Ethiopia and the Health Extension Programme

Learning for Action Across Health Systems – Case Study

Sophie Witter and Abiodun Awosusi

31 October 2017

Oxford Policy Management

About Oxford Policy Management

Oxford Policy Management (OPM) is committed to helping low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reform.

We seek to bring about lasting positive change using analytical and practical policy expertise. Through our global network of offices, we work in partnership with national decision makers to research, design, implement, and evaluate impactful public policy.

We work in all areas of social and economic policy and governance, including health, finance, education, climate change, and public sector management. We draw on our local and international sector experts to provide the very best evidence-based support.

Oxford Policy Management Limited
Registered in England: 3122495

Level 3, Clarendon House
52 Cornmarket Street
Oxford, OX1 3HJ
United Kingdom

Tel: +44 (0) 1865 207 300
Fax: +44 (0) 1865 207 301
Email: admin@opml.co.uk
Website: www.opml.co.uk
Twitter: @OPMglobal
Facebook: @OPMglobal
YouTube: @OPMglobal
LinkedIn: @OPMglobal

Acknowledgements

We would like to thank all key informants for their time and candour. In particular, we would like to acknowledge the support of Dr Kahsu Bekuretsion, who was invaluable in supporting and enabling our programme and visit. We also acknowledge the guidance and financial support of the Bill and Melinda Gates Foundation (BMGF).

Executive summary

Background

Ethiopia is Africa's second most populous country, with an estimated total population of 99.3 million. Although it is a low-income country with a *per capita* income of US$ 590, it is nonetheless one of the fastest growing economies in the world. Poverty levels were cut from 55.3% in 2000 to 33.5% in 2011 and it made remarkable progress toward achieving the health-related Millennium Development Goals (MDGs) 4, 5, and 6. One of the policies credited with making a substantial contribution to these gains is the government's flagship Health Extension Programme (HEP), which is the subject of this case study.

Tracer policy

The HEP, launched in 2003, which developed a new cadre of paid female community health workers (CHWs), supported by volunteers at community level, was selected as a tracer policy because of its contribution to the achievement of the health MDGs and because of the growing interest in the potential contribution of CHWs and task-shifting to improve outcomes within health systems. This case study seeks to: (1) provide insights into the contribution of international evidence to (and learning from) the conceptualisation, internalisation and contextualisation, operationalisation and evaluation of the HEP; and (2) gather country-level stakeholders' perspectives on how they could better use and contribute to other countries' experience.

Key informant interviews (KIIs) are the main source of information, backed up by document review. A total of 18 informants were selected purposefully and interviewed face-to-face between 18 and 22 September 2017, at national level and in Tigray region. Key informants included government health officials at federal, regional, and district level, including a health extension worker (HEW). We also interviewed staff from development partner organisations, researchers, and consultants with relevant experience.

Findings

The HEP had largely home-grown roots, although it was in a general sense inspired by the Alma Ata Declaration of 1978 and wider international experiences, such as the Chinese 'barefoot doctors'. It was directly inspired by cross-sectoral learning from agricultural extension workers and informed by the experience of community mobilisation during the civil war period in Ethiopia. The HEP was developed in the face of opposing international opinion and evidence at the time, and so provides an example of when not to be influenced by international evidence, given its later success in this context. The Ethiopian government was convinced that a community-based approach was the only realistic and feasible approach, given the scale of the country, its huge population needs, limited infrastructure of health facilities, and low health financing resources.

The general pattern observed in Ethiopia is for the government to do its own problem diagnosis, then seek external insights as policy responses to problems are developed. At the stage of developing national guidelines for the HEP, for example, relevant

international programmes such as the Kerala CHW programme were visited. Piloting is carried out and roll-out is swift if the intervention is seen as effective. There is active monitoring, though less frequently full-blown, independent evaluations. Learning across sites internally (e.g. through internal study tours and meetings) is encouraged. There is a strong focus on results and the programme has continued to adapt to the rapidly changing context in Ethiopia. There has been an active approach to sharing lessons from the HEP with other countries, especially in the Africa region.

Recommendations

This case study highlights the importance of engaging with and developing domestic mechanisms at national and subnational levels to be able to prioritise, analyse, filter, and share experiences. Learning *across* systems (understood as countries) is useful but secondary, given their different contexts, needs, and cultures. It suggests a focus on strengthening local organisations that are delivering internal and south–south learning, and which could be further developed.

Table of contents

List of abbreviations

ANC	Antenatal care
BMGF	Bill and Melinda Gates Foundation
CHW	Community Health Worker
FMoH	Federal Ministry of Health
HDA	Health Development Army
HEP	Health Extension Programme
HEW	Health Extension Worker
HSDP	Health Sector Development Programme
IIPHC	International Institute for Primary Healthcare
KIIs	Key informant interviews
M&E	Monitoring and evaluation
MCH	Maternal and child health
MDGs	Millennium Development Goals
MNCH	Maternal, newborn, and child health
NCDs	Non-communicable diseases
OPM	Oxford Policy Management
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary healthcare
PNC	Postnatal care
WHO	World Health Organization

1 Introduction

The BMGF wishes to better understand how low- and middle-income countries around the world improve the performance of their public health systems. This includes questions such as why, when, and how countries learn from the experiences of each other. Importantly, the BMGF also wishes to better understand what could be done better, or differently, in future to enable countries to learn from each other.

The BMGF has appointed OPM to undertake this analysis through literature reviews, expert meetings, and a series of case studies of relevant reforms. Case studies are being selected from countries that were low income in 2000 and performed well in meeting MDG targets by 2015 (i.e. had achieved at least 1.5 on the Centre for Global Development's health score). From those countries that met these criteria (23), eight were selected as initial case study candidates on the further criteria of geographic spread, representation of Francophone Africa, and feasibility for the team to achieve access to appropriate interviewees. The counties selected were Bangladesh, Nepal, Solomon Islands, Cambodia, Burkina Faso, Ethiopia, Georgia, and Rwanda. This case study focuses on Ethiopia.

More specifically, this case study focuses on the HEP in Ethiopia. The HEP is a successful reform programme that has received considerable interest within and outside Ethiopia, particularly because of its contribution to the achievement of the health MDGs. There is also a growing interest in the potential contribution of CHWs and task-shifting within health systems, which the HEP can provide insights on.

This study seeks to provide insights into the contribution of international evidence to the overall evidence base used to guide conceptualisation, formation and contextualisation, operationalisation, and evaluation of the HEP, as well as how it has been used to influence others. We also gather country-level stakeholders' perspectives on how they could better use other countries' experience. It answers two main questions:

- How do decision makers at country and regional levels access ideas and evidence about how to make their health systems work better and where does international evidence fit in that picture?
- What gaps do decision makers at country and regional levels perceive in their access to appropriate health system evidence in general, and evidence about other countries' experiences in particular?

A better understanding of these issues will contribute toward the wider project's final recommendation to the BMGF on future investments that may facilitate health sectors in low-income countries to learn from the successes and failures of other countries as they make their own system reforms.

1.1 Country context

Ethiopia is Africa's second most populous country with an estimated total population of 99.3 million.[1] Although it is a low-income country with a *per capita* income of US$ 590, it is one of the fastest growing economies in the world[2]. It has experienced sustained economic growth over the past decade due to a series of government policies, investments and partnerships in strategic sectors, particular services, infrastructure,

agriculture, and manufacturing. The country has grown at an annual average of 10% since 2003 and is moving toward lower-middle income status within the next 10 years[2]. Poverty levels were cut from 55.3% in 2000 to 33.5% in 2011.[2]

The World Bank's Fifth Economic Update on Ethiopia in 2016 concludes that the country has tremendous opportunities for sustained inclusive growth but challenges regarding the expansion of the urban labour force, civil unrest, and an import/export imbalance remain.[3] A key recommendation of the World Bank's report is the need for increased investment in vocational and technical training programmes to build needed skills and sustain the productivity of the labour market in key sectors.

Ethiopia made remarkable progress toward achieving the health-related MDGs 4, 5, and 6. Under-five and maternal mortality were cut by 67% and 71%, respectively.[3] The country recorded a 90% reduction in the incidence of HIV, a 73% reduction in malaria-related deaths, and a 50% reduction in tuberculosis deaths.[4] The country achieved the MDG targets for under-five mortality and nearly achieved the targets for maternal mortality ratios and infant and neonatal mortality rates. The percentage of women who receive one antenatal care visit increased from 6% to 62% between 1990 and 2015. There was an increase in facility deliveries from 5% in 2000 to 26% in 2015. During this period, the skilled birth attendance rate rose by 766.7%, while the percentage of married women with unmet needs for family planning fell from 37% in 2000 to 22% in 2015.[4]

Several strategies have been deployed by the government to improve population health, linked to evidence-based health development strategies and plans.[4] On the one hand, the 'One Plan, One Budget and One Report' strategy, introduced in 2011, facilitated effective coordination of domestic and external heath investments, programme implementation, and evaluation.[4,5] On the other, investment in health system strengthening and progress on socioeconomic determinants of health also played a major role. Significant increases in primary school enrolment rates, access to clean water, and a reduction in the number of people living on less than US$1.90 a day by half during the MDG era are key contributing factors.[2,4]

Despite sustained economic growth and poverty reduction, there are, however, still regional disparities in poverty levels and access to essential social services.[3] Although the Government of Ethiopia is accelerating its investments in pro-poor development programmes with the support of development partners, government expenditure on health as a percentage of total health expenditure is low (4.9% in 2014), and far below the 2001 Abuja Declaration target.[4] Development partners and households contributed a sizeable proportion of health expenditure during the MDG era. In the medium to long term, it is expected that government expenditure on health will increase as the economy grows to sustain the gains made during the era of the MDGs and fast track progress toward achieving the country targets of the Sustainable Development Goals.[4]

1.2 Description of the HEP

In the 1980s, Ethiopia had health development agents providing community-based care. However, they faced the challenges documented in many settings of multiple, parallel programmes, which overloaded these volunteers. They were supported by different non-governmental organisations, were commonly male, and often had poor literacy levels.

The government introduced the Accelerated Expansion of Primary Health Care Coverage and the HEP in 2003 through a multisectoral, inter-ministerial partnership involving the ministries of Health, Finance, Education, and Labour.[6] The HEP aimed to improve access to healthcare services in rural areas, where more than 80% of the population reside.[6,7] It combined deployment of paid community HEWs with unpaid community health promoters, now called health development army (HDA) volunteers.

The aim of the HEP was to train and deploy 30,000 HEWs across 15,000 *kebele*s (sub-districts) to achieve universal primary healthcare access by 2009.[5,7] Several regions adopted it immediately. Training centres were established and materials prepared. The government committed to constructing one health post per *kebele*, with the help of the community (serving an average of 5,000 people). There were relatively few health posts before the roll-out of the HEP. Partners assisted with equipment costs, training, and advocacy. There are now around 70,000 nationwide.

Between 2004 and 2009, rural community HEWs worked largely on health promotion and disease prevention. In 2010, diagnosis and treatment was added to their responsibilities.[8] The HEP was subsequently scaled up in urban and pastoralist communities across Ethiopia through the Urban HEP, launched in 2009, through which female clinical nurses were trained for three months to work as urban HEWs.[8]

Community HEWs were first trained in Ethiopia in 2004.[7,8] HEWs undergo one year of pre-service training by trainers employed within the formal health system. The ministries of Health and Education coordinate trainings that take place at technical and vocational training facilities across the country. The training included 16 packages covering family health services, disease prevention and control, environmental sanitation and hygiene, and health education. They also receive one month of in-service training per year. The Federal Ministry of Health (FMoH) ensures refresher training is integrated around one curriculum. The programme has an implementation handbook, which is translated into local languages.

HDAs receive a one-week training in similar areas but the depth is less than for HEWs. There is one model household per five households, whose role it is to share good practice, particularly on hygiene and disease prevention. Model household leaders meet monthly with each other within the *kebele* to share ideas and support one another. New cadres called community health volunteers and health development volunteers have also been incorporated to facilitate further uptake of primary healthcare services at the community level.[8]

The village health committee is involved in the selection of HEWs, while *kebele* councils ensure continued community participation in the implementation and evaluation of the HEP.[5] HEWs are female, recruited normally from their community, and need to have completed Grade 10 at school. They are responsible for health promotion, disease prevention, and diagnosis and treatment of uncomplicated, common illnesses including malaria, pneumonia, diarrhoea, and malnutrition in the community. They also ensure timely referral of severe cases to appropriate personnel at health facilities. Each HEW is expected to spend 75% of their time within the community providing outreach services and the remainder at the health post.[5, 6] Each *kebele* has two HEWs, so that at any given moment one is present in the community and one at the health post.

District supervisor teams supervise HEWs. This team includes a medical officer, a health officer, public health nurse, and an environmental and health education expert. HEWs have quarterly supervisory visits from the district and also receive support from

their health centre, which provides basic supplies such as malaria treatments, oral rehydration solutions, and family planning commodities. HEWs supervise HDAs and other lower cadre community health volunteers. They also engage with similar community-based workers across other sectors as part of the *kebele* cabinet, which includes water, agriculture, and education workers.

Household records are kept at the health post, although there is now a pilot focusing on making these records electronic.

HEWs receive salaries from the *woreda* (district), as formal employees, unlike the HDA volunteers who usually receive non-financial incentives, such as community recognition at celebrations.[8] The programme is financed from the health allocation by national and subnational governments and external financing from development partners, particularly bilateral and multilateral donors and public–private partnerships – including GAVI, the Global Fund, the US President's Emergency Plan for AIDS Relief (PEPFAR), and the World Bank.[6]

The Ethiopian health system is decentralised into three tiers: Tier 1 has Primary Healthcare (PHC) units, which comprise a health centre, five health posts, and district hospitals.[5] Tier 2 includes general hospitals and specialist and teaching hospitals make up Tier 3. By 2014, more than 35,000 HEWs had been trained and deployed to communities, providing vital linkages to all tiers, particularly Tier 1.[7] There has been a steady increase in the proportion of the population covered by the programme and attendant improvement in key indicators: antenatal care (ANC) and postnatal care (PNC) coverage, use of insecticide-treated nets and contraceptives, delivery with skilled birth attendants, and immunisation coverage.[6, 7]

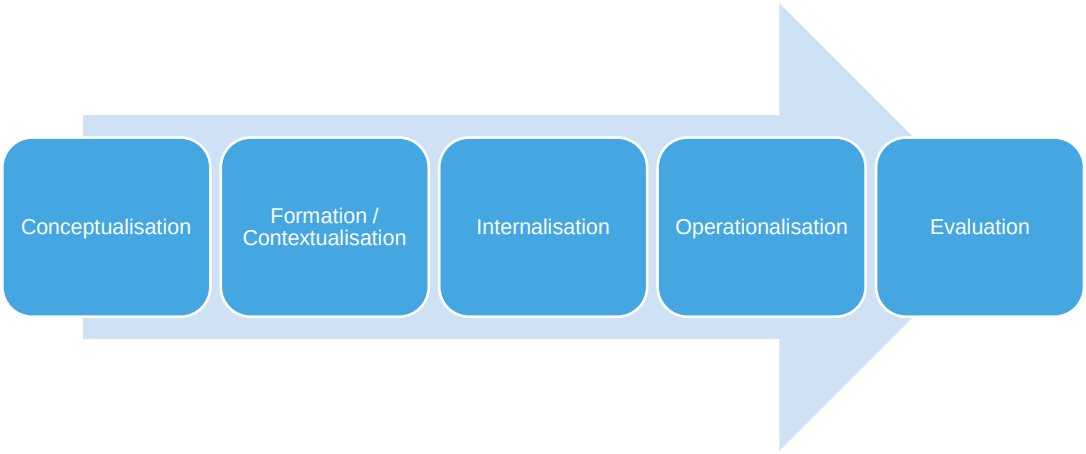
2 Methodology

We analyse the reform processes that have led to the development, adoption and scale-up of the HEP in Ethiopia. Our aim is to understand *what*, *why*, and *how* learning from other countries played a role (if at all) in these reforms, and more broadly how the Ethiopian government uses and shares evidence on health systems.

This is a case study of health system reform in a low-income country[1] that made significant progress against the health-related MDGs by 2010. This progress was assessed by replicating an approach used by the Center for Global Development (Leo & Barmeier, 2010) but focusing specifically on MDGs 4, 5, and 6 using their publicly available dataset.[2]

We use a phased conceptual framework of international policy transfer to guide the exercise and a narrative approach to describe how the reform evolved. The conceptual framework (depicted in Figure 1) starts with conceptualisation. This is the beginning of the policy transfer process and refers to the development of the broad idea of the policy itself. Formation and contextualisation refer to the processes by which the key conceptual and operational tenets of policy are concretised and then modified in light of the social, economic, political, and cultural norms of the country. Internalisation is the process by which a formed policy is accepted and transformed by in-country policy systems. Operationalisation is the process of actually carrying out or implementing the reform. Finally, evaluation refers to critical assessment of any component of the reform. These concepts are outlined in further detail in the project's previously published Landscaping Review Part 3.[3]

Figure 1: Phased conceptual framework for international policy transfer



KIIs are the main source of information, backed up by document review. Informants were selected purposefully and interviewed between 18 and 22 September 2017, with a view to including a wide range of participants who have played a direct role, either

[1] We use the World Bank definition of low income.
[2] Dataset accessed on 19 June 2017. Available at www.cgdev.org/page/mdg-progress-index-gauging-country-level-achievements.
[3] The phased conceptual framework is marginally adapted from one constructed in the project's Landscaping Review Part 3, which is available at www.opml.co.uk/publications/learning-action-across-health-systems-landscaping-review-part-3.

past or present, collectively across each phase of the selected reforms. Interviews were conducted face-to-face by both authors and were supplemented by a short field visit to Tigray region to interview stakeholders at all levels of the health system. Our 18 key informants included government health officials at federal, regional, and *kebele* level, including HEWs. We also interviewed partner organisation members, staff of non-governmental organisations, researchers, and consultants, all chosen purposively for their knowledge of the topic.

An interview topic guide was developed in advance with sections and suggested prompts for each of the policy transfer phases, as well as general questions on whether these reform experiences were common in Ethiopia, whether there are particular barriers to learning in policy reform, and whether and how Ethiopia had shared its knowledge regarding these reforms with other countries.

Each interview lasted approximately one hour. Notes were taken during the interviews and subsequently analysed by both authors individually. These were then compared by the first author. Data from the document review was primarily used to corroborate information gathered during the interviews, as well as for background information in advance of the interviews. The study was approved by the Ethical Review Committee of OPM.

Data from the KIIs and document analyses were used to address, at each stage of the policy transfer framework, what, why, and how (if at all) learning across countries played a role.

The main study limitation was the limited time to conduct the interviews (one week in-country). With more time, a wider group of informants could have been reached, which would have yielded even richer insights. Some of the key early stakeholders, such as the former ministers of health Dr Tedros Adhanom and Dr Kesetebirhan Admasu, are now in such senior positions in the World Health Organization (WHO) that we were unable to access them for interviews. However, interesting as they would have been, those additional interviews are unlikely to have changed the main findings of this report.

3 Results

Part 1: How did interviewees position themselves in relation to the six phases of policy transfer?

Most of the informants had worked within the system for more than two decades in policy design and programme implementation. While some have focused on specific technical issues, such as maternal and child health (MCH) or sexual and reproductive health, others had useful insights on broader themes such as PHC, community health system strengthening, and regional and national health system reforms. The combined experience from the state and non-state actors provided detailed insights into the learning processes within the Ethiopian health system.

Each interviewee engaged with or contributed to the evolution of the HEP at one or more stages. While some actors were instrumental in the conceptualisation and contextualisation of the programme, others had largely helped to operationalise and evaluate it. A few are involved in the ongoing iteration and development of a second-generation HEP.

Part 2: Use of systematic evidence and learning from other countries with respect to the conceptualisation stage

The HEP policy appears to have largely home-grown roots, though it was in a more general sense inspired by the Alma Ata Declaration of 1978 and wider international experiences, such as the Chinese 'barefoot doctors'. It was developed in the context of a civil war against the Derg military regime, which began in 1974, in which the Tigrayan People's Liberation Front joined with other liberation fronts to take control of the government, forming the Ethiopian People's Revolutionary Democratic Front in 1991. The new government had both a strong motivation to improve the livelihood of the wider population (and hence its own legitimacy) and also an agrarian focus, with experience of organising services from the grassroots during the long civil war period.

The FMoH launched the National Health Sector Development Programme (HSDP) in 1997/98 with a focus on prevention and equity.[5] It was recognised at that stage that behaviour change could only be achieved with greater community engagement, which was needed to tackle the poor MCH indicators.[4] The Tigray region started a number of experiments with model families, drawing inspiration from the agricultural sector extension workers. In 1998/99, four *kebele*s were selected to develop the model, a package focused on health education was drawn up, and community volunteers recruited, supported by the health facility staff and supplied by the Relief Society of Tigray. At this stage the community agents were not paid. Motivation was said to be high given the history of struggle in the region. The early experiences were reviewed at a regional conference in 2000, which after much debate decided to scale up the experiences from Tigray's central zone.

[4] Dr Admasu Kesete, former Ethiopia Health Minister, has recently told the story of the HEP programme: see here.

The first national workshop was held in 2002. Dr Tedros Adhanom, then regional health director of Tigray, championed the policy. A team was established representing all regions and reporting to then-Prime Minister Meles Zenawi to develop more detailed guidelines. During this period, the experiences of other countries or states, such as Kerala, were consulted.

It is interesting to note that the HEP was developed in the face of opposing international opinion and evidence at the time. In the 1990s, the international consensus was that CHWs had been tried and found to fail, due to problems maintaining motivation, supervision, skills, and coverage.[5] Despite this, the Ethiopian government was convinced that a community-based approach was the only realistic and feasible approach, given the scale of the country, its huge population needs, limited infrastructure of health facilities, and low health financing resources. Need was the mother of invention. Insights from other countries were sought, but more to inform design (see below) than as part of the original conceptualisation, according to most key informants.

In the first phase, alignment between the objectives of the HSDP, implemented in phases, and the MDGs, with donor support to tackle health worker shortages and expand access to health services, helped to support early programme development.[4, 12]

Parts 3 and 4: Use of systematic evidence and learning from other countries with respect to the contextualisation and internalisation stages

Questions about contextualisation and internalisation do not apply in this case as the policy was home-grown, so our focus is on how the policy design and development took place.

The HEP was based on several components, all found individually in some other settings but combined in a specific way in the Ethiopian context. These included:

- A focus on prevention and social determinants;
- The recognition that CHWs need to be paid and professionalised;
- An emphasis on women as the entry point to family health (both through female HEWs and the female HDAs);
- Strong intersectoral collaboration at the kebele level; and
- Diffusion to household level through ‘model’ households and women’s development groups.

Key informants mentioned that the national and regional leaders undertook study visits to Kerala in India to learn how the CHW programme there worked. Other programmes that were reviewed at the time included the Lady Health Worker Programme in Pakistan. However, specific lessons which had been drawn from these contexts were not mentioned, and it seems that learning for development of the programme was largely internal to Ethiopia, drawing from localised pilots.

[5] A review in 1989 highlighted the ‘unrealistic expectations, poor initial planning, problems of sustainability, and the difficulties of maintaining quality’ (Gilson *et al*., 1989).

There was a series of meetings in 2003 to evaluate the success of community health system strengthening in Tigray region. After extensive deliberation within the regions, and with strong political commitment from the highest level of government and the ruling party, the HEP was adapted and scaled up nationally.

Part 5: Use of systematic evidence and learning from other countries with respect to the operationalisation stage

Ethiopia has a decentralised health system, so implementation of any policy involves consensus building between national and regional levels. Roll-out has been nationwide, but with better performance in some regions than others. Stronger regions were paired with weaker to support the latter's implementation. States with challenging contexts, such as Afar, Gambela and Somali, received additional support from the FMoH.

The FMoH coordinated development of the programme and facilitated intersectoral collaboration for the recruitment, training, and deployment of the HEWs, working with the ministries of Finance, Labour, and Education. Regional bureaus led implementation across districts and communities. Use of evidence in this phase was largely restricted to routine internal evidence, processed through party and health technical reviews and meetings. The FMoH coordinates bimonthly and annual review meetings with Regional Health Bureaus, development partners, and other stakeholders. It also hosts technical working groups to evaluate evidence for policy formulation.

The programme was not fully formed at its start but has been developed adaptively, addressing problems as they arise – for example, supervision was not very strong at the start and this was found to be a problem, and a more systematic approach instituted, with greater links to the health centres. Curative care components were also boosted in response to demand – the original package had focused on health education, but elements like Integrated Community Case Management were added in 2008 to 2010 after piloting in the south of the country. The MCH package became a maternal, newborn, and child health (MNCH) package and emergency care was added.

Similarly, the community health information system was brought in a few years after the launch to better track progress and disease burdens. As with all components, it was tested in a few *woreda*s and then scaled up. The HDA component was also developed after the start of the programme, in 2010/11, in recognition of a lack of progress in some elements, specifically supervised deliveries. Closer cooperation with existing women's development groups and the design of a traditional ambulance to get women to health facilities also contributed to the substantial increase in supervised deliveries over 2011 to 2016.

Adaptation was also needed for particular contexts. The nomadic and urban areas were particularly challenging for the standard HEP model. Consequently, there have been innovations to tailor to these areas. For example, in 2016 an urban HEW programme was piloted in Addis Ababa, focusing on households with chronic diseases and poor households with children, and using health centres as the basis for the HEWs (not health posts). The urban population was estimated at 19% of the total Ethiopian population in 2014 but it is growing fast. Operational research was conducted to test approaches that could fit to the urban context, where social bonds are less strong.

In pastoralist areas (including an estimated 12% of the population), there has had to be a relaxation of the requirement for all HEWs to be female and to have completed Grade 10 at school, a shorter training period and use of distance learning for upgrading training, greater use of mobile clinics, and incorporation of relevant technologies for these areas, such as water filters.

Part 6: Use of systematic evidence and learning from other countries with respect to the monitoring and evaluation (M&E) stage

HEWs are accountable to *kebele* council and district health leaders, who provide administrative reports to the Regional Health Bureau. The performance of leaders at all levels of health governance is evaluated by their constituencies and peers based on approved national key performance indicators. High performing households, districts, and regions are praised and encouraged to support low performing ones to ensure widespread national progress – thus, internal cross-area learning is a strong feature of this policy. A strict internal performance management system within the ruling party ensures accountability. The policy is a national flagship, and thus receives the highest attention at all meetings, keeping a focus on assessing performance and addressing any bottlenecks.

There are several independent studies on the impacts of the HEP. Admassie *et al.* (2009)[7] show, through comparative analysis of empirical data from household, facility, and village surveys across 10 districts in three regions, that the HEP increased full childhood immunisation coverage and use of bed nets but had minimal effect on ANC and PNC. They also found that the programme did not have any effect on the incidence of diarrhoea, a major cause of morbidity and mortality among children under five. A similar cross-sectional household survey showed that the HEP is associated with an increase in ANC but had no impact on facility delivery[7] – a finding which was supported by other studies.[9, 10] Supportive supervision is associated with improved community case management of malaria, diarrhoea, and pneumonia within the HEP.[11]

It is, however, interesting that these studies do not appear to have fed back into policy revision, which is driven more by internal data and reports from the grassroot level according to our KIIs. There has been no large-scale independent evaluation of the policy, perhaps reflecting the high political stakes. The policy has developed a narrative of success independent of robust impact evaluations. (All positive trends in indicators over the period are attributed to the HEW – this is not to deny its substantial contribution, but clearly there have been other contributory factors too.) Ethiopia has also managed to balance keeping the momentum that comes from a narrative of success with a lack of complacency in improving its performance continually.

For example, a second generation of HEWs is now being launched, with a wider package to respond to changing epidemiology and higher quality standards to responding to rising expectations, with HEWs able to complete an additional year of training, which also creates a sense of career progression for them. A total of 10,000 HEWs have now passed Level 4, which means they can become potentially become community nurses, based at the health centre, though still working on outreach programmes in the community. HEWs with these diplomas (the aim being to get all upgraded to this level by 2020) will be able to undertake deliveries at health posts and provide long-acting intrauterine contraceptive devices. The revised HEW policy will also incorporate non-communicable diseases (NCDs) and mental health in the HEP

package – both areas of growing concern for Ethiopia. Health posts will also be upgraded. To address the growing workload, an additional HEW will also be added to the *kebele* team, with one HEW to be based in the local school.

This continual learning-by-doing approach is crucial as the HEP, like all programmes, faces operational challenges and a dynamic context. Many first-generation HEWs now expect to move to higher positions in the health system. Attrition rates are not published but have been assessed at around 5–6% per annum, according to one informant. Communities are expecting more extensive curative services. Intersectoral collaboration is demanding for HEWs, on top of their health work. There are resource constraints, including for running the health posts, in terms of adequacy of supplies, as well as to cover transport to the *woreda*. While the HEP has notched up impressive successes, it now faces new challenges as a mature programme; it needs to continue to innovate to maintain momentum. A technical working group set up in 2017 to review the HEP may create an open, organised space for all stakeholders to contribute to this process.

Equally, the HEP is part of a wider health system facing ongoing challenges in relation to all the health system blocks. For example, Ethiopia recognises that it faces overall human resources for health challenges of motivation, quality and low health worker density. Quality of care also remains a challenge, along with financial protection, health infrastructure, data, and supplies, including logistical management systems. In addition, some areas face specific challenges for health access and service uptake.

Ethiopia is now setting itself the goal of 'transformation' – raising its ambition to provide responsive and high-quality services within a still-limited resource envelope (US$ 15.60 *per capita* in public funding, according to the National Health Accounts for 2014[6]). It has set up the Ethiopian PHC Alliance for Quality and is offering awards for the best performing *woredas*[7] (using a similar approach to the HDAs – with a leader selected to share good practice locally, as well as with other areas, through meetings, internal study tours, etc.).

While inward learning at all stages appears to have been limited, there have been consistent attempts to document the impact of the programme 'to share experience with other countries' with similar socioeconomic conditions.[13] There is strong enthusiasm to share lessons from the HEP for other countries to adopt and adapt.[13] The development of the International Institute for PHC (IIPHC) is a key step in this direction – the institute was established in 2016 to train teams from other countries how to develop rural PHC programmes such as the HEP. It collaborates with the Johns Hopkins (on community health) and Yale (on leadership) universities and has funding partners, including the BMGF, although its longer-term financing is not secure.

Ethiopia is positioning itself as a practice leader in this area. A large number of country delegations[8] have been received and many countries, especially in sub-Saharan Africa, are now establishing their own programmes based on learning from the HEP. Programmes mixing classroom-based learning and field observations have been designed and rolled out for different participants (three-day courses for policy makers;

[6] https://knoema.com/WHONHA2016/national-health-accounts-1995-2014?country=1000170-ethiopia
[7] Performance targets go beyond PHC and include 80% coverage with CBHI, for example
[8] Nigeria, Namibia, Zimbabwe, Mozambique, Rwanda, Sierra Leone, Lesotho and others were mentioned – some 21 delegations so far. We were not able in the time to get feedback from recipient countries – all information here derives from the Ethiopian perspective.

two weeks for health programme staff; and six weeks for implementers, along with specific training for parliamentarians). These focus on changing attitudes and skills. The IIPHC has already recognised the need to engage in follow-up visits to their recipient countries to support them to tailor learning effectively to their contexts. An evaluation of follow-up by 400 alumni is underway, along with efforts to link them through an alumni website. The institute uses FMoH staff for its trainings and is interested in expanding into research; however, funding and capacity is currently limited. It also plans to run one international forum each year and possibly to start a journal. These experiences provide a very interesting and encouraging case study of south–south learning.

More broadly, there is a growing investment in the Ethiopia Public Health Institute as the research wing of the FMoH, providing data (such as periodic population-based surveys, e.g. the first national survey on incidence of NCDs, released September 2017) and evidence synthesis as needed for policy development and review. Similar bodies are being started and expanded in the regions to perform similar functions for the decentralised levels. Some directorates, such as the RMNCH one, have also established research advisory groups, including partners with technical expertise and local academics, to assemble and review best practice and feed into revised clinical guidelines. This proactive approach to identifying and using local and international evidence is encouraging and should be expanded to all programmes.

Part 7: Perspectives on what helps and hinders learning across health systems

Internal facilitators

The example of the HEP but also looking more widely at health system innovations within Ethiopia (such as its roll-out of community-based health insurance) suggests that a **strong political vision** and motivation has driven a focus on meeting population needs. **Internal systems for accountability** are also key – together these ensure that experimentation takes place, is reviewed, and is shared across areas within the country and internationally.

These forces also help explain why **evidence has *not* been transferred from other settings without proper contextualisation**. Ethiopia did not accept that CHW programmes, or a variation on them, would not work in its context. Equally, it did not accept that CBHI had been tried and found not to work well in other contexts, although the international experience is not encouraging.[9] It has a sense of its own uniqueness – rooted in a long and fascinating history – and deliberative processes that examine international evidence but do not allow it to dominate.

Internal barriers

There are, however, also internal barriers to learning, which highlight areas for future support. **Lack of resources** is one: in common with many other countries, funds for 'soft' areas such as policy development, evidence review, etc. are extremely limited,

[9] http://apps.who.int/iris/bitstream/10665/69023/1/EIP_FER_DP.E_03.1.pdf?ua=1

and while the FMoH and other players have been able to access specific support from partners for specific learning objectives, such as study tours, they are constrained from following a proactive agenda to identifying gaps and filling them. Examples of areas where the ministry lacks capacity and expertise include health technology assessment and health economic analysis (although there is now a small but growing team in this latter area in the ministry, leading on National Health Accounts, etc.). There were also some concerns about its capacity and progress in quality improvement initiatives. More generally, the FMoH faces capacity constraints due also to brain drain and low salaries, which are partly filled through seconded staff funded by international partners.

Most informants agreed that **routine data sources such as the health management information system are incomplete** and that there is a poor data use culture – an area in which development partners including the BMGF are investing in improving currently. Internet connectivity and computer literacy are also poor in many areas, websites are often not up to date, maintenance of computers is limited, and ICT departments face particular retention challenges. Open source software such as DHIS2 has only recently been introduced.

While there is a growing research community in Ethiopia, with an increasing number of universities (there are now some 50 in Ethiopia, of which 40 are reported to be functional) and demographic surveillance sites (currently six), **active coordination of research around the FMoH's policy agenda could be improved.**[10] For example, annual health research priorities that could guide universities should be developed, ensuring that research projects feed back into policy and practice improvements and also helping to grow the health research community through annual health research fora.

There was also a widespread perception on the part of non-state actors that **transparency on health reports, data, and decision making** could be improved. This may be the flip side of an appropriate emphasis on local leadership. External advice is never accepted unchallenged or unprocessed. There has to be government ownership of all key documents and policy decisions, and the resources to implement them. This can lead to long lags in policies being finalised, which can cause frustration for wider partners. There are also reports of data being suppressed (at least in terms of public distribution) where it is inconvenient.

As with many institutions, sharing of ideas and lessons derived from international meetings or visits by individuals or teams could be more **systematic and action-oriented**.

External facilitators

The FMoH and other stakeholders have developed **strong partnerships**, which allow them to access knowledge and resources as required. Government key informants consult their partners as needed, going to them for funds when specific learning activities are required, while partners bring back suggestions and ideas from international meetings (and support their government counterparts to attend).

[10] See here for a more general discussion of channels for getting evidence into practice in Ethiopia: link.

External barriers

Few specific barriers were noted, but there was **evidence of gaps**, or at least of institutions not working as effectively as might be expected. For example, despite probing, there was little evidence of regional bodies working well at sharing evidence across the east African or wider African communities. For example, Ethiopia is not active in the African Health Observatory, based in Brazzaville. Equally, while informants were members of online communities of practice, the general feedback was that these were essentially personal networks and not effective at sharing practical and well-contextualised information.

More generally, **operational evidence-sharing** across contexts could be further supported; most networks were seen as operating at a general policy level, which was not helpful in providing more tailored and operational support.

4 Discussion

Part 1: Patterns from across the six stages

The pattern suggested by this and other examples discussed in our KIIs is for problem diagnosis in the health sector in Ethiopia to be internally driven, after which public officials seek external insights as policy responses to problems are developed. Evidence is carefully sifted for its relevance to the local context. Local levels often develop innovations – Tigray has played an important role in the HEP, for example, which connects to its role as the starting point of the struggle against the previous regime. Roll-out is swift if the intervention is seen as effective. There is active monitoring, although less frequently wide-scale independent evaluations. Learning across sites internally (e.g. through internal study tours and meetings) is encouraged.

There is an active approach to disseminating Ethiopia's lessons externally, especially in the Africa region and in the field of PHC, where Ethiopia sees itself as a 'market leader'. Examples of seeking lessons elsewhere were present for the tracer policy (the HEP); however, the policy was very clearly seen to be 'home-grown' and indeed the need for policies to be strongly rooted in the domestic context and not transplanted artificially is one of their strongest training messages to delegates from other countries. Frustrations were expressed at other countries wanting to 'cut and paste' the HEP policy into their own contexts.

Part 2: What and who were the institutions, individuals and mechanisms by which (a) systematised evidence and (b) learning from other countries were introduced into the policy process?

The party apparatus and administrative structures are the key institutions that facilitate learning horizontally (between sectors, for example), across regions, and also vertically. Coordination with partners is also important, with some partners having a clear niche (for example, WHO is clearly recognised as a leading source of evidence for revision of clinical practice guidelines).

Underlying the effectiveness of these institutions are domestic political economy factors – the lack of contestability of policies (e.g. weak medical associations), the internal party discipline, the recognition of need for tangible progress in the face of a large, poor population, the history of effective organisation during the civil war, etc. These were not the focus of this report but have to be recognised as important underlying factors.

Individuals also play an important role – for example, the HEP has had powerful leaders and champions in the former prime minister and former ministers of health, as well as the regional leaders who developed the innovations and its programme directors. They drove learning, which was predominantly internal to Ethiopia, though now being shared outwardly too.

Study tours[11] were the most commonly mentioned mechanism through which policy makers picked up experiences, lessons, and inspiration from PHC models in other countries. The FMoH actively approaches donors for support to make such trips and on the whole this works well.

Attendance at international meetings is another important mechanism. As Ethiopia has a federal structure, federal actors ensure that regions also attend such meetings – not just national representatives.

When specific policy issues are raised, technical working groups are established on which state and non-state actors with the right specific expertise are invited to sit. These collate evidence from international and national sources as required.

Part 3: What are identified as the potential institutions, individuals and mechanisms by which (a) systematised evidence and (b) learning from other countries could be better introduced into the policy process?

Building on successes to date and identifying where further support could be helpful, we highlight the following:

- Developing and ensuring the sustainability of the IIPHC to share learning from Ethiopia and provide follow-up training should be a priority.
- The Ethiopian Public Health Institute (and its equivalents at regional level) are being grown to provide evidence synthesis and to conduct relevant research for the FMoH.
- Some directorates in the ministry have research advisory councils, which coordinate and sift evidence that is relevant for their specific needs (e.g. in MCH). It is not clear how widespread or effective these are in other service areas, but these certainly look like promising institutions to be encouraged and extended.
- It is clear that coordination with universities and supporting a policy-relevant research environment (e.g. through annual research conferences) could also be a way forward to develop the local demand and supply for evidence.
- Other mechanisms for supporting internal (area-to-area) learning could be trialled, such as local communities of practice and more distance learning for health workers' continuing professional development.
- Pooled funds to enable commissioning of research to fill specific gaps would also be helpful for the FMoH, which has limited 'soft' funds that can be used for such purposes. This includes for outward sharing – for example, some felt that the HEP experience had not been well documented internally to share with others.
- Others highlighted the need to support more health system and operational research – for example, on HEWs' competencies and why they seem to be performing better on some packages than others.

[11] Examples mentioned in KIIs included: to Kerala to see their CHW programme in 2003; to Nepal to study their community-based newborn care package; to Ghana, Rwanda, Vietnam, Brazil, and Mexico for health financing lessons; to Ghana and Zambia for sector-wide programmes; to Mozambique to visit youth-friendly family planning services; to Cuba to study urban primary health care; to India to study Integrated Child Case Management; and to Thailand to study the overall health system.

- Specific capacity gaps can be identified within the FMoH – e.g. in health technology assessment, health economics, and urban health – where capacity needs to be built, which could draw on wider expertise.
- The current draft national transformation plan proposes an 'information revolution', which, if followed through in the sector, could remove the concerns about poor transparency on data and policies.
- Regional networks were not found to be strong but could be further pursued.
- International platforms such as the Evidence-Informed Policy Network (EVIPNET) and their related training courses were seen as useful; the additional of more operation training and networks could help such platforms to fill the implementation gap that was highlighted and to reach more operational staff.

Part 4: What implications does this case study have for the final recommendations made to the BMGF?

This case study highlights the importance of engaging with and developing domestic mechanisms at national and subnational levels to be able to prioritise, filter, analyse, and share experiences.

Learning *across* systems (understood as countries) is useful but secondary, given their different contexts, needs, and cultures. Ethiopia has a strong sense of its own path. Outside actors and their ideas are given space but within a debate that is closely managed by the FMoH and government. Having the confidence to develop your own solutions and to not learn the wrong lessons from others may be as important as learning the right ones.

It suggests a focus on strengthening local organisations that are delivering internal and south–south learning, and which could be further developed.

The BMGF is already very well established in Ethiopia, has good political access, and is investing in several of the institutions mentioned above. Its role could be developed as a partner in supporting stronger information systems, open data sharing, and public accountability for results.

5 Conclusions

The origins and development of the HEP tell a powerful tale, illuminating some of the drivers of health policy development and factors contributing to its success.

The drivers were historical (emerging out of conflict) as well as ideological (a grassroots-based and pro-poor orientation) combined with political imperatives (the need to deliver basic services to a large, poor population as a new regime) and a healthy dose of pragmatism (other options were not feasible with the resources available).

Factors contributing to success included strong political commitment and the engagement of some powerful individual champions, as well as a focus on 'learning-by-doing' (assessing, identifying problems, testing solutions, scaling them up, etc.). While strongly promoting this flagship government policy as a success, the leadership has also managed to be self-critical, identifying challenges and the need for continuous innovation. This is a difficult balancing act.

Equally, while continuity of health policy vision and political stability have been important, there has been a strong result orientation (with ambitious targets and high expectations of all stakeholders, including partners). While many policies fail due to poor implementation, the attention to follow-up and detail has been high in this case, reflecting its political importance. We would also highlight the focus on prevention, on community engagement, and on strong intersectoral collaboration at all levels as key components in HEP effectiveness.

Paradoxically, given the focus of our study, learning from other health systems did not emerge as a strong factor – indeed, knowing when not to adopt international lessons was one of the strengths here. Ethiopia's strong sense of its own history and unique context has been helpful in this respect. Leaders were not interested in developments they could not fully own, adapt, and integrate.

That said, Ethiopia has been active in sharing the lessons from the HEP externally. In doing so, it has itself come up against the barrier that other participants also have to have the underlying drivers of success to take on Ethiopia's learning effectively.

Recommendations arising out of this case study focus on how to support learning institutions that can develop and share lessons internally, as well as disseminating them regionally. We also highlight the need for more resources to fill specific capacity gaps, support operational research, and grow the policy-relevant local research community. There is in addition a need to strengthen health information systems, their use, and wider data transparency initiatives. External resources are largely adequate but could be structured to provide more systematic evidence from international programmes, including better access to implementation tools and practical orientation.

References

1. WHO (2017) *Ethiopia Country Profile* [Online]. Available from: www.who.int/countries/eth/en/ (Accessed 26 July 2017).
2. World Bank (2017) *Ethiopia Overview* [Online]. Available at www.worldbank.org/en/country/ethiopia/overview (Accessed 26 July 2017).
3. World Bank (2017) *Ethiopia: Why so idle? Wages and Employment in a Crowded Labor Market*. Available from www.worldbank.org/en/country/ethiopia/publication/fifth-ethiopia-economic-update-why-idle-wages-employment-crowded-labor-market (Accessed 26 July 2017).
4. Assefa, Y., Van Damme, W., Williams, O. D. and Hill, P. S. (2017). 'Successes and challenges of the millennium development goals in Ethiopia: lessons for the sustainable development goals'. *BMJ Global Health*, *2*(2), e000318.
5. Federal Ministry of Health of Ethiopia (2007) *The HSDP harmonization manual (HHM)*. First Edition. Addis Ababa, Ethiopia: FMoH.
6. Gilson, L., Walt, G., Heggenhougen, K., Owuor-Omondi, L., Perera, M., Ross, D., & Salazar, L. (1989). National community health worker programs: how can they be strengthened?. *Journal of Public Health Policy*, *10*(4), 518-532.
7. Afework, M. F., Admassu, K., Mekonnen, A., Hagos, S., Asegid, M. and Ahmed, S. (2014). 'Effect of an innovative community based health program on maternal health service utilization in north and south central Ethiopia: a community based cross sectional study'. *Reproductive Health*, 11(1), 28.
8. Admassie, A., Abebaw, D. and Woldemichael, A. D. (2009). 'Impact evaluation of the Ethiopian health services extension programme'. *Journal of Development Effectiveness*, *1*(4), 430–449.
9. Perry, H., Zulliger, R., Scott, K., Javadi, D., Gergen, J., Shelley, K., Crigler, L., Afdhila, N. and Worku, Y. (2017) *Case studies of large scale community health worker programs. Examples from Afghanistan, Bangladesh, Brazil, Ethiopia, Niger, India, Indonesia, Iran, Nepal, Pakistan, Rwanda, Zambia, and Zimbabwe*. USAID Maternal and Child Health Integrated Program.
10. Karim, A., Admassu, K., Schellenberg, J., Alemu, H., Getachew, N., Ameha, A., Tadesse, L. and Betemariam, W. (2013) 'Effect of the Ethiopia's health extension program on maternal and newborn health practices in 101 districts'. *PLOS One*, 8:e65160.
11. Medhaniye, A., Spigt, M., Dinant, G. and Blanco, R. (2012) 'Knowledge and performance of Ethiopian Health Extension Workers on antenatal care and delivery care'. *Hum Resour Health*, 10:44. www.human-resources-health.com/content/10/1/44.
12. Ameha, A., Karim, A. M., Erbo, A., Ashenafi, A., Hailu, M., Hailu, B., ... and Betemariam, W. (2013) 'Effectiveness of supportive supervision on the consistency of integrated community case management skills of health extension workers in 133 districts of Ethiopia'. *Measurements*.
13. Birhanu, Z., Godesso, A., Kebede, Y. and Gerbaba, M. (2013) 'Mothers' experiences and satisfactions with health extension program in Jimma zone, Ethiopia: a cross sectional study'. *BMC Health Services Research*, 13(1), 74.
14. Banteyerga, H. (2011). *Ethiopia's health extension program: improving health*

through community involvement. MEDICC review, 13(3), 46–49.
15. Celletti, F., Wright, A., Palen, J., Frehywot, S., Markus, A., Greenberg, A., ... & Samb, B. (2010) 'Can the deployment of community health workers for the delivery of HIV services represent an effective and sustainable response to health workforce shortages? Results of a multicountry study'. *Aids*, 24, S45–S57.
16. GHWA Task Force on Scaling Up Education and Training for Health Workers (2008) *Ethiopia's Human Resources for Health Program*. Geneva, Switzerland: World Health Organization and Global Health Workforce Alliance. Available at: www.who.int/workforcealliance/knowledge/case_studies/Ethiopia.pdf.
17. McPake, B., Edoka, I., Witter, S. *et al*. (2015) 'Cost-effectiveness of community-based practitioner programmes in Ethiopia, Indonesia and Kenya'. *WHO Bulletin*. Available at www.who.int/bulletin/volumes/93/9/14-144899.pdf?ua=1.
18. Mengistu, B., Karim, A. M., Eniyew, A., Yitabrek, A., Eniyew, A., Tsegaye, S. and Marsh, D. R. (2014) 'The effect of performance review and clinical mentoring meetings (PRCMM) on recording of community case management by Health Extension Workers in Ethiopia'. *Ethiop Med J*, 52 (Suppl 3), 73–81.
19. Teklehaimanot, H. D., Teklehaimanot, A., Tedella, A. A. and Abdella, M. (2016) 'Use of Balanced Scorecard Methodology for Performance Measurement of the Health Extension Program in Ethiopia'. *The American Journal of Tropical Medicine and Hygiene*, 94(5), 1157–1169.
20. Addis Ashenafi, A. M. K., Ameha, A., Erbo, A., Getachew, N. and Betemariam, W. (2014) Effect of Ye-Ebiyo, Y., Kitaw, Y., Girma, S., Desta, H., Seyoum, A. and Teklehaimanot, A. (2016). Study on health extension workers: access to information, continuing education and reference materials. *The Ethiopian Journal of Health Development (EJHD)*, *21*(3).
21. Maes, K. (2015). '"Volunteers Are Not paid because they Are priceless": community health worker capacities and values in an AIDS treatment intervention in urban Ethiopia'. *Medical Anthropology Quarterly*, 29(1), 97–115.
22. Gopinathan, U., Lewin, S. and Glenton, C. (2014). 'Implementing large-scale programmes to optimise the health workforce in low-and middle-income settings: a multicountry case study synthesis'. *Tropical Medicine & International Health*, 19(12), 1437–1456.
23. Kane, S., Kok, M., Ormel, H., Otiso, L., Sidat, M., Namakhoma, I. and Theobald, S. (2016). 'Limits and opportunities to community health worker empowerment: a multi-country comparative study'. *Social Science & Medicine*, 164, 27–34.

Annex A Topic guide

1. We believe you were actively involved in the development of the HEP policy. Could you describe the role you played?

   Probes: How and when did this potential policy/reform first arise in the relevant agenda? Describe all the stages of the development of the policy in which you were involved? At each stage: Who were the advocates? Were there opponents? What was your position? What were the critical factors that influenced the progression of the debate to the point that the policy/reform was able to proceed?

Depending on the stage(s) at which the interviewee acknowledges involvement in the policy/reform development, and the extent to which the stages implicit in the questions below reflect the actual policy development process, the following question(s) can be selected. *A priori*, these are divided into the six phases of policy transfer identified in the Landscaping Review Part 3. In practice, these phases may not fit the interviewees' understanding of the steps involved in the specific policy under discussion, and the interviewee may modify the phase descriptions accordingly.

2. *Conceptualisation*: To what extent was the identification of a possible policy initiative influenced by formal forms of evidence (written accounts of the experience of similar policies or reforms in other national or international settings).

   Probes: How did you first hear about this policy and from whom? What evidence was offered? (Please summarise, including from where the evidence was drawn – locally or internationally – and what the evidence suggested would be the impact of the policy.) Who identified that evidence? Do you know from where they sourced that evidence? Did you identify any relevant sources of evidence? How did you go about identifying that and were there any individuals or institutions that supported you in this? Was the team able to identify all the evidence it wanted; and where there were gaps identified, how was the way forward decided? Was there evidence put forward at any stage that it was decided could not be trusted, or could not helpfully contribute to the debate?

3. *Formation and contextualisation*: Once the policy had gained traction and a more detailed proposal started to be developed, to what extent were discussions about the detail of that proposal and its implementation influenced by formal forms of evidence and/or domestic political considerations?

   Probes: What evidence was offered? (Please summarise, including from where the evidence was drawn – locally and/or internationally – and what the evidence suggested should be thought about in policy detail.) Who identified that evidence? Do you know from where they sourced that evidence? Did you identify any relevant sources of evidence? How did you go about identifying that and were there any individuals or institutions that supported you in this? Was the team able to identify all the evidence it wanted; and where there were gaps identified, how was the way forward decided? Was there evidence put forward at any stage that it was decided could not be trusted, or could not helpfully contribute to the debate? What kinds of evidence were used and how were they assessed?

4. *Internalisation*: Once a detailed proposal for the policy/reform had been finalised, to what extent were discussions aiming to ensure formal consent (such as approval through a constituted committee or legislative process) informed by formal forms of evidence? What mechanisms were used to assess evidence?

   Probes: What evidence was offered? (Please summarise, including from where the evidence was drawn – locally or internationally – and what the evidence suggested would be the impact of the policy or supported the policy design.) Who identified that evidence? Do you know from where they sourced that evidence? Did you identify any relevant sources of evidence? How did you go about identifying that and were there any individuals or institutions that supported you in this? Was the team able to identify or produce all the evidence it wanted; and where there were gaps identified, how was the way forward decided? Was there evidence put forward at any stage that it was decided could not be trusted, or could not helpfully contribute to the debate?

5. *Operationalisation*: As implementation mechanisms were worked out, to what extent were those informed by formal forms of evidence and existing implementation capacity?

   Probes: What evidence was offered? (Please summarise, including from where the evidence was drawn – locally or internationally – and what the evidence suggested should be included in implementation design.) Who identified/developed that evidence? Do you know from where they sourced that evidence? Did you identify any relevant sources of evidence? How did you go about identifying that and were there any individuals or institutions that supported you in this? Was the team able to identify or develop all the evidence it wanted; and where there were gaps identified, how was the way forward decided?

6. *Evaluation*: As the policy was refined on the basis of experience (either pilot or full operational experience), what kinds of evidence were gathered and applied? Was there evidence put forward at any stage that it was decided could not be trusted, or could not helpfully contribute to the debate?

   Probes: What M&E was undertaken? (Please summarise, including from where the evidence was drawn – locally or internationally – and what the evidence suggested should be included in implementation design.) Who identified that evidence? Do you know from where they sourced that evidence? Did you identify any relevant sources of evidence? How did you go about identifying that and were there any individuals or institutions that supported you in this or were directly responsible for the M&E? Was the team able to identify all the evidence it wanted; and where there were gaps identified, how was the way forward decided? Was there evidence put forward at any stage that it was decided could not be trusted, or could not helpfully contribute to the debate?

For all respondents:

7. Do you think the experience of identifying, developing, gaining approval, and designing an implementation strategy for this policy is typical of the processes that are usually involved here, in this sector and/or others?

Probes: What other policies/reforms have you had detailed involvement in (a few examples if the list is long)? What factors drive those involved to seek out evidence or to fail to seek out evidence? Are there differences in the kinds of evidence or the sources of evidence used by different participants in the process? What specifically is typical or atypical in relation to interest or lack of interest, use/lack of use of other countries' experiences, etc.?

8. Overall, what is your assessment of the quality, relevance and availability of evidence to inform health system development, across the different stages?

   What gaps have you experienced in finding and using appropriate evidence concerning global good practices both at a general level but also in terms of finding and learning from particular countries? What mechanisms can you imagine, or are aware of operating in other contexts, that you think would better support the use of evidence in this kind of decision making?

   Probes: Are there existing organisations that you think are well placed to encourage learning from other countries? What would those organisations need to do to improve the ability of countries to learn from each other? Do these organisations provide conflicting advice?

9. Are there institutions or individuals that constrain the use of evidence in this kind of decision making?

   Probes: Raise types of evidence and knowledge brokers that the respondent has not mentioned; ask about their potential to be helpful or tendency to be unhelpful; ask specifically about some of the ideas we are considering/that came out of the consultation such as use of observatories, relationships with individuals in UN agencies, study tours, academic research groups, etc.

10. Have representatives from other countries and global stakeholders shown an interest in learning from your experiences?

    Probes: What types of information did they want? How did they approach you? Have you put any mechanisms in place to facilitate others learning from your experiences? Do you think they are working well?