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ASSESSMENT OF URBAN COMMUNITY-BASED HEALTH INSURANCE SCHEMES IN ADDIS ABABA

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USAID Health Financing Improvement Program

The USAID Health Financing Improvement Program supports the Ethiopian government in its efforts to further strengthen and institutionalize health care financing reforms and initiatives to provide accessible, high quality, primary health care services for all Ethiopian citizens with reduced financial barriers. Led by Abt Associates, the program is implemented in collaboration with core partners Breakthrough International Consultancy, the Institute for Healthcare Improvement, and Results for Development, and resource partner Harvard T.H. Chan School of Public Health.

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Cover Photo: A community-based health insurance beneficiary with his insurance identification card. Photo credit: Ayenew Haileselassie, Abt Associates.

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ACRONYMS

AAHB	Addis Ababa Health Bureau
CBHI	Community-Based Health Insurance
EHIA	Ethiopian Health Insurance Agency
EPSA	Ethiopian Pharmaceuticals Supply Agency
FGD	Focus Group Discussion
HC	Health Center
HEW	Health Extension Worker
ID	Identification (Card)
KII	Key Informant Interview
OPD	Out-Patient Department
SNNP	Sothern Nations, Nationalities, and Peoples' (Region)
USAID	United States Agency for International Development
USNP	Urban Safety Net Program

1. INTRODUCTION

1.1 BACKGROUND

Community-based health insurance (CBHI) targets people who work outside the formal sector – often people in rural areas and but also informal workers in urban areas – to reduce the financial barriers they face when seeking health care. The government of Ethiopia began implementing CBHI in 2010, as a pilot program in four regions. Over the ensuing 12 years, the number of CBHI schemes has increased greatly, mainly in rural areas of the country. The first CBHI scheme in an urban setting was established in Yirgalem Town Administration in January 2011; since then, other towns have established schemes. Currently (as of June 2021), functional CBHI schemes exist in 582 rural woredas and 138 urban centers. In 2017/18, Addis Ababa City Administration began implementing CBHI in 10 sub-cities. Each sub-city started with a pilot scheme in one woreda, and then scaled up to three additional woredas in 2018/19 and to all 120 woredas in 2019/20. At present, all sub-cities are actively implementing the program.

The government of Ethiopia wishes to expand the program to all areas of the country, rural and urban, to further reduce financial barriers to accessing health care. Lessons learned from experiences in Addis Ababa over the past three years will help expand and fine-tune the design elements of the program, especially in urban areas.

1.2 STATEMENT OF THE PROBLEM

Currently, the design features of CBHI implemented in urban settings are similar to those of CBHI implemented in rural settings, except for differences in the contribution amount. However, because the urban setting differs from the rural in terms of socio-economic, epidemiological, technological, and other characteristics, the design of the CBHI implementation model should consider these unique urban features. (See Tables 1 and 2 in Chapter 3). Until now, no comprehensive study has been done to inform urban CBHI design. It is in this context that this assessment of urban CBHI practices took place.

1.3 SIGNIFICANCE OF THE STUDY

The assessment will generate evidence on how the existing urban schemes are functioning in terms of selected design features such as community mobilization, membership eligibility, contribution setting and collection, and governance.[1] The evidence generated will be used to streamline design parameters for sustainable implementation of CBHI in urban settings.

1.4 OBJECTIVES OF THE ASSESSMENT

The assessment explored the design features of CBHI schemes and their implementation in Addis Ababa, to draw lessons about the design of urban CBHI that can be used to adapt design parameters.

The specific objectives are to:

a) Explore the relevance of design features of CBHI schemes in the urban settings;

[1] A more complete list of design features includes: community mobilization, membership eligibility, members registration, premium setting and collection, membership renewal, community engagement, identification card provision, identification of eligible population and indigents including payment of their contribution by third party, benefit package, health service utilization, reimbursement mechanism, staffing, subsidy (general and targeted), risk management, and governance structure.

b) Assess the efficiency of contribution collection, and the level of subsidy and its disbursement; and

c) Asses the financial sustainability of the schemes.

2. LITERATURE REVIEW

The literature on CBHI in the urban context at both the global and local level is scant. What is available focuses on urban slums and the urban formal sector. The study team tried to extract from the literature as well as from primary sources what makes the urban setting different from the rural setting for effective CBHI implementation. The characteristics of people in the urban informal sector differ from those of the rural population in various aspects. For example, their employment and therefore residency are often short term, and many move around as they search for jobs. This demands a different approach for the CBHI benefit package, level and types of service providers, registration, targeting, amount and timing of membership contribution payments, and collection methods.

In rural areas, for instance, schemes make it easier for people to pay their annual contribution by scheduling payment during the harvest season. People in the urban informal sector are paid on a monthly, weekly, or daily basis, and sometimes irregularly, and therefore a similar timing of contributions may not be feasible. Studies have found that the timing of collecting contributions matters to enrollment. Carrin et al. (2005:803), who looked at schemes in developing countries, observed that "schemes in urban areas were more inclined to establish monthly or quarterly contributions so as to match the income patterns of urban informal sector workers."

Geographic access to a health facility is another determinant of CBHI enrollment and renewal. Because a significant number of people in the urban informal sector move in search of jobs, they do not have a permanent residence, and so their access to health services cannot be tied to specific health facility. CBHI in the urban context should be flexible, offering portability of benefits, that is, allowing members to access health facilities that are close to where they currently reside. Without this, these people are less likely to join and renew membership. Carrin et al. (2005:804) found that distance to a health facility is critical to accessing health services. For instance, in the Gonosasthya Kendra scheme in Bangladesh "… membership among the two lowest socio-economic groups appeared to be related to distance: up to 90% of that target population from nearby villages subscribed, whereas only 35% did so for the target population in the distant villages." The same is true in Rwanda. "In the Rwandan Project Study, it was also found that households who lived <30 minutes from the participating health facility had a much larger probability to enroll in the community based health insurance than those who lived farther away (Schneider and Diop 2001, in Carrin et al. 2005:804).

Another feature that distinguishes urban CBHI from rural CBHI is that urban residents are more aware of health benefits and tend to seek care more often than rural residents. Enrollment is highly likely to match the type and quality of services offered: the greater the quality, the higher the probability of enrollment. A typical example of this is found in Ghana (Adanna Uloaku et. al. 2018). Ghana has modified the rural scheme model to suit the impoverished urban setting, which is largely communities in the urban informal sector. Despite their socio-economic status, these communities are more likely to visit private facilities, which often are able to offer higher-quality health services than public facilities. For this reason, the urban CBHI model requires higher-quality health services, including access to private facilities. The lessons drawn from the above discussions were incorporated into our study methodology and thus informed our data collection (see Section 3.2).

3. METHODOLOGY

3.1 STUDY DESIGN

The appropriate study design for the assessment of CBHI implementation in the urban setting, one that will generate the required evidence, will take into account the design features, how they are being implemented, and challenges encountered (Table 1) from the urban perspective.

Table 1: Evaluation matrix: Design features against what is being practiced and challenges

Design features	Existing design	Practice/ implementation	Challenges	Recommendation
• Community mobilization system				
• Members registration				
• Governance structure				
• Contribution setting and collection mechanism - Contribution setting and community engagement - Collection system - Incentive				
• Identification card provision system including capturing family photo				
• Defining and identifying eligible households - Paying - Indigent				
• Health service utilization - Mechanisms in place to contain overutilization - Challenges associated with mobility - Members' attachment to health facility or service portability in line with mobility as well as residences versus workplaces				
• Reimbursement mechanisms - 75/25% - Contract management				
• Health service fee-setting mechanisms and community/EHIA/CBHI level of engagement				
• CBHI structure and staffing pattern - Woreda, sub-city, and city level in terms of number of staff and professions required to manage tasks				
• Risk mitigation mechanisms - Fraud management - Period to deposit collected contributions in CBHI bank account				
• Complaint handling				

Source: Study team's compilation from different directives and guidelines

Four urban characteristics were identified, with their implications for urban CBHI design (Table 2).

Table 2: Urban characteristics and their implications for CBHI design

Characteristics	Implication to the design features
High mobility of the eligible population	1. Requires different approach from that of the rural context for mobilization, registration, targeting, timing/collection of payment, and membership renewal 2. Accessing services cannot be tied to specific health facility
Challenges in classifying the eligible informal sector	Difficult to identify eligible population
High health-seeking behavior and better access to higher-level health facilities	1. Requires higher contribution rate to ensure scheme's financial stability 2. Has a higher risk of adverse selection (enrolling many high-risk individuals such as the chronically ill who anticipate a high need for care 3. Given the proximity of higher-level health facilities, makes overutilization of hospital services more likely (in terms of money budgeted for hospital utilization and/or copayment-payment) 4. Has a high risk of moral hazard both from suppliers (providers) and consumers (beneficiaries) of services
Households are overburdened by high and increasing cost of living	May require flexible payment mechanisms (not once a year but instead two or three times) and a larger subsidy

3.2 DATA SOURCES AND DATA COLLECTION

The study used both primary and secondary data sources collected through interviews and administrative reports as follows:

a) Qualitative data

- Key informant interviews (KIIs) of government officials at various levels (primary source)
- Focus group discussions (FGDs) with members and non-members of CBHI (primary source)
- Review of documents on CBHI design, directives, and guidelines, and administrative reports on status of CBHI schemes (secondary source)

b) Quantitative data

- Administrative data on CBHI schemes (secondary source)

Semi-structured interview guides were used to conduct KIIs and FGDs. Key informants were selected based on their roles and responsibilities related to CBHI, and the experience and information they have in the program. FGD participants were selected in consultation with woreda CBHI staff.

3.3 SAMPLING

The government selected Addis Ababa for the assessment. The sampling frame was all 10 sub-cities, all of which are implementing CBHI. Criteria were set for the selection of sub-cities and woredas. Four

sub-cities were selected randomly. From each, the first woreda that implemented CBHI was selected. Two of the other three woredas that implement CBHI (one better performing and one weak performing, based on their enrollment/renewal and contribution collection performance) were selected in consultation with the sub-cities' CBHI/health office. This gave a total of 12 woredas.

Selection of facilities to participate in the study was done by sub-city CBHI coordinators, United States Agency for International Development (USAID) Health Financing Improvement Project staff, and Ethiopian Health Insurance Agency (EHIA) staff during a workshop conducted for this purpose. For health facilities for KIIs, one contracted health center from each participating woreda (total of 12 health centers) was selected. From the six hospitals in Addis Ababa, two regional hospitals and a specialized Federal hospital were selected, based on their high utilization by CBHI members (Table 3).

Table 3: Selected sub-cities and woredas for KIIs and facility survey

Sub-cities	Woredas	Hospitals	Health Centers
Addis Ketema	09,* 02, and 06	• Black Lion and Paulos (Federal) • Ras Desta and Zewditu (Addis Ababa)	Kuasmeda, Abyssinia, and Felege Meles
Gullele	03, 02, and 09		Shiromeda, Maychew, and Selam
Kolfe Keranyo	04,* 05, and 09		Alembank, woreda 09, and woreda 05
Lideta	01,* 03, and 10		Hidase, Abinet, and Lideta

Source: Study team's compilation

* First pilot woreda

The sampling distribution for FGDs, KIIs, and a facility survey are presented in Table 4.

Table 4: Sampling distribution, Addis Ababa City Administration

Activity	Federal	City	Sub-city	Woreda	Total
FGDs				CBHI members (8, two in each sub-city) Non-members (4, one in each sub-city)*	12
KIIs	1. USAID Health Financing Improvement Program Total: 1	1. Health bureau 2. CBHI coordinator 3. Bureau of Finance and Economic Development 4. Civil Service Total: 4	1. Health office 2. CBHI coordinator 3. Finance office Total: 12	1. Health office 2. CBHI coordinator 3. Contribution collectors at ketena/village level (aderejajet) Total: 24	41
Provider KIIs	2 hospitals	3 hospitals		12 health centers	17
Total number of KIIs	3	7	12	36	58
Health facility survey	2 hospitals	3 hospitals		12 health centers	17

Source: Study team's compilation

* From two sub-cities, we took the first pilot woredas and from the other two sub-cities we took one strong and one weak woreda for non-member FGDs.

4. RESULTS AND DISCUSSION

4.1 COMMUNITY MOBILIZATION

Community mobilization involves government offices and different parts of the community. About three months before the start of the CBHI membership renewal and new enrollment period, preparation for mobilization begins and involves different forums, opinion leaders, community leaders, community organizations, ketena[2]/village volunteers, and woreda and sub-city officials. Community mobilization is carried out in three phases: in the early days of the new enrollment and renewal period, in the middle of the period, and toward the end of the period. House-to-house visits, distribution of banners, flyers, and brochures, loudspeaker announcements from mounted vehicles (montarbos), and other activities are used to mobilize the community for CBHI.

Woreda CBHI offices lead community mobilization, and use the ketena structure, a structure that has tasks broader than CBHI at grassroots levels, to enroll families, arrange for preparation of identification (ID) cards, and collect most membership contributions. Two to four residents selected from the ketena, who are known locally as aderejajet, work voluntarily[3] within their respective ketena to do much of the community mobilization. They make door-to-door visits, sometimes multiple visits, to the ketena's more than 200 households to create awareness of the CBHI program, especially during the enrollment and renewal periods. They collect contributions and issue receipts. They also assist Health Extension Workers (HEWs) in filling out membership forms.

Each health center has a morning meeting with clients who come to the health facility for outpatient services. Woreda CBHI employees and the woreda health office use this meeting to create awareness on CBHI benefits, objectives, and other issues. In addition to general awareness creation, the meetings promote CBHI through stories that show how CBHI members are saved from high medical expenses, which demonstrate the concrete benefits of CBHI membership to the community.

The sub-city (both CBHI section and health office) support community mobilization activities. The sub-city sends flyers and brochures and the woreda CBHI section duplicates and distributes them as a tool for awareness creation. Sub-cities also prepare banners and provide them to woredas to use for community mobilization. Woreda administration and woreda health offices are also actively engaged during community mobilization. For easy reach to the community, each woreda cabinet member is assigned to a ketena and is responsible for leading and monitoring community mobilization.

The community mobilization activities are effective as they reach every household, particularly through door-to-door visits by aderejajet and by vehicle-mounted loudspeakers moving around every corner. FGDs held with CBHI members and non-members attested to this, stating that they got adequate information (on benefits, referral system, contribution, etc.) largely from aderejajet.

Non-members were asked during FGDs why they did not join CBHI. They stated that they have adequate information but could not join CBHI because they cannot afford it. They stated, "we live on a hand-to-mouth basis. How can we pay so much money for future health care needs when we have a lot of immediate needs?" Many view paying for future health needs as a luxury they cannot afford. Some

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[2] A *ketena* is a sub-unit of a woreda. Woredas have five to seven ketenas, each with 200-plus households, depending on the size of the woreda. Ketenas exist to facilitate easy access to the community and households. They coordinate CBHI at the woreda level.

[3] While some aderejajet are paid an ad hoc amount on an ad hoc basis, they do not have formal contracts with fixed terms of work and compensation.

suggested that making a monthly or quarterly contribution payment might lead them to join. Some of the very poor stated that it would be very difficult for them to join as they cannot afford any payment.

The other issue the FGD participants raised is that there are people who used to get health services free of charge through the fee-waiver system that existed before the introduction of CBHI, and now have no access. FGD participants also reported that many do not get the information that very poor people can join the scheme through the targeted subsidy for the very poor/indigents. A problem in this respect, however, is that woredas have a very limited budget for indigents, too limited to meet demand. Hence, while some indigents are enrolled after their contributions are paid by the woreda budget, a significant number of very poor people are left out.

Generally, the KIIs and FGDs revealed that the community is well aware of the CBHI benefit package, the contribution amounts, and how the system works, showing awareness creation and community mobilization are carried out successfully. However, as just noted, some community members did not join because they could not afford the contribution, and the woreda targeted subsidy could not meet the demand. This is a particular challenge in woredas where poverty is widespread.

The main problem associated with the community mobilization process is its resemblance to a campaign: its period calls for intense effort, and those who shoulder most responsibility are volunteers (aderejajet). They are engaged full-time during campaign period (usually from October to December/January) with no formal contract or agreed amount of payment. They have serious complaints about this arrangement and want a formal contract and adequate remuneration.

Worse, in some woredas, HEWs withdrew from community mobilization activities last year, Until 2018/19, HEWs worked under the woreda health office. In 2018/19, they began reporting to the health center, which is accountable to the sub-city health office. The CBHI coordination office is under the woreda health office. This structural change encouraged HEWs to withdraw from community mobilization activities, which shifted more of the burden for community mobilization to aderejajet. This makes it difficult to reach every resident for new enrollment or renewal.

Woreda administrations also have limitations in owning and supporting the community mobilization. Although woreda cabinet members are highly involved in community mobilization, the woreda administration does not provide adequate financial support for community mobilization, nor does it approve a plan and budget for the activity. Because of this, most key informants from schemes feel that there is no full ownership of the scheme by the government at all levels in general and by the woreda administrations in particular.

Informants also stated that the Addis Ababa Health Bureau (AAHB) has not paid much attention to this problem, and instead claims that this problem will be fixed in the near future. They expect members to come to the CBHI office to enroll and renew, which implies that there is no need for community mobilization and aderejajet. As on the woreda level, community mobilization is challenged by the lack of a budget and the withdrawal of HEWs, which has shifted responsibility for community mobilization to aderejajet, who now have serious complaints. As a result, it might not be possible to sustain community mobilization in this way. But because CBHI membership is voluntary, community mobilization is essential and needs to be carried out every year to sensitize the community at least for some time.

The above discussions called for structured/systematic community mobilization by making it part of the woreda health office/sub-city health office annual plan with an adequate, dedicated budget. If aderejajet are to continue doing community mobilization, they should be given a clear contract.

4.2 ELIGIBILITY FOR CBHI

4.2.1 PAYING MEMBERS

The original plan for CBHI was to provide health insurance coverage to the rural population and the urban informal sector, the groups that are most vulnerable to high, possibly catastrophic medical costs that can jeopardize a family's livelihood. While the urban informally employed are theoretically eligible to enroll in CBHI, the Addis Ababa City Government CBHI regulation no. 86/2017 and the AAHB Directive 001/2017 do not define the informal sector nor do they make it clear who is eligible or not. In practice, the schemes themselves have each defined who is in the informal sector. As a result, definitions differ across woredas and sub-cities. In all of the woredas visited for this assessment, eligibility for CBHI membership follows a simple rule. According to all key informants and FGD participants, rather than defining who is eligible, in practice, the schemes accept any woreda resident except government employees, if they pay the annual contribution.

Identification is carried out by aderejajet (to some extent assisted by HEWs) doing house-to-house visits and checking identity cards (residency, employment status, etc.). It is assumed that as aderejajet are long-time residents of the community, they have information on employment and economic status of residents. Once aderejajet check that people are not government employees (the simplest way of identifying eligible people for CBHI), they submit the list to the woreda administration in consultation with the woreda health/CBHI office for approval. In woreda 6 of Addis Ketema sub-city, it is possible to enroll only certain members of a family. For instance, if the husband is a government employee and the wife is not, all the family except the husband can enroll. Furthermore, according to key informants, non-eligible categories of the community are allowed to enroll, such as government pensioners (found in almost all visited woredas), people without identity cards (woreda 2, Gullele sub-city), and non-governmental organization employees. Even public employees supposedly have joined CBHI schemes, as members of eligible households. There is no system that enables the scheme to track this.

Some woredas try to use a proper system to identify eligible populations by defining what the informal sector is, but, as noted above, this ends up differing by woreda. For instance, Woreda 2 of Gullele sub-city defines the eligible population as people who are employed by private firms with 10 or fewer employees. Woreda 9 of Addis Ketema sub-city sets the eligibility cutoff at not more than 15, but our key informant there claimed the number was not more than 20. Most woredas are not clear about who is eligible from the private sector. Therefore, the definition of informal sector is not well understood, and there is no manual to help in identifying eligible households.

This shows that there is no system to sort out who is eligible and who is not. Most identification is the burden of the aderejajet, who lack the skill to identify the eligible – and sometimes the courage to refuse an ineligible enrollment. The problem of identifying the eligible population clearly needs to be fixed.

Unlike Addis Ababa, regions have clearly defined what informal sector is and who is eligible to enroll in urban CBHI. For instance, in Amhara Region, eligible populations are defined as owners and employees of a private enterprise whose staff is not more than 10, workers in the informal sector (non-permanent employees), and employees of religious institutions. Pensioners, non-governmental organization employees, and public servants are not eligible (Art. 9 of Directive 07/2020). Addis Ababa needs to define who is eligible in consultation with the Addis Ababa Plan Commission and Central Statistical Agency. Doing this might require assessment of the nature and size of the informal sector.

4.2.2 NON-PAYING (INDIGENT) MEMBERS

Indigents are identified in two ways. The first is if they are direct beneficiaries of Urban Safety Net Program (USNP). If they are, they are eligible to enroll in CBHI. The woreda's Labour and Social Affairs Office is responsible for sharing the list of USNP beneficiaries with the woreda/CBHI office. In addition,

aderejajet identify the poorest of the poor during house-to-house visit. In this process, aderejajet are assisted by woreda cabinet members.

The list of identified poor is submitted to the woreda administration. All ketena leaders who are also woreda cabinet members and the woreda chief administrator deliberate on the list and approve a final list. This list along with deliberation meeting minutes are shared with the sub-city health/CBHI office and woreda health/CBHI office. The sub-city health/CBHI office checks if the total number of indigents in that woreda is realistic, and not exaggerated. Some sub-cities determine a ratio of indigents for each woreda and some do not. The woreda CBHI office posts the list sent by the woreda administration on notice boards, and anyone who has a grievance or a comment about the list can submit it in person or can call the telephone numbers put on the notice board to provide information. In addition, the community can comment on the indigent list through various means: verbally at the CBHI office; by letter to the woreda; or by dropping a written comment in the suggestion box. In many cases, the woreda CBHI schemes receive complaints and deal with them in consultation with the woreda administration. Unlike in rural areas, the list is not presented for verification or comment in public community gatherings to avoid embarrassing people who are announced as being the poorest of the poor.

Once indigents are enrolled, renewal is automatic for the next two years, although some woredas (e.g., woredas 2 and 3, Gullele sub-city) re-assess the economic status of indigents (both safety net beneficiaries and poorest of the poor, identified by the woreda) every year. As the economic status of indigents can change each year, checking economic status each year might be helpful in opening up slots for needy people who were rejected in a previous year. It seems better to have a common understanding and practice when the list of indigents should be revisited.

In sum, identifying the eligible population, both paying and indigent, and particularly non-USNP indigents, currently is largely left for the aderejajet to accomplish. As discussed elsewhere in this paper, aderejajet are selected on an ad hoc basis and have no formal contract or agreed payment. As "volunteers," they are paid token amounts – despite aderejajet complaints, woredas have not created a budget for this. Nor do aderejajet have the capacity to do this task due to lack of training, and the absence of organized targeting and identification and communication systems related to the eligible households. The job is very hard (visiting house-to-house full-time for at least two months, identifying eligible paying and indigent members, assisting/filling forms for members, collecting contributions and issuing receipts, and distributing ID cards), and many aderejajet are failing to carry it out. Woreda health offices are trying to replace aderejajet by recruiting new people from ketenas and providing training. But it will be impossible to sustain community mobilization relying on voluntary and poorly and irregularly paid workers. The urban scheme should learn from the rural CBHI schemes, which have had success in paying a regular incentive.

4.3 MEMBERSHIP AND CONTRIBUTIONS COLLECTION

4.3.1 MEMBERSHIP

All households that wish to join a CBHI scheme must fill out an application form. This is a standard form that asks personal details including names, addresses, occupation, and so forth. The household head is responsible for providing the information and submitting photographs of each family and paying the contributions for the household. In the first year, families pay Birr 20 for registration. The annual membership contribution that covers the core family is Birr 350. The core family members are the family head and spouse, and their children, including adopted children, younger than 18 years. Other family/household members can be included by paying an additional Birr 70 per person. Registration fees are not paid during membership renewals. The scheme verifies the information provided by family heads

with the woreda administration and sends it to the sub-city for a membership ID. The sub-city sends signed and stamped ID cards to woredas.

Renewals are done by woreda CBHI offices; there is no need to send files to sub-city. As informed by the KIIs from the woreda CBHI section and aderejajet, aderejajet distribute ID cards for members during house-to-house visits. Some members can also collect their IDs from woreda CBHI office.

As noted in KIIs and FGDs, not all eligible people enroll in CBHI. Poverty (inability to pay the contribution, or inability to pay in a lump sum) and lack of interest ("I am healthy") are the main reasons for people choosing not to join. People in the informal sector are poor and mobile. Both factors make it difficult for them to maintain their membership and benefits in the woreda where they originally registered. CBHI membership is not portable: members who move to another woreda in search of work must register – and pay a new registration fee and contribution – as new scheme members in their new woreda.

Indeed, the renewal rate is not progressing as expected. Although the renewal rate in two of the studied sub-cities increased between 2018/19 and 2019/20 (see Table 5), it declined in the other two and, overall, renewal did not increase. The AAHB acknowledges this in its 18/19 and 2019/20 reports. The reports state that the main reason behind poor renewal is people dissatisfaction with lack of drugs and diagnostic facilities at contracted health facilities.

Table 5: Enrollment by households

Sub-city	Year	Members			Paying members		Indigents		Total members	Renewal rate paying members
		Paying	Indigents	Total	Renewal	New	Renewal	New		
Addis Ketema	2017/18	1,708	303	2,011						
	2018/19	8,250	1,831	10,081	1,011	7,240	303	1,527	10,081	59.2
	2019/20	16,762	5,387	22,149	5,912	10,850	1,014	4,373	22,149	71.7
Kolfe Keranyo	2017/18	1,049	797	1,846						
	2018/19	5,383	1,754	7,137	592	4,791	290	1,464	7,137	56.4
	2019/20	22,178	7,271	29,449	3,381	18,797	1,405	5,866	29,449	62.8
Gullele	2017/18	817	544	1,361						
	2018/19	5,281	1,886	7,167	559	4,722	216	1,670	7,167	68.4
	2019/20	11,796	4,857	16,653	3,575	8,221	1,887	2,970	16,653	67.7
Lideta	2017/18	1,035	586	1,621						
	2018/19	5,619	1,853	7,472	788	4,831	501	1,352	7,472	76.1
	2019/20	9,697	3,501	13,198	3,946	5,751	1,691	1,810	13,198	70.2

Source: CBHI directorate, AAHB

4.3.2 COLLECTION OF CONTRIBUTION

CBHI contributions can be paid in three ways: i) members can pay at the woreda CBHI office, ii) they can deposit the payment in the CBHI bank account, or iii) they can pay to the ketena's aderejajet during their house-to-house visit. This last is the predominant mechanism used. The aderejajet collect contributions and issue receipts on one day[4] and deposit the money into the CBHI account the same day or at the latest the next day. They submit the bank deposit slip to the woreda CBHI office, and the finance officer reconciles the deposit slip and cash collection receipts and then provides a receipt to the aderejajet. This is done two or three times a week. Because of this the room for defrauding or misusing the money collected is very limited.

[4] Receipts are printed by the sub-cities and delivered to woreda CBHI offices.

Collecting many contributions in person during house visits and waiting in bank queues to deposit the money on the same day is time consuming and elicits frequent complaints from *aderejajet*. To address these complaints, the coordinator in Woreda 10 of Lideta sub-city collects the money from aderejajet and gives them an unofficial written receipt, and then he himself deposits the money into the CBHI account and submits the deposit slip to the finance officer. This may create opportunities for embezzlement and is not advisable.

The main challenge for eligible urban households that is encountered during the collection of contributions is having to pay the annual contribution at one time. Unlike in rural areas, where the renewal time is during the harvest season when rural residents have some extra money, many people in the urban informal sector do not have dependable income at any time of the year and they also face a high and increasing cost of living. CBHI offices at all levels recognize this is a problem. To help remedy this, the CBHI directorate of the AAHB signed a memorandum of understanding with the Commercial Bank of Ethiopia allowing CBHI members to open an account so they can save small amounts throughout the year and, at renewal time, the bank automatically transfers the contribution fee to the CBHI account. To open an account, members sign a consent form. All sub-cities are expected to facilitate this action by providing the bank a list of CBHI members and distributing an account book to members. People have started opening accounts and are expected to start making contribution payments next year. It should be noted, however, making CBHI payments in this way might not work well in the near future as it relies on voluntary will; members must voluntarily make regular deposits into their accounts.

The best practice we observed in solving the problem of having to pay the CBHI contribution at one time was started early on in Addis Ketema sub-city. For members who could not make a one-time payment, the scheme negotiated with the members' Idirs to lend them the money they needed for their contribution and let them re-pay it monthly. A significant number of members took advantage of this. Apparently this best practice has not been shared with other sub-cities; it should be shared with all relevant stakeholders.

In addition to the annual contributions of paying members, scheme revenue also comes in the form of government subsidies. The targeted subsidy, which covers the full contribution of people who are registered as indigents, is paid by the Addis Ababa City Administration. The Federal government, via the Ministry of Health, pays a general subsidy, which covers 10% of each member's (including indigents) contribution. The ministry budgets for this based on an estimate provided by the AAHB and transfers the amount to EHIA. EHIA transfers the money to the AAHB and then to schemes. So far, there has been no problem associated with the targeted or general subsidy.

Table 6 presents subsidies and contributions at the sub-city level. The study tried to get data on this from each study woreda, but their data were incomplete and inconsistent. This is a constraint for examining the financial sustainability based on pilot woredas.[5]

[5] Data collection, analysis, storage, and making it available for users is a serious problem. Despite there being enough staff at both at woreda and sub-city level, the assessment team was unable to get robust data. Data provided by the scheme (sub-city health office) on enrollment (new members and renewal), revenue collected, and spending, was not comprehensive and was inadequate for proper analysis, and the values changed at each visit the team made.

Table 6: Scheme revenue: Contribution and subsidy (Birr)

Sub-city	Year	Members			Contribution		General subsidy	Total revenue
		Paying	Indigents	Total	Paying	Indigents		
Addis Ketema	2017/18	1,708	303	2,011	583,060	120,790	70,385	774,235
	2018/19	8,250	1,831	10,081	3,574,940	777,920	435,286	4,788,146
	2019/20	16,762	5,387	22,149	7,317,170	2,222,580	953,975	10,493,725
Kolfe Keranyo	2017/18	1,049	797	1,846	339,380	306,720	64,610	710,710
	2018/19	5,376	1,754	7,130	2,211,290	726,680	293,797	3,231,767
	2019/20	22,178	7,271	29,449	9,177,110	3,108,310	1,228,542	13,513,962
Gullele	2017/18	817	544	1,361	263,800	212,550	47,635	523,985
	2018/19	5,300	1,887	7,187	2,182,710	830,280	301,299	3,314,289
	2019/20	11,796	4,857	16,653	4,942,270	1,918,350	686,062	7,546,682
Lideta	2017/18	1,035	586	1,621	337,020	230,330	56,735	624,085
	2018/19	5,673	1,853	7,526	2,401,840	758,550	316,039	3,476,429
	2019/20	9,697	3,501	13,198	4,140,160	1,436,490	557,665	6,134,315

Source: CBHI section of AAHB

Another issue is financial remuneration for the hard-working aderejajet. They are the lynchpin of the contribution collection system, responsible for mobilizing community membership, identifying eligible paying members and indigents, assisting/filling forms for members, collecting contributions, issuing receipts, and distributing ID cards. The official renewal time is one month but every year it is extended for at least a second month. The CBHI office has no formal agreement with aderejajet – they accomplish their tasks with no contract or specified remuneration. Their payment varies from year to year, sub-city to sub-city, and even from woreda to woreda within a sub-city. Although there is an effort to make contribution collection bank based, through CBHI accounts in which members make a monthly deposit, this may not happen soon as members' saving is voluntary – and so the CBHI program will likely remain reliant on the aderejajet for the near future. For this reason, the ad hoc nature of engaging aderejajet needs to be dealt immediately. Contribution collection should be systematized and aderejajet should be formally employed for at least three months every year until the bank-based system is fully operational.

4.4 HEALTH SERVICE UTILIZATION

4.4.1 ACCESS TO FACILITIES OUTSIDE THE WOREDA

As discussed in Section 2, people in the urban informal sector do not have permanent employment and so move from place to place in search of work. This demands portability of access to health facilities rather than assignment to a specific facility. As in other countries (Carrin et al., 2005), distance to a contracted facility is a factor that discourages CBHI enrollment and renewal.

As noted by key informants and FGD participants, CBHI members in the visited woredas in Addis Ababa (except in Kolfe Keranyo sub-city[6]) can only access one health center, in the woreda where they live.[7] They cannot carry their membership to a new woreda if they change residence. Either they must return to their previous woreda to seek health care or they have to enroll as a new CBHI member in the woreda where they live – and pay a new registration fee and contribution fee. For example, many members of the Gullele sub-city woreda 2 and 3 schemes complain that the health centers in those

[6] FGDs with CBHI members stated that, in Kolfe Keranyo, they can visit any health center within the sub-city.
[7] The referral system is not tagged to a specific hospital. In all visited sub-cities, referral is based on the patient's case.

woreda are far from where they now live, while there are other health centers nearby. As noted above, such a situation discourages people from joining a scheme or renewing their membership.

FGD participants and key informants agree that members must be allowed to visit a contacted health center close to where they live and/or work irrespective of the woreda administrative boundary and be allowed to carry their membership when they change their address at least within the sub-city. This is a valid judgment as long as the scheme is established at the sub-city, not the woreda, level. The AAHB CBHI directorate acknowledges this problem. It has authorized schemes to allow members to visit a health center in other woredas within the sub-city, and two sub-cities, Bole and Yeka, are implementing this. The directorate is also allowing schemes to have contracts with health centers outside their sub-city if their members live outside. This is welcome decision, but it should be noted that woredas across sub-cities or even within their own sub-city are not networked. Allowing members to access all contracted health centers will make data management and claims processing very difficult unless the woredas and schemes get IT support. The AAHB needs to consider networking the schemes and health facilities as it allows members to access health facilities close to them.

4.4.2 MONITORING QUALITY OF SERVICES

During KIIs with staff of CBHI schemes, woreda health offices, and health centers, the major complaint voiced about the quality of health service provision is lack of drugs and diagnostic facilities both at health centers and hospitals. Public facilities must refer patients to private ones for imaging, chemistry tests, and other procedures. For drugs, they refer CBHI patients to Kenema pharmacies, which are publicly owned and offer fair prices. However, as noted by FGDs participants and key informants, CBHI members are not well received there, and they may be denied drugs because they are not paying cash – the pharmacies feel the members are getting drugs for free. Some members manage this problem by not showing their CBHI membership card until the pharmacist confirms the drug is available.

The problem with drugs is related to procedures and capacity of the Ethiopian Pharmaceutical Supply Agency (EPSA), the public agency in charge of supplying drugs. Public health facilities have to procure drugs from EPSA. EPSA always has problems with processing procurements, which takes them a long time. It also does not have the capacity to supply what is required. As a key informant (head of a health center) reported, EPSA can supply only about 30% of what is requested, and it must issue a clearance (a letter with stock-out signature) to public health facilities that wish to procure drugs from a private supplier.

There are also problems with the private suppliers. Their prices are high and the procurement process does not allow for direct procurement – it requires bidding, and the bidding process takes a long time. By the time the winning bid is announced, other problems emerge; for example, the winning supplier has often run out of stock. This problem needs to be fixed.

Members also complained about diagnostic services. Most health centers and hospitals do not have all the required diagnostic facilities at all times. They refer CBHI members to private facilities, where the member must pay out of pocket and will not be reimbursed. CBHI schemes recognize that their inability to reimburse members' out-of-pocket payments is a problem but they fear that doing so will make the scheme financially unsustainable.

CBHI member opinions about their reception by health professionals are mixed. Some members feel welcome, others do not. Some members of the FGD reflected that many health professionals are not happy to receive CBHI beneficiaries, and their reception is even worse in hospitals. The members wonder if health professionals, like Kenema pharmacy staff, think they are getting services for free, or that they are seeking unneeded services simply because they do not have to pay at the point of service.

Feelings of health professionals also are mixed. Some (as per KIIs with facility heads) see CBHI as opportunity to bring more revenue to their health facilities. Some are happy that they can now prescribe

all relevant diagnostics without worrying about the patient's ability to pay. On the other hand, some health professionals in contracted health facilities view CBHI members as a burden due to insurance-induced patient flow increase. This is especially true at hospitals. Some ask members to show their renewed membership cards in September, when the new Ethiopian calendar year begins, even though a CBHI membership runs through November/December.

Almost none of the visited woredas have a regular and structured system, such as surveys, to monitor the quality[8] of the health services they provide.[9] The one exception is woreda 6 in Addis Ketema sub-city. The CBHI staff with the assistance from the sub-city do patient exit interviews every two months and discuss the findings with health facilities. The other woredas have no such practice despite complaints about the quality of their health services. Instead, they deal with complaints as they arise. In most visited woredas, the CBHI office is located in the health center, and so it is easy to talk to the health service providers.

There also are other forums at which complaints can be aired. The health facility, particularly health centers, regularly conduct discussions with people seeking health services; they do this for 20–25 minutes every morning, before the facility starts seeing patients. Discussions are about general health service delivery, and include CBHI. Every month, the woreda health office discusses service provision with health center management. A quarterly forum brings together the woreda health office and CBHI coordinators, health center management, and selected community representatives from each ketena. In this forum, the woreda health office presents a report, which is followed by discussion; the CBHI coordinators participate and raise issues related to service provision.

The AAHB and sub-city health offices are to make sure quality health services are being provided to CBHI members. However, our KIIs claimed that a system for doing this is not always in place, or, if a structure is there, it is not functional. Instead, checks on the quality of health service delivery is ad hoc. For instance, in theory, there is twice-yearly forum at city level where management of health centers and the community meet to discuss CBHI and other health issues. In practice, it does not always happen due to lack of budget. CBHI staff at all levels acknowledge the importance of carrying out a members' satisfaction survey at least at city level on a regular basis. This is something which needs the attention of the city administration in order to make the scheme sustainable.

4.4.3 HEALTH FACILITIES' READINESS FOR CBHI

During the launch of CBHI in 2017/18, woredas that host the better-quality health center was selected for the pilot exercise. In the following year, the same principle was applied to scale up the scheme to three additional three woredas in each sub-city. Last year, all woredas established CBHI schemes. At no time was a proper assessment done and lessons drawn for the subsequent scale-up. In reality, most facilities were not fully ready to participate in CBHI.

Facility staff were not ready for the increased inflow of patients, and there were acute shortages of drugs and medical supplies such as reagents (KIIs with heads of health centers and FGDs with members). CBHI members had been told during community mobilization that the health facilities were to provide all services including drugs. This raised the expectations of CBHI members and created frustration among health professionals. This problem diminished over time as health facilities strived to improve their services and beneficiaries understood the actual benefits to expect.

Over time, increased flow of CBHI patients means health centers are now collecting more revenue and have been able to improve service availability and quality. They now have reasonable staff and supplies to

[8] Quality means reasonable waiting times; availability of staff, diagnostic facilities, drugs, and supplies; moral hazard of the health service providers, patient files, etc.
[9] Clinical audits can ensure quality, but they are limited to patient files.

provide the services required at their level. They are improving drug availability and have added services that were not available at the beginning. In general, key informants at health centers feel their increased revenue is enabling them to do quite well (see Table 10). They procure medical equipment, drugs, and related services. In some health centers, expenditure on drugs has tripled. It should be noted that, in parallel, patient inflow is also increasing. Most health centers generally rate their service as good (average) and occasionally very good. Nevertheless, this implies there is a lot of room for improvement.

While staffing has improved, there is still lack of adequate staff. Health centers used to recruit their own staff but now the AAHB does this. Health centers claim this has made the process long and ineffective.

In addition to interviewing key informants at facilities, the study conducted a facility survey at 12 health centers (most selected based on responses from the head of the health center and in few cases deputy/delegated) and four hospitals (most based on responses from medical directors and in a few cases delegated) to assess whether the facility is providing the services as per the expected standard. Health centers are expected to provide four categories of service: preventive, curative, promotive, and rehabilitative; they also provide training and management (total: 24 services) (see Annex A). Respondents at each health center were asked to rate the quality on a four-point scale: very weak=1, weak=2, only adequate=3, up to standard=4. Table 7 presents the quality of health services provided.

The facility survey showed that only two health centers – in woreda 9 of Gullele sub-city and woreda 6 of Addis Ketema sub-city – are providing all 24 required services. The other 10 health centers are not. For instance, among the eight preventive health services, woreda 1 health center in Lideta sub-city does not do surveillance of major prevalent diseases and epidemics, and blindness prevention and control activities are not provided in woreda 9 of Kolfe Keranyo sub-city and woreda 3 of Gullele sub-city.

Table 7: Quality ratings of health services in health centers

Sub-city	Woreda (health center)	Preventive services	Promotive services	Curative services	Rehabilitative services	Training	Management services
Gullele	02	4	3	4	3	Not available	4
	03	3	3	2	Only 1 available	Not available	3
	09	4	4	4	4	3	4
A. Ketema	02	4	3	3	4	Not available	3
	06	4	4	4	4	3	4
	09	4	4	4	4	3	4
K. Keranyo	04	4	4	3	Not available	Not available	4
	09	4	4	3	Not available	Not available	4
	05	4	4	4	Not available	Not available	4
Lideta	10	4	4	4	Only 1 available	Not available	2
	01	4	4	4	Only 1 available	Not available	2.5
	03	4	4	4	Not available	Not available	3

Source: Study team's survey

Note: See Annex A for details.

As shown in the table, the quality of health services is up to standard for preventive health services in all but one health center (woreda 3, Gullele). Curative health services are relatively weak in Kolfe Keranyo. The most serious gap is in rehabilitative health services and training – the services are not available in many woredas. This is especially worrisome after three years of CBHI. Availability of the whole benefit package promised to CBHI members is critical to CBHI uptake.

The 28 health care services that hospitals are expected to provide are categorized into outpatient, inpatient, diagnostic, public health, training, health information and essential applied research, and management functions (see Annex B). The facility survey found that only two hospitals (Tikur Anbesa and St. Paulos) offer all 28. Ras Desta hospital does not provide physiotherapy service (under outpatient

services) or organize and conduct continuing education for staff (under training). Zewditu hospital does not design appropriate health learning materials (under public health), organize and conduct continuing education (under training), or conduct essential operational research (under health information and essential applied research).

Respondents told us that the quality of services differs significantly among hospital. As Table 8 shows, quality at Zewditu hospital is rated poor while Tikur Anbesa is up to standard for all expected services.

Table 8: Quality ratings of health services in hospitals

	Tikur Anbesa	St. Paulos	Ras Desta	Zewditu
Outpatient services	4	3	3	2
Inpatient	4	3	3	3
Diagnostics	4	4	3	2
Public health	4	4	3	2
Training	4	3	2	2
Health information and essential applied research	4	3	2	2
Management functions	4	4	3	3

Source: Assessment survey

Note: Very weak=1, weak=2, just adequate=3, up to standard=4

The facility survey also explored the availability of various health services, supplies, and equipment relative to the quantity and quality of the services provided. The services expected to be provided by the health facility were categorized under laboratory, outpatient care, delivery care, maternal and child health (MCH), emergency care, and inpatient medical service (see Annex C for details).[10] Respondents were asked to identify the availability of services. Survey responses showed that inpatient medical service is most poorly organized. It does not exist in three health centers (woredas 3 and 9 in Gullele sub-city and woreda 6 in Addis Ketema sub-city). Furthermore, a children's ward is not available in all health centers. Dental service and minor outpatient surgical procedures are not available in all health centers. Neonatal care is not provided in three health centers (woreda 5 and 9 in Kolfe Keranyo sub-city and woreda 10 in Lideta sub-city).

Respondents were also asked to to rate the quality and quantity of the available services in the following manner: very poor=1, poor=2, just adequate=3, and up to standard=4. Table 9 shows the results. Inpatient medical services was rated worst in terms of quality and quantity, simply because most services are not provided. The second worst service was outpatient care services, almost all of which were rated poor or just adequate. The ratings of most services provided under MCH also were rated between poor and just adequate.

The facility survey also revealed problems associated with availability of essential medicine. Nearly all health centers are challenged to keep essential medicines available. Facilities were also asked about how severe the stock-out rate on essential medicines is and how long it takes get these drugs. The severity of drug stock-outs is declining but still is a serious problem. What is worse is the time it takes to procure the drugs, two to three months. This has implications for the uptake of CBHI, as CBHI members incur costs in searching for the drugs they are prescribed at Kenema pharmacies. They incur even higher costs to buy them out of pocket from private facilities, costs that their scheme will not reimburse.

[10] It is assumed that health centers in Addis Ababa have the same standard.

Table 9: Rating the quality and quantity of health services at health centers

Sub-city	Woreda	Laboratory service team		Outpatient care services		Delivery care team		Maternal and child health		Emergency care team		Inpatient medical service team	
		Quality of equipment	Quantity of equipment	Quality of equipment	Quantity of equipment	Quality of equipment	Quantity of equipment	Quality of equipment	Quantity of equipment	Quality of equipment	Quantity of equipment	Quality of equipment	Quantity of equipment
Gullele	02	4	4	2.2	2.4	4	4	4	4	3	3	2	1
	03	2.5	2.5	1.8	1.2	3	2	3	2.5	2	3	0	0
	09	4	4	3.2	3.2	4	4	4	4	4	4	0	0
A. Ketema	02	3	3	2.4	2.4	3	3	3	3	3	3	2	2
	06	4	4	3.2	3.2	4	4	4	4	4	4	0	0
	09	4	4	2.4	2.4	4	4	4	4	4	4	2	2
Kolfe K.	04	3.75	3.75	3	3	3.75	3.75	2	2	4	4	1.33	1.33
	09	4	4	2.5	2.8	4	4	3	3	4	4	2.3	2.6
	05	4	4	2.8	2.8	3.75	3.75	2.75	2.75	3	3	0.66	0.66
Lideta	10	3.5	3.5	3.4	3.2	4	4	3	3	4	4	2	2
	01	4	3	2.8	2.8	3	4	4	3.75	4	3	2.8	2.4
	03	4	3	3	2.8	3.5	3.25	3.25	3.25	4	3	2	2

Source: Study team's survey

Note: Very weak=1, weak=2, just adequate=3, up to standard=4

The facility survey also checked the availability of 37 health services in eight service categories (see Annex D) that are expected to be provided by hospitals. All expected services are provided by Tikur Anbesa and Zewditu hospitals. A few services, like HIV/AIDS and tuberculosis and leprosy care, are not provided in St. Paul's hospital and physiotherapy in Ras Desta hospital.

Respondents (medical directors) were also asked to to rate the quality and quantity of the available services in the following manner: very poor=1, poor=2, just adequate=3, and up to standard=4. Results are presented in Table 10. St. Paulos hospital does the best in providing quality services, and Zewditu hospital does the least.

Table 10: Rating the quality and quantity of health services (hospitals)

		St. Paulos	Ras Desta	Zewditu
Laboratory service team	Quality of equipment	3.75	3.85	4
	Quantity of equipment	3.4	3.4	2.7
Outpatient care services	Quality of equipment	3	2.7	3.3
	Quantity of equipment	3	2.6	3.3
Surgical care	Quality of equipment	3	3.3	4
	Quantity of equipment	3	3	4
Delivery care	Quality of equipment	4	4	3.5
	Quantity of equipment	4	3	2.5
Maternal and child health	Quality of equipment	2.75	3.75	3.25
	Quantity of equipment	2.25	3	3.25
Emergency care	Quality of equipment	3	2	1
	Quantity of equipment	3	2	1
Inpatient medical service team	Quality of equipment	3.6	2.3	2
	Quantity of equipment	3.2	2.3	2
Other facilities	Quality of equipment	3	2.3	1.6
	Quantity of equipment	3.2	2.1	2

Source: Assessment survey

Note: Very weak=1, weak=2, just adequate=3, up to standard=4

To recap, readiness of health centers and hospitals to provide all required services leaves much to be desired, and this discourages uptake of CBHI.

4.4.4 OBSERVED BENEFITS OF CBHI

CBHI coverage offers several benefits. It increases health facilities' revenue and in turn the quality of service they can offer, enhances the health-seeking behavior and service utilization of the community, and protects households from catastrophic health expenditure. KIIs with health offices and health facilities as well as administrative data revealed that in Addis Ababa, health facility revenue has increased significantly. CBHI enables health centers to mobilize more financial resources as the volume and frequency of patient visits has increased and health facilities' drug prices shifted to cost plus 25%. In general, every additional patient visit generates more revenue that the health facilities can retain, and this revenue has allowed health facilities to improve the quality of their service provision – they have spent the retained revenues on procuring drugs, laboratory reagents, and medical equipment and renovating the facilities. This in turn has contributed to increased service utilization.

In general, our key informants agreed that introduction of CBHI has brought the positive impacts mentioned above. The head of a health center commented:

> We have spent on medical equipment such as ultrasound. We have bought laboratory equipment. We have renovated the health center. We are purchasing more drugs every year. The resources we get from CBHI are instrumental to all of these investments that contribute to service quality improvement.

Another key informant commented:

> We have observed CBHI members being more demanding than non-members; they are oriented to have a sense of right of use; this creates pressure to improve service; the finance that we get from CBHI also helps to increase quality.

Our key informants also confirmed that CBHI members have better health-seeking behavior and higher service utilization rates than non-members. In fact, CBHI members are often criticized for overutilization. All of the health centers witnessed a fast increase in health center visits after CBHI implementation began. Key informants also agreed that the positive impact of CBHI encourages CBHI membership uptake and membership renewal.

Claims for reimbursement by different health facilities are subjected to a clinical audit. The clinical audit reviews patient files for 20–30% of claims. The health facility must deliver all the requested cards. The audit checks whether:

a) The patient's history is written on their personal file/card;

b) Patients are CBHI members and have renewed their membership;

c) The prescribed medicines on the prescription slip and the info in the patient's file is the same;

d) The prescribed medicine is related to the patient's history;

e) The prescribed diagnostics are written in the patient's file; and

f) The patient's file is signed by the attending health professional.

Findings are extrapolated to total service delivery. Based on this, health facilities can be penalized for a discrepancy between claims and audit findings. For instance, Ras Desta hospital submitted about Birr 600,000 in claims for the first quarter of 2020/21; the Addis Ketema scheme paid only half of the amount. Shiromeda health center in Gullele sub-city was denied Birr 19,000 in claims in the second quarter of 2018/19. The clinical audit has serious financial implications for health facilities, so the facilities are becoming serious with their staff. For instance, Kuasmeda health center has made its health professional employees accountable for any deductions from their claim by the scheme.

As the above makes clear, it can be assumed that the clinical audit will play a significant role in improving specific aspects of health service quality. All key respondents (heads of health centers and health offices) agreed that the clinical audit has helped bring significant improvement in patient files (medical and drug history, diagnosis, etc.). It also encourages health professionals to take maximum care in consulting patients and recording their history and related actions. To increase and refine the positive impacts of the clinical audit, the sample size should be increased, with a target of auditing 100% of claims within three years.

Some health professionals reported that CBHI has brought them opportunities. Physicians are free to choose treatment options without worrying about patients' ability to pay. The key informants from the health centers and hospitals stated that before CBHI, they had to determine available treatment options when they encountered a poor patient. Insurance coverage encourages people to visit health facilities when they first feel ill and to visit more frequently than before. This has increased number of visitors.

While this has increased the work burden for the health professionals, it gives them an opportunity to expand health education.

The pressure from members has helped health facilities improve the quality and types of health service provision. People in the urban areas are more sensitive to service quality than people in rural areas. Traditionally, private facilities, particularly at lower levels of the health system, have had better availability of drugs and diagnostic supplies than have health centers. CBHI members put pressure on health centers, asking why these public facilities run out of drugs and other supplies when private clinics do not. They resist being referred to private facilities where they have to pay out of pocket. Their complaints put pressure on health offices which in turn pressure health centers to better equipped themselves.

Some health centers have decision-making boards and actively respond to pressures coming from health offices and clients (including CBHI members). Because of this, many of them are investing in diagnostic supplies and making their health center a center of good service. The arrangement that Shiromeda health center (woreda 3 in Gullele sub-city) has with the private sector is a best practice that other schemes might consider adopting. Shiromeda health center's budget does not allow it to procure all the diagnostic supplies it needs. The woreda health office therefore invited private facilities to provide diagnostic services. A private facility agreed to provide ultrasound services at the health center. The charge is Birr 100 for one service; 30% of the fee goes to the health center and the remaining 70% to the private facility.

This has brought various benefits: it reduces number of referrals, protects CBHI clients from out-of-pocket expenditure, reduces transaction costs of clients, and increases the revenue of the health center. One of our key informants explained as follows:

> We provide all the services that are provided at health center level. If we don't have it, we refer them to hospital. At present we have bought chemistry machine spending Birr 500,000; two ultrasound machines at a cost of Birr 400,000, and CBC machine (for blood examination) paying Birr 800,000. All of this investment is to expand scope of our service, which will reduce the need to referring to hospitals.

When our key informants (heads of health centers) were asked their opinion on engaging private facilities to provide public health services, most expressed support, because it will help expand services and will inject competition into the system, which may help improve quality. It can also reduce the burden on public health facilities. They also expressed concerns, primarily that contracting private facilities as independent providers might lead beneficiaries to prefer private providers for most services (minor common services or major ones), and this will affect scheme resource availability for public health facilities. In the short run, the response from the government should be to strengthen public facilities so as to improve their service provision. The AAHB should explore technically sound and acceptable arrangements with private facilities by learning from the experience of Shiromeda health center.

In interviews, CBHI program staff at all levels recognized the problem that health facilities are having in providing diagnostic services. They stated that a significant part of the problem could be managed if CBHI boards and the AAHB were actively engaged in CBHI issues. The CBHI boards and AAHB could facilitate loans for health facilities, so they can buy imaging machines, chemistry tests, and other diagnostic equipment and supplies. The loans would be paid back over a reasonable period of time. By keeping CBHI patients in the health center, it would reduce members' out-of-pocket payments at private health facilities to which they now are referred, reduce the referral burden on public hospitals, reduce members' complaints, and avoid transaction costs by members such as transportation to referred facilities. It would also increase the attractiveness of CBHI membership.

Interventions like contracting private facilities and facilitating loans requires the involvement, strategic thinking, and other leadership of the board and AAHB. The Addis Ababa City Administration CBHI board is empowered to give specific responsibilities to the AAHB (13.6) and the AAHB is responsible for enforcing the provision of standard services for CBHI members. However, as city-level CBHI staff reported, the board is not active and the AAHB does not take CBHI seriously. Therefore, the broader city administration should take this gap in CBHI functioning seriously and activate the board to discharge its responsibility.

4.4.5 CHALLENGES ARISING FROM CBHI MEMBERS

Despite the many benefits that CBHI offers to health facilities, there are also challenges for the facilities, many from the new CBHI members. The first one is the obvious increase in workload as members' service utilization rises. The number and frequency of visits have increased tremendously, but there has not been a concomitant rise in the number of health professionals. At present, a physician sees about 45 patients per day (a figure that has more than doubled because of CBHI), yet that physician has been offered no additional incentive for coping with the additional workload. One of our key informants (in woreda 6 of Addis Ketema) reported that, based on the clinical audit, the average number of visits per annum per individual is now 3.5 to 5 per year, much higher than the WHO standard of 2.5. Another challenge – although not common – is fraud, with repeated cases of people seeking care with ID cards that do not belong to them. One a key health center informant said:

> Last week a woman came to us covering her face with hijab, when the health professional checks her medical history during examination she noticed that there was no relation between what is on the record and what the woman was saying; then the physician suspected the true identity of the patient and called security guards to check her identity. She was found cheating.

Unnecessary health-seeking behavior by CBHI beneficiaries (moral hazard) also is a problem although less so than in the early days of the program when members would visit the health center when they had nothing else to do. The health center and CBHI staff had to educate them that such behavior is harmful to everyone because it creates overcrowding in facilities. Key informants reported that this alleviated the initial rush of visits. In addition, health center staff began monitoring overutilization by thoroughly checking patient files; when they see abuse, they discuss it and try to rectify it with the visitor. Educating the community and monitoring abuse by individual patients are thus the mechanisms used to deal with problems of unnecessary visits.

Because scheme organizers promise that CBHI members will get priority services without problems, some CBHI members have become violent when they learned the drugs prescribed for them are not available. With daily health education sessions that the health centers hold, and monthly or quarterly sessions at the woreda level, people have become aware of the reality.

Members also have shown a tendency to request unnecessary referrals. Based on a study by the health office in woreda 6 of Addis Ketema, referrals have increased each year. In 2017/18 referrals were only 70% of what was set as a target in the plan. was realized. This has increased to 98% in 2018/19 and to 105% in 2019/20.

4.4.6 OUTPATIENT HEALTH SERVICE UTILIZATION[11]

Table 11 compares data on the number of outpatient visits made by CBHI members and by non-members based on a sample collected from three selected contracted health centers from each of the

[11] We could not analyze trends and impact of the scheme on inpatient care use because data on utilization of inpatient care for CBHI members could not be obtained.

four sample sub-cities. As the table shows, there has been an increasing trend in use of outpatient care for CBHI members in all pilot woredas and a decline for non-members.

Table 11: Health service utilization

	2017/18	2018/19	2019/20	2018/19	2019/20	2018/19	2019/20
Kolfe Keranyo sub-city	**04 Woreda**			**09 Woreda**		**05 Woreda**	
No. of OPD-CBHI members	2,524	2,990	5,237	2,166	4,592	3,966	7,188
No. of OPD-Non-CBHI members	40,762	78,551	64,002	84,934	85,909	25,465	23,504
Total referrals to Addis Ababa hospital by HC-CBHI members							
Total referrals made to a hospital by HC-non CBHI members	3,314	3,100	4,238	2,701	2,591	980	3,315
Addis Ketema sub-city	**09 Woreda**			**02 Woreda**		**06 Woreda**	
No. of OPD-CBHI members	3,475	6,571	6,068	6,981	14,523	3,991	8,431
No. of OPD-Non-CBHI members	14,739	24,772	29,006	32,224	28,385	51,326	68,524
Total referrals made to Addis Ababa hospital by HC-CBHI members	54	106	207	86	109	40	44
Total referrals made to Addis Ababa hospital by HC-Non-CBHI members	1,075	1,546	1,976	1,109	881	1,546	2,061
Gullele sub-city	**03 Woreda**			**02 Woreda**		**09 Woreda**	
No. of OPD-CBHI members	2,815	5,878	6,474	3,727	6,159	2333	6,157
No. of OPD-non-CBHI members		20,652	15,395	24,141	28,464	41,171	39,113
Total referrals made to Addis Ababa hospital by HC-CBHI members	215	487	398	475	400	487	397
Total referrals made to Addis Ababa hospital by HC-Non-CBHI members		694	682	154	1,243	637	543
Lideta sub-city	**01 Woreda**			**03 Woreda**		**10 Woreda**	
No. of OPD-CBHI members	5,461	10,106	9,379	7,994	13,836	4,666	7,764
No. of OPD-Non-CBHI members		20,675	8,922	16,929	4,468	29,941	26,998
Total referrals made to Addis Ababa hospital by HC-CBHI members	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available
Total referrals made to Addis Ababa hospital by HC-Non-CBHI members				787	542	1,390	1,346

Source: Contracted health centers in each woreda

Note: HC=health center, OPD=outpatient department visits

For instance, between 2017/18 and 2019/20, outpatient utilization by CBHI members more than doubled in four pilot woredas (two each in Kolfe Keranyo and Gullele sub-cities), and increased by more than 1.7 fold in two woredas in Addis Ketema and Lideta sub-cities. Visits by non-members declined in three of the four woredas where member utilization doubled; in the fourth woreda (Addis Ketema), non-member visits increased at a rate faster than for CBHI members.

The same observation is even clearer for the second-round pilot woredas, which began service provision in 2018/19. Health care utilization by CBHI members increased in all eight. The increase is in the range of 1.65 fold in woreda 2 and 2.64 fold in woreda 9, both in Gullele sub-city. Health care utilization for non-members declined in five woredas and increased slightly in the other three.

In general, health care utilization has increased tremendously for CBHI members while not for non-members. The introduction of CBHI is believed to have significantly increased both health seeking and utilization. This will undoubtedly increase the revenue of health facilities.

4.5 FINANCIAL SUSTAINABILITY

The scheme has three sources of revenue: contributions from paying members, targeted subsidies for indigent members provided by Addis Ababa City Administration, and a general subsidy provided by the Federal government. By June 2020, the sample schemes had collected a cumulative Birr 25.6 million, 67.9% of which came from member contributions, 23.0% from the targeted subsidy, and 9.1% from the general subsidy (see Table 12).

CBHI design dictates that 90% of total scheme revenue is to be retained and deposited at the scheme (sub-city) level and 10% is to be transferred to the AAHB pool. The scheme is responsible for settling the claims of health centers and secondary hospitals, and the fund at the AAHB settles the claims of tertiary-level hospitals.

Scheme revenue from member contributions and the targeted subsidy has been more than enough to pay health service claims over the last three years. It should be noted, however, that significant scheme expenses are covered from other sources: Operational expenses such as the salaries of CBHI staff, printing of receipts and ID cards, and purchase of office equipment are covered by the city administration. And in a divergence from the scheme design, the scheme is also retaining all revenue – so far, it has not transferred any funds to the AAHB pool, even though the AAHB is covering claims from tertiary-level hospitals.

Table 12: Payment of claims (Birr)

Sub-City	Year	Health centers	Secondary/ AA hospital	Tertiary/ federal hospital	Kenema pharmacy	Total	Bank balance as of June 30, 2019/20
Addis Ketema	2017/18	157,255	133,400	68,242	24,673	383,570	
	2018/19	1,298,798	1,271,776	562,573	195,832	3,328,979	
	2019/20	2,065,406	1,800,037	744,135	565,867	5,175,445	7,933,700
Kolfe Keranyo	2017/18	43,241	47,088	19,549	-	109,878	
	2018/19	596,759	246,449	203,045	155,249	1,201,502	
	2019/20	1,000,800	523,053	282,369	276,823	2,083,045	13,844,722
Gullele	2017/18	65,932	17,626	19,154	4,949	107,661	
	2018/19	620,974	334,485	237,119	210,553	1,403,131	
	2019/20	989,978	508,189	308,260	375,493	2,181,920	5,921,257
Lideta	2017/18	192,356	39,262	50,468	1,582	283,668	
	2018/19	833,474	509,292	341,983	338,907	2,023,656	
	2019/20	1,406,676	828,421	480,372	726,860	3,442,329	3,289,350

Source: CBHI directorate, AAHB.

Payments to health facilities have increased over time as scheme coverage and the frequency of beneficiary visits increase, and, in all sub-cities, they have increased significantly relative to the scheme revenue. (See Table 13, and also Table 5 in Section 4.3.2, which shows scheme revenue). This means that the capacity of members' contributions to cover members' health service utilization, that is, the ratio of contribution to claim, has modestly declined. Still, it remains at more than 160% (see Table 13).

Table 13: Trends in scheme revenue (excluding general subsidy) to claim ratio (in %)

Sub-City	2017/18	2018/19	2019/20
Addis Ketema	183.5	130.8	184.3
Kolfe Keranyo	588.0	244.5	589.8
Gullele	442.5	214.7	314.4
Lideta	200.0	156.2	162.0

Source: Table 5 and 12

However, the study team observed that the ratio presented in Table 13, based on scheme bank balances on June 30, 2020, does not match the scheme revenue shown in Table 5. When we deduct what is paid for claims in 2019/20 (Table 12) from scheme revenue for the same year (Table 5), the balance is significantly less than that in Table 12. This reveals a problem with the data. As discussed elsewhere in this paper, the management of scheme data at different levels has serious problems.

With CBHI coverage, visit frequency, scheme payments of claims – and increasing claim amounts due to members' geographic access to more costly higher-level referral facilities – all increasing, the AAHB scheme submitted to the CBHI board a proposal to increase the CBHI contribution in 2020/21 to avoid a financial deficit (KII with the CBHI coordinator at AAHB). The proposed start date was postponed due to COVID-19 and for other economic reasons. Indeed, this is worth consideration. Contributions to schemes in urban centers of regional states have already been significantly increased. So, the revision of the contribution in Addis Ababa will be unwelcomed by members. Lessons can be learned from the recent revision of contributions in Amhara Region, which took into account the structure of the informal sector as categorized for tax purpose at three levels and size of households.

4.6 GOVERNANCE STRUCTURE AND LEADERSHIP

The legal governance structure of CBHI has four levels: city, scheme, woreda, and kebele.[12] The CBHI board and AAHB fulfill oversight and leadership functions at the city level. At the scheme (sub-city) level, the CBHI general assembly, CBHI board, and health offices do. At the woreda level, the woreda health office does. The AAHB, sub-city health office, and woreda health office each have a CBHI directorate. The ketena coordinates CBHI at the woreda level[13]; it is elected by the community and accountable to the woreda health office and the CBHI section in the woreda health office. Key informants told interviewers that the legal and functional relationship is not as strong as was designed. The board at all levels is not functional, nor is the general assembly.

The leadership of the Addis Ababa CBHI scheme is weak. The city-level CBHI board, the city administration council, and the AAHB do not actively monitor the scheme or provide it strategic leadership. The board is completely non-functional and has not met in the past two years. The other higher bodies are not concerned with CBHI and, as per our key informants, do not "own" the scheme. Some of their staff do not even know the full name of the scheme.

There is no legal horizontal relationship between the woreda health office and health centers. The woreda health office is accountable to the woreda administration but health centers – per a recent change – now are accountable to the sub-city health office. Woreda CBHI employees are under the woreda health office and paid by the woreda administration, yet their office is usually on the premises of the health center. While collaboration among these entities has worked without complaints, this might not continue. For instance, HEWs are legally responsible for CBHI activities but immediately after the change in their accountability, they withdrew from participating in CBHI activities. We foresee that lack of a legal framework for horizontal relationships will become a major constraint for effective administration of CBHI.

EHIA has no legal relationship with the CBHI program; nor do they have a regular, formalized functional relationship. Most of our key informants do not know the Addis Ababa EHIA branch office.

We found two aspects of the organizational structure to be of concern: the relationship between the CBHI scheme and woreda health office and between the CBHI scheme and the aderejajet. Currently, the sub-city health office both regulates health service providers and contracts/buys health services for

[12] See Addis Ababa City Government Community-Based Health Insurance Regulation no. 86/2017.
[13] Currently the kebele structure is not functional.

CBHI members, whereas the CBHI program, as an insurance organization, should be legally empowered to buy health services for its members. Currently, both the sub-city health office and CBHI work together with good understanding and team spirit. This might not continue. EHIA needs to think strategically and start to deliberate on how and when these two institutions need to be separated or be independent, before problems arise.

The other concern is the CBHI structure at the woreda level, which does not function as promulgated in the regulation. Its activities are carried out on a voluntary basis; people working for CBHI at the woreda level have neither a legal nor an administrative contract (see Sections 4.1 and 4.3.2). Nor, as has been discussed above, do they receive specific remuneration for their services; payment is ad hoc, differing from sub-city to sub-city and even from woreda to woreda within a sub-city.

4.7 COMPLAINT HANDLING AND RISK MITIGATION

The woreda health office is responsible for creating a system to resolve CBHI member complaints. Some offices have a suggestion box to collect complaints but members do not know this. Our FGD participants reported that they have no idea about the system of complaints collection and resolution.

The risks related to finance are minimal. The system installed from the collection to bank deposits and reporting to higher bodies with bank slips is completed within 2–3 days. Woreda finance officers collect contributions and registration fees from members by issuing receipts prepared by the sub-city under the woreda CBHI name, and deposits are made to the bank account opened in the name of the scheme. Aderejajet collect cash contributions from members and issue receipts provided to them by the woreda CBHI. They deposit the money in the bank account opened in the name of the sub-city (scheme) every day, as required by the CBHI finance manual, and hand over the deposit slips and receipts to woreda CBHI staff if possible the same day or at the latest the next morning. The woreda finance staff reconciles the bank deposit slips and receipts and hands them over with the reconciled deposit summary to the finance head of the sub-city CBHI; the sub-city checks and verifies the documents and issues a consolidated receipt to the woreda finance office. Financial audits are handled by the sub-city and not at the woreda level. From our KIIs of CBHI staff at all levels, it seems the system works very well and there has not been any problem with fraud so far.

There is one concern related to financial risk. In some woredas, to avoid aderejajet having to wait in long bank queues to deposit after spending the day collecting contributions, the aderejajet are allowed to hand over the money collected to woreda CBHI staff assigned for this purpose. The woreda CBHI staff deposit the money the next day. This system poses two risks: First, the amount of the money given to an individual CBHI staff can be considerable and this is a risk. Second, by the time the aderejajet hands over the collection, it is late afternoon and there might not be time to check everything. Finally, the aderejajet is not issued a legal receipt. The scheme needs devise a more secure system. Until this happens, it is better that each aderejajet deposit the relatively small amount they collect by the next day.

5. CONCLUSION AND RECOMMENDATIONS

The following evaluation matrix summarizes CBHI design against what actually happens, with challenges and recommendations for each design feature in the urban context.

Table 14: Evaluation of design features against implementation and urban context

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
Community mobilization system	The following are responsible for community mobilization: • City-level CBHI • Sub-city board • Sub-city health office and through them HEWs and Health Development Army • Woreda CBHI staff • Woreda cabinet member with woreda CBHI staff during renewal time • Woreda health office	• Woreda CBHI office plays the ownership role in the mobilization effort at woreda level. • Aderejajet and HEWs carry a big portion of the responsibility for community mobilization. • Social groups/organizations including religious leaders, famous individuals, community organizations, and heads of associations are used to create awareness and mobilize. • Woreda administration, woreda cabinet members and woreda health offices are actively engaged during community mobilization. • Woredas have strong support from the sub-cities and AAHB to conduct community mobilization as well as carry out the scheme. • Health centers are engaged in community mobilization by using the health center client meetings mainly conducted for health education purposes.	• Boards are not involved. • Community mobilization is carried out by campaign. • Budget problem for mobilization activities. • Aderejajet, who shoulder the main burden of community mobilization, are paid very little for the tedious activities they rendered.	• Revisit the role of boards: either make boards actively engage in CBHI activities or transfer their power to other bodies. • Make community mobilization part of the system. • The health offices at different levels should make community mobilization part of the annual plan and allocate an adequate budget. • Revisit the structure at woreda level particularly Aderejajet. Voluntary activities should be replaced by legal contracts with defined and agreed remuneration.
Member registration	• Woreda CBHI (woreda CBHI distributes forms which people fill out and submit to woreda CBHI with photos).	• Anyone joining CBHI fills an application form; the household head is responsible for providing information about and photographs of the family and for paying the contributions.	• HEWs are withdrawing from supporting CBHI during renewal time. • The activity is tedious for aderejajet and complaints are emerging for inadequate payment.	• There is a need to formally engage aderejajet. • Pensioners are highly likely to over-utilize health services and their net financial contribution to the scheme will be

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
		• The woreda CBHI office, HEWs, and aderejajet help members fill the forms correctly. • The woreda CBHI office verifies the information provided by family heads with the woreda administration.	• Pensioners are not eligible but allowed to enroll in some woredas. • In some woredas (woreda 6 of Addis Ketema) enrolling part of the family is practiced (if the husband is a government employee and the wife is not, all the family except the husband can enroll).	negative. So better not to enroll them in CBHI and refer them to social health insurance which will be in a relatively better financial position. • Take household as one unit for enrollment and do not not practice partial enrollment.
Transfer and connection system (refer)	• Referral is by HC to higher-level health service providers. • Any CBHI member who bypasses the referral system and visits a higher-level health service provider is obliged to pay 50% of the expenses.	• Referral is by HC to higher level health service providers • Overpass the referral system and visit higher level health service is not permitted by the scheme. • The 50% coverage is not applicable.		
Contribution setting and mechanism: • Contribution setting • Collection system	• The amount of contribution is to be decided by the CBHI board at city level based on study (but should not be less than Birr 350 per head of a family). • Woreda health office support collection. • Woreda CBHI collect receipts from the sub-city CBHI and collect contributions. • Aderejajet are also engaged in collecting contributions and submit to woreda CBHI.	• Premium is set at city level (but could not find any study that propose the existing level of premium). Seems to be a political decision. • For the first registration, families pay Birr 20; the annual membership fee that covers the core family is Birr 350. Other family members can be included by adding Birr 70 for each additional member. • Registration fees are not paid during membership renewals. • Fee is collected in three ways: 1. Woreda CBHI office collects at the office 2. aderejajet collects by visiting house-to-house and 3. Individual members deposit in CBHI bank account.	• The amount of contribution is low relative to the benefit package. • Aderejajet works on voluntary basis with no formal contract and agreed amount of payment. This has emerged as a problem. • Contribution collection is time consuming; one may have to visit the same house more than twice. • -The requirement of depositing the collected cash on the same day has put pressure on aderejajet because they have to wait for a long time due to long queues at the bank.	• Significant revision of the amount contribution is required. • Introduce different levels of contribution for owners of informal enterprises based on the tax category (a, b, and c). • Learn from the new CBHI implementation Directive issued by Amhara Health bureau in 2020/21 (directive No. 07/2020). • With regard to contribution collection, two suggestions: in the short run formalize aderejajet, i.e., that shift them from voluntary contribution collectors to

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
	• Woreda CBHI deposit this in to CBHI account.	• Cash collections are made by issuing receipts that are coming from the sub-city. • Deposit slips for contributions deposited at CBHI bank account by the individual CBHI members will be received by woreda CBHI office. • Woreda provides aderejajet with CBHI receipt pads to use as they collect registration fees and membership contributions; payees are given a receipt upfront and this is monitored by the woreda CBHI finance officer. • Collected money is deposited in CBHI account on the same day. • After registration and renewal period is complete, all receipts are surrendered to the sub-city. • Aderejajet collect contributions as volunteers. • There is no defined incentive or remuneration rate for the services of aderejajet. -Woreda administration, sub-cities, and AAHB have paid them some money in an irregular and ad hoc and inadequate manner.		formal and structured ones. In the long run, encourage members to directly deposit their contribution in a CBHI account (bank/microfinance). Also link annual contribution with mobile money and for those who use this, provide certain percentage of reduction. • Arrange with the banks to have a counter dedicated to CBHI payments during renewal time.
ID card provision system including capturing family photo	• Woreda CBHI office after completing the identity card and collecting members photo submit to the sub-city CBHI office. • Sub-city CBHI office puts official stamp and returns to woreda CBHI office.	• Woreda CBHI after completing the identity card and collecting members' photos submits to the sub-city CBHI. • Sub-city CBHI put official stamp and return to woreda CBHI. This is for new members. During renewal time everything is completed at woreda level.	• Distributing ID cards for members by house-to-house visit is a tiresome activity.	• Members should be encouraged to take their ID cards from the woreda health/CBHI office.

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
	• Woreda CBHI office distributes to members.	• Aderejajet are the main distributor of ID cards by visiting house-to-house.		
Defining and identifying eligible households: • Paying • Indigents	• The following are involved in identification: • City board • Sub-city board • Sub-city health office • Woreda health office: identifies indigents and submits to woreda administration.	• Boards at city- and sub-city level and AAHB are not totally involved. • Sub-city health office involvement is with indigents to check whether their number is within the target set at the sub-city level (the 10% target). • Any resident of a woreda except government employees and government pensioners are eligible to become CBHI paying members, as long as they are willing to pay the contribution. • Aaderejajet are involved in identifying who paying members. • Aderejajet play a significant role in initially identifying indigents. • The woreda administration approves the final indigents list.	• The definition of informal sector is not clear and there is no common understanding by all schemes. • There is no guideline that helps to identify who is in the informal sector and who is eligible and who is not. • Challenges in enrolling those in the informal sector who do not have ID of woreda residence. • Ineligibility of Civil Service retirees to be CBHI members raises issues of fairness. • Those who have higher income are members of CBHI by paying the same amount. • Most of the identification of paying and non-paying is the burden of the aderejajet. These people do not have the skill to identify. • There is no clear guideline for selecting indigents. Selection is largely left to aderejajet. These people may not have the courage to say no when it becomes to people they know well and who are long-time neighbors. • Some relatively well-off individuals managed to be on the list of indigents. • Too many very poor people which are not covered as indigents.	• Conduct assessment and define informal sector, produce a guideline for identifying people in the informal sector in collaboration with the Addis Ababa Plan Commission and Central Statistical Agency. • In the short run, community review of indigents has to be practiced and be more transparent. In the long run, identification of indigents should be carried out by the Social and Labour Affairs office as they are the right institution. • Explore mechanisms to cover all those below the poverty line (poverty line for Addis Ababa and woredas can be obtained from the Addis Ababa Plan Commission). • In the short run, revisit the fiscal space at woreda level to increase targeted subsidy. • In the long run, link the payment for indigents with social protection programs. • As an alternative, discuss with public enterprises

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
			• A significant number of people who benefited from the old system (free health service from health facilities based on letter from kebele) have been cut from the indigent category because of the limited quota given to woredas.	and Addis Ababa finance bureau to make the system sustainable. • Aderejajet do not have the capacity to identify who is eligible to pay and who is indigent. The aderejajet are overburdened carrying out community mobilization, identification of eligible paying members and of the poorest, assist/filling forms for member, contribution collection and issuing receipts, ID card distribution, etc. The scheme cannot sustain all these activities on a voluntary, irregular, and poorly paid basis. The urban schemes have to learn from rural ones, which pay a regular incentive that works well.
Health service utilization: • Mechanisms in place to limit overutilization • Health service delivery • Challenges associated with mobility (changing residence or workplace)	• City-level CBHI office responsible for standard service provision. • Sub-city health office responsible for health service provision and quality. • Members can only visit the health centers in the woreda where they initially register irrespective of their current workplace and residence.	• To contain overutilization of health services, a medical audit is done to closely monitoring patients' files. • There is a formal contract between the scheme and health facilities to ensure service provision meets the standard. • Members can only visit one health center in their woreda (except in Kolfe Keranyo, where CBHI beneficiaries can go to any HC in the sub-city). • Members cannot carry their membership with them when they move to another woreda. They have	• Contracts are not enforced. Members are exposed to spend money out of pocket for drugs and diagnostic services that are not available in the contracted health facilities. • Health professionals may prescribe drugs for up to three months but the pharmacy will not fill such a large prescription. Instead they keep the prescription and dispense to patients monthly. This is to control abuse of prescriptions, but the control system punishes	• Enforce the contract. When health facilities cannot provide what the contract requires of them, they should be responsible to find solution. • Advise health facilities to work with private facilities (lesson from Shiromeda HC). • Each health facility should have a clear plan for drug procurement and stock management based on patient flow and the

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
		to enroll as a new member in their new woreda of residence and pay another contribution and registration fee.	genuine users that might have to incur travel costs. • When there are shortages of drugs, the Kenema pharmacies discriminate against CBHI clients. • The EPSA drug supply system has serious problems (takes a long time and inadequate). • Health facilities are allowed to procure drugs directly from private facilities but they must get EPSA approval, which takes a long time. • CBHI members complain that they should be allowed to visit the HC of their choice (close to where they live/work).	preceding year's experience. • In the long run, allow members to visit HCs of their choice by networking schemes and health facilities. • In the short run, allow members to carry their membership when they change address. • Consider expanding Kenema pharmacies to each woreda. • Engage Kenema pharmacy and have regular discussions to improve their service provision to CBHI members. • Improve the drug supply system by encouraging/allowing some private providers to provide services in public facilities.
Reimbursement mechanisms: 75/25% contract management system to ensure quality	• City-level CBHI office is responsible for signing contracts with tertiary-level health facilities. • Sub-city health office is responsible for signing contracts with primary and secondary hospital.	• Health centers are immediately paid 75% of the amount due. The CBHI schemes check that the payment request is correctly completed and the calculations are correct and verified by attached documents. • 25% of due amount is settled after clinical audit.		
Health service fee-setting mechanisms and EHIA/CBHI level of engagement	• CBHI directorate under AAHB and AAHB are responsible.	• Health service fee is set by AAHB. • EHIA and CBHI have no involvement. • Fees for drugs and some lab tests are set based on the purchase price	• The price of health services is increasing as health facilities are increasingly forced to procure drugs from private facilities at high prices.	• CBHI scheme/EHIA as a buyer of the services should have a role in setting fees for health services. Contract should be enforced as initially

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
		plus 25% to cover administrative cost. • The HC management is responsible for preparing the fee rates proposal and the HC board makes the final decision.	• EHIA/CBHI scheme has no role in changing prices even within the contract time.	agreed and the scheme should not be forced to pay higher prices that is not part of the contract.
CBHI structure and staffing pattern: • Governance structure • Woreda, sub-city, and city level in terms of number of staffs as well as professions required to manage the tasks	• City board, sub-city board, CBHI general assembly of sub-city, AAHB, sub-city health office, woreda health office, city CBHI, sub-city CBHI, woreda CBHI, EHIA • Sub-city board is accountable to general assembly and AAHB	• The scheme is governed by a board and general assembly. • Among the woredas interviewed, three have all the required staff (CBHI coordinator, finance, and data expert) and are adequately equipped. One of the woredas interviewed (woreda 09 CBHI office in Kolfe Keranyo sub-city) has only one staff; that means the woreda needs two or three more staff. • Salaries of staff are based on the AAHB carrier structure.	• Community has no role in CBHI management. • There is no regulation/directive to guide the vertical and horizontal relationship between and among different responsible bodies (see the structure of CBHI in Addis Ababa). • Staff in some woredas are inadequate while in some sub-cities seem to be more than needed. • Currently there is a serious problem in properly storing data and make the data available when required. This is serious problem that impedes proper analysis.	• Woreda CBHI office should fill vacant posts. Having too few staff jeopardizes the quality of CBHI operations. • Study the required number and composition of staff at city, sub-city, and woreda level. • There is a need for significant change both in infrastructure and human resources for proper management of data.
Risk mitigation mechanisms: • Fraud management • Periods to deposit collected premium to CBHI bank account	• City-level CBHI office is responsible for making sure payment is as per the contract, • Sub-city CBHI office ensures the bank account is opened, checks deposit slips and receipts coming from the woreda CBHI office, and makes sure all money is deposited. • Sub-city CBHI office does clinical audit of primary and secondary hospitals.	• The finance manual details each step from contribution collection to ensuring bank deposit are made on time; the woreda CBHI office follows the manual. • The sub-city finance officer monitors the process and scrutinizes each document submitted to the office by woredas to verify they are in good order and proper condition. • The woreda finance officers collect contributions and registration fees from members by issuing receipts prepared by the sub-city in the woreda CBHI name and deposits the	• The requirement to deposit the collected cash on the same day has put pressure on the aderejajet because they have to wait in queues at the bank.	• Currently there is no serious problem. Cash collected is deposited at the bank at the latest a day after it is collected. The risk is not visible. • Identify main source of risks and design implementation arrangement.

Design feature	Existing design	Practice/ implementation	Challenges	Recommendations
	• City-level CBHI office does clinical audit of tertiary-level hospitals. • Financial audit of the scheme by Finance and Economic Development Office. • Contribution collection and deposit into bank account is made the same day.	funds in the bank account of the sub-city (the scheme). • Aderejajet collect cash from members and issue receipts provided to them by the woreda CBHI office; they then hand over copies of the receipts and the cash to the woreda CBHI coordinator; who deposits the cash and brings the deposit slip to the finance officer. • Alternatively, aderejajet deposit the cash themselves and bring the bank deposit slip to the woreda CBHI finance officer. • Collected cash is deposited at bank on the same day. • The woreda finance office reconciles the totals of the receipts issued and the bank deposit slips and hands over the reconciled deposit summary to the finance head of the sub-city CBHI office. • The sub-city office checks the documents and issues a consolidated receipt to the woreda finance office. Financial audits are handled by the sub-city.		
Compliant handling	• Woreda health office is responsible for creating a system for complaint resolution.	• Some woreda health offices have a suggestion box in the office for complaint handling; they claim they check the box regularly. • Some woreda CBHI offices also use a color-coded client satisfaction monitoring tool. • Woreda health offices report substantive complaints to the sub-city; minor complaints are dealt with by discussing with the clients and the health center.	• There is no systematic approach to handle complaints and to track experiences over time. • Complaints are handled as they occur. • No recording at all.	• Introduce system that keeps/stores complaints, provides solutions, and allows proper monitoring.

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ANNEX A: AVAILABILITY OF MEDICAL SERVICES FOR HEALTH CENTERS

Are the following services available at the HC?	Yes=01 No=02	B) Remark
Preventive services		
01) Information, education & communication service to population on major health problems		
02) Integrated MCH/FP services		
03) Integrated EPI		
04) Prevent and control common endemic communicable diseases including vector borne diseases		
05) Prevent and control out-breaks and epidemics		
06) Surveillance on major prevalent diseases and epidemics		
07) Blindness prevention and control activities		
08) School health services		
Promotive services		
09) Promote community based care for HIV/AIDS, mental & other chronic illnesses case		
10) Promotion of appropriate waste disposal system, housing, inspection of food and drinking establishments		
11) Promote RHP, FP, Sex education programs, effective management of HIV/AIDS and STD		
12) Promote oral-dental health services		
13) Promote community mobilization for health development activities		
Curative services		
14) Basic and integrated patient care including diagnosis, treatment & follow up services		
15) Handle emergencies particularly operative procedures such as appendectomy and caesarian sections		
16) Refer difficult cases to hospital		
Rehabilitative services		
17) Organize nutrition rehabilitation clinic		
18) Minor physiotherapy		
19) Participate in community based undertakings for the mentally, physically and socially disabled members of the community		
Training		
20) Provide basic training and continuing education programs for CHAs & TBAs		
Management services		
21) Prepare annual budget plan		
22) Ensure proper management of drug, medical equipment and supplies		
23) Issue medical certificate as per the guideline		
24) Organize and maintain proper health information system for the catchment population (mortality, etc.)		

ANNEX B: AVAILABILITY OF MEDICAL SERVICES FOR HOSPITALS

A) Are the following services available at the hospital?	[Yes=01 No=02]	B) Remark
Outpatient services		
01) Registration, consultation, investigation, diagnosis and treatment		
02) 24 hrs emergency care		
03) Minor operation		
04) Oral-dental health service		
05) Ophthalmic services		
06) Surgical contraception		
07) Counseling services for HIV		
08) Physiotherapy services		
09) Outpatient services		
Inpatient services		
10) Admission, investigation, diagnosis		
11) Treatment of medical, surgical, pediatric, obstetric and gynecologic		
12) Delivery services		
13) Essential obstetric, gynecologic & surgical operation (emergency cesarean, laparotomy, chest tube insertion)		
14) Immunization services		
Diagnostic services		
15) Standard laboratory services		
16) Basic radiography services		
Public health services		
17) Health education		
18) Undertake surveillance of diseases		
19) Prevent, control & notify epidemic diseases and outbreaks		
20) Design appropriate health learning materials		
Training		
21) Provision of basic training for primary health workers		
22) Organize and conduct continuing education for staff		
Health information and essential applied research		
23) Conduct essential operational research		
24) Compile, analyze and utilize information as a tool to improve the management services		
Management functions		
25) Technical supervision of Health centers		
26) Develop monitoring and evaluation mechanism		
27) Set management control system		
28) Management functions		

ANNEX C: AVAILABILITY, QUALITY AND QUANTITY OF MEDICAL FACILITY AND EQUIPMENT FOR HEALTH CENTER

Please use the column "Remark" to elaborate on the quantity and quality of equipment.

	A) Do you have [……..] facility/service? [Yes=01, No=02]	B) How would you rate the quality of equipment in each facility/service [1=very poor, 2=poor, 3=just adequate, 4=up to standard]	C) How would you rate the quantity of equipment in each facility/service [1=very poor, 2=poor, 3=just adequate, 4=up to standard]
Laboratory service			
01) Blood test			
02) Urine test			
03) Stool test			
04) Rapid HIV/test			
Outpatient care team			
05) OPD			
06) ART service (HIV care service)			
07) TB and leprosy service			
08) Dental service			
09) Minor operating room			
Delivery care team			
10) Ante-natal care			
11) Delivery service			
12) Post-natal care			
13) Family planning service			
MCH (maternal and child health care) service			
14) Abortion care			
15) HIV\AIDS care			
16) EPI(Extended program of immunization)			
17) Neo-natal care			
Emergency care team			
18) Emergency room			
Inpatient medical service team			
19) Female ward			
20) Male ward			
21) Children ward			

ANNEX D: AVAILABILITY, QUALITY AND QUANTITY OF MEDICAL FACILITY AND EQUIPMENT FOR HOSPITALS

Please use the column "Remark" to elaborate on the quantity and quality of equipment

	A) Do you have [….] facility? [Yes=01, No=02]	B) How would you rate the quality of the equipment in each facility/service [1=very poor, 2=poor, 3=just adequate, 4=up to standard]	B) How would you rate the quantity of the equipment in each facility/service [1=very poor, 2=poor, 3=just adequate, 4=up to standard]
Laboratory service			
01) Blood test			
02) Urine test			
03) Stool test			
04) Rapid HIV/test			
05) X-ray			
06) Ultrasound			
07) ECG machine			
Outpatient care team			
08) OPD			
09) ART service (HIV care service)			
10) TB and leprosy service			
11) Dental service			
12) Physiotherapy service			
13) Psychiatry service			
14) Ophthalmic service			
Surgical care team			
15) Minor surgical procedure			
16) Major surgical procedure			
17) Emergency Caesarian section			
Delivery care team			
18) Ante-natal care			
19) Delivery service			
20) Post-natal care			
21) Family planning service			
MCH (maternal and child health care) service			
22) Abortion care			
23) HIV\AIDS care			
24) EPI (Extended program of immunization)			
25) Neo-natal care			

Emergency care team			
26) Emergency room			
Inpatient medical service team			
27) Male medical ward			
28) Female medical ward			
29) Male surgical ward			
30) Female surgical ward			
31) Pediatrics ward			
32) Gynecology and obstetrics ward			
Other facilities			
33) Isolation ward			
34) Nurse station			
35) Morgue			
36) Laundry			
37) Kitchen			