Universal Health Coverage for Inclusive and Sustainable Development

Country Summary Report for Ethiopia

Huihui Wang and G.N.V. Ramana

Health, Nutrition and Population Global Practice
World Bank Group Report
August 2014
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMDD</td>
<td>Averting Maternal Death and Disability, Columbia University</td>
</tr>
<tr>
<td>CBHI</td>
<td>Community-based health insurance</td>
</tr>
<tr>
<td>CNHDE</td>
<td>Center for National Health Development in Ethiopia</td>
</tr>
<tr>
<td>CSA</td>
<td>Central Statistical Agency</td>
</tr>
<tr>
<td>EDHS</td>
<td>Ethiopia Demographic and Health Survey</td>
</tr>
<tr>
<td>ECSHE</td>
<td>Essential Services for Health in Ethiopia</td>
</tr>
<tr>
<td>FMOH</td>
<td>Federal Ministry of Health</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>GTP</td>
<td>Growth and Transformation Program</td>
</tr>
<tr>
<td>HEP</td>
<td>Health Extension Program</td>
</tr>
<tr>
<td>HEW</td>
<td>Health Extension Worker</td>
</tr>
<tr>
<td>HRH</td>
<td>Human Resources for Health</td>
</tr>
<tr>
<td>HSDP</td>
<td>Health System Development Project</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MDGPF</td>
<td>MDG performance fund</td>
</tr>
<tr>
<td>MEFF</td>
<td>Medium Term Federal Government Finance Forecast</td>
</tr>
<tr>
<td>MOFED</td>
<td>Ministry of Finance and Economic Development</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>ODI</td>
<td>Overseas Development Institute</td>
</tr>
<tr>
<td>OOP</td>
<td>Out of pocket health spending</td>
</tr>
<tr>
<td>PBS</td>
<td>Protection/Promotion of Basic Services</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>SHI</td>
<td>Social Health Insurance</td>
</tr>
<tr>
<td>THE</td>
<td>Total Health Expenditure</td>
</tr>
<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
</tr>
</tbody>
</table>
Preface

In 2011, Japan celebrated the 50th anniversary of achieving universal health coverage (UHC). To mark the occasion, the government of Japan and the World Bank conceived the idea of undertaking a multicountry study to respond to this growing demand by sharing rich and varied country experiences from countries at different stages of adopting and implementing strategies for UHC, including Japan itself. This led to the formation of a joint Japan–World Bank research team under The Japan–World Bank Partnership Program for Universal Health Coverage. The Program was set up as a two-year multicountry study to help fill the gap in knowledge about the policy decisions and implementation processes that countries undertake when they adopt the UHC goals. The Program was funded through the generous support of the Government of Japan.

This Country Summary Report on Ethiopia is one of the 11 country studies on UHC that was commissioned under the Japan–World Bank Partnership Program. The other participating countries are Bangladesh, Brazil, France, Ghana, Indonesia, Japan, Peru, Thailand, Turkey, and Vietnam. A synthesis of these country reports is in the publication “Universal Health Coverage for Inclusive and Sustainable Development: A Synthesis of 11 Country Case Studies,” available at: http://www.worldbank.org/en/topic/health/brief/uhc-japan.

These reports are intended to provide an overview of the country experiences and some key lessons that may be shared with other countries aspiring to adopt, achieve, and sustain UHC. The goals of UHC are to ensure that all people can access quality health services, to safeguard all people from public health risks, and to protect all people from impoverishment due to illness, whether from out-of-pocket payments or loss of income when a household member falls sick. Although the path to UHC is specific to each country, it is hoped that countries can benefit from the experiences of others in learning about different approaches and avoiding potential risks.
Acknowledgments

This study was supported through the PHRD Grant (Japan) as a joint Partnership Program between the government of Japan and the World Bank. The Program was steered by the Program Coordination Committee, co-chaired by Keizo Takemi, Member of the House of Councilors of the National Diet of Japan, and Timothy Grant Evans, Director of Health, Nutrition and Population Network of the World Bank.

The Program was led by a team comprising Akiko Maeda, Lead Health Specialist and Task Team Leader for the World Bank, and co-Team Leaders, Professor Naoki Ikegami, Department of Health Policy and Management, Keio University School of Medicine and Professor Michael Reich, Taro Takemi Professor of International Health Policy, Harvard School of Public Health.

This Country Summary Report was prepared by a World Bank team comprising Huihui Wang, Senior Health Economist, and GNV Ramana, Lead Health Specialist, World Bank Group.

The report was edited by Jonathan Aspin.

Disclaimer: The findings, interpretations and conclusions expressed in this work are entirely those of the authors, and do not necessarily reflect the views of The World Bank Group, its Board of Executive Directors, or the governments they represent.
Country Summary Report for Ethiopia

Overview

A low-income country, Ethiopia has made impressive progress in improving health outcomes. The Inter-agency Group for Child Mortality Estimation reported that Ethiopia has achieved Millennium Development Goal (MDG) 4, three years ahead of target, with under-5 mortality at 68 per 1,000 live births in 2012. Significant challenges remain, however, with the maternal mortality ratio at 420 out of 100,000 live births.

The government has introduced a three-tier public health care delivery system to deliver essential health services and ensure referral linkages, with level three as specialized hospitals (one per 3.5–5 million population), level two as general hospitals (one per 1–1.5 million), level one as primary hospitals (one per 60,000–100,000) with satellite health centers (one per 15,000–25,000) and health posts (one per 3,000–5,000).

One initiative contributing greatly toward universal health coverage (UHC) is the Health Extension Program (HEP) that provides free primary care services at health posts and communities. The country is at its early stage initiating insurance schemes to provide financial protection for its citizens: Social Health Insurance (SHI) for formal sector employees and Community-Based Health Insurance (CBHI) for rural residents and informal sector employees. Public facilities are expected to provide exempted services for free, and there is a fee-waiver system for the poor.

Table 1. Data overview

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>84.7 million (2011)</td>
</tr>
<tr>
<td>Gross domestic product (GDP)</td>
<td>$31.71 billion (2011)</td>
</tr>
<tr>
<td>Gross national income per capita, Atlas method (current $)</td>
<td>$370 (2011)</td>
</tr>
<tr>
<td>Total health expenditure (THE) as % of GDP</td>
<td>4.65% (2011)</td>
</tr>
<tr>
<td>THE per capita (in current exchange rate dollars)</td>
<td>$16.6 (2011)</td>
</tr>
<tr>
<td>Out-of-pocket spending as % of THE</td>
<td>33.8% (2011)</td>
</tr>
<tr>
<td>Public expenditure on health as % of THE</td>
<td>57.7% (2011)</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>59.2 (2011)</td>
</tr>
<tr>
<td>Hospital beds per 1,000 population</td>
<td>6.3 (2011)</td>
</tr>
</tbody>
</table>


---

PART I. Universal coverage—status and sequencing

A. Overview of current status

1. Legal and statutory basis

The National Health Policy gives strong emphasis to fulfilling the needs of the less privileged rural population, which constitutes about 83 percent of Ethiopia’s total population. The Health Sector Development Program (HSDP) is a mechanism translating the country’s health policies into actions (FMOH 2010). It covers the period from 1997/98 to 2014/15 through consecutive multiyear plans. In the current HSDP IV (2010/11-2014/15), the mission of health sector is stated as follows: “to reduce morbidity, mortality and disability and improve the health status of the Ethiopian people through providing and regulating a comprehensive package of promotive, preventive, curative and rehabilitative health services via a decentralised and democratised health system.”

The government’s commitment to achieving UHC is reflected in the HSDP IV. It is part of the government’s overall vision for Ethiopia to become a middle-income country soon after the MDG target date of 2015. To achieve this objective, “the health sector of Ethiopia will have to stretch to attain its objectives of reaching every section of the population with effective health interventions”. Participants of the annual review meeting of HSDP are key stakeholders of the health sector including representatives from the FMOH, regional health bureaus, woreda (district) health bureaus, nongovernmental organizations (NGOs), academia, and development partners.

Ethiopia has one of the most ambitious decentralization programs in Africa. It has a federal system of governance where powers and mandates are devolved first to regional states, and then to woreda authorities and kebele (village) authorities. The decentralized levels receive block grants from the Ministry of Finance and Economic Development (MOFED) based on mutually agreed resource allocation criteria.

The FMOH formulates national health policy. Its responsibilities include expanding health services; establishing and operating national referral hospitals and national-level study and research centers; determining standards and operational protocols; regulating health services and professional education in public health; and preventing, controlling, and eradicating communicable diseases. It sets policies, strategies, and guidelines for improving services for underserved populations, and the regions adapt these guidelines to their needs. The FMOH also supports regions to develop their health systems by mobilizing additional resources to improve service delivery and by establishing appropriate platforms for mutual accountability, information flow, and efficient use of resources.

The nine regional health bureaus and two city administrations are responsible for plans and programs in their areas to deliver health services based on the national health policy and health service delivery capacities within the region (including all types of hospitals). They are also responsible for licensing of health facilities, and ensuring adequate supply of safe and affordable medicines and supplies. The woreda health offices, which fall under the administrative control of woreda councils, manage and coordinate the primary health care units (health centers and health posts) and are responsible for planning, financing, and monitoring the health progress and
service delivery within the \textit{woredas}. The regional health bureaus provide technical support to \textit{woreda} health offices (FMOH 2010).

A proclamation to provide SHI was approved by Parliament in 2010 (No. 690/2010). It indicates that the objective of the SHI program is to provide quality and sustainable UHC through pooling risks and reducing financial barriers at the point of service delivery.

2. \textbf{What is the current status of coverage along the key dimensions of UHC?}

\textit{a. Population}

The Health Extension Program (HEP), a leading vehicle developed by the government for achieving UHC at primary care level, makes basic services available at health posts (village level) and communities for the entire population. Two female health extension workers (HEWs) are trained and deployed to each post serving a \textit{kebele} with a population of 3,000–5,000 (FMOH 2012a).

The government aims to provide financial protection through a combination of two health insurance programs: SHI among formal sector employees and their family members (around 11 percent of the population); and CBHI among informal sector employees and rural residents (around 89 percent of the population). The government’s goal is to cover about 50 percent of the 84 million citizens through these two programs by 2015. The FMOH is at the preparation stage of launching the SHI. The CBHI has been piloted in 13 \textit{woredas} in four regions, covering more than 1.6 million people, and is scaling up to 161 \textit{woredas}.

The government introduced fee-waiver and exemption systems for services at health centers and hospitals for the poorest of the poor. Eligible beneficiaries are identified by communities and given a certificate to access free health care. In the Amhara region, where the new fee-waiver system is fully implemented, an increasing number of poor households have experienced better access to health services. In 2011, 1,319,114 indigents were selected through community participation and benefited from free health care services (Purvis et al. 2011). In other regions, full implementation is yet to start.

\textit{b. Services}

The HEP provides “a package of basic and essential promotive, preventive and curative health services” targeting households in a community through HEWs (FMOH 2012a). Interventions include:

- \textit{Hygiene and environmental sanitation:} Proper and safe excreta disposal system; proper and safe solid and liquid waste management; water supply safety measures; food hygiene and safety measures; healthy home environment; arthropods and rodent control; and personal hygiene.
- \textit{Disease prevention and control:} HIV/AIDS prevention and control; TB prevention and control; malaria prevention and control; and first aid.
- \textit{Family health services:} Maternal and child health; family planning; immunization; adolescent reproductive health; and nutrition.
- \textit{Health education and communication:} Cross cutting.
SHI and CBHI have a defined package of services and a set of excluded services. Under SHI, essential health service packages and other critical curative services are covered, including outpatient care, inpatient care, and delivery services in health centers/clinics and hospitals, surgical services, and prescribed generic drugs and diagnostic tests. A negative list is also prescribed in the proclamation. The benefit package of CBHI pilot programs includes outpatient and inpatient services at the health center and hospital level, but tooth implantation, and eye glasses for ophthalmic cases, are excluded. Although both programs have a defined comprehensive service package, it remains questionable whether people can access services effectively given existing supply-side constraints. According to the 2011 welfare monitoring survey, 64.7 percent of households are within less than 5 kilometers of the nearest health post, 40.1 percent are within 5 kilometers of a health center, and 14.2 percent are within 5 kilometers of a hospital (CSA 2012b).

Exempted services include family planning, deliveries, pre- and postnatal care, tuberculosis, leprosy, childhood vaccination, voluntary counseling and testing of HIV, antiretroviral treatment, and prevention of mother-to-child transmission of HIV. This list applies to the entire country, and all public health facilities are expected to post lists of exempted services in the waiting area.

c. Financial protection

HEWs provide services for free and there is no copayment requirement for CBHI enrollees under the pilots. Through the fee-waiver and exemption system, a selected list of services at the health center and hospital are exempted to protect the poorest against user fees.

It is expected that the incidence of unofficial, extra, and balance billing will be minimal for HEP services and CBHI benefit services, given that communities are well informed about the characteristics of free services provided by HEWs and zero copayment requirements under CBHI. However, there is no data available in this regard.

Exempted services are mostly financed through external sources. There are reported divergences between policy and practice in implementing fee-waiver and exemption systems. One major reason for the divergence is that service providers need to charge fees to recover costs of providing the exempted services. For example, due to the lack of financial support in providing delivery service to women, 17 percent of health centers and 77 percent of hospitals charged mothers for normal deliveries (FMOH, UNICEF, UNFPA, WHO and AMDD 2010). There is a continuous and ongoing dialogue to review the financing and list of exempted services.

3. How is governance structured?

a. Goal setting

The government’s current development plan—the Growth and Transformation Plan (GTP)—aims to achieve the MDGs (MOFED 2010). HSDP IV, a key component of the GTP, provides the overarching strategic framework for the health sector and reflects the government’s commitment to achieving the health MDGs, which is central to all efforts for UHC. For example, expanding the HEW initiative to urban and pastoral communities and improving quality in the rural areas is one of the strategic directions envisioned by HSDP IV.

HSDP IV is implemented through the annual budgeting process. This involves both bottom-up and top-down planning exercises. For the bottom-up planning and budgeting, each woreda
health office engages partners and prepares evidence-based plans and consolidated budget requests with targets aligned to national goals based on indicative budgets. The top-down process follows the decentralized fiscal arrangement and involves the MOFED preparing the Medium Term Federal Government Finance Forecast (MEFF)\(^2\) which is approved by Parliament with general- and specific-purpose grants to regional states in accordance with the national equity formula. The regional states subsequently establish the general purpose grants for *woredas*, and *woreda* councils in turn provide sectoral ceilings. The general- and specific-purpose grants include external loans and on-budget external grants. There are other external resources flowing from the federal MOH to the regions and *woredas*, mostly in the form of in-kind assistance and support for capacity building.

**b. Financing**

The health sector is financed through three sources: government budget (including on-budget donor support), off-budget donor assistance, and private out-of-pocket expenditures (Figure 1). Public expenditure is allocated through two harmonized financing arrangements: the MDG performance fund (MDGPF) channeled through the FMOH; and the block grants provided by MOFED to regional states. The block grants mainly cover recurrent costs, especially salary and operational costs at health facilities, including salaries for health extension workers; the MDGPF supports procurement of equipment and commodities for facilities, construction of health facilities, capacity building of health extension workers, and establishment of CBHI.

---

\(^2\) The MEFF is a three-year rolling budgeting tool. The principles are similar to the MTEF. However, the MEFF provides sectoral projection for federal ministries only. It does not provide aggregated sectoral projections. Sectoral allocations will only be known at *woreda* level. The intergovernmental transfer from federal to regions, and from regions to *woredas*, is in block grants.
c. Service delivery

A three-tier health care delivery system has been introduced (Figure 2) to deliver essential health services and ensure referral linkages. A primary care unit is composed of a primary hospital, health center, and health post. The secondary level comprises general hospitals. A general hospital provides inpatient and ambulatory services and serves as a referral center for primary hospitals. The tertiary care level comprises specialized hospitals and serves as a referral from a general hospital.

![Figure 2. Ethiopia’s Three Tier Public Health System](image)

The public sector remains an important source for health care and the major recipient of health sector resources. According to the latest National Health Accounts (2010/2011) report released in April 2014, private providers (for-profit and nonprofit) received only 16 percent of total national expenditure on health. In addition, private providers are concentrated in urban areas, where less than 20 percent of the population lives.

HSDP IV envisaged that public–private partnerships will be enhanced through collaborative endeavors on selected health sector priority programs and health system issues. Areas identified for such collaboration include: expansion of health infrastructure, local production of pharmaceuticals, provision of health services, training of health professionals and mobilization of resources for the health sector, and partnerships with professional associations on improving quality of health services and reducing professional malpractice.

The Private Health Sector Program supported by USAID has collected considerable information on initiatives that include: workplace prevention and treatment services for HIV/AIDS in 84 companies where 46,000 workers were trained; more than 6,000 staff received HIV counseling and testing while more than 2,000 received treatment for TB; and 90 sites were offering Public-Private Mix Directly Observed Treatment, Short Course (PPM DOTS). In addition, professional
associations are engaged in clinical capacity building, such as provision of essential surgical skills to health officers.

Service providers are financed through a combination of sources: block grants transferred from general government revenue, in-kind transfer from the FMOH (mostly donor financing), user fees collected from service users, and fee-recovery from woredas for providing waivered services to the poor. User fees are usually carried from history, therefore tend to be outdated and vary between facilities—because of which, revision of user fees has been piloted in some regions.

The share of capital expenditure grew from 21 percent in 2005/06 to 64 percent of total government expenditure in 2010/11. This shift reflects expanded construction of health facilities and related capital investment for rural populations.

B. Current status of health financing

1. How sustainable is current coverage?

a. Fiscal space

There has been strong political commitment to achieve MDGs and promising economic growth in the country; GDP grew by 11 percent on average annually during 2004/05–2009/10 (World Bank 2012). Spending on health (from all sources) as a share of GDP remained relatively flat at between 4 and 5 percent in 1999–2008. Per capita expenditure increased from US$5.6 to US$20.8 during a 10-year period from 1999/00 to 2010/11. However, there has been a shift in mix of the total health expenditures (Figure 4). The fifth-round National Health Accounts for 2010/11 indicated that only 16 percent of total health expenditure was directly from government budget. The proportion of external assistance has increased significantly from 37 in 2004/2005 to 50 percent in 2010/2011. Out-of-pocket financing is another significant source of health financing, accounting for 33.7 percent of total health expenditure as of 2010/11 (FMOH and Abt Associates 2010).

Figure 4. Per capita total health expenditures, 1995/96-2010/11

The health sector is facing severe resource constraints, which also apply to UHC initiatives. HSDP IV used the marginal budgeting for bottlenecks tool to estimate resource needs for achieving MDGs. The base-case scenario envisages using existing infrastructure and human
resources to provide universal access to health centers with a backup of primary hospitals providing emergency surgical and obstetric care. The best-case scenario envisages providing effective clinical care at all levels of the health system. It is estimated that the total budget required will be $8.8 billion and $10.8 billion respectively for the base- and best-case scenarios. This requires the current base of $883 million public health expenditure to increase annually by 9 percent for base-case and 13.5 percent for best-case scenarios over 2010/11 to 2014/15 (FMOH 2010).

The planned SHI will collect contributions from both employees and employers (3 percent of salary respectively as planned), and it is unclear how this may affect overall health financing and its sustainability, particularly the contribution from government. Analytical work is being planned to study the fiscal and equity implications of this new development.

**b. Cost management and value for money**

Although health resources are low—$21 per capita in 2010/11—Ethiopia has achieved impressive results. An Overseas Development Institute study (ODI 2010) noted that Ethiopia is making the third-fastest improvements of any country toward reaching the MDGs. The latest Ethiopia Demographic and Health Survey (EDHS) data show that child mortality fell from 123 per 1,000 in 2005 to 88 in 2010. Ethiopia also reports solid reductions in both stunting among children and anemia among women. Contraceptive use nearly doubled over this period, contributing to a reduction in the total fertility rate (Table 2).

**Table 2. Progress in key health indicators**

<table>
<thead>
<tr>
<th>Health outcome/output</th>
<th>EDHS 2005</th>
<th>EDHS 2011</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-five mortality rate</td>
<td>123</td>
<td>88</td>
<td>Down 28%</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>77</td>
<td>59</td>
<td>Down 23%</td>
</tr>
<tr>
<td>Severe stunting in children under five</td>
<td>24</td>
<td>20</td>
<td>Down 17%</td>
</tr>
<tr>
<td>Prevalence of anemia among women</td>
<td>27</td>
<td>17</td>
<td>Down 37%</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>5.4</td>
<td>4.8</td>
<td>Down 11%</td>
</tr>
<tr>
<td>Contraceptive prevalence rate</td>
<td>15</td>
<td>27.3</td>
<td>Up 83%</td>
</tr>
</tbody>
</table>


The health sector is more efficient than that in other low-income Sub-Saharan Africa (SSA) countries, and able to deliver better health outcomes at a given level of resources. Taking Ethiopia as the origin point, the share of total health expenditure in GDP and expected life expectancy for all SSA countries is plotted in Figure 5. Countries in the second quadrant are more efficient than Ethiopia given they have lower shares of total health expenditures in GDP, but higher life expectancy at birth. Countries in the fourth quadrant are less efficient than Ethiopia because they have higher shares of total health expenditures in GDP, but a lower life expectancy at birth. Most low-income SSA countries are in the fourth quadrant, reflecting lower
efficiency. It is mainly middle- and high-income SSA countries that appear to be more efficient than Ethiopia: Ghana, Mauritius, Namibia, Sudan, Senegal, and São Tomé and Príncipe.

Figure 5. Percentage of total health expenditures in GDP (X axis) vs. life expectancy at birth (Y axis), all Sub-Saharan African countries relative to Ethiopia

The public system of health sector mainly uses line-item budgeting that is inputs-focused. It is easy from the perspective of financial administration, but not effective for getting value for money since resources uses are not linked to service outputs or outcomes. With about half of the external assistance off budget, there is room for potential efficiency gains through harmonizing fragmented off-budget donor financing. In addition, even with the government system, better planning and coordination may promote efficiency given recurrent cost and capital cost are managed by regional governments and the FMOH separately.

The SHI under preparation and CBHI being piloted may increase value for money in that they intend to increase risk pooling and reduce out-of-pocket spending, which has proved to be least efficient and equitable mechanism for health financing. For both, however, the government needs to carefully calibrate benefit package design, provider payment mechanisms, and cross-subsidization within and between the two programs. The current CBHI pilots use fee-for-service payment mechanisms to providers. The Ethiopia Health Insurance Agency, an entity responsible for managing both the SHI and CBHI programs, is working with the health financing reform working group and development partners to evaluate and distill lessons from these pilots, and making evidence-based decisions on payment mechanisms.

Source: Author’s calculation based on data from HNP statistics, World Bank.
2. **How equitable is coverage?**

To examine whether coverage is equitable, we focus on whether the UHC initiatives have supported pro-poor actions to narrow the gap between poor and non-poor people, as it is often not surprising that better-off people have a higher coverage than poor people at a snapshot.

**Figure 6. Concentration curves for selected essential services, 2005-2011**

![Concentration curves for selected essential services, 2005-2011](image)

Source: Authors' calculation based on data from EDHS2005 and EDHS2010/11.

In Figure 6, concentration curves are plotted for a number of essential health interventions\(^3\) based on group-level data\(^4\) in order to show whether the equity in coverage of these services have improved over time. Concentration curves plot the cumulative percentage of the variable of interests (y axis) against the cumulative percentage of the population (x axis), ranked by wealth status, beginning with the poorest, and ending with the richest.

\(^3\) These interventions include antenatal care, skilled birth attendance, use of modern contraceptive, immunization, fever treatment for under-5 and mothers' knowledge on how to dispose of children's stool.

\(^4\) Mean for each wealth quintile in 2005 and 2011.
diagonal line shows the ideal situation where coverage of services is the same across all groups. The distance between the diagonal line and a concentration curve shows the extent of inequity; the smaller is the distance, the more equitable is the coverage of services. Results show that although wealth inequity exists for all these services, there are noticeable reduction in inequity for all of them except immunization and skilled birth attendance. It is worth noting that the HEP implementation is indispensable for the improved equity in the service coverage.

a. Solidarity and redistribution

The regional block grants from MOFED to regional states, through which the HEP is financed, are calculated based on an equity formula. The health sector will benefit from this policy when woredas give enough emphasis to health when allocating block grants between sectors. Analysis of woreda level recurrent expenditures shows that about 17 percent go on health.

CBHIs are piloted at woreda level, with populations ranging from 34,332 to 206,730 and enrollment from 11.3 percent to 90 percent. Thus the actual risk pools vary by size, from 15,343 to 66,741 (FMOH 2012b). The premium contribution is fixed for each woreda at $7–10 per household a year. There is no redistribution between households based on income level, but because of the fixed contribution rates per household there is a net effect of smaller households subsidizing larger households, although the total effect is small. An issue of concern is that the per capita public subsidy for government employees covered under the SHI program will likely be much higher than that for CBHI enrollees (Purvis et al. 2011). Given that SHI employees tend to be the better off than CBHI enrollees, this may exacerbate inequities in government budget allocations.

b. Targeting for priority population groups

The last decade has seen a real effort to address supply-side constraints and expand primary health care coverage that will mostly benefit the rural population. The HEP is one of the strategies involved, with the construction of 15,668 health posts, as well as training and deploying over 35,000 HEWs. During the life of HSDP III (2005/06–2009/10), there was aggressive capital investment to expand coverage of health services in general and primary health care in particular. The investment cost was estimated at $1.2 billion ($322 million for construction and equipping 12,249 new health posts; $225 million for construction and equipping 563 new health centers; and $672 million for upgrading and equipping 2,167 health stations to health center level).

To tackle the shortage of mid-level health workers and availability of essential commodities and supplies, the government has invested in expanding medical schools and enrolling large numbers of students in the pre-service training program. The HSDP IV midterm independent review reported that the number of medical schools increased from five to 10 during this period. To bridge the health workforce gap at the primary health care level, Ethiopia has introduced a new cadre of health workers—health officers, trained to provide many basic public health and clinical services. The Pharmaceutical Fund and Supply Agency was set up in 2007 to procure equipment and commodities and deliver them to facilities. One study (FMOH 2011) reported major improvements in stock-outs of essential commodities in primary health facilities. For example, more than a quarter of health centers and health posts were found to be stocked out of BCG vaccine on the day of visit.
Targeted subsidies are allocated to cover CBHI contributions for indigents, accounting for about 10 percent of the population in each pilot woreda. The fee-waiver screening and identification of eligible beneficiaries are conducted with community participation. The selected beneficiaries are given a certificate to entitle them to free health care services. The experience is diverse across regions and a recent review of the health sector reform recommended further improvement in “the targeting and identification of the right beneficiaries” (Purvis et al. 2011). All public health facilities are expected to post lists of exempted services in the waiting area.

C. Human resources for health (HRH) policies

1. Current status of HRH

Table 3: Number and status of health workers in Ethiopia

<table>
<thead>
<tr>
<th>Health worker</th>
<th>Current number per 1,000 population a</th>
<th>Qualifications</th>
<th>Government determines the number of new entrants</th>
<th>Number of newly licensed per year b</th>
<th>Number of years of education</th>
<th>Number of newly licensed per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>0.03</td>
<td>Secondary school</td>
<td>Yes</td>
<td>1,517</td>
<td>At least 6 years of university, including one year of internship</td>
<td></td>
</tr>
<tr>
<td>Health officers</td>
<td>0.02</td>
<td>Secondary school</td>
<td>Yes</td>
<td>1,415</td>
<td>4 years of clinical training and internship</td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>0.26</td>
<td>Secondary school</td>
<td>Yes</td>
<td>1,227</td>
<td>Professional/specialized nurses: 3 years at university Level IV nurses: 3 years at college</td>
<td></td>
</tr>
<tr>
<td>Midwives</td>
<td>0.02</td>
<td>Secondary school</td>
<td>Yes</td>
<td>333</td>
<td>Bachelor of Science Midwives: 3 years at university Diploma midwives: 3 years at college</td>
<td></td>
</tr>
<tr>
<td>Health extension workers</td>
<td>0.39</td>
<td>Secondary school</td>
<td>Yes</td>
<td>2 for 3,000–5,000 population c</td>
<td>1 year</td>
<td></td>
</tr>
</tbody>
</table>

b. The annual intake of medical universities and colleges has been increasing over time. Data presented in this table is for the most recent year with data available (2009/10). Source: Feysa et al. 2012.
c. Training for HEWs has been conducted in campaign mode so far, and has not been part of the regular training program.

There is substantial variation in health human resources stock between regions. For example, the health worker density per 1,000 population is in a range of 0.01–0.33 for physicians, 0.003–0.06 for health officers, 0.07–1.18 for nurses, 0.01–0.08 for midwives, and 0.23–0.70 for HEWs. No data are available for distribution of health workers at primary care level or among specialties.

2. Labor market dynamics

There is no particular financial incentive available for health workers to work in rural areas. Altruism is a key factor. About half the HEWs listed “to help the community” as their primary reason in joining the HEP. Indeed, disincentives abound for working in rural areas. Studies show that nurses and particularly doctors deployed to rural areas tend to rapidly transfer to an urban posting not long into their career. The most important reasons for leaving the rural area were dissatisfaction with salary (more among doctors) and location (more among nurses) (Feysa et al. 2012).

The government has developed a mechanism to intervene in the health labor market, and deploys physicians who have graduated to public health worker posts by lottery. The objective is to make rural assignment impartial and provide equality of opportunity.

Training institutions have been established in regions that require special attention to provide mid-level and community-level training, including nursing, pharmacy technicians, laboratory technicians, and HEWs. The government has also made efforts to offer opportunities for postgraduate training, particularly for professionals (e.g., nurses) who served in remote health facilities (such as those in Tigray). HEWs and health officers are required to have a rural background and are trained in a rural context, which has helped subsequent rural deployment.

Documented factors that affect the productivity of health workers include inadequacies of both pre-service and in-service training, lack of accountability arrangements, and adverse working environments. An HEP evaluation conducted in 2010 indicated that challenges in providing services include lack of means of transport and communication systems, irregular supply of commodities, lack of promotion and refresher courses, and low remuneration (CNHDE 2012).

3. Flexibility of HRH workforce

HEWs and health officers are examples of the country’s flexibility in developing the HRH workforce, with relatively shorter training period and lower entry bars. They are recruited based on nationally agreed criteria that include residence in the village, capacity to speak local language, graduation from 10th grade, and willingness to remain in the village and serve communities. Selection is done by a committee comprising members nominated by the local

---

5 The three regions with the smallest populations are excluded: Gambella (332,599), Dire Dawa (360,183), and Harari (193,002).

6 Adverse working environments covers a range of issues, including high workload, lack of equipment and supplies, and physical condition of the work place.
community and representatives from the woreda (district) health office, the woreda-capacity building office, and the woreda education office.

All selected HEWs go through a year-long training, which includes both theoretical training in training institutions and practical training in health centers. The theoretical training is provided in technical vocational education centers under the Ministry of Education. Upon graduation, HEWs are assigned to their home villages to provide HEP health services. The village council and the health center support the HEWs. Training in providing community-based care, such as treatment of sick children and the conduct of clean and safe deliveries, and some refresher courses are also provided to some HEWs.

D. Sequencing of reforms

1. How and why were the relevant UHC reforms put into effect?

The HEP was launched in 2003/04 first in the four big agrarian regions, expanded to the remaining regions in later years tailoring to the particular requirements of pastoral areas, and more recently expanded to urban areas. The overall goal is to create a healthy society and reduce maternal and child morbidity and mortality (FMOH 2007).

The HEP was initiated to improve access to primary health care in rural communities in the shortest time possible. The key motivations for launching it included low coverage of high-impact interventions, low access to health services particularly among the rural poor, shortage of health workers, and weak institutional synergies to expand primary health care.

Health financing reform (covering the initiation of health insurance and the fee-waiver system) was introduced to increase overall resources for the health sector; increase efficiency in the use of available resources; promote sustainable health care financing; and improve the quality and coverage of health services.

2. Actors

The HEP was initiated and is led by the government, particularly the FMOH, MOFED, and Ministry of Education. Experiences with earlier approaches using community health workers (such as traditional birth attendants) informed its design. Experience was also shared with Kerala State, India, for South-South learning. The government demonstrated its strong political will and commitment for the program by covering the cost of its design, curriculum development and training of HEWs. The government also covered the salary of HEWs by making them civil servants with defined career paths. External support was sought and successfully mobilized for capital investments such as in building health posts and procuring equipment, for purchasing commodities and supplies, and for capacity building.

The Protection/Promotion of Basic Services (PBS) program started as an initiative supported by the World Bank in 2005/06, and initially funded through the World Bank Project. The program

---

7 Amhara; Oromia; Southern Nations, Nationality and Peoples; and Tigray.
has since grown to a multi-donor program with nine supporting partners in 2011/12. Since 2006/07, contributions from PBS ranged from 1.3 to 1.7 percent of GDP and 10–20 percent of domestic revenue. PBS finances the recurrent costs of basic service provision in social sectors, including salaries, which account for about 66 percent of PBS budget. The average growth rates of basic service salaries and PBS funding is almost identical. This implies that PBS has played a key role in supporting the incremental salary cost of basic service providers (e.g., HEWs) over the past few years (World Bank 2013).

For health financing reform, prototype legal frameworks and operational manuals were developed at the federal level, with continuous technical assistance from subsequent USAID projects. These projects include the Essential Services for Health in Ethiopia (ESHE-I and ESHE-II) from 2001–08, and the current Health Sector Financing Reform project. Other development partners, including the World Bank and the Bill & Melinda Gates Foundation, provide technical assistance on health financing.

## Part II. Lessons to be shared

Through the implementation of a series of HSDP plans since 1997/98, Ethiopia has made steady progress in improving health outcomes and moving toward UHC. Results from Ethiopia DHS 2005 and 2011 indicate that under-5 mortality has decreased from 123 to 88 during the period between two surveys. Total Fertility Rate has decreased from 5.4 to 4.8 during the same period, which is associated with the significant expansion of contraceptive use, 14.7 percent to 27.3 percent. Moreover, these achievements have been inclusive, observed among all income groups (Figure 7).

### Figure 7. Under-5 mortality rate (left panel) and Total Fertility Rate (right panel), by income groups, 2005–2011


The country is still facing many challenges in achieving MDG 5 (reducing maternal mortality), expanding some essential interventions such as skilled birth attendance and improving quality of services provided. The health insurance schemes and management institutions are at their
formative stages. A significant amount of consultations and capacity building exercises will be needed along the course to refine the scheme designs and enhance implementation capacity. Decision makers and practitioners in the country acknowledge these challenges and are taking steps addressing them. For example, the theme of the 2013 annual review meeting was set as “the last lap toward the MDGs: promise renewed to end preventable maternal and child death in Ethiopia”. During the meeting, many key issues related to maternal health improvement and service quality enhancement were highlighted. The high level officials responsible for health insurance schemes are seeking knowledge and experience exchange with international experts and peer countries. They are also planning a comprehensive capacity-building program that will fit the country’s long-term needs.

Despite the challenges Ethiopia is still facing, the bold steps taken in establishing HEP may offer some lessons from which other countries could learn.

A. Health Extension Workers

The introduction of HEWs, the backbone for the HEP, has greatly improved availability of health workers, particularly for rural areas, in a relatively short period of time (Figure 8). As a result of the rapid large-scale deployment of HEWs, on average about 2,500 people are served by one HEW. HEWs serve communities and households through an innovative approach by spending a significant amount of time to visit communities besides staffing health posts. In addition to providing service care, one of their important roles is to train households on healthy living styles and care-seeking knowledge. As of 2011/12, more than 12 million households (about 70 percent of the eligible population) graduated as model families that met certain defined criteria in knowledge and behavior about environmental management, personal hygiene, and care-seeking knowledge (Bilal et al. 2011).

Figure 8. Population to Health Human Resource Ratio in 2009–10, by Region and HEW Scenario
HEWs made it possible to target those who mostly need improvement in their access to services. In Ethiopia, evidence shows women who are poor and less educated tend to underutilize essential services. For example, according to EDHS 2011, 57 percent did not receive antenatal care among women who gave birth during the past five years. This indicator is 65.7 percent for women without any education, 44.6 percent for women with primary education and 10.5 percent for those with secondary education. However, for women with less education who receive antenatal care, they are much more likely to receive care from HEWs than from doctors/nurses, which is due to their easy access to such services (Figure 9). Consequently, equity between people with different income levels is also improved as shown in previous section.

**Figure 9. Antenatal care received, by education levels**

![Antenatal care received, by education levels](image)

Source: Author’s calculation based on 2011 EDHS data.

Besides providing services directly to communities, HEWs also take important roles in training model families and mobilizing the Health Development Army (HDA). Both model families and the HDA were designed to improve households’ knowledge on healthy practices and promote appropriate care-seeking behaviors. By 2010/211, more than 12 million households graduated as model families, covering 70 percent of eligible households. As of 2012/2013, 364,070 HDA groups were established.

The successful deployment of HEWs can be attributed to the following main factors:

- Deep community engagement: The HEP is a program deeply rooted in communities. Through this program primary level preventive services and basic clinical services are provided to communities and households. It encourages families to be responsible for their own health by promoting knowledge dissemination and adoption of hygiene practice, feeding practice, appropriate health seeking behavior from professionals, and proper environmental management. This community outreach ensures sense of ownership and sustainable changes in communities. Communities are deeply engaged in selecting candidates, which greatly contributed to making sure
HEWs stay in the community.

- Strong political commitment: The HEP is long-term commitment by the government of Ethiopia. From its inception in 2003/04, it has lived through changes of leadership in the Ministry of Health and in the country itself. Although the specific focus changed over time, it has always been on top of leaders’ agenda. Related issues are regularly reviewed and discussed between FMOH and development partners through the Joint Consultative Forum (JCF) cochaired by the minister of health and chair of HNP development partner group. They are also reviewed by FMOH and regional health bureaus through bimonthly regional steering committee meetings chaired by the minister of health.

- Liaison with development partners: The implementation of HEP benefited from the financial support for local recurrent expenditures and broad community empowerment activities under the Promotion of Basic Services (PBS) supported by multiple development partners including the World Bank. PBS supports a variety of measures designed to improve service quality and local government capacity to manage basic services. These measures range from financial transparency and citizen education in budget issues, to grievance redress mechanisms and social accountability through structured feedback.

B. System-wide interventions centered on the HEP

Instead of standing out as a program that is exceptional to the health system, HEP has been seamlessly integrated into the public health system and sector management. HEWs have formed the base of the pyramid of the public health system, receiving guidance and supervision from health centers, district hospitals, as well as health authorities at all levels from woreda to central level. The Annual Review Meeting of the health sector, as an important process of assessing past years’ performance and planning next year’s work, always includes the HEP as an important component. Each year, new targets are determined by region, and actual results are evaluated against the target. Challenges are also identified for all levels of decision makers to follow up.

The implementation of the HEP cannot be successful without a series of national policies creating an enabling socioeconomic and political environment. These include devolution policy, civil service policy, vocational education policy, and health policy.

The power devolution to local government makes it easier for a community approach to be adopted, as they share principles of local empowerment, participatory governance, demand-responsiveness, administrative autonomy, greater downward accountability, and enhanced local capacity. Ethiopia introduced decentralization as the strategic tool for empowering citizens and devolving power to lower levels, so that a conducive environment could be established to enhance basic service delivery. As a result, a four-tier governance structure was created with the center, the regions, the zones, and the woredas. Within this decentralized context, HEWs were mandated civil servants and included as an integral part of the health service delivery system; their salaries are paid from block grants transferred from MOFED to regions and
woredas. Putting 38,000 people on the payroll is a substantial financial commitment, particularly for a country with limited resources. The fact that this program has been financed for ten years without major delays has been critical in allowing the program to contribute steadily to UHC.

The HEP has benefited from an innovative collaboration with the Ministry of Education: The Ministry of Health has undertaken the training for health extension workers through their network of technical and vocational training institutions. They developed an occupational standard and curriculum for each level of the health extension services. After the majority of HEWs were deployed, since 2009, the Open University UK (OU), in partnership with UNICEF and African Medical and Research Foundation, is supporting the development of an innovative program of print-based blended learning resources to teach the theoretical component and to train HEWs on practical skills in local health centers and district hospitals.

The introduction of HEWs greatly increases availability of health human resources for underserved populations in a short period of time. In rural and remote areas where they are introduced, there is severe shortage of physicians as well as lack of incentives for health professionals to work. They have relatively lower entry bars, receive less training, and work in rural communities. For the types and modalities of services that HEWs provide, people would have chosen other health professionals if they could afford it. For the level of the training, it is also difficult for HEWs to work in other health professional categories, such as nurses, midwives, and physicians. It is worth noting that HEWs were not introduced as a short-term solution, rather with a vision for them to be an integral part of the health system. This is the cornerstone of the HEP that is being institutionalized.

There are discussions in setting policies on developing career paths for HEWs. The government is in the process of upgrading health extension workers from level III to level IV. The core objectives of the upgrading program are to improve the extent and quality of HEP services, to fill gaps identified in previous level III HEP trainings, to improve the knowledge, skill, and attitude of HEWs, to make a significant contribution in achieving the health-related MDGs, and to upgrade careers of HEWs.

![Figure 10. Number of HEWs vs number of health posts constructed](image)

Equipping HEWs with hardware is indispensable for the implementation of the HEP. With MOFED covering salaries of HEWs, the Ministry of Health focused on capital investment so that all critical inputs could be in the same place and at the same time for service delivery. Training and deployment of HEWs were well coordinated with infrastructure and functionality improvement of health posts. The FMOH also uses resources from the MDG Performance Fund (harmonized support from partners) to provide in-kind transfers, ensuring availability of drugs, commodities, supplies, and capacity-building activities. Figure 10 shows that the deployment of HEWs and construction of health posts are progressing in parallel, and achieved the target of two HEWs per health post in 2009/10.
References


——. 2005/06 Annual Performance Report

——. 2006/07 Annual Performance Report

——. 2007/08 Annual Performance Report

——. 2008/09 Annual Performance Report

——. 2009/10 Annual Performance Report

——. 2010/11 Annual Performance Report

——. 2011/12 Annual Performance Report

——. 2012/13 Annual Performance Report


