1.2 *Community-based health insurance*

LUCY KANYA, MANUELA DE ALLEGRI, VALÉRY RIDDE

Key messages

Chapter 1.2 assesses community-based health insurance (CBHI). CBHI is a voluntary, self-organized approach to financing health care for groups of individuals in the absence of other forms of health care coverage. CBHI scheme members organize themselves, collect and pool their insurance premiums, and use them to purchase health services for members. Key learning includes that:

- CBHI is not a miracle solution to affordable access to health care:
  - the very poor often do not enrol, and when they do, they tend to use fewer health services;
  - out-of-pocket (OOP) payments are not necessarily reduced.
- Low uptake, poor delivery of promised benefits and challenges around governance undermine the impact of CBHI.
- CBHI does not overcome broader issues, such as a lack of financial resources.
- CBHI might serve as a transitionary mechanism towards universal health coverage (UHC) and offer some financial protection for the most vulnerable provided that:
  - policy-makers create a supportive political and economic environment;
  - social capital can be mobilized;
  - schemes are institutionalized within the health sector.

Introduction

CBHI is one of many terms used to describe small-scale schemes which aim to provide financial protection for individuals when they seek

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medical care.[1] Community members organize themselves, collect and pool their insurance premiums, and use these to purchase health services for their members. Traditionally associated with settings where health care is not publicly funded or provided universally, CBHI schemes apply the same principles used in formal health insurance – in particular, resource pooling, prepayment and risk sharing – and adapt these to local social contexts.

CBHI's proponents advocate for its use on two main grounds. Firstly, it can provide an additional or alternative form of revenue-raising in low- and middle-income countries (LMICs) without a robust tax base and the institutional capacity to collect either taxes or insurance premiums effectively. Secondly, in the absence of universal public provision of health care, CBHI has the potential to overcome the financial barriers to accessing health care put up by formal private and social health insurance (SHI) schemes (see chapters 1.1 and 1.3). In particular, these formal schemes tend to exclude rural and informal sector workers and those with an irregular income or none. In many LMICs, those excluded constitute over three quarters of the population and the members of this already vulnerable group – often the most affected by ill health – are left without any form of financial protection from its effects (Donfouet & Mahieu, 2012).

CBHI schemes are intended to provide financial protection, cushioning households from potential poverty occasioned by catastrophic health care costs (Haddad et al., 2012; Rosner et al., 2012). They reduce members' vulnerability to health-related financial shocks by eliminating dependence on OOP payments at the point of health service utilization. Pooling risks across members enrolled in the CBHI scheme reduces the financial burden among the members, as they do not have to incur financial costs to receive health services (see Chapter 2.1). The removal or reduction of financial barriers is intended to increase access to health care and prevent absolute poverty among beneficiaries (Donfouet & Mahieu, 2012).

Some advocates of CBHI go further, suggesting that its implementation is a plausible option for countries seeking to achieve United Nations Sustainable Development Goal 3.8 of UHC, including financial protection (Seventieth United Nations General Assembly, 2015; Qin

[1] Community-based health insurance is variously referred to in the literature as community health insurance, medical aid societies/schemes, mutual health insurance/organizations or, in francophone countries, *mutuelles de santé* (Carrin, Waelkens & Criel, 2005; Adebayo et al., 2015).

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et al., 2019; van Hees et al., 2019). International development agencies are leading the narrative that CBHI holds potential as a transitionary mechanism for UHC and many LMICs now include CBHI in their strategies towards UHC (Mladovsky & Mossialos, 2008).

Countries vary in their definition of CBHI, however. In its purest form, CBHI is defined as a form of micro health insurance (Donfouet & Mahieu, 2012), which is distinguished from other health financing structures by five key characteristics: (i) voluntary enrolment; (ii) pre-payment of premiums; (iii) community ownership and participatory management of the schemes; (iv) solidarity, with membership not tied to risks and an emphasis on inclusivity; and (v) non-profit, with the primary goal being supporting members to assure the community's health status (Atim et al., 1998; Criel et al., 2008; Michielsen et al., 2010; Soors et al., 2010). However, in the case of some of the schemes held up as the success stories of CBHI, for example, in Ghana and Rwanda, enrolment is mandatory (among other differences), so their status as exemplars of CBHI is questionable (McIntyre et al., 2008; Witter & Garshong, 2009).

In this chapter, we look in more detail at how CBHI works and its impact, the challenges in implementing it, the preconditions required for its success (including a brief case study of CBHI as implemented in Senegal), and assess CBHI's potential as a transitionary mechanism to UHC. First, however, we examine the nature and origins of the financial barriers that CBHI is intended to overcome.

Financial barriers to accessing health care

Since the 1980s, in response to structural adjustment programmes (SAPs) imposed by the World Bank and the International Monetary Fund, LMICs have introduced a series of health financing reforms to generate revenues for the health sector (Helleiner, 1983).

Initially, these reforms created a health care market, allowing for the introduction of user charges and the establishment of an insurance market, for both public (i.e. social) and private health insurance. Anyone wishing to access health care was therefore required to pay the user charges either by means of their health insurance or "OOP", i.e. with their own money. Unfortunately, the quantification of health as an economic good as envisioned by the proponents of such reforms was, and remains, far removed from the realities of many of the

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countries where SAPs were imposed. Their realities include an economic and financial base which is too low to support individual OOP payments, a fiscal capacity too limited for governments to subsidize much of the population and similarly limited capacity to pool resources from the large informal economy (Helleiner, 1983).

In practice, targeting mechanisms for both social and private health insurance exclude rural and informal sector workers and those with an irregular or no income at all from coverage (Donfouet & Mahieu, 2012). Excluded households must instead pay user charges for their health care via OOP payments, which have been described by some as "the worst form of health care financing conceivable" (Rosner et al., 2012; Qin et al., 2019) (see Chapter 2.4). Many are unable to pay and, unprotected by health insurance, therefore are faced with an insurmountable financial barrier to accessing health care.

An overwhelming body of evidence confirms the negative effects of this form of financing on the utilization of health services and population health outcomes (Ridde, 2015; Leone et al., 2016; Ponsar et al., 2011; Qin et al., 2019; Tahsina et al., 2018; Watson et al., 2016). Further, it is now widely acknowledged that health service user fees are incompatible with UHC. Faced with health care costs, uninsured households either opt to forgo or postpone access to medical care, or resort to borrowing funds or selling household assets to meet the costs (Leive & Xu, 2008; McIntyre et al., 2006; Nguyen et al., 2012; Rosner et al., 2012; Sangar, Dutt & Thakur, 2019; Tahsina et al., 2018).

It is unsurprising that attempts to institutionalize reforms such as user fees at a national level have not yielded the desired impact – i.e. increased health revenues, greater access to health care and improved health outcomes (Ridde, 2015). Since the 1990s, then, many LMICs have looked to CBHI schemes as a way of overcoming the financial barrier faced by so many when in need of health care.

Diop and Ba (2010) highlight four forms/levels of financial exclusion which characterize population groups likely to be without both public insurance and SHI (Diop & Ba, 2010; Soors et al., 2010): (i) total exclusion – those who are unable to pay for health care services due to economic inability to do so; (ii) temporary exclusion – those who are unable to pay for health care services at the time of need and therefore opt to postpone care; (iii) seasonal exclusion – those who may be seasonally excluded owing to cash flow constraints resulting from the nature of their work, such as farmers dependent on harvests; and (iv)

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partial exclusion – individuals who may not be able to cover part of their treatments. Therefore, theoretically CBHI mechanisms can fill a gap and offer health services and financial protection to individuals and households thus excluded, in particular those totally excluded (group i) and those seasonally excluded (group iv).

How CBHI works

The simplicity of CBHI designs, affordability by group members with flexible premiums and payment options and the community-based nature make CBHI schemes attractive. Their flexibility in design allows for different types of health insurance dependent on a community's specific set-up and needs. The schemes are often linked to a social, family, ethnic or community group or health care provider (Alkenbrack, Jacobs & Lindelow, 2013; Fadlallah et al., 2018; Musau, 1999; Nshakira-Rukundo, Mussa & Cho, 2021). Members often share residence; for example, a village or groups of villages in the same locality or neighbourhoods or other geographical and administrative boundaries. Some are user-initiated or local health care provider-initiated schemes, as is the case in Uganda (Basaza, Criel & van der Stuyft, 2010) and India (Devadasan et al., 2006), or schemes initiated by microfinance institutions, as in Kenya and India (Devadasan et al., 2006; Musau, 1999), cooperative movements and nongovernmental organization (NGO)-led schemes (Aggarwal, 2010; Devadasan et al., 2010; ILO, 2008; Kamau & Njiru, 2014; Yap, 2003).

The groups organize themselves in a voluntary capacity to pool resources, allocate these and purchase needed health services for their members. The community agrees the premiums and the range of benefits covered, which may be linked to the level of contribution. Premiums are paid in cash or kind, with some schemes designing payment to coincide with the availability of the means to do so; for example, following a harvest (Preker et al., 2001). By pooling both risks and resources from involved communities, members are responsible for ensuring the viability of the scheme (Criel et al., 2008; Soors et al., 2010).

Externally sponsored CBHI schemes

Since the 1990s, CBHI has been seen as the way to extend social health protection, with multiple experiences in LMICs. Interest in CBHI (re) intensified after 2015 when United Nations' Member States adopted

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UHC, including financial risk protection, as part of Sustainable Development Goal 3.8.

Most CBHI schemes in Africa and Asia were introduced and supported by external actors; for example, Belgians and the French for CBHIs in west and central Africa. Many started as research projects or pilots, such as in Guinea (Sylla et al., 2002), Lao People's Democratic Republic (Bodhisane & Pongpanich, 2017), government trials, such as in China (Hsiao, 2001; Wang et al., 2005; Yip & Hsiao, 2008), the Philippines (ILO, 2004) and Ghana (McIntyre et al., 2008).

Some were initiated by NGOs, both locally and internationally; for example, the ORT Health Plus scheme in the Philippines (Aviva & Kupferman, 1996) and faith-based institutions, such as the Presbyterian Church of East Africa's CBHI scheme at Chogoria mission hospital in Kenya (Musau, 1999). In Mali, early CBHI schemes targeted specific members of the population; for example, pregnant women (Ndiaye et al., 2008) while the Bwamanda district hospital scheme in the Democratic Republic of the Congo started in 1986 with funding from the Belgian government which was targeted to health providers (Moens, 1990).

In Africa, CBHIs started in, and were more common in, West Africa than the rest of the continent. In Senegal, the first CBHI schemes were trialled during the colonial period from 1910 onwards, but they did not remain in place for long and covered very few people (mostly colonists) (Ridde, Diaw & Béland (2025). The Mutuelle Pharmaceutique de la Sainte Famille Tounouma in Burkina Faso was one of the first, initiated in 1986 (Soors et al., 2010). Senegal and Benin followed closely, with other countries in the continent establishing similar schemes albeit with variations in the designs (Atim et al., 1998; Criel et al., 2008; Musau, 1999).

In Asia, CBHIs were piloted primarily in Afghanistan, Bangladesh, India and Nepal (Bhageerathy, Nair & Bhaskaran, 2017; Criel et al., 2008; Devadasan et al., 2010; Soors et al., 2010). While CBHIs were mainly designed for and available in rural populations, schemes were also established in Tanzania and Ivory Coast targeting urban populations (Soors et al., 2010).

Subsequently, such schemes have been considerably expanded, in particular by government initiatives to subsidize contributions for people who wish to join CBHIs voluntarily, and thus to increase coverage. For example, in Mali and Senegal, the state subsidizes 50% of the annual premiums for the general population. In Senegal, the

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state subsidizes 100% of premiums for indigent people with varied provisions for other population groups while in Burkina Faso the poorest pay 50% of the premiums (Ridde et al., 2018; Parmar et al., 2014). In 2019, the Senegalese government provided CFA franc 19 billion to cover 50% of the premium costs for 2.84 million general population CBHI members and 100% of coverage for 1.27 million indigent people (Ridde et al., 2018; Daff et al., 2020).

CBHI's impact: mixed evidence

Evidence on the impact of CBHI is mixed. Some is positive: for example, evidence from the first CBHI scheme in Mali suggested increased coverage across all dimensions, higher hospital utilization rates and a reduction in OOP payments for members compared to non-members (Soors et al., 2010). We present here some of the evidence of CBHI's impact on the level of utilization of health services, equity in using them (i.e. do the poor use them as much as the non-poor?), financial protection and population coverage.

Utilization

On the positive side, affiliation to a CBHI scheme has been associated with increased use of hospital-based health services in countries such as Ethiopia and Senegal (Mebratie et al., 2019; Joshi et al., 2020; Artignan & Bellanger, 2021), and greater use of preventive services, including insecticide-treated mosquito nets and deworming services in Uganda (Nshakira-Rukundo, Mussa & Cho, 2021).

Equity

There is positive evidence on equity in Rwanda (Collins, Saya & Kunda, 2016) – but questions surround whether Rwanda's health insurance scheme is CBHI in anything but name; and some evidence of success in Armenia (Polonsky et al., 2009) and Burkina Faso (Parmar et al., 2014). In most settings, the very poor are still less likely to enrol or to use health services even when enrolled in a CBHI scheme (Parmar et al., 2014). An evaluation of CBHI schemes in Senegal established that while membership increased utilization of services by the non-poor, the schemes had no impact on poor people's health care utilization and did not protect them against impoverishing catastrophic expenditures (Ly, Faye & Ba, 2022).

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Financial protection

Overall, the evidence on the impact of CBHI schemes on financial protection has been either limited or very modest. A 2015 review of the role of CBHI in 14 Asian and nine African countries established that by reducing OOP payments, current health expenditure, total health expenditure, household borrowings and poverty in the majority of cases, targeted schemes contributed to the financial protection of members (Habib, Perveen &Khuwaja, 2016).

Evidence also suggests a reduction in OOP payments for enrolled households in some of the CBHI schemes in Senegal (Jutting, 2003), Burkina Faso (Parmar et al., 2014), Benin (Haddad et al., 2012), Tanzania (Msuya, Jutting & Asfaw, 2007), Rwanda (Lu et al., 2012; Saksena et al., 2011) and India (Aggarwal, 2010; Devadasan et al., 2007).

However, CBHI affiliation in China was associated with increased OOP payments and the risk of catastrophic health spending during the period 1991–2003 (Wagstaff et al., 2009).

With less than 1.5% of the Guinea population enrolled in a CBHI scheme as of 2006, there was no impact on financial protection and population coverage (Ndiaye, Soors & Criel, 2007).

Population coverage

In 2011, Ethiopia set a target of 80% CBHI coverage by 2020. However, more than a decade later, the national coverage is estimated as 50% with significant variations across the regions (Tahir, Abdilahi & Farah, 2022).

Higher rates are reported in Ghana and Rwanda, where management by government officials and mandatory enrolment have transformed community-based schemes into SHI. A strict enforcement of enrolment in Rwanda has led to near-universal population coverage (Chemouni, 2018). However, with minimal enforcement in Ghana, the expected coverage has not been attained (Kwarteng et al., 2019) and remains at under 40% (Salari et al., 2019).

Next we turn to the challenges in implementing CBHI schemes that help to explain why their overall impact so far is disappointing.

Challenges to implementing CBHI

Many CBHI schemes have collapsed after initial pilot phases or are struggling due to an array of factors, ranging from discontinuity of funds, heavy dependence on external funding for survival, limited

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government involvement, lack of trust and non-affordability of premiums, to broader health system issues such as the inaccessibility of health facilities (Bennett, 2004; Criel & van Dormael, 1999; Kigume & Maluka, 2021; Muchabaiwa et al., 2017; Fadlallah et al., 2018; Waelkens et al., 2017; Umeh, 2018; Atinga, Abiiro & Kuganab-Lem, 2015). As already mentioned, Francophone west African countries have witnessed decades of trials and large-scale deployments of CBHI – yet they still fail to cover and protect many people in the informal sector, especially in rural areas (Ridde et al., 2018). Indeed, while seeking to provide a solution to the problems of exclusion from health care and financial protection, CBHI brings with it its own set of challenges – in particular, low uptake, inadequate benefits packages and issues of governance – as well as having to contend with broader health system issues. We explore each of these challenges briefly below.

Challenge 1: Low uptake

The uptake of CBHI schemes remains limited in many settings. A core barrier to increasing uptake of CBHI is the limited ability of people in the informal sector to pay for premiums (Adebayo et al., 2015). High poverty levels, lower education and the resultant limited purchasing power among households preclude the sustainability of CBHIs (Fadlallah et al., 2018; Shewamene et al., 2021; Umeh & Feeley, 2017; Adebayo et al., 2015). Evidence also points to a lack of awareness or limited understanding about health insurance generally, and CBHI specifically, which leads to poor uptake among communities (Alkenbrack, Jacobs & Lindlelow, 2013; Cofie et al., 2013; Kigume & Maluka, 2021; Noubiap et al., 2013; Shewamene et al., 2021). The limited uptake of CBHI schemes is also considered to be a function of the lack of supportive regulatory frameworks, and interpersonal, community- and system-level conflicts in horizontal and vertical relationships (Atim et al., 1998; Alkenbrack, Jacobs & Lindlelow, 2013; Bennett, 2004; Carrin, Waelkens & Criel, 2005; Purohit, 2014) (see the *Challenge 3: Issues with governance* section).

Challenge 2: Inadequate benefits poor delivery

The benefits expected with CBHI membership are not always delivered. For example, in one scheme in the Democratic Republic of the Congo,

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while all costs were covered in theory, hospitals did not recognize CBHI cards (Soors et al., 2010). As a result, patients incurred significant OOP costs while accessing care, defeating the purpose of their CBHI membership. Similarly, in Bangladesh, the level of financial protection offered by the CBHI schemes often did not sufficiently protect households from incurring catastrophic health expenditures (Werner, 2009). Perceived poor quality of health services and frequent medication stockouts have also been documented (Criel et al., 2020; Kigume & Maluka, 2021). In part, CBHI's failure to deliver is a function of its low uptake: small-scale CBHI pools with very limited risk sharing present a serious organizational challenge (see Chapter 2.1), and the poor delivery of services then further discourages uptake.

Challenge 3: Issues with governance

CBHI issues with governance are both internal, related to the schemes' community base, and external, related to the quality and level of support they receive from outside agencies, including other parts of the health system, local and national government and NGOs (i.e. both horizontal and vertical linkages).

Internally, the weak managerial capacity in many CBHI schemes is attributed to the community ownership and management of the structures (Atim et al., 2001; Basaza, Criel & van der Stuyft, 2007; Kigume & Maluka, 2021; Mladovsky, 2014). By excluding non-members from their management and decision-making, CBHI schemes can lack necessary input from management experts, as well as health professionals (Soors et al., 2010). Lack of trust in CBHI leadership and among fellow members has also been associated with low enrolments and dropouts of previously enrolled members (Alkenbrack, Jacobs & Lindelow, 2013; Fadlallah et al., 2018; Muchabaiwa et al., 2017; Ozawa & Walker, 2009; Rao et al., 2009; Shewamene et al., 2021). The communal membership, which would otherwise be a strength, instead becomes a risk.

Externally, researchers have pointed out that some CBHI schemes are disconnected from the local health systems (Alkenbrack, Jacobs & Lindelow, 2013; Bousmah et al., 2021; Mladovsky, 2020). The non-recognition by hospitals of CBHI cards in the Democratic Republic of the Congo, as described above, constitutes a prime example (Soors et al., 2010).

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Government support for CBHI schemes includes establishing a regulatory framework within which CBHIs can operate, monitor, coordinate and manage the schemes (but stopping short of mandating enrolment and transforming CBHI schemes into SHI). However, overall, the lack of, or often-limited, political buy-in has been highlighted as a major challenge facing CBHIs (Basaza, Criel & van der Stuyft, 2010; Purohit, 2014; Uzochukwu et al., 2009). There have been attempts to create and adopt legislative frameworks within which CBHIs can operate in countries such as Mali, Senegal and Togo (Barry, 2007; Diop & Ba, 2010; Letourmy & Ouattara, 2006). In India, a policy supporting the development of health insurance programmes encourages the involvement of community-based organizations in pro-poor risk pooling arrangements (National Rural Health Mission, 2005; 2007). Similarly, the SHI master plan in Cambodia, while offering a fragmented approach towards achieving UHC, recognizes the use of CBHI as one of the strategies and has established relevant implementation guidelines (Annear, 2009; ILO, 2008). The community health funds and TIKA schemes in Tanzania, and CBHI in Lao People's Democratic Republic, are backed by legislation (Alkenbrack, Lindelow & Jacobs, 2010; Jutting, Msuya & Afsaw, 2004) while in the Democratic Republic of the Congo, development of CBHIs was included in the country's 2009–2011 specific action plan (*Programme National de Promotion des Mutuelles de Santé*, 2009). However, the evidence on the impact of such policies aimed at enabling CBHI is limited.

It remains the case that most countries do not have regulatory frameworks supporting the operationalization of CBHI schemes and, where they do exist, for example offering financial support to cushion vulnerable population groups, or re-insurance of schemes and guarantees, they are perceived as weak (Atim et al., 1998; Diop & Ba, 2010). Nonetheless, there have been several initiatives to subsidize contributions for people who wish to join CBHIs voluntarily – again including in Mali and Senegal. In both countries, the state subsidizes 50% of the annual premiums for the general population (Ridde et al., 2018). In Senegal and Burkina Faso, the state subsidizes 100% of premiums for indigent people, with varied provisions for other population groups, while in Burkina Faso the poorest pay 50% of the premiums (Ridde et al., 2018; Parmar et al., 2014). However, there is limited evidence on the effectiveness of such subsidies on the utilization of services and financial protection for indigent people.

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Challenge 4: Broader health and insurance system issues

Broader health and insurance system issues have also been highlighted as key barriers to enrolment in, and the sustainability of, CBHI schemes.

Moral hazard, adverse selection and supplier-induced demand

By being based in the community, theoretically, the occurrence of some of the challenges faced by private and SHI systems can be minimized, such as moral hazard, adverse selection and supplier-induced demand. This is because, theoretically, these can be accounted for at the design stage. However, CBHI faces these problems too, as well as underinsurance and information asymmetry.

Moral hazard refers to the situation where individuals alter their health-seeking behaviours, accessing or utilizing care simply because they are covered (Powell & Goldman, 2021). The voluntary nature of the membership of CBHI schemes makes them more prone to adverse selection, a situation where high-risk or sicker individuals are more likely to self-enrol than those who are deemed low risk or healthier (Parmar et al., 2012). Adverse selection has been identified among CBHI enrollees in Zimbabwe (Muchabaiwa et al., 2017) and elsewhere in sub-Saharan Africa (Wiesmann & Jutting, 2000); and especially following the introduction of subsidies in Burkina Faso (Parmar et al., 2012). Evidence of moral hazard and supplier-induced demand for services among members of CBHI schemes has also been documented in Ethiopia (Ayana, 2020) and Zimbabwe (Muchabaiwa et al., 2017). Supplier-induced demand occurs when health providers use their discretionary powers to influence change in demand; for example, by overprescribing services and commodities (Crane, 1992). Such malpractices threaten the sustainability of CBHIs.

Overall lack of resources for health care

Sparse distribution of health facilities and limited health benefits have been identified as contributing to low CBHI enrolment and dropout rates (Basaza, Criel & van der Stuyft, 2008; Hao et al., 2010; Shewamene et al., 2021). We have already noted the problems of perceived poor health services and frequent stockouts of medications (Criel et al., 2020; Kigume & Maluka, 2021).

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Preconditions for CBHI's success

Are there, then, any conditions under which CBHI can succeed on its own terms, without giving up its voluntary nature and transmuting into SHI? To answer this, we first present a case study of CBHI as implemented in Senegal, before listing the preconditions identified as enabling CBHI schemes to work.

Evidence in practice: Senegal

In 2014, in Senegal, the communal mutuals of two departments were merged to create a single health insurance department (UDAM – *Les Unités Départementales d'Assurance Maladie*) managed by professionals (Ridde et al., 2022). Membership remains voluntary, so risk sharing on a large scale is still limited. However, through professional management and the recruitment of specialists, innovative strategies for recruiting members have been implemented. These include a state contribution for entire villages or schools which enables CBHI membership fee reductions for all those living, studying or working in these places and creates collective conduits to channel the state subsidy to the recipients. These UDAMs have a headquarters, general management and qualified support staff for all administrative tasks (Mbow et al., 2020). The scheme's management by professionals is the main way in which it deviates from the Donfouet & Mahieu (2012) definition of CBHI we introduced at the beginning of this chapter. The two UDAMs have been effective and able to cope with overdue subsidies from the state. In addition, all the health facilities in the region have transitioned from unit pricing for each service to a global flat rate, making the price predictable for patients (Mbow et al., 2020). UDAMs also influence the supply of care during the regional health team coordination meetings. In 2021, more than 50% of the population in the two districts were members of the UDAMs, which is an impressive achievement. In addition, between 30% and 60% of the region's hospital revenue comes from the UDAMs, which gives them undeniable power. The Senegal national UHC agency (ANCMU – *Agence Nationale de Couverture Maladie Universelle*) is scaling up this reform to other districts. This has been noted by neighbouring countries which have visited for benchmarking. However, the scalability of these reforms has been opposed by the

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community mutualist movement, which is challenging the management of mutuals by professionals rather than volunteers (Ridde, Kane & Faye, 2025). With the support of the Belgian and French mutualist movements, the Senegal body has engaged in advocacy through the Lomé Platform so as to scale up these reforms.

What preconditions are needed for CBHI to work?

Available evidence suggests that success of a CBHI scheme is heavily dependent on its design and structure, including the affordability of the scheme, managerial capacity, benefits package, level of trust, distance to facilities and the perceived quality of health care covered by these schemes; as well as personal factors, such as individual knowledge and understanding of the scheme, among others (Dror et al., 2016). It is argued that barriers to the successful implementation of CBHI schemes are largely operational in nature (De Allegri et al., 2009) and these have been documented widely (Ekman, 2004; De Allegri et al., 2009; Ridde et al., 2010; Fadlallah et al., 2018).

Here we outline the underlying preconditions for the successful implementation of CBHIs, as follows: a supportive political and economic environment (from which several of the other preconditions flow); the availability of and ability to mobilize social capital; awareness of CBHI and issues of equity; the formalization/institutionalization of CBHI schemes within the overall health sector; and enhanced vertical and horizontal linkages.

Supportive political and economic environment

Country evidence shows that successful UHC schemes are politically driven or have government support (de Ceukelaire, de Vos & Criel, 2011). This ensures that the required economic and regulatory frameworks supporting CBHI are established. Such frameworks enable the creation of incentives for expanding access to health care to rural and informal sectors, and for insurers willing to establish a presence in these settings. The government can use its infrastructure to facilitate the pooling of multiple schemes, purchase health care, provide subsidies for the indigent, ensure civic education and harness support from civil society actors (Bennett, 2004; Fadlallah et al., 2018; Mladovsky & Mossialos, 2008). However, without the correct balance, such government intervention easily changes the scheme from CBHI to

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a pooling and collection agency for SHI taxes. Therefore, an appropriate balance must be determined.

Availability of and ability to mobilize social capital

The central role of social capital in the success of CBHI schemes has been highlighted in the literature (Donfouet & Mahieu, 2012; Derose & Varda, 2009). Social capital, in the context of health financing, is generally understood as the "norms and broader social networks that enable individuals to act collectively" (Woolcock & Narayan, 2000). These norms promote trust, build cooperation and move communities to work together towards an agreed objective. The networks thus enhance solidarity which is essential for pooling risks and resources within a community. Addressing individual and community level social capital is associated with willingness to enrol, contribute and stay in a CBHI scheme (Chemouni, 2018). The evidence from Senegal, for example, suggests that CBHI is more likely to thrive where individuals already possess social capital (Mladovsky, 2014).

Awareness of CBHI

An awareness of the possibilities of health insurance and issues of equity among the general population empowers target communities to actively engage in purchasing health care and demand accountability from health providers (de Vos et al., 2009). In addition, an overall awareness is necessary to address inequity, including strategies for dealing with inability to pay, identification of indigent people and targeting mechanisms in rural populations and the informal sector (Mladovsky et al., 2014). The government is often best placed to ensure civic education and create such awareness (Fadlallah et al., 2018).

Formalization/institutionalization of CBHI schemes within the health sector

Giving a CBHI scheme formal status facilitates linkages with other arms of the health sector and enhances the trust, sustainability and scalability of the schemes, as has been evidenced in Ethiopia (Tahir, Adilahi & Farah, 2022). Institutionalization would also facilitate required managerial support. As demonstrated by the UDAMs in Senegal, managerial capacity is critical for the effective functioning of CBHIs (Ridde et al., 2022).

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Enhanced vertical and horizontal linkages

Enhancing vertical and horizontal linkages involves creating synergy between the central government, community, local government and other players in the health sector. It requires engaging with other actors such as civil society, the private sector and other relevant bodies who can support civic education or create awareness of health insurance and strengthen the managerial capacity of CBHIs. These linkages would also support the regulation and accountability of CBHI schemes. Relationships should also be developed with other CBHI schemes to facilitate pooling of risks and resources and enable the strategic purchasing of services.

CBHI and UHC

Available evidence to support the narrative that current CBHI schemes can be used as a vehicle to achieve UHC in their different settings is limited and patchy (Carrin, Waelkens & Criel, 2005; Ekman, 2004; Mladovsky & Mossialos, 2008; Soors et al., 2010), and thus researchers express cautious optimism about CBHI's potential.

Arguments against the use of CBHI to advance UHC relate primarily to design issues. The significant heterogeneity in current CBHI scheme designs poses challenges to building large-scale and sustainable financing mechanisms. The huge variation in coverage and the range of benefits offered also hinders measurement of CBHI's progress in achieving universal coverage. By design, the population group targeted by CBHI schemes (rural populations, informal sector and the indigent) all have irregular and often seasonal incomes. This creates barriers to effective and sustainable collection of CBHI contributions. Challenges related to unaffordability, small pools and limited contributions to the CBHI scheme lead to issues of equity. In the absence of significant support from other sources, the precarious financial state of CBHI schemes threatens their long-term sustainability (Atim et al., 1998; Creese & Bennet, 1997; Criel, 1998; Ekman, 2004).

Countries such as India, Ethiopia, Ghana and Rwanda have nominally embraced CBHI as one of the potential instruments to achieve UHC (Lavers, 2019; McIntyre et al., 2008; WHO, 2010; Urban Health Division, 2008). These countries have made pragmatic decisions to institute their own versions of CBHI, developing relevant regulatory frameworks to enable their schemes' establishment and

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expansion. However, countries such as Ghana and Rwanda have deviated significantly from the CBHI concept by enforcing mandatory membership.

The enforcement of mandatory CBHI membership is the subject of ongoing debates across west African states. Some countries have suggested enforcing this by requiring proof of membership in a health insurance scheme for the issuance of administrative documents such as a passport, birth certificate or national identity card. However, this proposal has faced objections already. For example, unions in Mali won a legal battle rejecting mandatory contributions, but they finally reached an agreement several years later (Ridde et al., 2018). Time will tell whether these solutions are feasible in sociopolitical contexts very different from Rwanda, which has been able to make membership mandatory (Chemouni, 2018).

Policy relevance and conclusions

Theoretically, in the absence of state-provided, tax-funded health care or formal health insurance, CBHI has the potential to reach rural and informal sectors, helping to create awareness of the concept of health insurance and providing some access to health care. Ideally, CBHI schemes would help to build trust in the use of health insurance. This would facilitate the entry of insurers into this market (Rosner et al., 2012), including private and SHI schemes, and non-salary-based options. In addition, CBHI schemes could support functions such as the recruitment of community members and identification of indigent people requiring subsidies, as is the case with the Rwanda scheme (Diop & Ba, 2010; Chemouni, 2018). However, CBHI design attributes – in particular the voluntary nature of enrolment and contribution – often prevent it from being a successful mechanism to raise sufficient revenue in practice. CBHI may therefore be better suited as solely a collection mechanism, given its potential to reach rural and informal sectors. If successful, this would support at least two of the UHC coverage goals: expanding population coverage and enhancing financial protection. With relevant awareness, community members can also demand accountability from the health system which would hopefully enhance responsiveness to their health needs, improved efficiency and quality of care.

Based on the evidence presented in this chapter, current CBHI schemes are still a long way from making a significant contribution to

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achieving UHC. Those held up as current examples of success can no longer be defined as CBHI schemes. Beyond the small pilots of CBHI schemes, there is very limited and often mixed evidence on the impact of pure CBHI across the different health financing functions and population health coverage. The role of the government is critical for the establishment and sustainability of effective CBHI schemes. Only then can CBHI be included in the suite of financing mechanisms that countries can use to advance the UHC agenda. Wide-scale adoption of CBHI rests on policy-makers' decisions to create a regulatory space where these systems can operate. This would also facilitate the generation of sufficient evidence to support definitive decision-making on the implementation of CBHI, including appropriate design and scale-up.[2]

Additional resources

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[2] Unless noted otherwise in the chapter text, the book covers developments up until the end of 2023.

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