear and well-implemented policies that prevent the late payment of premiums.

**CBHF cost management strategies include:**

- **Mandatory referrals:** members must be referred to higher levels of care by primary caregivers participating in the scheme so as to avoid inappropriate use of the high-level facility (also known as gatekeeping).
- **Member education:** including the promotion of preventive and primary care services.
**Box 6: Premiums, Co-payments, and Benefit Packages for a Selection of West African Schemes**

<table>
<thead>
<tr>
<th>CBHF Scheme and Region</th>
<th>Premium per Person per Month (USD) (2003)</th>
<th>% Co-payment</th>
<th>Benefit Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>And Faggaru Thiès, Senegal</td>
<td>$0.35 per person per month + $1.72 one-time member fee</td>
<td>0%</td>
<td>Pre- and postnatal care, Family planning, Delivery, Primary health care, Medicines, Hospitalization</td>
</tr>
<tr>
<td>Fissel Thiès, Senegal</td>
<td>$0.17 per person per month + $0.86 one-time member fee</td>
<td>20%</td>
<td>Delivery, Hospitalization (only medicines), Medicines (ambulatory care setting), Primary health care, Transport</td>
</tr>
<tr>
<td>Darou Mousty Louga, Senegal</td>
<td>$0.17 per person per month + $1.72 one-time member fee</td>
<td>Hospitalization: 0%, All other services: 50%</td>
<td>Delivery, Hospitalization (only medicines), Medicines (ambulatory care setting), Primary health care, Prenatal care</td>
</tr>
<tr>
<td>Nkoranza Nkoranza, Ghana</td>
<td>$0.10 per person per month</td>
<td>0%</td>
<td>Excludes outpatient care except snake bites, Hospitalization includes: medical consultations, admission fees, complicated delivery, lab analysis, x-ray, medicines, and referral</td>
</tr>
<tr>
<td>Dodowa Dangme West, Ghana</td>
<td>$0.09 per person per month</td>
<td>0%</td>
<td>Outpatient services, Basic laboratory services, Pre- and postnatal care, Family planning, Delivery, Child welfare services, immunization, Ambulance services</td>
</tr>
</tbody>
</table>

*Note: Conversions: 580 CFA/1USD, 8500 cedis/1USD*

- **Provider education:** to promote rational use of drugs, appropriate case management and referral.
- **Capitation payments:** paying providers a lump sum for each patient registered with them provides a strong incentive to the provider to contain costs.
- **Co-payments and fixed deductibles** that require CBHF members to cover part of their medical expenses immediately when seeking care. Both deductibles and co-payments seek to reduce the risk of unnecessary use of services by participants in the CBHF scheme.
- **Ceilings on how much or how long benefits will cover care** (for example, up to $20 or 15 days of hospital care). These ceilings increase the ability of the CBHF to control both the predictability and amount of health care costs.
How can CBHF schemes improve quality of care?

To date, the potential for CBHF to improve quality of care has not been fully exploited. While CBHF schemes are often set up around existing health care services of acceptable or exceptional quality, it remains a challenge to improve quality of care through the collective purchasing power that CBHF schemes create. It appears particularly challenging to set up CBHF schemes where provider quality is poor.

CBHF schemes can improve the quality of care through:

- Mobilizing additional financial resources;
- Providing more certainty to providers about cash flow;
- Strengthening accountability channels and communication between providers and patients;
- Using contractual levers.

The additional revenues generated for providers by CBHF schemes may be used to purchase essential pharmaceuticals, pay supplementary staff, or enhance supplies, all of which may contribute to quality of care improvements. As discussed above, unlike user fees, CBHF schemes offer health care providers more reliable cash flows that enable better resource use planning.

Strengthened lines of accountability and an open dialogue between providers and community members are perhaps more important than sheer financial resources in terms of improving quality. CBHF schemes offer a forum for discussing quality and providing feedback to health care providers and also for creating more informed health care consumers. CBHF schemes can also improve quality of health care by entering into negotiations and contracts with providers. Contracts between CBHF schemes and providers include standards specifying what the scheme expects of providers in terms of structural and process aspects of care.

---

3 For more information on CBHF schemes and quality of care issues, see Gamble Kelley et al. (forthcoming).
How can CBHF schemes be monitored and evaluated?

As with any endeavor, monitoring and evaluation is critical to ensure the continued success of CBHF schemes. Monitoring is likely to be conducted in a number of different ways and for varying purposes. A primary distinction is between internal monitoring (monitoring that serves the purpose of the scheme itself) and external monitoring (monitoring that government or another external body conducts to assess the contribution of the scheme to broader health sector goals).

Most of the CBHF schemes with which PHRplus works conduct an initial feasibility study and, based upon this study, develop a strategy or business plan. The baseline study and business plan form a critical benchmark against which to evaluate the performance of the scheme and adapt strategy if necessary. CBHF scheme managers should monitor and evaluate constantly throughout the life of the scheme. Typically CBHF schemes will monitor membership trends (including enrollments and disenrollments), certain financial indicators (such as the rate of dues collection or the ratio of dues to expenses), institutional aspects such as committee activity, and services provided (see Box 7). While monitoring information is used primarily by scheme managers, members of CBHF schemes monitor and evaluate their scheme performance through general assembly meetings and regular contact with the elected representative managers of the scheme.

Strategies for external monitoring of CBHF schemes are much less well developed, although some pioneering efforts are underway. For example, Senegal’s Ministry of Health has created a multi-partner committee within the ministry to harmonize monitoring and evaluation systems for CBHF schemes across the country. Ideally a government whose financial strategy for the health sector depends upon CBHF as a major component would monitor indicators such as total membership in CBHF schemes and distribution of members by geographical area, total expenditures via CBHF schemes, scheme failure rates, and the profile of CBHF scheme members compared to the rest of the population. Where possible, monitoring and evaluation plans for CBHF schemes should measure the utilization of health services by members relative to non-members to better understand the impact of such schemes on health service utilization. Issues concerning how CBHF schemes relate to the broader health care system (and hence how they should be monitored) are discussed further below.

Box 7: Monitoring Indicators used by CBHF Schemes

PHRplus recently worked with CBHF schemes in Senegal to develop and, to some degree, standardize routine monitoring systems. Descriptive baseline data were collected on: conditions for membership; premium including amount, frequency, co-payment; services covered by the scheme including priority services, hospital benefits, and other services; waiting period for enrollment; providers under contract; and any changes made to provider contracts. PHRplus is now helping scheme managers to track changes in the schemes. The indicators, which are being measured on a monthly basis, are shown in the table below.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Interpretation of Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>▲ Premium collection rate</td>
<td>Fiscal stringency, assess active participation, sustainability</td>
</tr>
<tr>
<td>▲ % of members participating in general assembly</td>
<td>Level of participation in overall governance</td>
</tr>
<tr>
<td>▲ % of beneficiaries who are new to the scheme</td>
<td>Assess growth of the scheme</td>
</tr>
<tr>
<td>▲ % of women beneficiaries aged 15-49 as members</td>
<td>Assess for special populations</td>
</tr>
<tr>
<td>▲ % of child beneficiaries aged 0-5 as members</td>
<td></td>
</tr>
<tr>
<td>▲ Net operating surplus</td>
<td>Financial sustainability and stability</td>
</tr>
<tr>
<td>▲ % of expenditures on administrative costs</td>
<td>Administrative efficiency</td>
</tr>
<tr>
<td>▲ Reserves as % of monthly expenses</td>
<td>Financial stability</td>
</tr>
</tbody>
</table>
CBHF is probably not the most appropriate financing strategy for all population groups. The primary advantage of CBHF schemes is that they provide a means to pool risks for otherwise hard-to-reach populations outside of formal sector employment. They are not the best strategy for risk pooling for formal sector employees; more formal, social health insurance-type schemes or even regulated private insurance may address the needs of this group better. Moreover, as discussed in question 9, the very poor are least likely to join CBHF schemes; in order to ensure financial access to services for this group, additional health financing strategies will be required, although it is possible that these strategies may work through CBHF schemes. For example government could subsidize CBHF premiums for the very poor from general tax revenues.

As yet no country has attempted to meet all its health care financing needs through CBHF, but if one were to do so, then it might face a number of problems. First, CBHF is fundamentally a community-based activity; if CBHF schemes were mandated nationwide then it is likely that community ownership of the schemes would be weakened and it is possible that this would have adverse effects upon the success of schemes. Second, a national health financing system based entirely upon multiple small-scale CBHF schemes would imply a very fragmented health financing system. Experience from industrialized countries (such as the United States) suggests that such fragmentation has many negative consequences; fragmented systems are difficult to regulate, they tend to result in cost escalation, their administrative costs are higher, and the ability of schemes to negotiate with providers may be weaker than if the financing system were more consolidated.

In most low-income and many middle-income countries, no single financing mechanism, including CBHF schemes, is likely to provide a universal solution for health care financing.

Could a country meet its health care financing needs through CBHF alone?

Yes, for the reasons discussed above, CBHF schemes may be an important part of a country’s overall national health care financing system. Increasingly national policymakers seem to be viewing CBHF in this light. CBHF schemes can help to meet some of the needs of the rural “middle class” and workers in the informal sector while complementary financing strategies can address the needs of other groups. For example, the Thai Health Card scheme (a CBHF-type scheme) is targeted at the non-poor in rural areas. The Thai government also runs schemes for the indigent and various priority groups (children and the elderly) that are 100 percent subsidized, and there are also parallel insurance schemes for workers in the formal sector. In Tanzania the Community Health Fund (a CBHF-type scheme) targets workers outside the formal sector while a new social security scheme is designed to cover formal sector employees. Similar strategies are under development in Ghana.

In low-income countries it is unlikely that rural or informal sector populations served by CBHF schemes have sufficient funds to finance fully their own care, and accordingly CBHF schemes should supplement government’s health care budget rather than displace government health care financing.

While it is easy to state that CBHF schemes will serve the needs of a certain population group, in practice it may be quite difficult to design a policy and operational environment that ensures that a scheme indeed serves the target group. CBHF schemes require a certain degree of autonomy in order to be able to respond to community preferences and needs. It is unlikely that government will be able to dictate to schemes how much they should charge or what benefits to offer, and it is factors such as these that will influence who joins the scheme.

Policymakers also need to think carefully about how CBHF schemes will interact with government-financed services and the implications of this for the achievement of broader health sector goals (equity, efficiency, quality of care, etc.). CBHF

Can CBHF schemes be a part of a national health care financing system?
schemes might complement government health financing in a number of ways. CBHF schemes might:

- Risk pool for the out-of-pocket payments (user fees) associated with using basic services at government health care facilities;
- Facilitate access to private providers who are perceived to offer better quality care;
- Risk pool for services outside of the government-funded essential package of care.

Whether and how government chooses to subsidize and regulate CBHF schemes should be influenced by an understanding of how CBHF schemes fit into the bigger health care financing picture.

CBHF may be best viewed as an interim solution to help meet the health financing needs of low- and middle-income countries where substantial parts of the population remains outside of formal sector employment, rather than as a long-term health financing model. In Korea and Japan in the last century, schemes similar to CBHF were widespread; however, as the countries became more affluent, with greater formal sector employment and greater government capacity, these schemes became increasingly regulated and were finally incorporated into an overarching social security framework. While for many low-income countries this scenario is a long way off, policymakers should think carefully about how CBHF schemes will evolve as part of a national health financing system.

Critics of CBHF have suggested that the small scale of these schemes and the fact that they focus around defined communities may mean that the poor pool risks with other poor people, and there is little cross-subsidy from more affluent to less affluent population groups.

Government subsidies are clearly critical in terms of determining the overall equity effects of CBHF schemes. Government frequently subsidizes health care providers contracted by CBHF schemes, and may, in addition, subsidize the scheme directly (as in Tanzania) or provide targeted subsidies to schemes in order to extend membership to the very poor. Certain subsidies intended to help the poor may actually be subject to capture by the non-poor. For example, if governments provide subsidies directly to CBHF schemes, but poorer households are unable to afford premiums, then they are effectively excluded from accessing the government subsidies. Government subsidies targeted at extending membership to the very poor seem most likely to contribute to overall equity, although there are obviously difficulties in ensuring the accuracy of targeting (as discussed in question 9).

In the context of CBHF schemes, governments need to pay close attention to and carefully analyze the pattern of subsidies that they provide, how the subsidies interact with CBHF schemes, and the equity implications. Unfortunately, these issues have not been well explored and there is limited empirical evidence on which to base policy development.

This is an important question, to which there are currently few answers. Even if CBHF schemes succeed in providing coverage to poorer people within their communities, it is not clear that this contributes to overall system equity. For example, a national health care financing strategy that promoted CBHF coverage of poor rural populations and public financing of services for more affluent urban populations would clearly not lead to an equitable health care system, no matter how many poor people joined CBHF schemes.

What constitutes an appropriate role for government in the oversight and promotion of CBHF schemes is also poorly understood and somewhat contested, and is likely to vary from country to country. While some analysts argue that government has a critical role to play in structuring the policy and regulatory environment within which CBHF schemes operate, others are concerned that heavy-handed and premature intervention by government will kill the grassroots initiative that characterizes the CBHF
movement before it has taken root. Those who adhere to the latter view argue that, even in countries such as Senegal where CBHF schemes have been in existence for a decade or more, the movement is still relatively new and the scope and nature of schemes is still evolving; premature government involvement might thwart innovation. Moreover, government intervention typically implies financial participation, which can deter communities from investing their own resources and time in local health financing solutions. On the other hand, there is a danger that, without government providing at least some minimal consumer protection (such as setting reserve requirements or ensuring audits), failure of poorly managed CBHF schemes will lead to disillusionment among the population with this financing mechanism.

Those working with CBHF schemes have identified a number of functions that a higher-level body could usefully perform. These include coordinating/facilitating technical assistance to schemes, training scheme managers, disseminating best practices, and monitoring and evaluating the overall effects of CBHF schemes and accreditation of schemes. However, there is a healthy debate as to whether functions such as these are best performed by government or by a non-governmental body. For example, in the Thiès region of Senegal, the GRAIM, a local NGO, has evolved out of the CBHF movement (see Box 5). The GRAIM, made up of experienced CBHF presidents and managers, provides support such as that described above to schemes throughout the region. The issue of reinsurance, or how best to protect small CBHF schemes from financial volatility also brings into question the appropriate role of government. While some analysts have advocated a role for a non-government “social reinsurance” organization, other analysts have speculated that alternative solutions involving government-led initiatives might be more feasible.

Part of the difficulty of determining what is an appropriate role for government in response to the emergence of CBHF is that frequently CBHF schemes have evolved due to perceived widespread failure on the part of government to provide an accessible and quality health care service. In some of the countries where CBHF schemes are prevalent, issues of government corruption and lack of accountability are substantial. In such contexts it is understandable that those who have initiated CBHF schemes are reluctant to cede control over aspects of the schemes to government.

What are the prospects for scaling up CBHF schemes?

The potential advantages of CBHF schemes have made some policymakers interested in the rapid expansion of their number and coverage. What are the prospects for this to actually occur?

In several countries CBHF schemes are already experiencing rapid growth. For example, it is estimated that in the West African region as a whole the number of CBHF schemes grew from 199 in 2000 to 585 in 2003. However, in the majority of cases this rapid growth is occurring from a relatively small base. For example, the number of schemes in Ghana has grown from four to 159 within a period of less than three years, but total population coverage remains relatively small.

The speed at which CBHF schemes can grow is constrained for a number of reasons. First, as described in question 10, setting up a sustainable CBHF scheme is quite a difficult and prolonged process. In most countries there is limited technical capacity to support the necessary design and development steps in a large number of CBHF sites. While it would certainly be possible to start CBHF schemes without adhering to all of these steps, experience suggests that shortcuts increase the risk of scheme failure and this may have negative repercussions on the population’s willingness to join in the future.

During the past year or so, there has been increasing optimism at the international level about the role that CBHF schemes may play in meeting health care financing needs and promoting access for the poor to quality health care services. CBHF schemes do indeed hold substantial promise – so long as they are well designed, well implemented, and well coordinated with national financing policies – to deliver a range of benefits to historically underserved populations. Given the pressing need in many low-income countries to enhance quality of care and accountability of providers and alleviate financial barriers to
accessing health services, it is understandable that many stakeholders wish to see the rapid expansion of such schemes. Successful scaling up, however, must be tempered by the knowledge that without true community engagement in and ownership of the scheme, as well as strong design and management, the full potential of CBHF schemes will not be realized.

### Bibliography


**Partners for Health Reformplus** (PHRplus) is funded by USAID under contract no. HRN-C-00-00-00019-00 and implemented by Abt Associates Inc. and partners Development Associates, Inc.; Emory University Rollins School of Public Health; Program for Appropriate Technology in Health; Social Sectors Development Strategies, Inc.; Training Resources Group; Tulane University School of Public Health and Tropical Medicine; and University Research Co., LLC.

21 Questions on CBHF: An Overview of Community-Based Health Financing was written by Sara Bennett, PhD; Allison Gamble Kelley, MA; and Brant Silvers, MA. Raj Gadhia, MPH, and Salamata Ly contributed to the boxes. The authors thank Charlotte Leighton, PhD; Nancy Pielemeier, DrPH; and Jack Galloway for helpful comments on earlier drafts. The issue was edited by Linda Moll, and designed and produced by Michelle Munro.

PHRplus Resource Center
Abt Associates Inc.
4800 Montgomery Lane, Suite 600
Bethesda, Maryland 20814 USA
Tel 301-913-0500
Fax 301-652-3916
Email PHR-InfoCenter@abtassoc.com
URL www.PHRplus.org