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Financing Primary Health Care in Ethiopia

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Acronyms

CBHI	Community Based Health Insurance
EHSP	Essential Health Services Package
EPI	Expanded Program of Immunization
EPRDF	Ethiopian People Revolutionary Democratic Front
GDP	Gross Domestic Product
HDA	Health Development Army
HDT	Health Development Team
HEP	Health Extension Program
HEW	Health Extension Worker
HSDP	Health Sector Development Plan
HSTP	Health Sector Transformation Plan
MOFEC	Ministry of Finance and Economic Cooperation
MOH	Ministry of Health
NHA	National Health Accounts
OOP	Out of Pocket
PHC	Primary Health Care
PHCU	Primary Health Care Unit
RHB	Regional Health Bureau
SHI	Social Health Insurance
THE	Total health expenditure
UHC	Universal Health Coverage
WBHSP	Woreda Based Health Sector Plan
WDA	Women Development Army
WHO	World Health Organization
WrHO	Woreda Health Office

Executive summary

This report provides an assessment of the role of financing to realise Ethiopia's Primary Health Care (PHC) ambitions. It was undertaken for the Lancet Commission on Financing Primary Health Care, which aims to generate evidence-based, actionable policy recommendations on how countries can use health financing tools to improve efficiency and equity of PHC. The report is part of a set of country case studies that present empirical evidence on arrangements for financing PHC, drawing on published and unpublished literature, policy documents, surveys and census data. The other study countries are Brazil, Chile, China, India, and the Philippines.

PHC system in Ethiopia

Ethiopia has embraced the principles of Primary Health Care since the Alma Ata Declaration in 1978, implementing health plans that emphasise inter-sectoral collaboration, community participation, and the integration of vertical programs and specialized health institutions. Currently, PHC is guided by the Health Sector Transformation Plan and the Woreda (district) Based Health Sector Plan, implemented through the country's flagship Health Extension Program (HEP). Through this, PHC coverage has grown rapidly over the last 16 years: since 2004, more than 30,000 health extension workers have been trained and deployed and more than 3,000 health centres and 15,000 village health posts have been built.

PHC services are delivered through primary hospitals, health centres and health posts in rural areas, managed and supervised at the regional and woreda levels. A network of community volunteers links community members with the PHC system at the grassroot level. Through these services, the government has committed to ensuring the delivery of a minimum package of promotive, preventative, curative and rehabilitative interventions as set out in the Essential Health Services Package. Private hospitals and clinics operate alongside public sector PHC facilities; however, they focus on diagnostics, curative care, selling medicines and providing traditional services, rather than health promotion and disease prevention.

A national evaluation of the HEP in 2019 revealed that the current capacity of health extension workers based at health posts is not sufficient to effectively deliver the package of essential health services, and that the quality of care they provide is sub-optimal. A roadmap for the HEP from 2020-2035 aims to improve quality of PHC through several reforms including: the provision comprehensive services at health posts in remote areas, the expansion of multidisciplinary teams at health posts, and improvements in infrastructure, basic amenities and medical supplies.

Health expenditure

Total and per capita health expenditure in Ethiopia has increased over the last twenty years: between 1999 and 2017 health spending increased from US$7.7 to US$34 per capita. The health system relies on external funding from donors and out-of-pocket (OOP) expenditure for approximately two-thirds of the total resources spent on health, although this share of funding as a percentage of total health expenditure has decreased in recent years.

Mobilisation and allocation of PHC resources

PHC is mainly funded by contributions from external sources of revenue (54.8%), followed by user fees from households (36%) and government contributions (9%). In 2016/17, the Health Extension Program received 40.3% of its funding from the government and 59.7% from external aid. Many major development partners channel funds either through the central government or to government sectors, i.e., the Ministry of Health, who then allocates funds to the Regional Health Boards and on to the Woreda Health Offices.

Purchasing PHC services

Government resources mostly pay for the salaries of health workers and overhead costs, while external resources are used mainly to purchase essential health commodities and for capacity building. Health facilities have their own bank accounts and are expected to manage their internal revenue. Facilities are allowed to charge predetermined user fees for non-exempt services and medicines, in order to mobilize additional resources to improve service availability and quality of care. Facilities also receive a budget from the Woreda administration to reimburse user fees under the waiver system for low-income households, and a small amount from insurance schemes.

1. Organisation of the Primary Health Care System in Ethiopia

1.1 Past and current "vision" for PHC

Ethiopia is among the founding member states of the World Health Organization (WHO) and played a role in the introduction of the primary health care (PHC) concept.[1,2] Ethiopia was represented in the Alma Ata Declaration of 1978, and started integrating PHC principles in its health system soon after the declaration.[3] The 1984/85-1993/94 Ten-Years Perspective Health Plan contained primary health care approaches in the standard care provision. This plan emphasised inter-sectoral collaboration, community participation, and the integration of vertical programs and specialized health institutions. It had ambitious goals of increasing per capita visits to modern health providers from 0.5 to 2.5 per year, and expansion of maternal and child health services, focusing on the immunization of all pregnant women and children under two years of age. It also aimed to decrease infant mortality from 145/1,000 to 95/1,000 and child mortality from 274/1,000 to 150/1,000, hence increasing life expectancy from 42 to 55 years by 1993/94.[4]

After the downfall of the military regime in 1991, the transitional government drafted and approved Ethiopia's national health policy in 1993, which sought to improve access to PHC services. The focus to improve access to PHC services was sought as a means to improve the socioeconomic status of the population since the health plans in the earlier regime, though well aligned with PHC principles, were left unattended due to preoccupation with war and civil conflicts. The 1993 policy was further expanded to four five-year plans titled "the health sector development plan" (HSDP), implemented over twenty years (1995 – 2015). The first two phases of HSDP (1997 – 2005) had an ambitious focus on improving health infrastructure and service availability - facility rehabilitation and expansion, improvement of service availability and quality of care; pharmaceutical supply and management; health sector management; human resource development; information, education, and communication; health care financing; and health management information systems.[5–7] The third and fourth phases of the HSDP (2005-2015) focused on improving maternal and child health care and prevention and control of communicable diseases.[8,9] Financing reform efforts were also introduced during the first HSDP period, which helped increase health care spending from 4.5% to 5.2% of GDP between 2007 and 2011.[10]

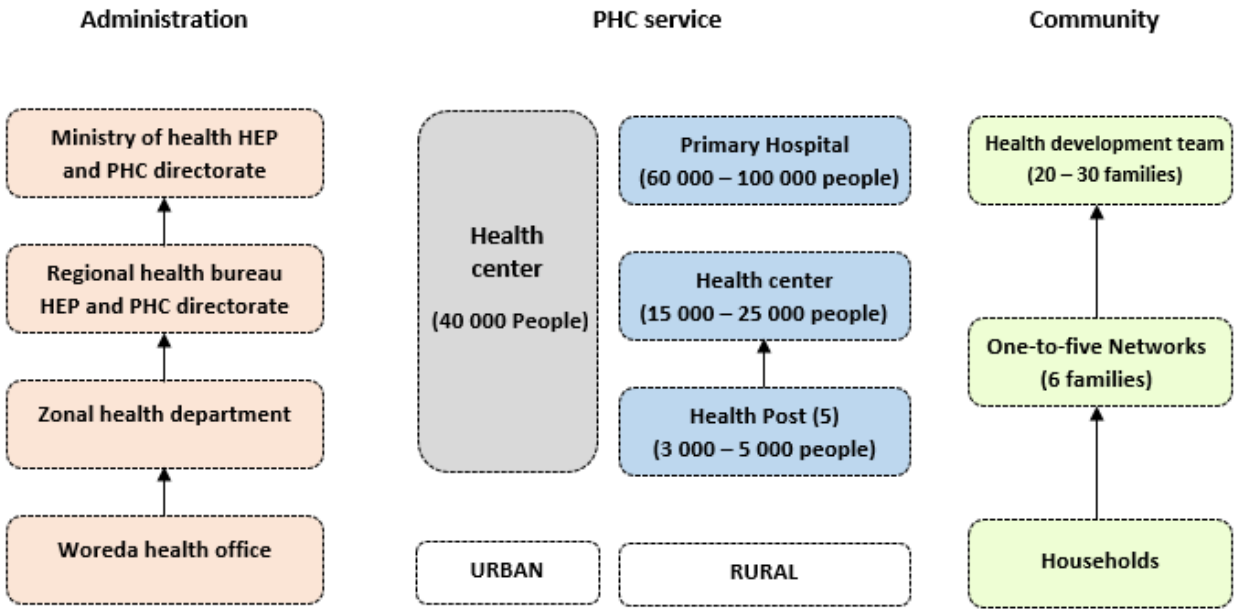
Currently, the Ethiopian health system in general and the PHC in particular are being guided by the health sector transformation plan (HSTP). The first phase of the HSTP was launched in October 2015 when the four consecutive HSDPs were concluded. The development of the second HSTP is currently being finalised.

1.2 Administrative structure of PHC services

The administrative chain of the PHC system extends from the Ministry of Health (MOH) to the Woreda (district) health offices. At the ministry level, PHC-related policies and guidelines are

developed by the Health Extension Program (HEP) and Primary Health Care Directorate. This Directorate was established as a separate unit in the Ministry during the rapid expansion of the HEP under the PHC. The Directorate provides guidance on how community-based healthcare programs are organized and delivered. Some of the major responsibilities of the directorate include developing basic policy and strategic plans, national guidelines and manuals, health education resources and engaging in resource mobilization and partnership activities. Regional states, on the other hand, have their own HEP team under the Health Promotion and Disease Prevention Directorate in the Regional Health Bureaus (RHB) to oversee HEP and PHC related activities. At the Woreda Health Office and Zonal Health Departments there are HEP coordinators who provide direct support to the PHC system. The woreda has a dedicated staff to regularly supervise services at health centres and health posts. Each health centre in turn assigns a supervisor who regularly visits the health posts under its catchment area to support the health extension workers (Figure 1).[11]

Figure 1: The Ethiopian primary health care (PHC) administration, service delivery and community systems linkage



The management structures of PHC in Ethiopia have evolved over time. During the military regime, most PHC services were provided at clinics that were supervised by district health division. Before the HEP was developed, most PHC services were provided in health centres. Currently, all the units at the regional and woreda level of the health system are responsible for managing and supervising PHC activities under their jurisdiction. Under the current three-tier healthcare system, the PHC packages are being delivered at the first tier. According to the recent PHC structure, this level is composed of primary hospitals, health centres and health posts. The primary health care unit (PHCU) comprises five satellite HPs (the lowest-level health system facility, at village level) and a referral health centre. A network of community volunteers, known as women's health development army, links community members with the PHC system at the grassroot level.

1.3 Planning PHC services

Health services planning for PHC is guided by a centrally developed health plan known as Woreda Based Health Sector Plan (WBHSP). The MOH introduced this evidence-based planning approach, which involves a collaborative action for "top-down and bottom-up" approach to planning along the health administration ladder. The WBHSP is a means to implement the HSTP by incorporating evidence-based preparation in partnership with all stakeholders and collaborators.[12] This planning approach links planning of activities and financing of the PHC. One of the strategic directions of the WBHSP is improving health financing. It aims to ensure sufficient and sustainable funding to achieve Universal Health Coverage (UHC) in Ethiopia with no financial hardship for citizens. Implementing this strategic direction requires mobilizing sufficient and sustainable financial resources, pooling resource and risk, improving the health system's efficiency, and purchasing and paying for health services. It also involves improving transparency and accountability in utilization and management of finance.[13] The WBHSP is used by the Regional Health Bureaus to guide context specific annual plans for each district (woreda). The Woreda Health Office does the actual district health planning to submit it to the Woreda administrative Council for review and approval. A lot of emphasis has recently been placed on fairness and quality of service by engaging the population with active involvement and engagement during the planning process, which is why the "top-down and "bottom-up" planning approach has been used by the health sector.[14]

1.4 PHC services delivery

The government of Ethiopia has demonstrated its commitment to ensuring a minimum package of promotive, preventive, curative and rehabilitative interventions defined as Essential Health Services Package (EHSP). Among the main criteria to include an intervention in the EHSP are burden of disease, cost-effectiveness, equity, financial risk protection, and budget impact. The EHSP document also outlines that the main objectives of determining a minimum package of health services include protecting "the population against catastrophic health expenditures and provide financial risk protection." It is also indicated that the EHSP will increase health system efficiency. The list of interventions in the ESHP is, however, very long and risks ending up in a wish list. For instance, "337 essential promotive, preventive, curative and rehabilitative sexual and reproductive health, maternal health, neonatal health, child health and adolescent health services" are included as part of EHSP. It is important to note that most of the 337 services are mainly provided at the primary health care level.[15]

In terms of service delivery, the Ethiopian primary health care system ends at the primary hospitals at the top. Clients can get primary curative, preventive and rehabilitative services with referral from health centres or directly. A primary hospital provides inpatient and ambulatory services to a population of 60,000 to 100,000. The service mixes at this level include emergency surgical services, including caesarean sections, and blood transfusion services. Next to the primary hospitals are health centres. These units are supposed to provide service for an average population of 25,000. Basic curative, preventive and rehabilitative

services are delivered in the health centres. The nearest service point to the community are the health posts. Health posts provide mostly preventive and promotive services as well as some basic curative care home to home, outreach and at facility. On average a health post provides services to 5000 people. Health posts are typically staffed with a minimum of two health extension workers (HEWs).[11]

There is a referral and administrative linkage between these three entities. Health centre is a referral point for health posts. Similarly, primary hospitals are referral centres for health centres. A single PHCU is comprised of five health posts and a referral health centre. The health centre's director serves as a director to the PHCU. Health posts get technical support and supportive supervision from health centres while health centres get supportive supervision and technical support form primary hospitals.[11]

Health care issues that cannot be managed at primary hospitals are referred to general hospitals at the secondary level of care. This referral linkage continues to tertiary level hospitals. There is demand among communities for linkages between the formal health system, especially the PHC system, and community-level systems. This has been guaranteed through the introduction of the health development armies (HDAs). Organizing a functional HDA requires the establishment of health development teams (HDTs) that comprise up to 30 households residing in the same neighbourhood. The HDT is further divided into smaller groups of six members (households), commonly referred to as "one-to-five" networks. HDA implementation started in 2011, since when considerable progress has been made in the organization and formation of a network of HDAs. In Ethiopia there are about 442,773 HDTs, within which are 2,289,741 one-to-five networks. The HDA network enables mobilization of the community through participatory learning and action meetings.[16] The participation of these community members in their own and their neighbours' health affairs is totally voluntary and there are no formal payments. The role of the HDA network has slightly faded after the recent political change of 2018.

1.5 The role of private sector in delivering PHC services

Expectedly, the role of the private sector in the health promotion and disease prevention function of the PHC system is minimal. While many private facilities engage in the vaccination program and delivery of family planning services, other critical functions of the PHC system are not of interest for them. The majority of the private facilities engage in the delivery of curative care operating in hospitals and clinics; diagnostic laboratories and diagnostic imaging facilities; while drugs and supplies are distributed by pharmacies, drug stores and rural drug vendors. The private hospitals provide a range of services similar to those provided by public hospitals. The practice of contracting in or out service to private companies happens at secondary or tertiary level hospitals only. In contrast, most of the traditional medicines are practiced by private providers, including traditional healers, traditional birth attendants, and vendors of herbal and or alternative medicines.

1.6 Health care reforms

A remarkable change to the community health system in Ethiopia happened during the implementation of HSTP III (2005/6-2009/10).[9] This 5-years plan had two significant strategies aiming at improving access to essential health services at the village level; namely the HEP and the accelerated expansion of primary health care coverage.[17] Both of these initiatives required huge financial commitment for realization. The accelerated PHC expansion document indicated that additional 4,486 health posts and 1,141 health centres were to be built and equipped; 1,055 health stations to be upgraded and equipped to become health centres in less than 5 years. The strategic document also indicated that training and deployment of 8,972 paid HEWs to manage the newly constructed health posts was to happen. These seemed unrealistic to many at the time. However, although equipping the health posts remained a challenge (with 75.6% of the target of equipping 16,253 health posts met), the number of health posts increased from the baseline 6,191 in 2004/05 to 14,416 in 2009/10. The number of health centres in the country increased from the baseline 519 to 2689 during the same period. In addition, more than 33,000 HEWs were trained and deployed. There was also a program of accelerated training of health officers (health cadres of BSc level for local need) aiming to simultaneously fill the clinical and health administration gap at the district level during the same period. With this initiative, nurses and other health professionals were trained to fill the human resource gap of the health system.[8] The trainings were given at public universities in Ethiopia. It was financed by the Ethiopian government in collaboration with development partners.

In 2019, there was a national evaluation of the HEP commissioned by the HEP and PHC Directorate of MOH to a local consulting firm with a funding from the Bill and Melinda Gates Foundation. The evaluation concluded that there is "a mismatch between the current capacity of HEWs and the skills required to effectively deliver expanded HEP packages." It was also indicated that the skillsets of the HEWs has led to "sub-optimal quality of care." The evaluation further implied that there were inadequate resources for upgrading the skills of the HEWs which aggravated the problem related to quality of care. Hence, the MOH and stakeholders came together to craft a roadmap for the HEP for the next 15 years (2020-2035). This roadmap proposes several changes to this flagship program of the Ethiopian health system.[11,18]

According to the proposal in the roadmap, kebeles (villages) with limited or remote access to a health centre will have health posts providing "comprehensive HEP service". Kebeles having a health centre close by will have health posts with just "basic package" with referral connection with the health centre for a more comprehensive care. While currently all kebeles including those with a health centre have a health post (which sometimes could be in the same compound as the health centre), the road map suggests merging the two to avoid duplication of efforts. Table 1 below provides the different packages of HEP proposed in the roadmap. Another proposal worth noting is that HEP services will not be limited to health posts but will also be provided in health centres and primary hospitals of the PHC system.[11]

In an effort to improve the poor quality of care at the health posts it is proposed that the main target of the optimization will be "increased accountability and responsiveness of HEP to community needs." The staffing pattern in the health posts will also be changed overtime to become multidisciplinary where both male and female health officers, nurses/midwives, environmental health professionals, and HEWs will be included. There is a plan to address concerns related with infrastructure, basic amenities and medical supplies as deemed necessary.[11]

Table 1.1: Different packages of HEP services proposed in the roadmap

HEP packages	Description	Type of communities
Comprehensive HEP Packages	Comprehensive maternal health care for normal pregnancy, childbirth, and postpartum period, treatment of common childhood illnesses through integrated management of childhood illnesses, treatment of common adulthood illnesses, and prevention and treatment refill for chronic illnesses.	Communities in kebeles that have limited access to a health centre or primary hospital (more than one-hour distance)
Basic HEP packages	The current HEP packages will be provided by addressing issues in quality of care, strengthening referral linkages with catchment HC, and outreach/ mobile health services to communities living far from the health post.	Communities in kebeles that have access to a health centre or primary hospital within a reasonable distance (within one-hour distance)
HEP for communities with access to a health centre and/or a primary hospital	Community-based health promotion and disease prevention packages linking communities with HC and PH for clinical services.	Communities in kebeles that already have a health centre and/or a primary hospital.

Source: Realizing Universal Health Coverage through Primary Health Care: A Roadmap for Optimizing the Ethiopian Health Extension Program 2020 – 2035.[11]

2. Overview of health expenditure

2.1 Sources of revenue

There are three main sources of revenue in the Ethiopian health sector. The government treasury is the first one. Taxes and bilateral and multilateral loan deals raise funds from these sources. The majority of government revenues are collected in the form of income taxes, profit taxes, import duty, excise taxes, value added taxes, sales and turnover taxes. Recently, the government also increased excise taxes on products believed to affect health such as tobacco, some alcohol and soft drinks. All government revenues are pooled into central treasury and allocated to federal ministries and block grants to regional governments based on a predetermined set of criteria. The available funds are then used for services and management of health services.

The Ministry of Health receives its share of allocation from the Ministry of Finance and Economic Cooperation (MoFEC) for its federal level functions. On the other hand, block grants are received by Regional Governments who have the freedom of allocating budgets according to local priorities form MoFEC. The regions then grant block grants to the woreda councils. The woreda council receives and reviews the health plan and its associated budget as presented by the woreda health office. The share of district health budget is determined by the woreda council after considering needs in other social welfare sectors. The amount or share of budget allocated to health varies between regions and woredas depending on local context such as disease burden, staffing and local benefit packages. In addition to allocating resources to health system and public health facilities, different levels of government have started recently to allocate resources to subsidize CBHI scheme and cover insurance premium for some of the indigent households in their jurisdiction.[29]

External funds are the second significant source of revenue for health. External funds are raised through three main channels. Channel 1 contains services that come directly to the Ministry of Finance and Economic Cooperation from donors. These are of two categories: earmarked resources, which are resources targeted to a particular initiative, and unearmarked resources, which are budgetary resources allocated to the Federal MOH according to their objectives. Resources also come from donors through what is known as Channel 2 and go directly to the account of the MOH. Channel 3 consists of donor funding specifically to help non-governmental organizations (NGOs) involved in health matters.[28] According to a study by Kelly R. et al., there is a low public health spending in Ethiopia, but the health outcomes are favourable. Ethiopia allocates about 7.8% of its national annual budget on health which is far below the Abuja target of 15%, but the relatively generous external support enabled the country to finance and achieve significant health improvements over the last two decades.[33] The significant health improvement with low spending is mainly due to large amount of donor support - which at one point exceeded half of the national health expenditure – as well as well-coordinated and targeted spending by government.

The third significant source of revenue for health in Ethiopia is out-of-pocket (OOP) expenditure, or direct payments by households. According to the most recent national health accounts, the country spent ETB 72.05 billion on healthcare in 2016/17 fiscal year. From the

total amount, the contribution of donors, government and households was 35.2%, 32%, and 30.6%, respectively. The remainder, 2.1%, was contributed from private employers, NGOs and other sources of finance.[24]

The community-based health insurance (CBHI) initiated by government, has been scaled up to the majority of Woredas but social health insurance (SHI) is yet to be launched. Through the insurance schemes, the government aims to expand financial coverage with support from government funding and the existing Ethiopian Health Insurance Agency. Overall, the goal is to contribute to the establishment of universal health coverage in Ethiopia. But existing evidence shows that coverage is so far low,[19] while recent expansion to hundreds of Woredas has likely to have an improved the CBHI coverage. A recent performance report of the MOH shows that the scheme is being implemented in 743 woredas with an average enrolment rate of 49%.[20]

2.2 Trends over time

Total and per capita health expenditure in Ethiopia has increased over the last twenty years. Per capita health spending increased from US$7.7 in 1999/00 to US$34 in 2016/17 despite the high rate of population growth. However, according Ethiopia's health accounts, there is a slightly decreasing trend of expenditure on health as a percentage of Gross Domestic Product (GDP). In the recent four-year period, the share of health as a proportion of GDP decreased from 4.7% to 4.2%. Nevertheless, the government's share of total health expenditure is increasing as shown in various indicators. For example, general government expenditure on health as percentage of GDP has increased from 0.9% to 1.4% over a period of ten years. Also, during this period, both general government expenditure on health as a percentage of general government expenditure and as a percentage of total health expenditure increased from 4.8% to 8.07% and 22.3% to 32% respectively. The per capita government expenditure on health also doubled three times between 2007/08 and 2016/17 (Table 2.1).

Recent figures suggest that the share of external funding and out of pocket health expenditure are decreasing over time, albeit slowly. The external resources for health as a percentage of total health expenditure decreased by 14.7% between 2010/11 and 2016/17. Similarly, out-of-pocket expenditure as percentage of total expenditure on health has been decreasing since 2007/08 (Table 2.1).

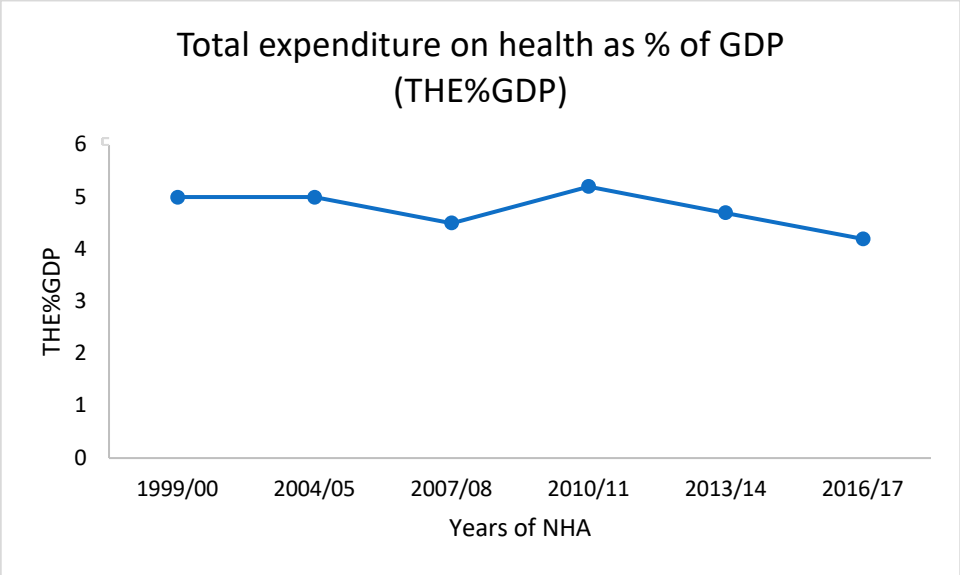
Table 2.1 Trends in health expenditure in Ethiopia, 2000 to latest available year

	Expenditure	1999 /00	2004 /05	2007 /08	2010 /11	2013 /14	2016 /17
1)	Total expenditure on health as % of GDP (THE%GDP)	5	5	4.5	5.2	4.7	4.2
2)	General government expenditure on health as % of GDP (GGHE%GDP)	1.7	1.4	0.9	0.8	1.4	1.4
3)	Per capita government expenditure on health, US$ adjusted for purchasing power ("purchasing power parity" (PPP) or $ International)	7.7	8.3	10	12.1	24.4	34.2
4)	General government expenditure on health as % of total general government expenditure (GGHE%GGE)	5.6	4.8	4.8	3.5	7.6	8.07
5)	General government expenditure on health as % of total health expenditure (GGHE%THE)	37.1	30.5	22.3	15.6	29.7	32.0
6)	Private expenditure on health as % of total health expenditure (PHE%THE)*	5.0	1.9	1.4	0.8	1.5	2.1
7)	External resources for health as % of total health expenditure (EXT%THE)	17.9	36.9	39.2	49.9	35.6	35.2
8)	Out-of-pocket expenditure as % of total expenditure on health (OOPS%THE)	40.1	30.7	37.1	33.7	33.3	30.6
9)	Private prepaid plans as % of total expenditure on health (VHI%THE)**	NA	NA	NA	NA	NA	3.0%

Source: The Ethiopian National Health Accounts[21–24]
*sum of private, NGOs and other sources of fund except for 1999/2000
**information is comprehensive of the community-based health insurance and other forms of insurance.

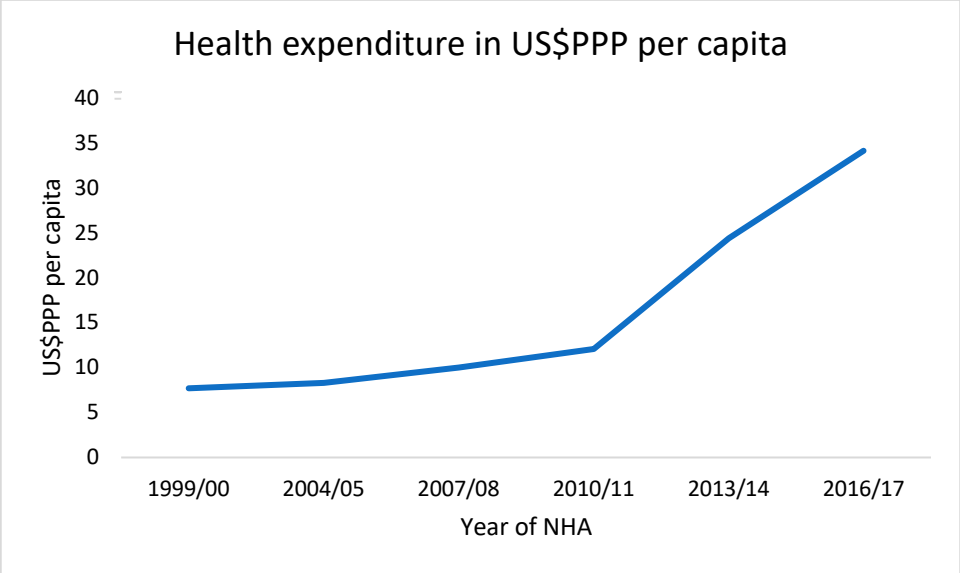
Note: the information given in this table are based on the six consecutive national health accounts of Ethiopia. And the years of report are as given in the table above. The information given at the 6th raw is inclusive of health expenditure private, NGOs and other sources except for 1999/2000 NHA.

Fig. 2.1 Health expenditure as a share (%) of GDP in Ethiopia, 1999/00-2016/17



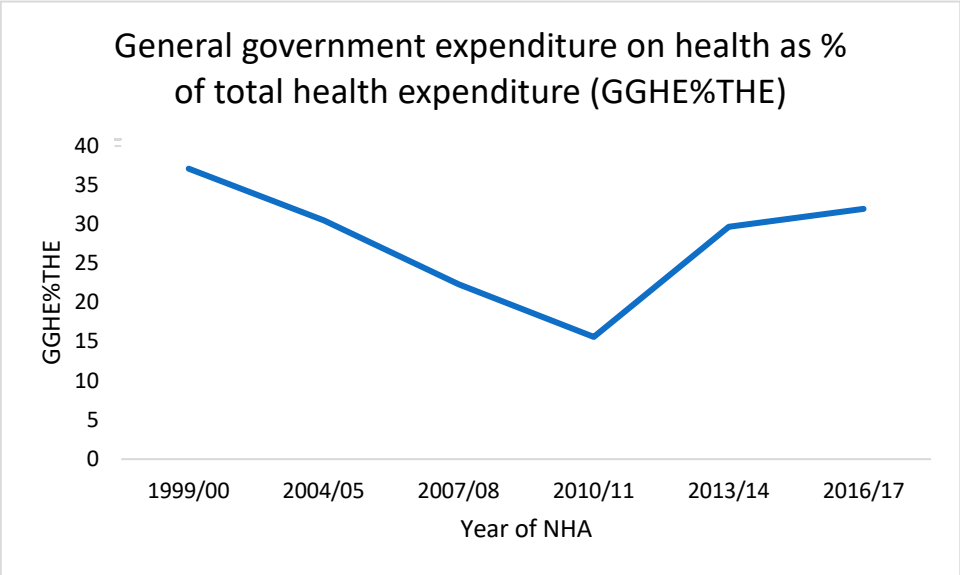
Source: The Ethiopian National Health Accounts[21–24]

Fig. 2.2 Health expenditure in US$PPP per capita in Ethiopia, 1999/00-2016/17



Source: The Ethiopian National Health Accounts[21–24]

Fig. 2.3: Public sector health expenditure as a share (%) of total health expenditure in Ethiopia, 1999/00-2016/17



Source: The Ethiopian National Health Accounts[21–24]

The health sector in Ethiopia spends resources on direct health service provision and other relevant supporting activities. According to the recent national health accounts, the country spends about 18% of public and 17.7% total health expenditure on health administration and financing activities. About 4% of the total health spending goes to support training and research activities in the health sector. Public health and prevention activities on the other hand took 7.8% of total health expenditure. Among the medical services almost one quarter of the public spending on health finances the primary and specialty outpatient physician services.[24]

Table 2.2: Public health expenditure on health by service programme in Ethiopia, latest available year

	Expenditure	% of public expenditure on health	% of total expenditure on health
1.	Health administration and financing	18%	17.7%
2.	Training and research*	11%	4%
3.	Health research and development*	Included in the above	
4.	Public health and prevention	8%	7.8%
5.	Medical services:		
	a. inpatient care**	7.7%	
	b. outpatient/ambulatory physician services (primary care)***	24.9%	
	c. outpatient/ambulatory physician services (specialist care)	included in the above	
	d. outpatient/ambulatory oral health services		4%
	e. home or domiciliary health services	NA	NA
	f. mental health		2%
	g. ancillary services		< 1%

Source: Ethiopian seventh national account.[24]
*In the Ethiopian NHA "education and training" and "health research and development" are not provided but "training and research" is given.
**Represents proportion of recurrent expenditures for inpatient care from the total government expenditure
***Represents proportion of recurrent expenditure for outpatient services from the total government expenditure

2.3 Fiscal context

The growth of primary health care in Ethiopia over the last 16 years has been celebrated as a model in sub-Saharan Africa and the country is often cited as a model by the social movement to improve primary health care. Since 2004, more than 30,000 HEW have been trained and deployed in the country and more than 3,000 health centres and 15,000 village health posts have been built. In contrast, Ethiopia's domestically funded government spending on health in 2007/08 was US$ 267 million, which amounted to a per capita spending of US$ 3.4. Ethiopia's decision to recruit HEWs and construct new health centres and health posts has resulted in substantial recurrent costs. As of 2016, HEW's compensation expenses was US$ 31.7 million annually constituting 21% of the government's recurrent health expenditure.[30] Ethiopia faced financial difficulties with regard to its involvement in PHC: the PHC investment initiative (including the HEP) required an estimated US$ 1.2 billion in start-up costs over 5 years.[31]

Although positive progresses were observed over time, almost one third of the Ethiopian health system is currently dependent on funds obtained from the external world.[24] Within the government system, regional health bureaus and the MOH managed 48% and 44% of the government's health expenditure, respectively. Other ministries and public units (belonging to central government) managed 6%, while parastatals managed 2% of the resources managed by the government.[24] Regions have autonomy over the health care fund under their jurisdiction[29] but they're expected to work towards meeting their local goals which will feed into national priorities and targets.

Mobilizing revenue for the entire health system and the PHC specifically passed through different approaches based on the country's political economy over different governments. During the imperial period of Emperor Haile Selassie I, essential health services were funded by a health tax levied in 1959, but preventive health care and disease prevention relied heavily on foreign assistance. This highly efficient rural health initiative encouraged the MOH to prepare for the implementation of universal health service with health centres as the backbone of the health system. However, instead, much of the allotted funds went to hospitals. The reign of Emperor Haile Selassie ended when the military regime took power in 1974.[4,32]

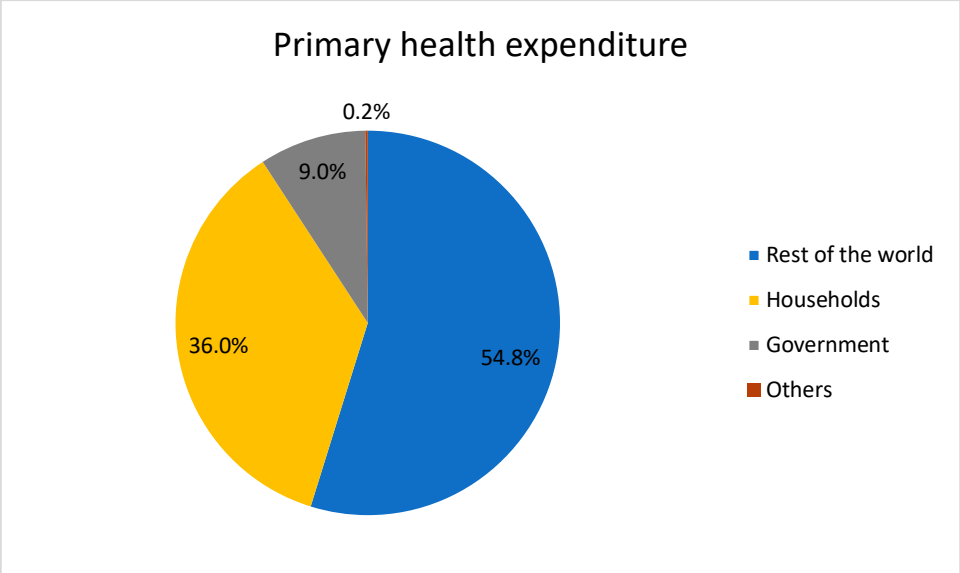
The military government grouped the population into peasant groups and urban dwellers' associations (kebele) and charged them with the distribution of land, the creation of cooperatives, the collection of taxes and house rent, the enforcement of decisions and laws by the central government and the mobilization of the population for socio-economic growth. The military government followed the socialist economic principles. The military rule spent almost all of its ruling period in warfare with both internal rebels and neighbouring countries. Most of the government's revenues were spent on military activities; for instance, in 1990 the socialist government spent 65% of its annual budget on defence and security. Ethiopia continued to adhere to its fee-for-service policy, although poor people could obtain free care if recommended by their peasant associations and kebele and government employees had half of their medical bills paid by their employer. Funds from the external world mostly spent on some vertical health service interventions and was not coordinated under departments.[4,32] After 17 years of war the coalition Ethiopian People Revolutionary Democratic Front (EPRDF) took power in 1991. Its economic policy strongly endorsed an open, free market economy with emphasis on privatization and subsistence agriculture. It allowed for the phase-out of the command economy into a market economy in which the state plays a defined but diminished role. The government's source of revenue for health made its base on predominantly on three sources including government's revenues collected from taxes and tariff, funds from the external world and money from user fees.[4,32]

3. Resource mobilisation and allocation

3.1 Sources of revenue and financial flows in PHC system

The Ministry of Health annual woreda-based planning exercise analysed annual spending in PHCUs for 808 woredas in 2011, and estimated that funding for primary health care came from external donors (54.8%), households (36%), government (9%), and other sources such as private and not-for-profit organizations (0.2% contributed) (Fig 3.1).[25]

Fig. 3.1 Percentage of total expenditure on primary health care according to source of revenue, latest available year



Source: Financing Ethiopia's Primary Care to 2035: A Model Projecting Resource Mobilization and Costs. (Berman P et al., 2015)[35]

Specific focus on the HEP reveals that whilst the program was exclusively government financed at its inception, communities were mobilized to voluntarily contribute in-kind contributions of building materials and labour for the construction of health posts and, later, the HEP attracted significant funding from external sources. The national HEP evaluation reported that during the period 2010/11 to 2016/17, HEP spending increased from 70 million to 148 million US$. An average of 86% of this spending went into recurrent costs (24% for human resources and 62% for drugs and other medical supplies) with the remaining 14% spent for capital expenditure.[11,18]

According to the evaluation, the percentage of government spending in HEP expenditure increased from 20.8% in 2010/11 to 40.4% in 2013/14. Similarly, the government contributed 40.3% of HEP spending in the period 2016/17. The contribution of external aid was high at 59.7% in 2016/17. Relative to total PHCU level spending and total health expenditure (THE), the finance that went into HEP has declined. The proportion of HEP expenditure out of THE and total PHCU level spending dropped from 8.9% to 7.1% and from 25% to 22%, respectively, during the period 2010/11 to 2016/17.[11]

Interestingly, the 6th NHA provides a monetary value of the contribution of community volunteers. The NHA report estimated that community contribution through Women Development Army (WDA) and malaria control programs was at a nominal value of US$ 99 million in 2016/17.[24]

Coverage: who and what is covered

Funding from the government and partners covers 'essential' health services that are exempted from payment (as opposed to services that require cost sharing and full cost recovery from households).[26] Exempted services include expanded program of immunization (EPI) related services; maternal and reproductive health services like family planning, antenatal care, delivery services, postnatal care; treatment of tuberculosis, anti-retroviral therapy (ART), and malaria treatment.[27] In addition, there is a fee waiver system for individuals who are considered as indigent and those who cannot afford to pay for PHC services.[28] Peculiar to the HEP is that all services rendered at the health post are currently exempted from user fees.[11] These expenses share significant proportion of the primary health care costs.

Collection and pooling of PHC revenue

The three key health care financing functions (collecting revenue, pooling resources, and purchasing goods and services) are not executed distinctly. The government at each administrative level takes the lead in the execution of all of these functions. Revenue collection from general taxation and external sources provides most of the financing. Risk pooling is in its early phase with legislative and implementation guidelines in place a few years ago for community-based health insurance (CBHI) and social health insurance (SHI). While CBHI is being implemented at scale, SHI is yet to be launched. In the CBHI scheme revenue is being collected by the state-owned Ethiopian Health Insurance Agency. This agency pays public health facilities based on the prearranged contractual agreement.

Purchasing on behalf of the community is usually done by the government operated insurance agency from public health facilities, although some districts allow private pharmacies to engage in reimbursement schemes. Direct out of pocket payments to patients receiving care is also a significant encounter since the share of insurance schemes (CBHI, SHI and private insurance) is not very significant.[24]

Public financial management (PFM) process related to PHC services

The primary health care financial management in Ethiopia starts from the Ministry of Health as do the annual plans. The annual health plan of the country involves three interrelated panning activities at the ministry level, regional level and at the woreda level. The annual plan at each level is supposed to include two components: one, the core plan at the respective level, which is linked to the minimum targets set by the higher-level government core plan and two, activities implemented by partners at that government level. Financial resources obtained from donors, government, and NGOs would be incorporated into 'one budget' for implementation of the strategic objectives. One outcome of the joint financial approach is the development of a pooled fund mobilization from partners. The FMOH has fairly independent power to allocate resources from this fund as per national priorities.[33,34]

3.2 Resource allocation in PHC system

Allocation from collection agencies to pooling agencies

Financial resources are pooled from different sources including the external sources, tax revenues and users' fees and more recently the CBHI scheme.

I. Funds from the external world for instance come from different channels.[34] Based on the One-Plan, One-Budget and One-Report approach, the government prefers to pool all the funds from development partners and direct them into one channel. Although it is not a precondition for development partners to strictly follow the one budget approach, many major partners have put their funds to the government's account. Accordingly, the options of channels are the following:
   - Channel 1a (unearmarked): in this channel the funds that came from the donors are deposited into the government's account and disbursed through government channels. The finance is used to implement government's plan after pooling it with the government's money. All the finances in this channel are managed at the Ministry of Finance and Economic Cooperation (MOFEC) at the national level, Bureau of Finance and Economic Cooperation at the region level and Finance and Economic Cooperation Office at the woreda level.
   - Channel 1b (earmarked): in this channel the finance obtained from multilateral and bilateral donors are used for some specific use among the government priorities. A separate plan for this purpose may be developed based on the donor's request.
   - Channel 2: many bi-lateral and multilateral funders use this line. MOH or sector units at the federal and regional level expend and account for funds. Funds pooled in this channel can be disbursed either from the centre or at the regional level.
     - Channel 2a (un-earmarked): This channel consists primarily of the performance Fund of the SDG. During the woreda-based planning process, finances are distributed based on negotiated job schedules and follow the decentralized framework, meaning that the MOH allocates funds to the RHBs that are then allocated to the Woreda Health Offices (WrHOs). These allocations are either procured at the national level or are in-kind gifts in the form of goods and supplies, with limited funds distributed. This is the channel of support favoured by the MOH.
     - Channel 2b (earmarked): Similar to Channel 1b, these funds are program-specific, and contributions meet the accepted project/program schedules via this channel. The FMOH handles these services but accounting and monitoring strictly follow donor protocols. Partner services, such as the Global Fund, GAVI, and UN departments, pass resources to Woreda Office for Finance and Economic Development through MOH to monitor and report their use through agreed government procedures.
   - Channel 3: all the finance coming from this channel are neither deposited to the government's account nor disbursed by the government. It is sent directly to an NGO that intervenes in some health aspect in the country. A separate plan for intervention is required.

II. Government's revenues from the treasury: money collected by the government from taxes and non-tax sources are used to pay government expenditures. Government

spreads portion of its money to each of the ministry and region under its leadership. Accordingly, the health sector receives its proportion from the account of MOFEC which are transferred to MOH. Much of this finance is being utilized for federal functions. In the regions, Bureau of Finance and Economic Development (BOFED) leads the financing of health services in the region, by allocating resources to RHBs as well woredas, the latter through woreda Bureau of Finance and Economic Development).

III. Internal revenue: health facilities, specifically primary hospitals and health centres in the PHC system, collect fees from health service users. There is a retention mechanism of this revenue for the health service organization's use. They, however, do not directly use the collected money. The facility management team prepares the plan for use of internal revenue. Then the facility uses the internal revenue following endorsement by the woreda health office and appropriation of the same by woreda cabinets and councils. Major sources of revenue are the sale of drugs and other medical supplies, fees for consultation, and non-medical services, which include income from sale of items such as trees and grasses.[36] Facilities get user fees reimbursed by local government and EHIA respectively on behalf of patients from indigent and CBHI member households.

IV. Other sources: other sources include contribution from private volunteers, and NGOs. This accounts less than 3% of health expenditure in the country.

The main players of the country's health budget are the health and finance sectors at the federal, regional and woreda level.

With the intention of effectively implementing national strategies, the Ministry of Health developed a national health sector development plan harmonization manual in 2007. The manual gives due emphasis for one-plan, one-budget and one-report approach of managing the country's health services. Generally, the idea of one-plan, one-budget and one-report is, plans and budgets of all stakeholders should be replicated in one strategic plan which is then broken down into annual plans. The performance is then evaluated using an agreed set of indicators and reporting formats.[34,37]

Both vertical and horizontal linkages are required in this approach. Vertically the linkage starts from the kebele and health facilities to woredas, zones, regions and ministry levels. Horizontally on the other hand, the integration would be among various stakeholders including, government, donors, NGOs, and other partners. The regions and woredas are autonomous for the plan, budget and reports under their jurisdiction but are required for following core strategic health directions and provide routine report to MOH.

Woredas Health offices prepare their annual plan based on the national and regional priorities. The plans would be under the umbrella of national strategic plan. There would be a predetermined amount of financial resources for the health services in the woreda. Given this constraint the woreda health office develops its annual budget for a range of services and purchase of items. They then submit their detailed annual plan and budget to the Woreda council and Finance and Economic cooperation office for approval.[34]

The MOH has the mandate to develop a nationwide strategic plan that identifies broad health priorities and to oversee its implementation. Local plans should be in effect for the region, (zones) and woredas, which are responsible to their local councils, but also reflect national goals. The one report component of the "One plan, one budget and one report" approach is all about the monitoring and evaluation of the program implementations. There is a reporting and accountability channel for various entities in the health system. Health posts and health centres report to the woreda; the woredas report to the zone or region; the zones report to regions; the regions report to the MOH.[34]

The approach, especially the one-budget component, puts details about resource pooling and use. According to the approach the MOH would prefer partners to pool their funds and distribute them through government's channels based on the national priorities. It is, however, not always the case to adhere the one-plan, one-budget and one-report approach. It involves at least sharing information about plans and budgets, and monitoring according to jointly agreed indicators.[34]

Allocating resources to purchasers

Ethiopia follows a decentralized planning and budgeting system, by which woreda level government offices and institutions have separate roles and responsibilities. At the woreda level, financial management is done by the woreda finance and planning office, in which Woreda health offices and health centres do not have any influence.[36] Health facilities are supposed to report the revenue they have retained. They will then start utilizing internal revenue after the endorsement by Woreda health office and appropriation by Woreda cabinet and council. Laws and guidelines in regions demand health centres to open separate bank accounts for internal revenues. Since regional laws allow health facilities to manage their internal revenue, they are supposed to manage deposits into and withdrawals from their special accounts.[36]

Different collaborative projects such as essential service for health in Ethiopia (ESHE) give support to the various government entities in areas like budget development, defence, allocation and use; financial management (including utilization plan, purchasing, salary payment, bill settlement, bookkeeping, use of financial documents and settlement); and monitoring and reporting (financial and physical performance, regularity of monitoring and reporting).[36]

Decentralization, which shifted authority to woredas from regional authorities, was a significant reform. Fiscal decentralization, which started in EFY 1995 (2002/3), shifted decision-making from federal and regional authorities to local administrations on revenue and expenditure.[29] Lower-level government bodies are authorized to collect their own income, assign it to their priority sectors, and control financial and non-financial resources under their jurisdiction. Fiscal decentralization has significantly enhanced the capacity of states to efficiently recognize and meet the needs of their people by transferring revenue and expenditure obligations and decision-making authority to lower government bodies.[36]
There are a number of problems related to financial management at the woreda level. According to a recent study, limited awareness of the HCF reform was identified by 56.4% as the major issue, followed by insufficient budget (55%) and limited technical capability (43%).

Woreda officials received inadequate consideration, critical personnel shortages and high staff turnover were 40%, 30% and 27%, respectively.[36]

3.3 Efficiency reform

The need for improving efficiency has increasingly been recognized in the Ethiopian health care system. Recent studies have demonstrated that there are real concerns about how existing resources are used in the health sector. A few studies conducted in limited geographic areas indicate that most of the PHC facilities are not efficient enough.[38–40] A nationwide study conducted among health centres indicated that health expenditures at health centres grew as the number of outpatient-equivalent visits increased. Some health centres had high budget but poor output. Other health centres tend to be more efficient with low levels of cost compared to health output. These findings suggest the need for an expanded emphasis on demand generation practices for this level of treatment as a tool for improving efficiency, not just on supply-side variables. Expanding certain departments within health centres, along with encouraging clients to use lower level of primary care services, can lead to more optimal level of resource usage.[41] Following these reports there are some initiatives at the national level to measure the efficiency of PHC facilities and translate the evidence to inform policy decision.

4. Purchasing PHC services

In the Ethiopian health care system, services are delivered at both public and private health facilities. The government is the major health services provider through its public health facilities. More than 80% of health service users visit public health facilities to access services. In the public health facilities, users receive services, the payers for service can be different, however.

I. Exempted services: these are services being delivered by public health facilities which are free of charge at point of use. Services like expanded program of immunization (EPI); maternal and reproductive health services like family planning, antenatal care, delivery services, postnatal care; tuberculosis treatment, ante retroviral therapy (ART), and malaria treatment are examples for exempted service. Funds from the government and external sources cover this expenditure.
II. Out of pocket payment: in this approach, service users and their families pay the service charges and purchase medicine, but fees are often subsidized by government or donors. About 60% of the costs are subsidized as the fee-for services are cost sharing.
III. Fee waiver system: considering those who are economically poor, the Ethiopian government introduced the fee waiver system. Such a provision was in place in Ethiopia as early as the 1960s where anyone with a monthly income of less than 50 Birr (US$ 25 back then) was eligible for free medical services. In this approach, some of the indigent households receive an identification card and get the appropriate health services in public health facilities and are exempted from paying user fees. The

implementation of the fee waiver system has, however, been shown to be prone for significant leakage and under coverage. The Woreda Administration is expected to allocate a budget to reimburse the health facilities based on their report of clients with fee waiver.[42,43] However, health facility managers often complain that they are not being reimbursed in a timely manner. Recently, in woredas where CBHI is being started, premiums for these indigent households are either subsidized or fully paid for by government to encourage them join the scheme.

IV. Insurance: With the goal of mitigating the financial barrier to health care, community-based health insurance was introduced in Ethiopia. Accordingly, one aspect of health funding functions is the pooling of health resources. Of the 31% out of pocket contribution of the total health expenditure during 2016/17, 30% was spent at the time of sickness, while 1% was pooled via CBHI into the government system. About three percent of the total health expenditure was contributed by private employers and insurance providers, but these funds were not pooled into one account. Instead, the CBHI schemes are pooled at woreda level, although there are efforts recently to pool resources at regional levels.[24] In the private for profit health facilities, on the other hand, service users themselves are expected to pay for services and purchase of medicines. Exception to this is purchasing of health services by private insurance companies for those whose employer covers the premium. Hence, in the Ethiopian health system the contribution of pooled health care financing is very low.

Health professionals working in public health facilities like doctors, nurses and midwives, pharmacists, community health workers etc. are considered as civil servants. Therefore, they receive a fixed monthly salary for 40 hours weekly activity regardless of the volume of service delivered by the professional. For overtime services beyond the expected weekly hours and weekends service the professionals get paid some additional amount.

The other payment mechanism employed at public hospitals is payment for practicing in the private wing of public facilities. The implementation of private wing service arrangement started in 2008. When implementing the private wing, the government had several objectives. The main objective of integrating a private wing in Ethiopia's public hospitals is to raise the motivation and reduce staff turnover among health workers, especially among specialist physicians. Other objectives include enhancing the quality of services by allowing patients to visit physicians of their choice after normal working hours; mobilizing new funding and subsidizing the public sector; and providing users with alternative access to treatment. This arrangement under which medical services are offered to inpatient and outpatient clients in public hospitals on a service basis at a fee. In public hospitals, physicians and other health professionals earn extra income to offer care to private clients.

On top of these benefits, for professionals working in remote health facilities, the government facilitates educational opportunities. There is partiality in placement of new graduates and unequal service year obligation for those working in the remote and rural areas.

5. Digital technologies and health financing

The use of technologies in health financing is limited in Ethiopia. Digital technologies are applied largely on surveys such as the national health accounts, service provision assessment, service readiness and availability assessment and resource tracking as well as public expenditure reviews.

There are also efforts to embed technologies in routine data collection that automate statistical analysis of health outputs and inputs. These include digitization of the Health Management Information System (HMIS) and DHIS2 systems as well as the Ethiopia Health Data Analysis Platform. These and other digitization initiatives at facilities and agencies such as the Ethiopia Pharmaceutical Supplies Agency and the Ethiopian Health Insurance Agency are often supported by external resources and technical advice.

6. Conclusion

The Ethiopian PHC program is coordinated by specialized directorates at federal and regional levels while services are provided primarily at lower level of the health system and in the community. The government's aggressive health infrastructural development in the early and mid 2000s became the foundation for building the current PHC system in Ethiopia. The health extension program platform has been instrumental for recent successes in enabling Ethiopia to expand PHC services to every village and community and achieve critical health goals and improve health outcomes.

Government and donor resources were successfully channelled to the delivery of an effective essential health services – government resources mostly pay health workers and overhead costs, while external resources are used largely for purchasing essential health commodities and capacity building. Facilities are allowed to charge predetermined user fees to enable them to mobilize additional resources for improving service availability and quality of care at the facility level. Fee-exempted and -waiver programs are embedded in the user fees system to facilitate horizonal and vertical equity in paying for PHC services.

Critical challenges remain to streamline and continue the development of the Ethiopian PHC system in a sustainable manner. The HEP needs evolving to accommodate the changing needs at community level, which requires further decentralizing more PHC decisions, resources, and capacities to facility and community levels. More domestic resources need to be mobilised to gradually replace the recently declining external financing, potentially affecting availability of commodities needed for essential PHC services. More innovative resource mobilization at community and all government levels is critical in ensuring sufficient resources are available to finance PHC sustainably. This is even more pressing with the recently published HEP optimization roadmap of the MOH calling for significant investment to realize. More importantly, a more equitable risk pooling as well as provider payment mechanisms – including introduction of national PHC prepayment and result-based provider

incentive systems – are critically important to install the culture of tracking effectiveness and efficiency in Ethiopian PHC going forward.

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