



## CONTEXT ANALYSIS: CLOSE-TO-COMMUNITY PROVIDERS IN ETHIOPIA



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## EXECUTIVE SUMMARY

### INTRODUCTION

Many countries are striving to achieve the Millennium Development Goals (MDGs) and universal health coverage. In the 1970s, countries invested in Community Health Workers (CHWs) who received basic training and were often volunteers. However, programmes involving CHWs went into decline due in part to political instability, economic policies and difficulties in financing. There has been recent and renewed interest in strengthening community-level services, using a variety of close-to-community (CTC) providers.

A CTC provider is a health worker who carries out promotive, preventive and/or curative health services and who is the first point of contact for the community. A CTC provider can be based in the community or in a basic primary facility with at least a minimum level of para-professional training — not more than two to three years. The performance of CTC providers can be influenced by broad contextual factors, which include community and political contexts, health system factors (such as the financial model and logistics and supplies) and intervention design factors, such as incentives and supervision.

According to a report of the Ethiopian Demographic and Health Survey in 2011, the maternal mortality rate was 676 deaths per 100,000 live births, and the infant mortality rate was 59 deaths per 1000 live births. Improving maternal and child health outcomes are a priority area for the health system in Ethiopia. In 2004 the Government of Ethiopia introduced the Health Extension Program (HEP) to provide quality promotive, preventive and selected curative health care services to ensure universal access, with special attention to mothers and children, targeting them at the household level.

REACHOUT is a five-year multi-country project consortium; in Ethiopia it focuses on seeking to strengthen the provision of rural maternal health services by Health Extension Workers (HEWs) in the Southern Region. HEWs are the largest cadre of CTC providers in the country. Sidama Zone, where the study is set, has the lowest coverage of institutional delivery and postnatal care (PNC).

### AIM AND OBJECTIVES OF CONTEXT ANALYSIS

The aim of the consortium is to maximize the equity, effectiveness and efficiency of CTC services in rural areas and urban slums in six countries. REACHOUT consists of two phases:

- conducting a context analysis through desk review and qualitative studies to identify contextual factors that influence the performance of CTC providers and CTC services; and
- implementation of two improvement cycles to test interventions for improving CTC performance and their contribution to CTC services. This report presents the results of phase 1, the context analysis in Ethiopia.

The objectives of the context analysis were:

- to identify evidence for interventions which have an impact on the contribution of HEWs to deliver effective, efficient and equitable maternal health care;
- to map the types of CTC providers;
- to assess the structures and policies of the health system for strengths and weaknesses regarding the HEP and management of HEWs;
- to identify and assess contextual factors that form barriers to or facilitators for the performance of HEWs on maternal health services; and
- to synthesize evidence on key barriers and facilitators to be built on in future HEP interventions and identify knowledge gaps to be filled regarding HEW services.

## METHODOLOGY

The context analysis comprised a desk review and a qualitative study. The information for the desk review was primarily drawn from policy documents and published and grey literature. Focus group discussions and in-depth interviews were used for the qualitative study with a range of participants: HEWs, health centre heads, delivery case team leaders, *Kebele* administrators, traditional birth attendants (TBAs), programme coordinators, mothers and community leaders.

The study was conducted in six *Woredas* (districts) of Sidama Zone, selected on the basis of resource availability, infrastructure, accessibility and HEW performance. *Woreda* field supervisors and health office staff supported the selection of participants.

## RESULTS

### EFFECTIVENESS OF HEALTH EXTENSION WORKERS

The HEP has improved access, coverage and utilization of family planning, antenatal care (ANC) and immunization services. Promising results were obtained in prevention and control of communicable diseases such as HIV, TB and malaria. The evidence on institutional delivery and postnatal care is limited.

### FACTORS AFFECTING THE PERFORMANCE OF THE HEALTH EXTENSION WORKERS

Cultural beliefs and practices affected HEWs' performance and the community's utilization of health services. Influences included the tradition to bury placenta at home, the desire to have many children, advice of relatives and elderly women, unwillingness to be examined by unfamiliar health workers, religious beliefs and low perception of risk during childbirth. Client costs for maternal health services and the lack of availability of logistics and infrastructure also affected service utilization and HEWs' performance.

A perceived mismatch between the workload and HEWs' salary (which is lower than that of other government employees), limited education or transfer opportunities, limited supervision and constraints regarding referrals were intervention design factors that influenced HEWs' motivation and performance. Limited feedback and the absence of referral forms affected the referral system, while inconsistency, fault-finding and inadequate feedback compromised supervision.

The study found that HEWs lack specialist knowledge and skills on delivery, ANC and PNC. Mobile phones were used for patient referral, to send reports, request logistics and coordinate TB work. TBAs and Health Development Armies (HDAs) support ANC, referral of pregnant women, PNC and community mobilization. Many NGOs work on capacity-building, supplying logistics and supplies, motivating HEWs and volunteers, supporting the referral system and conducting supervision.

## DISCUSSION

There is evidence that mobilizing and involving the community improves the utilization of maternal health services and HEWs' performance. Clinical mentoring and performance review meetings held with HEWs were found to improve their performance in community case management of childhood illnesses. The HEWs performed well when they were supported by community volunteers and the HDA.

TBAs are not formally supported by the government to conduct delivery services and to collaborate with the HEWs, even though they are informally engaging in maternal health service provision in the community. Strengthening the link and collaboration of the HEWs with the HDA and TBAs could increase access to maternal health services and improve HEWs' performance.

The HEP is designed to provide promotive, preventive and selected curative health care based on the country's decentralized health policy. The programme has implementation guidelines which clearly articulate its roles, responsibility, accountability and implementation strategy, even though it has certain drawbacks in these areas which need consideration and improvement.

The role of HEWs in providing ANC and family planning is implemented quite well; however, their contribution to improving institutional delivery and PNC was found to be minimal. A lack of adequate knowledge and skills and an absence of important logistics, supplies and infrastructure at health posts contributed to their poor performance.

Community-related factors affecting HEWs' performance and the utilization of maternal health services included culture, privacy and confidentiality, religious beliefs, a lack of knowledge and awareness and a low perceived risk among expectant mothers. Targeted

awareness creation, community mobilization and addressing HEWs' links and communication with the community could possibly improve HEWs' performance and service utilization.

Client costs incurred at hospitals and the absence of important logistics, supplies and infrastructure were found to hinder HEWs' performance. Providing maternal services free of charge at hospitals and equipping the health posts could improve their performance.

Financial and non-financial incentives, workload, the referral and supervision systems, use of mobile technology, HEWs' relationships with the HDA and TBAs and coordination of programmes were found to have an effect on motivation and performance.

## CONCLUSION

We have systematically examined the enablers of and barriers to CTC service delivery in the health system and the community. Community awareness and perceptions, the referral system, supervision, skills and competencies of HEWs and the infrastructure were the key factors that significantly affected service delivery. Thus, we aim to address issues related to supervision of HEWs, referral and HEWs' competencies in addressing community factors.

### A. IMPLICATIONS FOR THE IMPROVEMENT CYCLES

The REACHOUT quality improvement intervention will focus on areas in which it is feasible to intervene. We will focus on HEWs' skills and competencies regarding community mobilization, communication with the community and facilitation of behavioural change. The linking and coordination of the HEWs with the HDA and TBAs will be strengthened.

The HEWs, *Woreda* field supervisors and HEP coordinators will receive focused capacity-building training on supervision, ANC and referral, with the aim of establishing a system of problem solving and regular supportive supervision at all levels. Mobile technology will be introduced to assist identification, follow-up and referral of pregnant women. We will work with stakeholders on capacity-building, supervision, referral and ensuring the availability of logistics and supplies.

### B. KEY LEARNING POINTS

- Community culture and beliefs can influence HEWs' performance and the community's utilization of health services.
- Intervention design factors such as incentives, workload, transfer, career advancement, referral and supervision can affect HEWs' motivation and performance.
- The coordination and collaboration of HEWs with the HDA and TBAs can improve their performance and extend health services to the community.

- Collaboration and coordination of programmes among and between non-governmental organizations can improve HEWs' performance and the delivery of health services to the community.



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## ABBREVIATIONS AND ACRONYMS

ANC	Antenatal care
CAC	Community Action Cycle
CAG	Country Advisory Group
CHW	Community Health Worker
COC	Centre of Competency
CTC	Close-to-community
FGD	Focus group discussion
FMOH	Federal Ministry of Health
HC	Health centre
HDA	Health Development Army
HEP	Health Extension Program
HEW	Health Extension Worker
HHA-YAM	Hiddasse Hulantenawi Agelglot Yebego Adragot Mahiber
HMIS	Health Management Information System
HP	Health post
HSDP	Health Sector Development Program
HSEP	Health Service Extension Program
IDI	In-depth interview
IMCI	Integrated Management of Childhood Illness
KII	Key informant interview
KIT	Koninklijk Instituut voor de Tropen
M&E	Monitoring and evaluation
MDG	Millennium Development Goal
MSF	Médecins Sans Frontières
PNC	Postnatal care
PHCU	Primary health care unit
SNNPR	South Nation, Nationalities and Peoples Region
SSI	Semi-structured interview
TB	Tuberculosis
TBA	Traditional Birth Attendant
USAID	United States Agency for International Development
U5MR	Under-five mortality rate
VCHP	Voluntary Community Health Promoter

## CHAPTER 1 – INTRODUCTION

### 1.1. BACKGROUND

Many countries are striving to achieve the Millennium Development Goals (MDGs) and universal health coverage. In the 1970s, countries invested in Community Health Workers (CHWs) who received basic training and were often volunteers. However, from the 1980s onwards, programmes involving CHWs went into decline due in part to political instability, economic policies and difficulties in financing [1].

Health systems are once again turning to strengthen close-to-community (CTC) services through the use of CTC providers. There are many types of CTC providers, such as CHWs, midwives, traditional birth attendants (TBAs), informal private practitioners and lay counsellors, delivering a wide range of services in different contexts. Their roles include education, counselling, screening and point-of-care diagnostics, treatment, follow-up and data collection. What these approaches have in common is their reliance on staff that live and work at the community level, engaging with people in their own dwellings or workplaces. By meeting people in their homes, CTC providers are in a unique position to observe and understand the factors that influence health, gaining insights that may have been missed if the consultation had taken place in a health facility. This means that there is true potential for CTC services to strengthen the delivery of health services by tailoring services to best meet the needs and realities of individuals and households, and making more appropriate links to the health sector and beyond.

CTC providers are embedded within communities and can offer opportunities to strengthen health services equitably, effectively and efficiently, though these are often unmet. Vertical, disease-specific programmes that use CTC providers for service delivery tend to give limited consideration to the multiple workloads and competing priorities they face.

Services struggle to plan and manage their human resources, resulting in high staff attrition and poor effectiveness, and the quality and supervision of services varies widely. CTC services often lack Monitoring and evaluation (M&E) systems, and referral mechanisms to formal health facilities are poorly tracked or recorded. The contribution of CTC services is often not valued, nor is their potential maximized. There is a need for the formal health system to better understand the context and conditions of CTC services, to strengthen and support these critical services to realize their potential.

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#### THE DIVERSITY OF CTC PROVIDERS AND THEIR INTERACTION WITH COMMUNITIES

CTC providers may operate in the public or private sectors, respond to single or multiple diseases and have differences in their level of knowledge and training, their practice setting, and their relationship with regulatory systems [2]. Within this category, CHWs, the collective

term used for many types of CTC providers, have been defined as “any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or degree in tertiary education” .

In addition, it is argued that CHWs “should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system but not necessarily a part of its organisation and have shorter training than professional workers” [3].

There is a growing recognition of CHWs as an integral component of the health workforce needed to achieve the MDGs [4]. The focus on achieving universal coverage has seen some countries use CHWs nationwide, and others are seriously considering this. As well as themselves being a diverse group, formal CHWs also interact with a range of other types of CTC providers, including those working in vertical programmes, less formal community workers (health promoters and volunteers) and informal private practitioners (such as traditional healers and grocery store owners).

The interactions of CHWs with other community-level providers is an important part of CTC services [5], but key knowledge gaps remain around how this interaction plays out in different rural and urban slum contexts and what the potential impact on and lessons for the formal health sector are.

## 1.2. REACHOUT DEFINITION OF CTC PROVIDERS

A CTC provider is a health worker who carries out promotional, preventive and/or curative health services and who is the first point of contact at community level. A CTC provider can be based in the community or in a basic primary health care facility. A CTC provider has at least a minimum level of training in the context of the intervention that they carry out and not more than two to three years of para-professional training.

IS THERE EVIDENCE THAT CTC SERVICES ARE ACHIEVING WHAT POLICYMAKERS HOPED FOR?  
A trained workforce to scale up interventions relating to the health MDGs has not been achieved. To overcome chronic financial and human resource shortages, health services are increasingly relying on CTC providers to reach out to underserved communities [6, 7]. When policymakers conceive CTC services it is because they are trying to respond to national health priorities by increasing the coverage of a wide range of primary health care services at low cost.

The term ‘universal coverage’ has been described as having three dimensions: a population dimension (who is to be covered, including equity concerns); a health service dimension (which services are to be covered, including their effectiveness); and a financing dimension

(how the services are to be paid for, and how efficient and cost-effective they are). CTC services should be planned in light of each.

CTC providers have an important set of shared characteristics which shape their potential contributions to these three dimensions. On the one hand, their proximity to and acceptance by the communities in which they work can improve their reach. On the other hand, their lack of or limited professional qualifications can hinder their ability to provide a range of services well. Finally, while personnel costs for individual CTC providers may be cheaper, high attrition rates and poor capacity mean that start-up and supervision costs are high. Despite concerns in relation to equity, effectiveness and efficiency [8], there have been few evaluations of CTC programmes that assess these three factors.

CTC services offer the potential to improve poor and marginalized communities' access to health services, as their geographical proximity reduces the opportunity costs of using distant formal health services. However, there are currently limited data on their contribution to improving the equity of coverage or attempts to improve this. CTC providers are also well placed to understand a broad range of cultural and social issues, and can engender trust, as they live within the population they serve and have cultural, linguistic and experiential similarities. They often have a motivation, beyond professional conduct, to serve their community and, in contrast to other health workers, are unlikely to be transferred or leave the area. CTC providers have been referred to as cultural brokers [9] or mediators providing a link between communities and health and social services systems. Interactions at household level and in communities provide an opportunity to better understand the broader context of people's lives yet may also lead to emotional distress associated with addressing the needs of members of their own communities. CTC providers may themselves be poor, needy and from the lower strata of society, and they are often women. They often have to juggle to meet (sometimes competing) expectations from their communities and the formal health sector, fulfilling multiple roles. There is limited knowledge about how they manage the tensions of their position and the impact of these on their effectiveness and lives.

CTC providers are the least well-trained workers in health, yet in urban slums and rural areas they may also be the best-trained health worker that vulnerable populations can access. They may, therefore, be consulted about many health problems for which they are not trained. Some countries have responded to this by expanding the training of CHWs to encompass many different health issues after some evidence of and concerns about a resultant drop in quality and effectiveness emerged [10]. There are also concerns about the degree to which CTC providers have appropriate supplies and infrastructure [10, 11]. However, further robust evidence of current effectiveness and potential interventions to improve this in specific programmes and contexts is required.

Considering the important role that CTC providers play in delivering health services to the members of their communities, it is surprising that there is a scarcity of studies that assess both the effect and costs of the different types of CTC programmes [12]. Robust efficiency analysis of interventions to improve CTC services is also needed. Cost-effectiveness analyses rarely include the full costs and benefits to the health system, communities and CTC providers. Direct costs of CTC services include recruitment, training, honoraria/salary or personal expenses (depending on context), supervision, equipment and supplies [6]. These costs are increased by a rapid turnover of workers. Less often considered are the indirect costs and benefits for providers and users, including the opportunity costs of volunteer time (where CTC providers are not formally paid) and community members' time and resources spent seeking services.

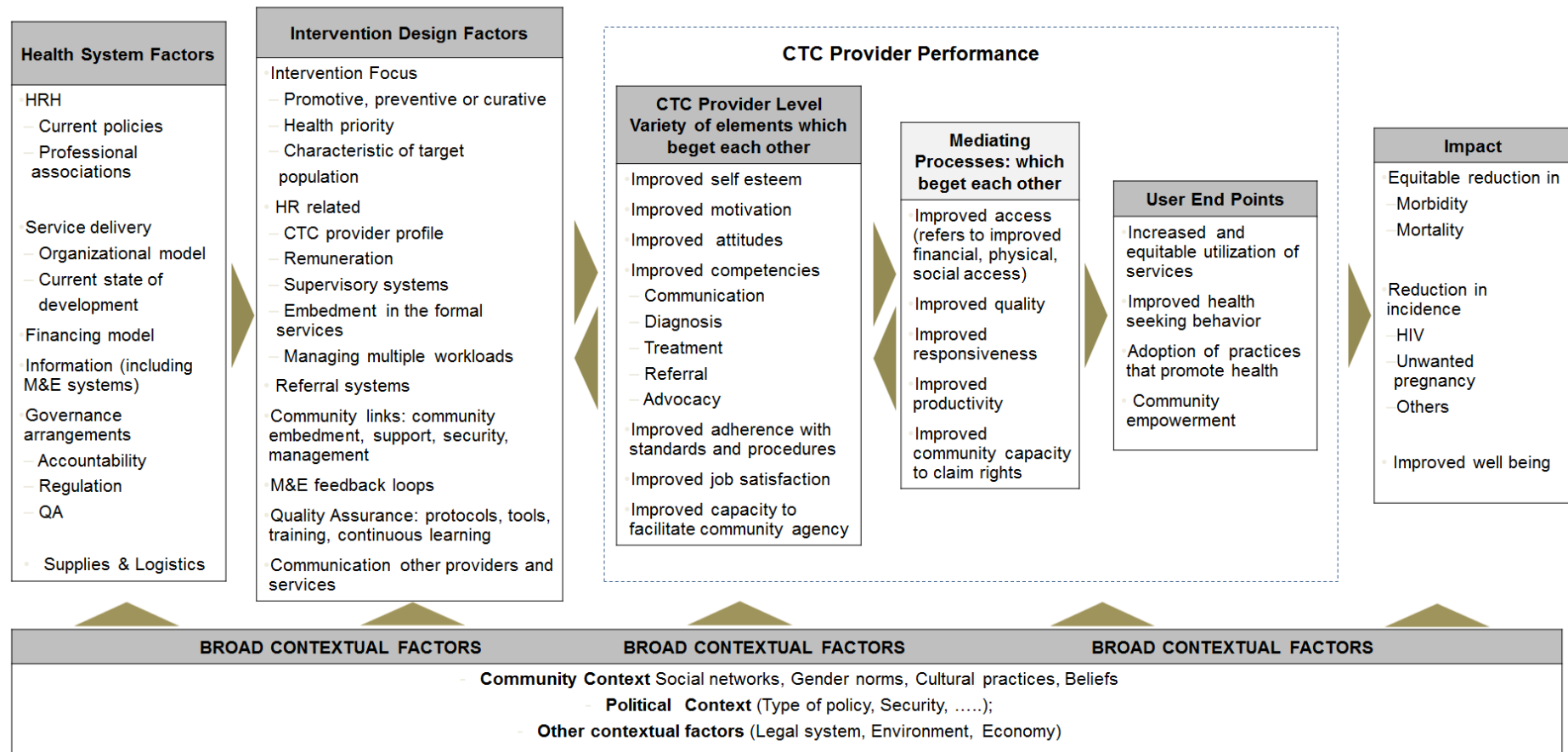
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WHAT IS KNOWN ABOUT THE FACTORS THAT DETERMINE THE SUCCESS OF CTC SERVICES?

The initial conceptual framework that was developed in the first stage of an international literature review carried out by KIT is presented in Figure 1. This framework was developed based on an initial review of literature on CTC providers and a review of other frameworks which have outlined the factors influencing the performance of CTC providers and their impact on the health and well-being of the population they serve [13-19]. This a priori framework served as the basis for the desk review and qualitative study. The framework divides the factors influencing the performance of CTC providers into three categories:

- broad contextual factors, which include:
  - community context (social networks, gender norms, cultural practices, beliefs);
  - political context (type of policy, security); and
  - other contextual factors (legal system, environment, economy);
- health system factors; and
- intervention design factors.

Factors to the left of the framework, such as health system factors, have a direct influence on aspects immediately to their right — for example, intervention design factors — and either a direct or indirect effect on aspects further to the right, including on CTC provider performance and impact. For example, a lack of a policy and coordination mechanisms (health system factor) for the focus and implementation of CTC programmes influences the possibilities to avoid overlap in the design of a programme, may lead to CTC providers carrying multiple workloads for various projects and programmes and affects potential workload, motivation, competences and quality of the CHWs' work. Broad contextual factors can influence other factors (health system, intervention design factors) but also directly influence CTC providers' performance and impact.



**Figure 1. Conceptual framework**



The framework places CTC providers' performance in the centre, as this is the focus of the research. In the framework, CTC providers' performance is distinguished across three categories: the first involves changes that occur at the provider level; these changes translate into improved performance in terms of specific user-level end points (the third category as presented in the framework) but do this (partly) through a set of mediating processes (the second category). Improved CTC providers' performance ultimately translates into improved population health and well-being.

### 1.3. REACHOUT FOCUS AND MATERNAL HEALTH SITUATION IN ETHIOPIA

Ethiopia has high maternal mortality and low utilization of maternal health services. The World Health Organization estimate of the maternal mortality ratio for Ethiopia is 630 deaths per 100,000 live births [20], which is comparable with the figure of 676 deaths per 100,000 live births found in the Ethiopian Demographic and Health Survey of 2011 (the study covered the whole country, including the Southern Region and Sidama Zone). In other words, for every 1000 live births in Ethiopia, about seven women died during pregnancy, during childbirth or within two months after childbirth. The lifetime risk of maternal death is about 4 per cent [21]. Improving maternal health outcomes to achieve MDG 5 (to reduce the maternal mortality ratio) is a major health priority in the country.

REACHOUT in Ethiopia focuses on maternal health services provided in rural areas by Health Extension Workers (HEWs) in Sidama Zone, South Ethiopia. The HEWs are the main cadre of CTC providers in Ethiopia. The HEWs are women, selected from the community, trained for one year and practising and implementing the health extension packages. Sidama Zone, where the study is set, is one of the zones in the Southern Region with the lowest coverage of institutional delivery and postnatal care (PNC). There is a paradox in that the number of expectant mothers attending antenatal care (ANC) services is inversely related with institutional delivery: there is high ANC coverage with a low coverage of institutional delivery [22, 23].

Maternal health service utilization is low and significantly affected by socio-demographic factors, availability and accessibility of the service, affordability, women's status in the household and women's knowledge, attitude, beliefs and culture [24, 25].

Different studies identified various reasons for non-utilization of maternal health services. These include the unexpected occurrence of labour and the short duration of labour [26-28]; experience of no illness during pregnancy and a lack of awareness [29]; preference of giving birth in the presence of relatives [26]; trust in TBAs and cultural reasons [26, 30]); and the belief that delivering in health facilities is not necessary and not customary [21].

A study of health facilities conducted in Jima and Ambo Hospitals in the south-western part of Ethiopia showed that haemorrhage, puerperal sepsis, hypertensive disorders in pregnancy [31, 32], ruptured uterus and unsafe abortion were major causes of maternal deaths [32]. Most maternal deaths are from direct obstetric causes [31, 32].

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#### 1.3.1. INFLUENCE OF COMMUNITY CONTEXT, SUPERVISION AND REFERRAL ON HEWS' PERFORMANCE

Factors related to community, supervision and referral are assumed to affect HEWs' performance and the community's utilization of maternal health services. The community's cultural beliefs, customs and practices may also have an influence.

The implementation guideline of the Health Extension Program (HEP) indicates that the programme should be supervised by a team of professionals working in different departments of the health structure. The supervisory structure goes down from the Ministry of Health to the health post. The guideline also indicates that HEWs are responsible for supervising and supporting Voluntary Community Health Promoters (VCHPs) [33]. This guideline also mentions that the HEWs refer patients they cannot manage by themselves to a health post. The way in which the supervision and referral system is actually implemented can influence HEWs' performance and the programme's effectiveness.

#### 1.4. CONTEXT ANALYSIS OBJECTIVES

This context analysis is part of the broader REACHOUT project. The aim of the REACHOUT consortium is to maximize the equity, effectiveness and efficiency of CTC services in rural areas and urban slums in six countries: Bangladesh, Ethiopia, Indonesia, Kenya, Malawi and Mozambique. In Ethiopia the study focuses on maternal health services.

REACHOUT consists of two phases:

- conducting a context analysis through desk review and qualitative studies to identify contextual factors that influence the performance of CTC providers and services; and
- implementation of two improvement cycles to test interventions for improving CTC performance and their contribution to CTC services.

The context analysis itself consists of two parts: a desk review and a qualitative study. These will contribute to the analytical framework that will be used to design and analyse the REACHOUT improvement cycles.

The objectives of the context analysis were:

- to identify evidence for interventions which have an impact on the contribution of HEWs to deliver effective, efficient and equitable maternal health care;
- to map the types of CTC providers;
- to assess the structures and policies of the health system for strengths and weaknesses regarding the HEP and management of HEWs;
- to identify and assess contextual factors that form barriers to or facilitators for the performance of HEWs on maternal health services; and
- to synthesize evidence on key barriers and facilitators to be built on in future HEP interventions and identify knowledge gaps to be filled regarding HEWs services.

This context analysis study was designed to assess how community, broad contextual, health system, intervention design and other factors influence the delivery of the HEP by the HEWs, in relation to maternal health services. The outcomes of this study feed into the development of two research improvement cycles focused on improving HEWs' performance in the field of maternal health.

The results of the study are hoped to provide policymakers and local planners with a better understanding of the contextual determinants of maternal health and serve as an important tool for any possible intervention aimed at increasing the utilization of maternity care services in the country. Lessons learned from this study and the following improvement cycle in Sidama Zone will aid the Regional Health Bureau and Ministry of Health to transfer the lessons learned to other areas and take measures at regional and national level to improve maternal health services provided by HEWs, with a special focus on enhancing community utilization of maternal health services.

#### 1.5. COMPONENTS OF THE CONTEXT ANALYSIS

This report contains the findings of desk review, the types of CTC providers in Ethiopia, a stakeholder mapping and the qualitative research findings. The desk review focused on the general contextual factors affecting the performance of HEWs, and addressed the facilitators for and barriers to performance. Based on the definition of CTC providers, HEWs are the main CTC providers identified; however, the Health Development Army (HDA) and TBAs were also considered, since they are involved in providing community health services. In the qualitative study, which is the main body of this report, the broad contextual factors (community, policy and general contextual factors), health system factors and intervention design factors which affected the performance of HEWs either as a facilitator or barrier are addressed.

#### 1.6. REPORT SECTIONS (OUTLINE OF THE REPORT)

This report contains seven chapters. Chapter 1 presents background information concerning CTC providers, effectiveness of CTC services and factors that determine the success of CTC services. Chapter 2 deals with the findings of the desk review. In this section, types of CTC providers in Ethiopia, health services effectively offered by HEWs and factors interacting with HEWs' performance are presented. Chapter 3 identifies the different stakeholders which can affect the implementation of the project, and their engagement. Chapter 4 presents the methodology of the qualitative research. In Chapter 5, the findings of the qualitative research are presented. Chapter 6 contains the discussion part of the study, in which the findings of the desk review and qualitative research are discussed. Chapter 7 presents the implications of the study both to the framework and to the quality improvement cycles.

## CHAPTER 2 – DESK REVIEW

### 2.1. INTRODUCTION

Primary health care is essential health care that is universally accessible to individuals and is acceptable to them at a cost that the country and community can afford. It focuses on disease prevention and health promotion by involving the community in the whole process of health care delivery and encouraging them to maintain their own health [34]. Sometimes primary health care is described as ‘health by the people, of the people and for the people’.

Ethiopia has a poor health status relative to other low-income countries in sub-Saharan Africa. This is largely attributed to preventable infectious ailments and nutritional deficiencies. Infectious and communicable diseases account for about 60–80% of the health problems in Ethiopia [35]. According to the report of the Ethiopian Demographic and Health Survey of 2011, the maternal mortality rate was 676 deaths per 100,000 live births, the infant mortality rate was 59 deaths per 1000 live births, the child mortality rate 31 deaths per 1000 live births and the under-five mortality rate 88 deaths per 1000 live births. During the same period the neonatal mortality rate was 37 deaths per 1000 live births [21].

In 1993 the government formulated the country’s first health policy in 50 years, articulating a vision for the development of the health care sector. The policy fully reorganized the health services delivery system as a way to contribute positively to the country’s overall socio-economic development efforts. Its major themes focused on democratization and decentralization of the health system, expanding the primary health care system and emphasizing preventive, promotional and basic curative health services and encouraging partnerships and the participation of the community and non-governmental actors [36].

After the formulation of the new health policy, the Ethiopian government designed a series of Health Sector Development Programs (HSDP I, II and, most recently, III for 1997–2010) in line with the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and to achieve the health-related MDGs.

Despite the gains that were made in the implementation of HSDP I, it became clear that basic health services had not reached those in need, owing to a lack of primary health care services at the community level [35].

In response to this, in 2004 the government introduced the Accelerated Expansion of Primary Health Care Coverage and the HEP, which addressed the country’s major health problems. The

new HEP focused mainly on providing quality promotive, preventive and selected curative health care services in an accessible and equitable manner to reach all segments of the population, with special attention to mothers and children, targeting them at the household level. The programme has a particular emphasis on establishing an effective and responsive health delivery system for those who live in rural areas.

Based on the concept and principles of primary health care, the HEP is designed to improve the health status of families, with their full participation, using local technologies and the community's skills and wisdom. The HEP is similar to primary health care in its concepts and principles, except that the HEP focuses on households at the community level, and it involves fewer facility-based services [33, 35].

## 2.2. PURPOSE AND SPECIFIC OBJECTIVES OF THE DESK REVIEW

The purpose of the country desk/literature review is to learn from existing evidence and use it for future use in improvement cycles. The country literature reviews focuses on:

- evidence for interventions which have an impact on the contribution of CTC providers and HEWs to the delivery of effective, efficient and equitable care; and
- identification of contextual factors and conditions that hinder or facilitate the performance of CTC providers and services.

It was intended to identify examples of the best interventions that can be used and further scaled up in the country's improvement cycles. It could also help us to identify knowledge gaps about what works and why, to design feasible and efficient interventions.

The desk review's three specific objectives were:

- to identify the type of CTC providers in the country, particularly their role regarding the HEP;
- to identify and appraise qualitative and quantitative evidence on health system, community, policy and other general contextual (political, administrative, economic, socio-cultural and legal) factors affecting the performance of HEWs; and
- to synthesize evidence on key barriers and facilitators to be built on in future CTC interventions and identify knowledge gaps to be filled regarding the HEP.

The desk review summarizes what is currently known about the HEP in Ethiopia, identifies gaps in knowledge that may require further investigation and provides a summary of the overall policy environment regarding the HEP.

### 2.3. METHODS

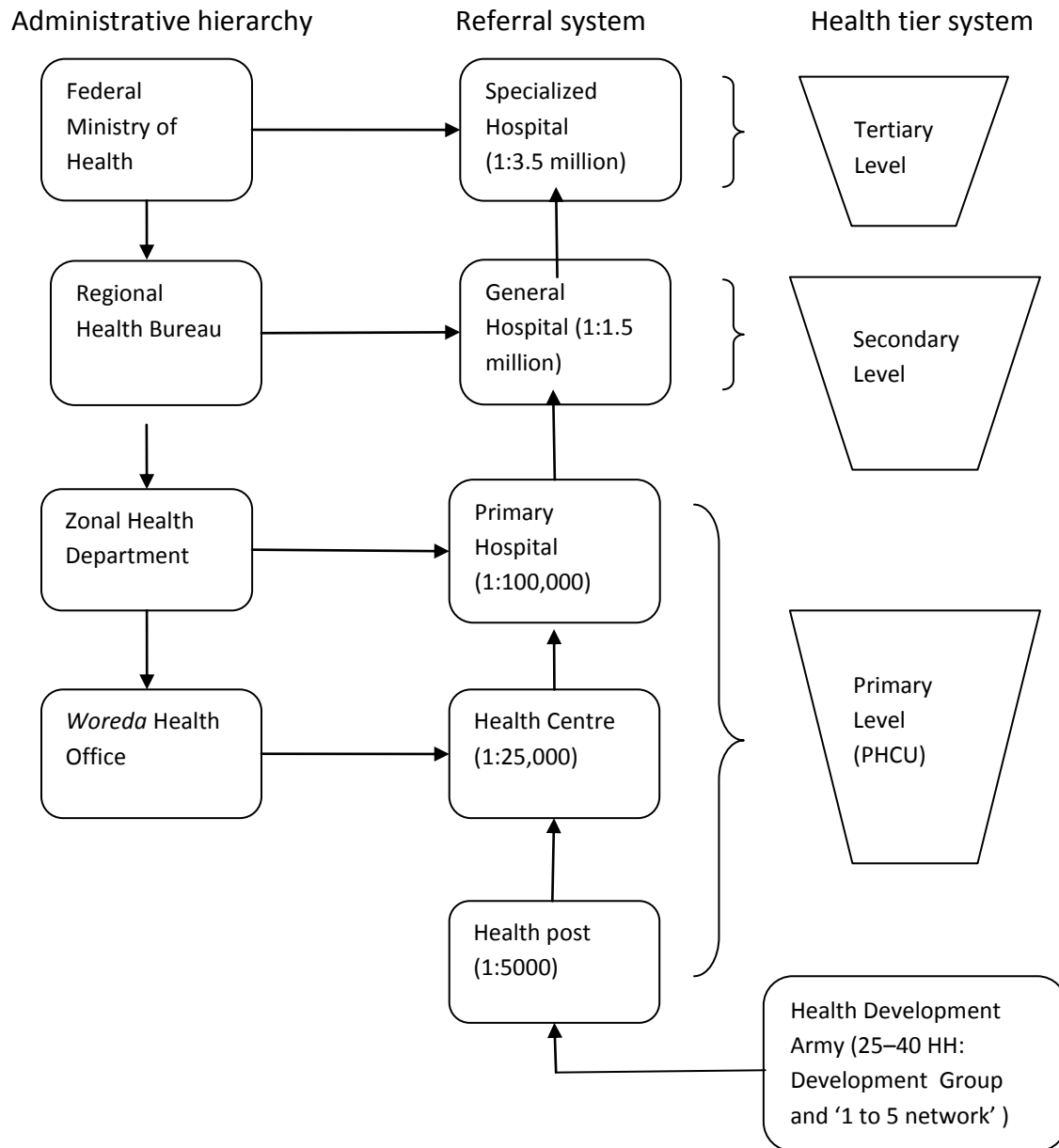
The information for the desk review was primarily drawn from policy documents and published and grey literature. An online search was carried out using key terms such as ‘community health worker’, ‘voluntary community health worker’, ‘health extension worker’ combined with ‘Ethiopia’ using online databases Pub Med, Google Scholar, Henari and the Ethiopian journals. We identified publications, journal articles and project reports from donors and researchers working in the health sector in Ethiopia. Policy documents on the health system and HEWs, articles and reports of qualitative and quantitative studies, randomized controlled trials and intervention studies related to HEWs and other CHWs in the country and evaluations of HEW interventions or broader programmes were reviewed.

Different organizations that work in the Southern Region were contacted by email, personal visits and phone calls to obtain grey literature and reports. These organizations include Save the Children, Integrated Family Health Program (IFHP), GOAL, Plan International, Médecins Sans Frontières (MSF), the Regional Health Bureau and the Zone Health Department.

### 2.4. PRIMARY HEALTH CARE UNIT AND HEALTH SYSTEM ORGANIZATION

The recently implemented business process reengineering of the health sector has introduced a three-tier health care delivery system. Level 1 is a *Woreda*/district health system comprised of a primary hospital (one primary hospital for 60,000–100,000 people); health centres (one health centre for 15,000–25,000 population); and their satellite health posts (one health post for 3000–5000 population) connected to each other by a referral system. The primary hospital, health centre and health posts form a Primary Health Care Unit (PHCU). Level 2 is a general hospital covering a population of 1–1.5 million people, and level 3 is a specialized hospital covering a population of 3.5–5 million people [35]. See Figure 2 for a diagram of the organization of the health system in Ethiopia.





**Figure 2. Organization of the Ethiopian health system**

### *Zones, Woredas and Kebeles*

The Zone is the administrative structure next to the regional state. A collection of *Woredas* forms a Zone, and a collection of Zones forms a Region. A *Woreda* is equivalent to a district, managed by a local government and comprising a number of *Kebeles*. *Kebeles* are the smallest unit of local government and can best be regarded as neighbourhoods — localized and delimited groups of people.

## 2.5. CTC PROVIDERS IN ETHIOPIA

No published data were found which indicate the types of CTC providers in the country. However, it is known that different CTC providers providing community-based health services exist. For this reason we conducted a brainstorming discussion and consulted knowledgeable and experienced people to map the CTC providers.

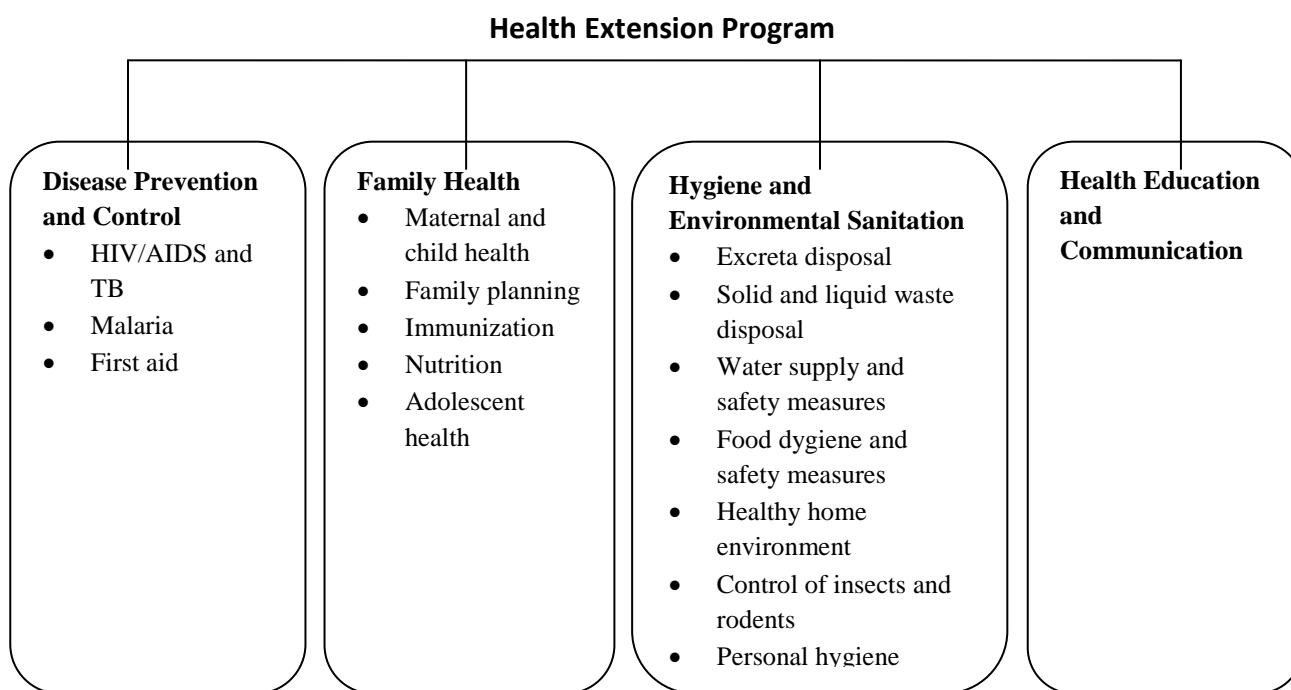
Primary health care is implemented in many countries to reach rural communities, where most of the health problems exist. To ensure access to the primary health services, different community members were involved in community-based health and health-related interventions under different names and modalities in Ethiopia. In the past, these included front-line health workers, TBAs, Trained Traditional Birth Attendants, Community-Based Distributors, Community-Based Malaria Agents, Community Health Agents and others. However, these CTC providers were not sustained due to factors such as insufficient technical and managerial support, irregular involvement in the implementation of activities and a lack of in-service training and remuneration. With the introduction of the HEP, a new type of service provider was introduced that replaced existing CTC providers: these are HEWs, who since 2012 have been supported by a 'Health Development Army' (HDA). Initially, VCHPs supported the work of the HEWs and worked in collaboration with them, both to extend contact with families and the community and to share different skills [33]. The VCHPs have been integrated into the HDA.

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### 2.5.1. HEALTH EXTENSION WORKERS

The HEP is primarily implemented by HEWs; theoretically they are residents of the community selected by the community in which they work. They are salaried women who receive training for one year, including theoretical and practical sessions, after which they are deployed as employees by the government to work in health posts.

The HEP implements 16 packages under four major components: disease prevention and control, family health, hygiene and environmental sanitation, and health education and communication [33]. Figure 3 shows the HEP packages.



**Figure 3. Health Extension Program Packages**

#### 2.5.2. HEALTH DEVELOPMENT ARMY

The HDA, a concept introduced in 2012, is a network that comprises all families in rural Ethiopia, whereby groups of five households are led by one ‘model family’ which advises them on matters relating to public health and is responsible for teaching, following and helping the members of their ‘one to five network’ to adopt elements of the health extension package.

HEWs are responsible for the training of the model families on the health extension package, and the families then pass their knowledge onto other families in their network. To become a model family, the family requires a ‘graduation’ to certify that basic training has been undertaken and health activities have been successfully promoted. In principle, eventually all families will become model families. A group of 25–30 households forms one development group which evaluates the progress of health extension packages implementation among their community.

#### 2.5.3. TRADITIONAL BIRTH ATTENDANTS

In addition to formal cadres of CTC providers, TBAs are present throughout communities in Ethiopia. They are the CTC provider of choice for most rural women for assisting during delivery. Currently they are not formally supported by the government and do not have formal links to the health system. However, as members of communities, HEWs often have contact

with TBAs and may request that they identify high-risk pregnancies and refer women to health centres as appropriate.

## 2.6. HEALTH EXTENSION PROGRAM

### 2.6.1. IMPLEMENTATION AND MANAGEMENT OF THE HEP

The HEP provides promotive and preventive activities and some basic curative activities, divided into 16 health packages, targeting households, and particularly women and children, at *Kebele* level, the smallest administrative unit with a population of about 5000 people. It is targeted at the household level, based on the concept and principles of primary health care; it is designed to improve the health status of families, with their full participation, using local technologies and the community's skill and wisdom. It is delivered by HEWs with support from the HDA.

The HEWs start their activities by conducting a census as a baseline for planning purposes. The baseline census is used to understand the population dynamics, household conditions, sanitation and other key indicators for HEWs to deliver the HEP in their catchment area.

HEWs are required to spend 75% of their time conducting outreach activities by going from house to house. The HEWs implement the HEP by using three approaches: training model families, conveying messages at different community or government institutions and associations and providing different health services at the health post.

HEWs train model families on the health extension packages; after practising the packages by themselves, the model families in turn will train other model families. These model families become leaders of 'one to five networks' and are responsible for teaching, following and supporting the members of their 'one to five networks' to adopt and implement the health extension package. A group of 25–30 households will form one development group, which evaluates the progress of their implementation of health extension packages, and the whole grouping of involved parties is called the HDA. The families graduate after completing the training and applying it to their households. They continue to provide key support to the HEWs.

HEWs convey health messages in the community using different formal organizations such as women's and youth associations, schools, prisons and informal community-based organizations such as *idir*, *mehaber* and *ekub*. *Ekub* is one of the informal groups formed by the community, in which a group of people regularly contribute a fixed amount of money, agreed by the members, and use a lottery method to provide for each member. *Idir* is a type of community-based establishment specially formed for bereavements. Members benefit by receiving money when their family members or relatives die, and other members of the group attend funeral

ceremonies and provide comfort. *Mehaber* is similar to *ekub* but has a spiritual component with some rituals and religious ceremonies take place.

At the health-post level, HEWs provide ANC, delivery, PNC, immunization, growth monitoring, nutritional advice and treatment, family planning, TB and malaria treatment, under-five treatment according to the Integrated Community Case Management protocol, health education and referral services to the general population of the *Kebele*.

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#### 2.6.2. HEP SUPPORT AND SUPERVISION

HEWs are accountable to health centres technically and administratively, whereas the *Woreda* health office has general oversight over both HEWs and health centres. The health centres have a crucial role to play in providing referral care and technical and practical support to the HEP. The *Woreda* health offices have an important role in allocating budgets and providing necessary supplies and logistics to the health posts [34].

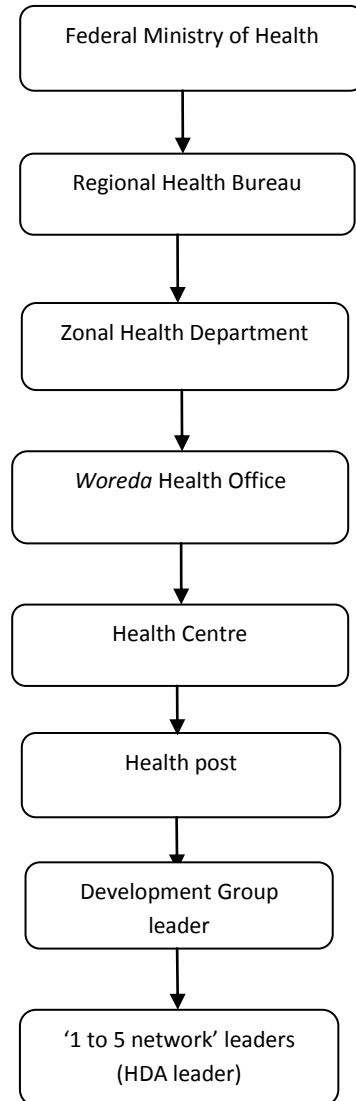
In the HEP implementation guidelines, it is stated that several services/units or professional expertise drawn from different disciplines at various organizations and administrative levels — Federal Ministry of Health (FMoH), Regional Health Bureau (RHB), Zone Health Department (ZHD) and *Woreda* health office (WoHO) — are responsible for supervising the programme. The supervisory team established at different levels — i.e. from the MoH down to *Woreda* level — is responsible for overseeing the programme planning and implementation. The team is also responsible for monitoring and evaluating the programme [34].

The supervision is conducted from the FMoH to the RHB, the RHB to the ZHD, the ZHD to the WoHO, the WoHO to the health centres, and the health centres to the HEWs. However, this does not mean that the upper level does not supervise the HEWs. Individuals or professionals working on the HEP are supervised at each level. The supervision becomes more frequent as we go down to the lower structure. It is carried out annually, biannually, quarterly, monthly and weekly by the FMoH, RHB, ZHD, WoHO and health centres, respectively.

At *Woreda* level the supervisory team comprises a public health officer, a public health nurse, an environment health expert and a health education expert. The team of experts responsible for supervision at the upper level comprises people with an advanced level of education and experience.

For an overview of the supervision structure, see Figure 4.

#### Supervisory level/structure of the HEP



**Figure 4. Supervisory structure of the HEP**

#### 2.6.3. REFERRAL

The HEWs refer cases which are beyond their capacity to the health centre or hospital. HEWs refer patients who require laboratory or other diagnostic techniques which are not available at the health post, for expert advice at the health centre, for medical and surgical interventions and for inpatient services.

## 2.7. FINDINGS

### 2.7.1. EFFECTIVENESS OF THE HEP

Few studies have been conducted on the effectiveness of the HEP. The available literature focused on the coverage of a particular health programme and/or the role of HEWs as a source of information to increase awareness and service utilization regarding certain health issues in the community. Only one study was identified on the HEP's cost-effectiveness.

#### 2.7.1.1. Maternal and child health

The HEP has improved access to maternal and child health. The cross-sectional study conducted in Jimma Zone, Southwest Ethiopia, on the contribution of the HEP to improving the coverage and comprehensiveness of primary health care services identified that access and coverage of maternal and child health services (family planning, ANC, vaccination) had improved since the introduction of the HEP [37]. This finding was also consistent with the findings observed in the national HEP evaluation report. The HEP improved current use of contraceptive methods to 31% in 2010 from 17% in 2005 and 19% in 2007 [38]. The contribution of the HEP to the improvement in women's utilization of family planning and ANC was also documented [38, 39]. A secondary document review conducted by USAID also found that coverage of primary health services such as contraceptive prevalence and protection from neonatal tetanus increased from 15% to 29% and 32% to 48%, respectively, from 2005 to 2011 since the introduction of the HEP [40].

However, the contribution of HEWs to the improvements in health facility delivery, PNC check-ups and use of iodized salt seemed insignificant [39]. Coverage of ANC provided by HEWs showed an improvement over time. It increased to 25% in 2010 from 0% in 2005 and 11% in 2007 [38], however, HEWs' knowledge of the content of counselling on ANC and danger signs during pregnancy was found to be poor [41].

The coverage of first ANC in 2012 was above 100% in the Southern Region and 84% in Sidama Zone. The percentage of women who had had the recommended more than four ANC visits was 54% in the region and 48% in Sidama Zone. Some 272,070 women (47% of the total) had institutional delivery in the region; among them, 156,916 (26.6%) gave birth by the HEWs and 120,154 (20.4%) by skilled health workers. A quarter (26%) of women had institutional delivery in Sidama Zone; among these births, 16,253 (14%) were performed by HEWs and 13,701 (12%) by trained health workers at a health centre or hospital [22, 23].



#### **2.7.1.2. Environmental and personal hygiene**

HEWs are expected to play a key role in providing health information on environmental health in the community, with the aim of supporting the community to practise a healthy lifestyle. HEWs also participate in teaching how to use, construct and maintain latrines.

The HEP increased access to hygiene and sanitation services in the community. The national cross-sectional HEP evaluation study found that the HEP improved access to safe water supplies. The supply of safe water increased in three regions of the country (Amhara, Oromia and the South Nation, Nationalities and Peoples Region — SNNPR) from 47.7% in 2005 to 53.7% in 2007 and 61.9% in 2010 [38].

The national evaluation study of the HEP identified that environmental and personal hygiene practices have significantly improved since the introduction of the HEP [38]. The HEWs played a role in disseminating information on personal and environmental hygiene in the community [42]. Another study also found that two thirds (66.4%) of the rural population had access to improved toilet facilities after implementation of the HEP [40].

#### **2.7.1.3. Disease prevention and control measures**

HEWs are commonly involved in disease prevention and control activities. They provide disease prevention and control measures and health information to the community on major communicable diseases such as TB, HIV and malaria. They are also involved in providing treatment for TB and malaria.

Increased utilization of bed nets that resulted in a decrease in the incidence of malaria has been observed since the implementation of the HEP. HEWs contributed tremendously to disease surveillance when epidemics occurred and took part in curbing outbreaks [43]. VCHPs who supported and worked with the HEWs improved the level of ownership of mosquito bed nets in the community. *Kebeles* in which VCHPs were working showed higher levels of mosquito bed net ownership than *Kebeles* without VCHPs [38].

The introduction of TB treatment at the health-post level by the HEWs improved TB detection and treatment success rates. A community randomized trial conducted in Southern Ethiopia, involving HEWs in identifying suspects and providing treatment, found that the mean case detection rate in the intervention *Kebeles* was higher than in the control *Kebeles* (122.2% versus 69.4%,  $p < 0.001$ ). In addition, more female patients were identified in the intervention *Kebeles* (149.0 versus 91.6,  $p < 0.001$ ). The mean treatment success rate was higher in the intervention than in the control *Kebeles* (89.3% versus 83.1%,  $p = 0.012$ ) and more so for females patients (89.8% versus 81.3%,  $p = 0.05$ ) [44].

Another community randomized trial study conducted by the same authors found that it was more cost-effective for HEWs to treat TB patients in the community than for general health workers to treat TB patients at health facilities. The total cost for each successfully treated smear-positive patient was considerably higher in health facilities (US\$161.9) than in the community-based approach (US\$60.7). The total, patient and caregiver costs of community-based treatment were lower than the health facilities' Directly Observed Treatment by 62.6%, 63.9% and 88.2%, respectively [45].

The contribution of HEWs in providing information about HIV/AIDS [38] and in women's HIV testing [39] in the community has been significant. VCHPs played a role in increasing the community's knowledge of HIV prevention measures such as using condoms, being faithful to one partner and abstaining from sexual intercourse. Women who lived in *Kebeles* where there were volunteer CHWs were more knowledgeable than women who lived in *Kebeles* where there were none [38].

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#### 2.7.2. FACILITATORS FOR AND BARRIERS TO HEWS' PERFORMANCE

In our literature review we did not find a lot of studies on factors influencing the performance of HEWs. However, a few studies showed important factors which affected their performance. Community factors such as cultural beliefs, privacy, preference for curative services and understanding and knowledge on certain health issues have an influence on HEWs' performance. Broad contextual and health system factors such as the availability of suitable roads, water, electricity, logistics and supplies affect both HEWs' performance and the community's utilization of services. Different financial and non-financial incentives which the HEWs receive, their workload and problems related to supervision and referral systems also influence their performance.

##### 2.7.2.1. Community factors

Factors related to the community affect HEWs' performance. As the recipient of services provided by the HEWs, the community can affect their performance either positively or negatively. Cultural beliefs, customs and practices occurring within the community can influence the interactions between service providers and the community.

##### *Culture*

Community culture and customs can affect the utilization of health services. The need for more children and opposition from husbands/partners were two of the reasons for not using contraceptive methods [38]. The community was found to choose traditionalists over the HEWs

due to cultural beliefs and the attachment they had with the traditional healers [46]. Latrine ownership was also determined by the culture of the community [38].

Privacy issues, such as not wanting to be seen by a health professional but only by relatives, also affect the utilization of maternal health services in the community. Some studies found that women were mentioning the assurance of privacy and the provision of care by their families as a reason for delivering at home [38].

The health service providers have to recognize and respect community culture and beliefs to gain acceptance by that community and to have good interactions with them. One study found that there were HEWs who had limited knowledge about the health-related beliefs of the community and had been teaching the community only what they thought was important [46]. In this study it was also mentioned that the involvement of HEWs in some social occasions such as marriages and religious festivities was limited and resulted in a gradual loss of acceptance of the HEP and a decreasing sense of belonging. However, other studies found that the majority of HEWs had been involved with the community during happy and sad times and community work activities [38].

#### *Gender*

The HEP is staffed by female HEWs. This is appreciated by the community because women can discuss their ideas openly and not be ashamed when revealing specific women's health problems to the female practitioners [38]. However, some studies found that the community criticized the policy in which the HEP is run by female HEWs. The involvement of men in the programme was highly recommended, and males were perceived as more professional in handling technical issues, having the capacity to withstand challenging work conditions and being able to make the right decisions for immediate action during health hazards [42].

Sometimes the HEWs may face a challenge from the community because they are female. In some studies, the HEWs mentioned that they did not get much support from males while providing health education due to the deep-rooted belief in the community that females are inferior to males in all aspects. In this study it was mentioned that HEWs encountered sexual assault in the community due to their gender [46].

#### *Community expectations*

The HEP addresses common health problems focusing on health promotion, prevention and targeting few curative services in the community [35]. However, sometimes, the community may claim more services which were not initially designed to be provided in the programme at the health-post level. Some studies found that the community claimed to have curative services

provided by HEWs such as the services they get from the health centre and hospital [46]. The inclusion of curative services in the HEP was not only supported by the community, but also the HEWs themselves recommended the inclusion of these services, and they also recommended the placement of nurses and other health professionals at the health post to provide the curative services [38]. The mismatch between community expectations and the actual services being provided was associated with dissatisfaction of HEWs and a gradual decline in acceptance of the HEP [46]. The community expected curative services such as those provided at health centres and hospitals and perceived the HEWs' role as limited and deficient in the delivery of curative health services such as the treatment of people who were sick. Another study found that the community members were rarely visiting the health post due to the absence of curative services [42].

#### *Community knowledge and understanding*

The community's knowledge, understanding and level of awareness influence health service utilization. A lack of knowledge about contraceptive methods in the community was a reason for not using contraception [38]. The same study found that a lack of community awareness of the importance of using latrines was the reason for not owning a toilet or latrine. A lack of behavioural change in the community and the community's low utilization of health posts were mentioned as barriers to HEWs' provision of ANC and delivery services for pregnant women [41].

The community's low literacy level was found to create a communication barrier for HEWs while giving written messages during health education sessions [46]. On the contrary, women who were literate and listened to the radio were found to demonstrate good utilization of maternal health services [39].

#### *Behavioural change in the community*

To bring about behavioural change in the community, interventions are needed to address the identified community-related factors influencing the utilization of health services. Community mobilization was found to bring about desirable behavioural change in the community. Community Action Cycle (CAC) as a community mobilization in a maternal, newborn and child health and nutrition project implemented by Save the Children in the Southern Region showed an increased number of women using ANC, delivery, PNC and family planning services, reduced home delivery, increased early referral of sick mothers and children, increased immunization and a minimal number of or no maternal or child deaths in CAC *Kebeles* as compared to *Kebeles* where CAC was not implemented [47]. In this project, the community was engaged in every step of the CAC — i.e. in identification, analysis, planning, implementation and evaluation phases of the CAC. Initially, a Community Mobilization Team was established at *Woreda* level

and then trained on the principles, methods and approaches of participatory community mobilization. After that, Community Core Groups at *Kebele* level who were interested in maternal and child health were established and involved in the whole process of community mobilization, including implementation and evaluation of the programme.

#### **2.7.2.2. Broad contextual factors**

Broad contextual factors such as the legal system, the environment and economic situation can affect HEWs' performance and the community's service utilization. In addition, access to the service is affected by the physical proximity or feasibility of easily reaching the health facility when the service is required. One of the key elements is road infrastructure, which plays a major role in communities' access to and utilization of the HEP. It was found that 14% of health posts had no road connecting them to the referral cluster health centre, and 11% had no road connecting them to the *Woreda* health office [38].

#### **2.7.2.3. Health system factors**

The health service is a function of the health system, and the community is receiving that service. The health system needs to be well equipped by trained personnel, and supplies are required to deliver the service it is meant to deliver. Infrastructure such as water, electricity and telephone services are among the important utilities which affect the implementation of the HEP.

Different studies recognized the absence or shortage of vaccines, oral rehydration salts, pills and Depo injections in the health posts [38]. Medical equipment for delivery, newborn care and children's services including supplies and logistics for vaccination were found to be below the standard specified at health posts. It was reported that the HEWs felt that they failed to provide ANC and delivery services due to the absence of infrastructure [38]. Another study found that many of the health posts did not have basic infrastructure — electricity, water supply and a fixed telephone were only available in 8%, 5% and 21% of the health posts, respectively [41].

The health post is the operational centre of the HEP. According to the HEP implementation guideline, the *Woreda* administration, in collaboration with the *Woreda* health office and the respective *Kebele* administration has to build health posts in *Kebeles*. Each *Kebele* is expected to have one health post to serve a population of 5000 people. Some studies indicated that only 64% of the *Kebeles* had health posts [37], and the majority of the health posts were poorly equipped with basic furniture [38]. Low commitment of the *Woreda* and the *Woreda* administration was mentioned as a reason for not having health posts in the *Kebeles* [38].

According to the Sidama Zone Health Department report for 2012, 96% of the 544 *Kebeles* had functional health posts, whereas 22 *Kebeles* did not. The HEWs need to have a dwelling in the health post compound to provide health services to the community day and night. Some 72% of HEWs in the Southern Region and 38% in Sidama Zone had a dwelling [22, 23].

#### **2.7.2.4. Intervention design factors**

##### *Intervention focus*

The HEWs are expected to provide health services which are included in the 16 health extension packages. The three top services which they enjoy performing were immunization, family planning and ANC. Normal delivery, Integrated Management of Childhood Illness (IMCI) and Child Health Day were found among the services provided less frequently [38].

##### *Incentives*

Be it financial or non-financial, incentives can affect HEWs' motivation and performance. When there are incentives, they can motivate HEWs to work hard while providing the service. The quality of the health post in which the HEWs work and the opportunities and remuneration they receive can influence their motivation.

The HEWs' housing conditions are one of the non-financial motivating factors related to their performance. A nationwide evaluation of the HEP found that around 50% of HEWs were unsatisfied or very unsatisfied with their housing conditions [38].

Being civil servants, HEWs are entitled to annual and maternity leave. However, since they are recruited from and residing in the community they are serving, they are not permitted to ask for transfers to other *Kebeles* or areas. One study found that only around half of the HEWs were satisfied or very satisfied when requesting maternal leave. Some 30% were found to be satisfied when requesting annual leave, and only 20% of the HEWs interviewed were satisfied or very satisfied with the treatment they received when requesting a transfer [38].

HEWs are community-level civil servants who receive their salary from the government. Different studies assessed the HEWs' perception of and satisfaction with their salary. Some HEWs reported that they found the salary to be fair and in line with the level of the training they received. However, a significant number of HEWs believed that they were underpaid considering their heavy workload and complained that the government had been paying them a very low salary or one that was lower than other governmental employees with a similar educational background [38].

### *Workload*

HEWs perform their work on the 16 health extension packages by spending 25% of their time at the health post and the remaining 75% conducting outreach activities by going from house to house. HEWs have differing perceptions about the amount of time they have to perform their work. The majority of them believed that they were overloaded with their assigned tasks [38]. The most common tasks on which the HEWs spent most time were the construction, use and maintenance of sanitary latrines, provision of family planning and vaccination services and performing solid and liquid waste management and malaria prevention and control activities [38].

### *Supervision and support*

Supportive supervision can enhance capacity and help with any constraints encountered in the implementation of the HEP. Effective supervision requires a team of experts with an appropriate mix of skills, strong management abilities and continuity among team members. As indicated in the HEP guideline, a supervisory structure drawing its members from different disciplines was established at the federal, regional, zonal and *Woreda* levels to direct and support HEWs so that they can effectively perform their duties.

HEWs are also expected to supervise CHWs who work as volunteers and support the HEP. One study indicated that HEWs conducted supervision in 65% of the *Kebeles*, whereas written documents about the supervision conducted were found in 18% of the *Kebeles*. It was mentioned that a good proportion of health posts were supervised three months prior to the survey; however, records confirmed a figure below the reported one. Some 30% of supervised health posts received written feedback, and 27% received oral feedback [38].

Performance Review and Clinical Mentoring Review Meetings (PRCMRMs) held with the HEWs can improve their performance. A quasi-experimental study conducted by Save the Children on the effect of PRCMRMs on improving and/or maintaining Integrated Community Case Management performance of HEWs showed that their performance in doing correct assessments, providing correct treatment and giving proper follow-up dates for pneumonia, diarrhoea, malaria and severe uncomplicated malnutrition improved significantly after their participation in PRCMRMs compared with their performance beforehand. The HEWs' performance was found to be improved after subsequent review meetings were held and follow-up visits were conducted by the Integrated Family Health Program in the region [48].

### *Referral*

HEWs refer cases which are beyond their capacity to the next level up. They themselves also receive referrals from community members such as the HDAs. It was documented that the



majority of the HEWs had been referring cases to the nearest health centre and very few were referring to the hospital. Referral forms were absent in the majority of the health posts. The main means of transportation were stretchers, followed by animals. The lack of financial capacity was mentioned as a reason for the community not attending the referral health facility. Less than a quarter of health posts reported that they had received feedback from the referral health facilities, and in only 29% of health posts did patients return to the health post for follow-up [38].

#### *Quality assurance*

There are many factors which can hamper the quality of services provided to the community by HEWs. The quality of initial and in-service training and the availability of logistics, supplies and standard guidelines are among the factors which can affect the quality of service provision. The HEP evaluation showed that the HEP implementation manual and HEP package manual were found in about half the health posts which were included in the study. The same evaluation showed that IMCI guidelines were found in 21.2% of health posts, and obstetric guidelines in 18%. It was reported that 40% of the HEWs did not have the standard manual that guides the allocation of time for the 16 components of the HEP, which affects their use of time for efficient HEP service delivery. Referral guidelines were available in 13.2% of health posts, and the national drug list for HEP in 8.4% [38].

#### *Communication and coordination with other CTC providers*

The HEP implementation guideline indicated that there were groups of VCHPs who work with and support the HEWs at the community level. Research shows that HEWs are more effective when working in collaboration with VCHPs both to extend contact with families and the community and to share different skills.

A nationwide study conducted to evaluate the HEP found that women who were residing in *Kebeles* in which there were VCHPs were more likely to have a better knowledge on HIV prevention and control and had acceptable attitudes towards people living with HIV/AIDS. In addition, these *Kebeles* had a higher proportion of women currently using contraceptive methods and a higher number of women attending ANC than women living in *Kebeles* where there were no VCHPs. The percentage of people with access to toilet facilities was also higher in *Kebeles* where there were VCHPs than in *Kebeles* without VCHPs [38].

HEWs identify and train model families that have been involved in other development work and/or that have acceptance and credibility among the community as early adopters of desirable health practices to become role models in line with health extension packages. Model

families help disseminate health messages, leading to the adoption of the desired practices and behaviour by the community.

Better knowledge of HIV prevention and control in the community, an increased proportion of currently married women using contraception and increased ANC attendance and tetanus vaccination coverage was observed in *Kebeles* where one round of model family training and graduation had been completed than in *Kebeles* where no model family training had started [38].

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#### 2.7.3. CTC PROVIDER-LEVEL FACTORS

The competency of HEWs in terms of knowledge and skills can affect their performance. The level of quality of the service provided by the HEWs depends on their competencies. Studies identified that the HEWs had different levels of knowledge. A national evaluation of the HEP [38] identified that HEWs' level of knowledge on ANC was relatively high; however, in another study, their knowledge on the content of counselling on ANC and danger signs during pregnancy was found to be poor [41]. Moreover, HEWs' knowledge on some areas related to complications during pregnancy such as how to assess vaginal bleeding during pregnancy, comprehensive knowledge in understanding the establishing of labour and on observations made to monitor the progress of labour were found to be poor. It was also reported that HEWs' knowledge on the diagnosis of severe malaria in pregnancy was not satisfactory. In addition, their knowledge on the signs of severe anaemia was moderate, with 74% of HEWs stating marked pallor, and 46% shortness of breath [38].

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#### 2.8. SUMMARY

##### 2.8.1. Effectiveness of the HEP

The introduction of the HEP showed promising results in the provision of health services and their utilization by the community. Access, coverage and utilization of maternal and child health services such as family planning, ANC and vaccination of children have improved in the community since the introduction of the HEP. However, the role of HEWs in improving the proportion of deliveries taking place in health facilities and PNC was not significant. The HEWs played a good role in the control and prevention activities of major communicable diseases such as TB, malaria and HIV. HEWs improved the utilization of mosquito bed nets, which ultimately decreased the occurrence of malaria epidemics in the country. The detection of TB cases and the success rate of the treatment improved in the areas where the HEWs started TB case screening and treatment. It was more cost-effective for HEWs to treat TB patients at the health post than for health professionals to treat them in other health facilities. The HEWs played a major role in teaching the community on environmental and personal hygiene,

encouraging them to own toilet facilities and making them get improved access to a safe water supply; this has improved since the introduction of the HEP in the community.

#### **2.8.2. Factors affecting the performance of the HEWs**

Some cultural practices continue to affect the utilization of health services in the community. Women were found to be not utilizing family planning services due their desire to have more children and the influence of their husbands. Also, the community tended to prefer traditionalists over the HEWs, due to cultural beliefs and the personal proximity that the community had with the traditionalists. Concerns about privacy and not wanting to be seen by health professionals also affected the utilization of maternal health services in the community. In addition, the community's expectation of having curative services at the health post was cited as a reason for a decline in the acceptance of the HEP in the community. Moreover, a lack of community awareness of particular health programmes affected their utilization of health services.

Supplies, logistics and basic infrastructure such as electricity, water and roads affect HEWs' performance. The desk review identified that different logistics and supplies were not available in health posts, and the majority of health posts did not have basic infrastructure and tools such as electricity, water and a road connecting the community to the health centre and *Woreda* health offices. The health post is where the community receives services from the HEWs, and the HEWs also need to have a dwelling in the health post compound to provide health services to the community day and night. Building the health post and dwelling for the HEWs is primarily the responsibility of the *Kebele* administration with support from the *Woreda* health office and the *Woreda* administration. In this study we found that there were *Kebeles* which did not have health posts and that the number of HEW dwellings was very low in both Sidama Zone and the Southern Region.

The HEWs work on the 16 health extension packages under four thematic areas. The literature review found that the HEWs enjoyed performing immunization, family planning and ANC services, whereas normal delivery, IMCI and PNC were among the services they provided less frequently.

The performance of the HEWs is directly related to their motivation. Literature in this study indicated that they were dissatisfied with their housing conditions and the treatment they received when requesting a transfer or annual leave. The majority of the HEWs believed they were underpaid considering their workload and claimed they were less well paid than other government employees working in different sectors. It was also mentioned that the majority of the HEWs believed they were overloaded with their assigned tasks.

Literature in this review showed that supervision is often lacking a feedback mechanism. The majority of the supervised health posts did not receive supervisory feedback. The HEWs carried out limited supervision of the VCHPs, and this was verified by the written documents in a few *Kebeles*.

The HEWs refer cases beyond their capacity to the health centre or hospital, and the referral health facility is expected to send feedback to the HEWs, so that the HEWs can follow the referral cases. Some logistics and supplies for referral should be available at the health posts. This study found that in the majority of the health posts the referral forms were absent and that the majority of the health posts were not receiving feedback about the patients they sent to the higher-level health facility.

Guidelines and manuals were absent in the majority of the health posts, and the HEWs were found to be lacking basic knowledge and skills in obstetric emergencies and their management.

## CHAPTER 3 – STAKEHOLDER MAPPING

### 3.1. METHODS

Different stakeholders that can play important roles in CTC providers' performance and, therefore, can bring about a change in maternal health services in Sidama Zone were identified. These stakeholders are expected to influence policy and show their commitment to mobilizing resources and giving necessary support to the REACHOUT Ethiopia project. The stakeholders are found at community level, at different levels of government and among NGOs, UN agencies and partners working in the area of HEP, universities and colleges.

Initially they were identified by the brainstorm discussion within the REACHOUT team. Then after that, the most important stakeholders were included in the Country Advisory Group (CAG), and the first CAG meeting was held on 15 May 2013. When selecting the stakeholders, their area of work, the mission of the organization and the potential role of the stakeholders were taken in to account. The second CAG meeting was held on 10 January 2014. The main aim of the meeting was to present the findings of the context analysis to the CAG members and obtain input for the quality improvement cycle. The CAG members suggested important areas for the implementation of the quality improvement cycle, such as supervision, referral and capacity-building for the HEWs and their supervisors.

### 3.2. LIST OF STAKEHOLDERS

- Ministry of Health (MoH) — from federal to local-level line offices
- Policymakers: Federal MoH, Regional Health Bureau, Sidama Zone Health Department and *Woreda* health office
- Health facilities (health posts, health centres and hospitals) and the health workforce (HEWs, health workers)
- Reproductive Health Technical Working Group (RH-TWG)
- Bureau of Education (BoE) — regional and line offices at lower level
- Bureau of Women and Youth (BoWY) — regional and line offices at lower level
- Pharmaceutical Fund and Supply Agency (PFSA) and UNICEF
- University of Hawassa (UoH) and Hawassa Health Science College (HHSC)
- Councils: Regional, Zonal, District and community (community representatives at different administrative levels)
- Community leaders and members including religious leaders, *Kebele* administration, TBAs and HDAs

- NGOs working on maternal and child health: Save the Children, Family Guidance Association (FGAE), Engender Health, Integrated Family Health Program (IFHP), Intra Health, faith-based organizations (FBOs), Plan International and Goal Ethiopia
- Mass media: Regional and local media.

### 3.3. INTEREST AND ALIGNMENT

The interest and alignment of stakeholders was assessed based on evidence about their current behaviour — i.e. their discourse, attitudes, the procedures they follow, and the content of their formal and informal policy expressions.

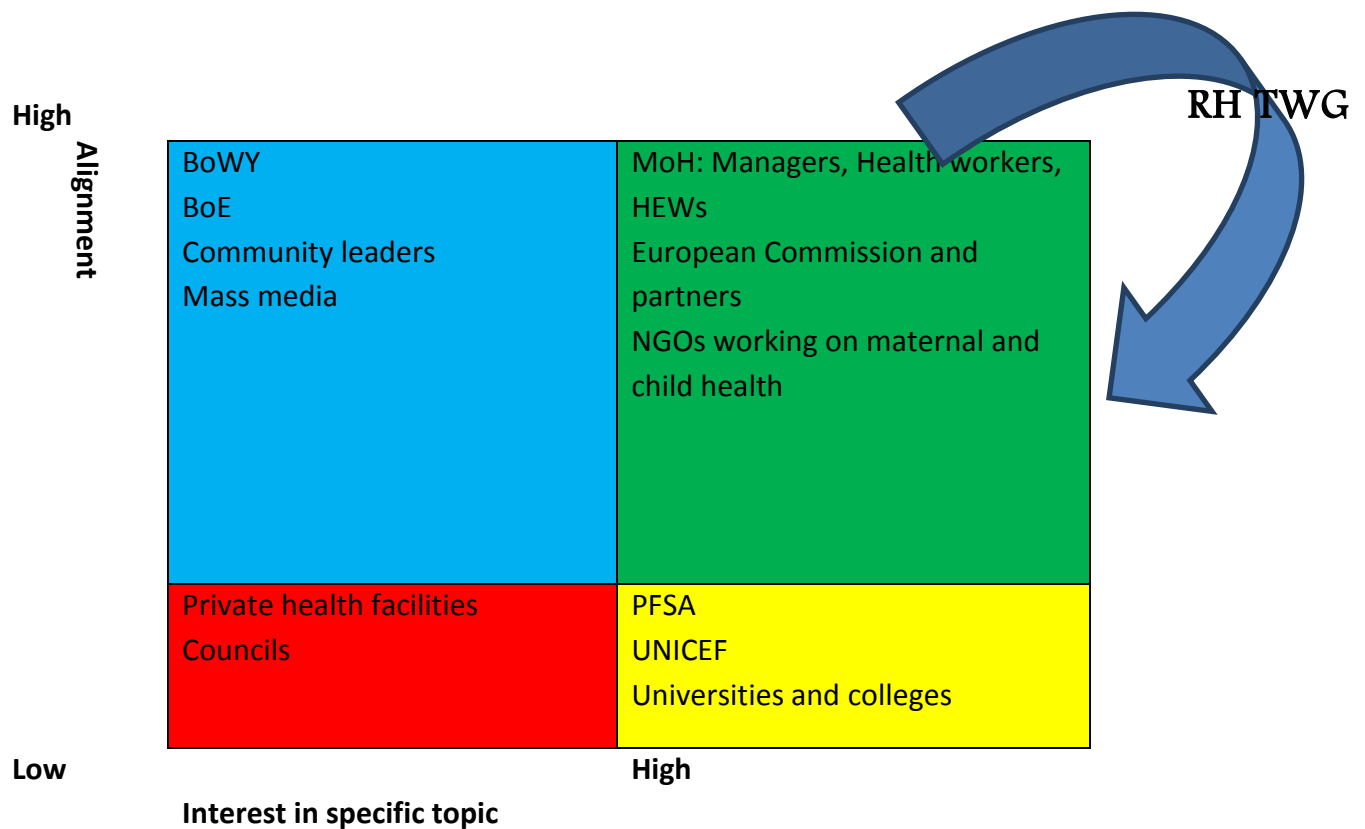
The potential stakeholders identified through the stakeholder mapping are listed above in Section 3.2. Subsequently their characteristics/role and their potential contribution to REACHOUT were discussed. The coloured grid in Figure 5 shows the level of alignment and interest of the stakeholder to REACHOUT.

**Green Quadrant:** These are the organizations/individuals which have high interest and high alignment with our project. They will be regularly engaged in the activities of REACHOUT and take part in review meetings, workshops, trainings and policy briefings. The REACHOUT team is also responsible for submitting and presenting the performance report and the findings of the study to this group.

**Blue Quadrant:** These organizations have high alignment but less interest in maternal health, such as the BoWY and BoE, the community and mass media. These organizations need to be stimulated in their interest and engagement through communication with the managers of the organizations. This can be done by involving them in joint meetings and working closely with them to increase their engagement.

**Yellow Quadrant:** These stakeholders are most important because of their high level of interest in the programme. They include PFSA, UNICEF, universities and health science colleges. The REACHOUT team will keep them informed. The priority agenda has to be shared with them so that they can support and think along with REACHOUT.

**Red Quadrant:** They are not likely to be part of initial communication activities, but the REACHOUT team will keep them in the loop. Occasional involvement in REACHOUT meetings and workshops will improve their level of engagement.



**Figure 5. Alignment, Influence and Interest Matrix (AIIM)**

### 3.4. OUTCOME (WHAT STAKEHOLDERS ARE EXPECTED TO DO DIFFERENTLY FOR REACHOUT)

MoH at policy level: We would like to inform managers and policymakers about the findings of our study and lessons learned as a result of REACHOUT so that they can scale up interventions and introduce some policy changes which will improve the performance of HEWs. We expect policy development, resource allocation and mobilization from these stakeholders.

At the second level of the MoH, we find different health facilities rendering health services to the community. We expect their services to be integrated and collaborate with the maternal health services provided by HEWs. We would like to involve and receive support and coordination from these stakeholders on strengthening the referral system, the provision of logistics and supplies to the HEWs, on-the-job training, supportive supervision and monitoring and evaluation of the HEP.

BoE: We would like the BoE to increase the enrolment of women in schools, which will directly capacitate women so that they their health-seeking behaviour will improve. We would also like the BoE to convey messages about maternal health to the students so that they can communicate with their families.

BoWY: The BoWY will be involved in strengthening women's development groups at *Kebele* level, which will stimulate women to discuss maternal health issues. The bureau and its line offices can convey maternal health messages to women at any women's gatherings. The BoWY can be involved in strengthening pregnant women's forums and awareness creation activities on cultural and traditional practices which affect the utilization of maternal health services in the community.

UN agencies, NGOs and partners can support REACHOUT through resource mobilization and capacity-building such as by providing training, logistics and supplies at the health posts. They will be involved in joint supportive supervision and will be asked to share the knowledge of their expertise and best practices to improve the performance of HEWs.

Councils at different levels are expected to allocate budgets for maternal health services, ambulance fuel and maintenance and infrastructure such as electricity, water and roads.

Community and religious leaders will be involved in community mobilization and awareness creation activities conducted by HEWs. They will be involved in addressing cultural and religious factors which influence the utilization of maternal health services. They will be also take part in activities which strengthen community support mechanisms for HEWs.

Local mass media will be responsible for raising awareness and providing information to the general community.



## CHAPTER 4 – QUALITATIVE RESEARCH METHODOLOGY

### 4.1. OBJECTIVES

The qualitative research had the following objectives:

- to identify evidence for interventions which have an impact on the contribution of HEWs to the delivery of effective, efficient and equitable maternal health care;
- to identify and assess factors and conditions that form barriers to or facilitators for HEWs' performance on maternal health services; and
- to synthesize evidence on key barriers and facilitators to be considered as an intervention focus for the first improvement cycle, to ultimately contribute to improving HEWs' performance in maternal health.

### 4.2. STUDY DESIGN

A qualitative study design which employed focus group discussions (FGDs), in-depth Interviews (IDIs) and key informant interviews (KIIs) was used. Pre-tested semi-structured interview (SSI) and FGD guides were used to assess the HEP and to identify specific conditions that influence implementation and performance of the HEWs in relation to structures, policies, organization and communication. IDIs and FGDs were held with HEWs and mothers, only FGDs with male informants, and KIIs with health centre heads, delivery case team leaders, *Kebele* administrators, TBAs, and policymakers who had adequate knowledge of HEWs and their programmes.

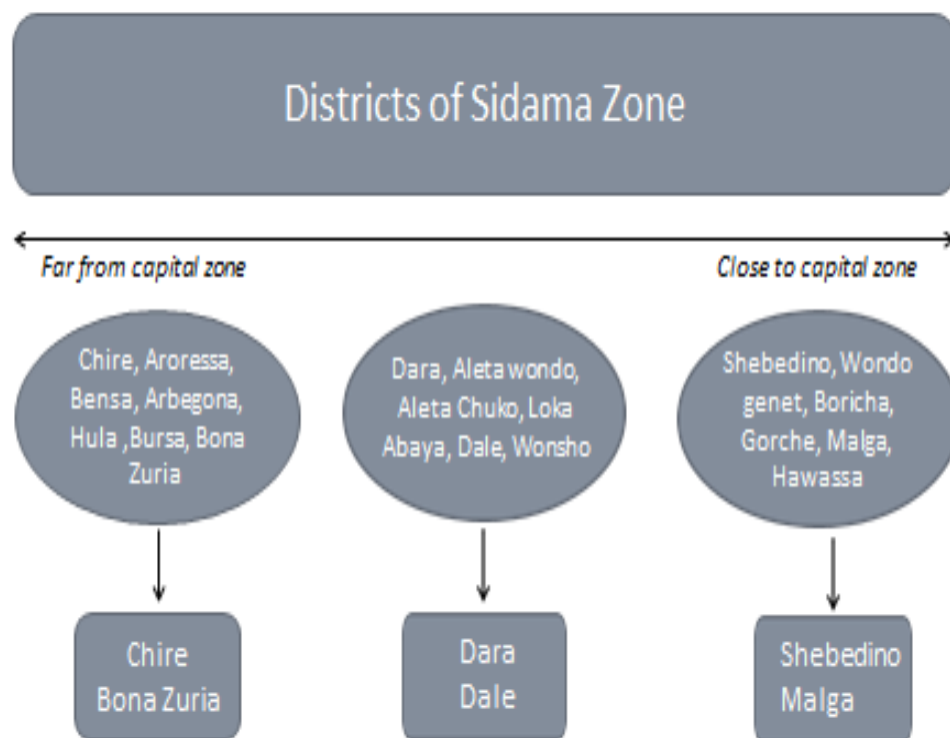
The SSIs were used to obtain perceptions, critical reflections and insights that may not be shared in FGDs. In the SSIs and FGDs, questions were asked about the existence and perceived contribution of each of the health system building blocks of the HEP. In particular, health system policies and structures related to human resources planning and management, quality assurance and M&E were explored.

### 4.3. DESCRIPTION OF RESEARCH SITES/DISTRICTS

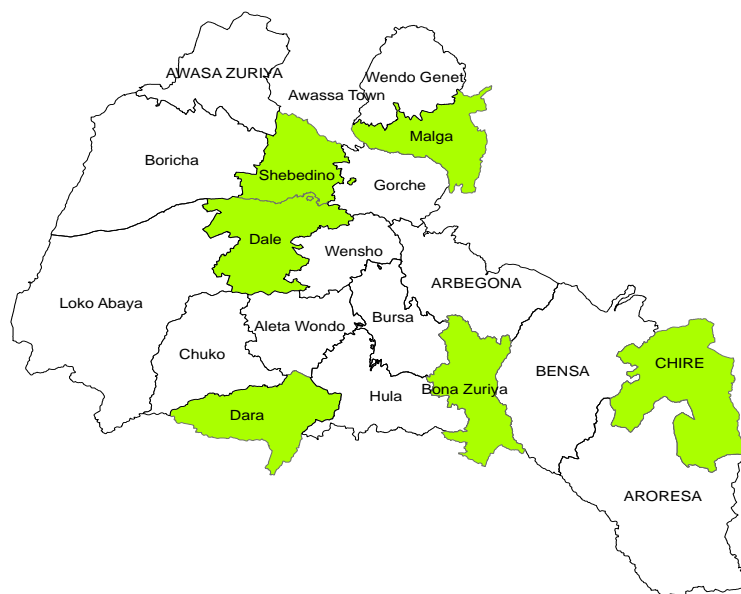
Sidama Zone is one of the 15 Zones and four special *Woredas* found in the South Nation Nationalities and Peoples Region (SNNPR). (A special *Woreda* is a kind of special administrative division in SNNPR established in areas where there is no zone structure, and it is directly accountable to the regional government.) Sidama Zone has a population of 3.4 million people, which accounts for 20% of the regional population. The zone has two city administrations and 19 rural districts, which are administratively decentralized. Geographical variations and differences in infrastructure, including the availability of human resources, affect the utilization

of maternal health services. In addition, socio-cultural and economic factors influence the community's health-seeking behaviour. However, the interplay among factors affecting health service delivery and utilization in the zone was not well studied.

Site selection was made based on the distance from the districts to the zonal capital; all 19 districts were sorted into three clusters. The study was conducted in six districts (two districts from each cluster). The selection of two districts per cluster was made based on the general performance of HEWs and the availability of infrastructure and human resources (one relatively good and one poorly performing district) (see Figure 6).



**REACHOUT Ethiopia, Sidama Zone, Context Analysis,2013**



**Figure 7. Map of intervention sites**

#### 4.4. SAMPLING AND PARTICIPATION SELECTION

HEWs, managers (health centre heads who are responsible for organizing supervision and giving technical assistance to HEWs) and key informants (HEP coordinators at *Woreda*, zonal and regional level) and community members (men, women, TBAs) were included in the study. For a detailed description, please refer to Annex 2.

**Interviews with mothers:** A total of 12 women were selected for IDIs (two per district). Women who had recently delivered or who had children less than two years of age and women who were known to be pregnant were selected. These women were purposively selected to represent a range of experiences: some had delivered at home, some at a health post, and some had been assisted by a TBA, and they had different positions in the HDA (some were HDA leaders, and some were members of the '1 to 5 network'). District field supervisors and *Woreda* health offices were involved in identifying women for the study.

**FGDs with women:** Six FGDs consisting of 8–10 participants were conducted in each district. They included women who were older than 18 years of age and who were close family with pregnant women or mothers of young children (mothers, mothers-in-law, other relatives, HDA leaders). TBAs were not included in these FGDs. District field supervisors and *Woreda* health offices were involved in identifying women for the study.

**FGDs with men:** FGDs with men consisting of 8–10 participants were conducted in two districts. They included influential men in the community who had been involved as religious leaders, community leaders and who were respected by the community, and two of them were the husbands of women who participated in the IDIs for mothers.

**Interviews with HEWs:** Two HEWs were selected from each district for an IDI. They were purposively selected to represent a range of experiences, including HEWs working in remote *Kebeles* and *Kebeles* with poor/good maternal health performance. To learn about their experiences on maternal health, HEWs who had served for two or more years were included. The health centre, *Woreda* health office and *Woreda* field supervisors assisted the research team in selecting appropriate HEWs.

**FGDs with HEWs:** A total of six FGDs (one in each *Woreda*) were conducted. HEWs were selected from *Kebeles* with a range of experiences, including remote *Kebeles*, based on proximity to the *Woreda* centre and maternal health performance (poor or good). To learn about their experiences on maternal health, HEWs who had served for two or more years were

included. Prior to the fieldwork, the health centre, *Woreda* health office and *Woreda* supervisors assisted the research team in selecting appropriate participants.

**Interviews with TBAs:** One TBA was recruited for an IDI in each of the six districts. HEWs and members of *Kebele* administrations were asked to identify currently active TBAs in their area who are active in conducting deliveries in the community and/or referring pregnant women for skilled delivery.

**KIIs:** These took place with a range of respondents who had direct contact with HEWs. The key informants included *Kebele* administrators or chairpersons (HEWs are recruited and evaluated by and accountable to them) and health centre heads and delivery case team leaders (midwives/clinical nurses) who had direct contact with HEWs regarding issues related to supervision, referral and support to the HEWs. KIIs were also done with core process owners in disease prevention and health promotion at the zonal, district and regional level. Recruitment was done purposely, on the basis of knowledge about the HEP, their role related to the HEW, and those with experience in supervision, on-the-job training, management and involvement in policymaking and implementation. For more information about how many and which KIIs were conducted in which districts, see Annexes 2 and 3.

#### 4.5. DATA COLLECTION INSTRUMENTS AND TRAINING

Open-ended FGD and SSI guides were adapted from the generic protocol prepared by KIT and supplemented by a literature review of policy documents and published journals to suit the context of Ethiopia. The guides are presented in Annex 1.

Prior to the data collection, field staff took part in a two-day training course on the data collection tools. The tools were pre-tested in one district that had not been selected for the research (Wondo Genet district) and were minimally modified after the pre-test before the actual data collection started.

#### 4.6. DATA COLLECTION PROCESS, DATA PROCESSING AND DATA ANALYSIS

A field protocol was developed to indicate the responsibilities and roles of each team member involved in data collection for the context analysis and to plan for the fieldwork and important resources (human, logistical and finance).

The interviews and FGDs were carried out by four trained data collectors. Two of them were lecturers at Hawassa and Arbaminch Universities who had experience in qualitative data collection, speak Sidamigna, Amharic and English and had a relevant health background and Masters-level education. The other two data collectors were REACHOUT Ethiopia staff

members who had conducted qualitative research before; they supported the other data collectors during the whole research period. All the data collectors were initially trained by a KIT colleague, who was also involved during the pilot test.

After obtaining written or oral (if the participant was unable to read and sign) consent, digital audio recordings and detailed notes of all FGDs and SSIs were taken. Audio records and transcripts, notes and data records were kept in a secure and locked place. Electronic copies were kept to be used by authorized people who were involved in the study. All the data were coded (participant identifiers were removed). Data were transcribed, translated and subjected to qualitative analysis techniques.

All the transcripts were read to identify key themes to develop a coding framework (which was inspired by the REACHOUT framework as presented in Chapter 1), and the responses were coded accordingly. The coded transcripts were entered in an electronic qualitative data management and analysis software (Nvivo 10). Data were also further analysed, 'charted' in themes and sub-themes and summarized in narratives for each theme and sub-theme. The narratives led to further questions and associations between the themes, to obtain answers to the original objectives and the themes that emerged from the data.

#### 4.7. QUALITY ASSURANCE/TRUSTWORTHINESS

To ensure that the data collected were of an acceptable quality, the following measures were taken:

- Oversight for field-testing and finalizing the data collection instruments and the training of data collectors was done prior to the actual data collection. Draft data collection instruments were finalized after field-testing.
- Two data collectors who had the skills and knowledge of qualitative data collection and were able to speak and translate using the local language (Sidamigna) were recruited for fieldwork.
- The qualitative data collection instruments were initially drafted in English and translated into the local language. To ensure quality, during the researchers' training key terms were also translated into the selected local languages and translated back by others, confirming that terms were understood in the same way.
- Interviews and FGDs were digitally recorded, transcribed and at the same time translated into English and independently checked by a mentor from KIT.

Interviews and FGDs were anonymous to ensure confidentiality. Identifiers such as names, personal identification numbers, ethnicity and personal addresses were not collected. FGD participants were assigned unique identifiers. All data collected as part of this project, including

notes from and recorded interviews, were kept and stored in a secure facility. Computers, filing cabinets and related research equipment/facilities that could reveal identifying information were only accessible to authorized research staff. The research team was trained on research etiquette and the importance of confidentiality.

#### 4.8. STUDY LIMITATIONS

The collection and presentation of qualitative data is deemed appropriate for the objectives of this study; however, qualitative data cannot and should not be quantified to define characteristics of people, services or other elements of the study. Some of the informants — notably, women and TBAs — were difficult to recruit. Only male candidates were recruited for the field data collection, as no females applied for the data collection posts. Since the TBAs were not allowed to provide maternal health services except referring expectant mothers to health posts, there was some reluctance from TBAs to participate in the research or provide any information.

#### 4.9. ETHICAL CLEARANCE

The generic protocol was approved by the KIT Ethical Review Committee. The specific research protocol for Ethiopia, which was derived from the generic protocol, was submitted to the SNNPR Health Bureau Research and Technology Transfer Core Process for ethical review (Ref. No. H/HU/021/13 of 17 June 2013), and ethical clearance was obtained (see Annex 6). We also obtained a letter of support from the Sidama Zone Health Department subsequently, to allow us to contact district health offices, health institutions, health workers, HEWs and community members. Written informed consents were sought at each level and from participants.

## CHAPTER 5 – QUALITATIVE RESEARCH FINDINGS

### 5.1. OVERVIEW

In this chapter the findings of the qualitative study with regard to the performance of HEWs are presented. The chapter begins by describing community-level contextual factors which influence the community's health-seeking behaviour. Subsequently, factors related to the intervention design and others are discussed.

### 5.2. FACILITATORS AND BARRIERS

#### 5.2.1. COMMUNITY CONTEXT AND ITS INFLUENCE ON MATERNAL HEALTH-SEEKING BEHAVIOUR

##### *Culture*

Traditionally women in Ethiopia are expected to have many children, and half of the female respondents in this study had five or more children. Attitudes towards family size appear to be shifting, and many respondents described birth spacing and receiving family planning services. Some female respondents were active in seeking contraception; others may be reluctant despite some having pressure from their husbands to use it. Traditional beliefs are starting to change in many spheres of life such as seeking health care, but practices around pregnancy and childbirth seem to be deeply embedded within tradition.

Some male respondents felt that health-seeking behaviour is influenced by a lack of knowledge and awareness among women about maternal health issues, and, as described above, they also share the traditional belief that a woman is expected to deliver at home. Women described how they should follow the same practice as their mothers and ancestors and were heavily influenced by the advice from elder family members and village elders.

HEWs described how some women refused the advice of both the HEW and members of the HDA and sought assistance from the TBA for 'cultural' reasons:

*"Regardless of who is rich and poor, all can get services; the problem is only on the mother's side because of the past culture. They don't want to get it. They complain that these are not the experiences of our women in the past."* (ETH-DL-FGD-WO)

Women were described as not perceiving a risk or a need to seek health services. Therefore, if a woman is not unwell, she may just stay at home rather than seek ANC services:



*"If there is no clear sickness, they don't come to visit health institutions. Not only this, if you bring them to health institutions during their labour they run away and deliver at home. I have seen this type of case myself. They look at this place [health post] as sinful and they go home to deliver." (ETH-CH-FGD-MEN)*

*"...first mothers don't come early and get the necessary check-up. They usually don't seek support from health professional at the start of labour; they hide their labour. When they come late to the health institution they will end up in death. Late care-seeking behaviour is the major problem." (ETH-BZ-KII-KA)*

The role of men in maternal health-seeking behaviour tends to be minimal. Husbands tend to see their role as a provider, or sometimes as supporting women by accompanying them to receive maternal health services. However, some participants indicated that husbands were not supportive of their wives during pregnancy:

*"...in some cases their husbands don't allow them to go to the health facility. There was a woman who I managed her labour, at that time her husband was not at home. He came to the health post and shouted at his wife." (ETH-DL-IDI-HEW1)*

Some female respondents described that they felt the need to prioritize their domestic or agricultural activities above looking after themselves during pregnancy.

### *Privacy*

A sense of shyness, secrecy or shame also prevents some women from seeking maternal health services. 'Shame' may mean that they conceal pregnancy until the fifth or sixth month. The woman's husband will usually be aware of the pregnancy, but there may be little disclosure to anyone else about it, although one woman felt unable to tell her husband, and assumed he would work it out for himself:

*"In our culture we don't want to talk to people. People should know after the birth of the baby or when our abdomen becomes big." (ETH-DL-IDI-M1)*

Again there is a sense of changing attitudes and practice, although this was not reported in all districts:

*"Previously pregnant mothers didn't go for ANC; they would hide themselves. They were ashamed of their pregnancy if they exposed themselves. Now they stopped behaving as previously and start to go for ANC. No woman in the community is willing to give birth by the TBAs. Due to culture, in previous times labouring mothers would not go outside [leave her home] even though she had long and difficult labour. Now when a woman feels labour pain, she immediately goes to the health centre by herself." (ETH-SH-IDI-M1)*

Many respondents felt that willingness to use maternal health services was improving as a result of the health education and community mobilization efforts of recent years. It encouraged women to seek services, whereas in the past they were more dependent on the advice of their relatives or elders. Changes in practices have occurred, such as cutting the umbilical cord with a traditional blade or putting butter on the umbilicus. Other practices persist, such as burying the placenta inside the home, with failure to do this considered bad fortune by some people. The importance of such traditional practices can influence willingness to deliver at a health facility, as health staff are not — in theory — permitted to return the placenta to the family so that they can take it home.

Some women who had more than one child spoke of change over time and how they previously had chosen to give birth at home, but with the new emphasis being given to promoting maternal health services they were increasingly choosing to give birth at a health post or health centre. The women in this study frequently described how they now present themselves to the health facility for delivery, and are generally less likely to seek the assistance of a TBA than the more trusted HEW. There was, however, a good deal of variation in the health-seeking behaviour in villages, and sometimes this appeared to be associated with the characteristics and perceived skills of HEWs and local administrative staff and the relationships and trust that existed between mothers, HEWs and other key people.

### *Religious beliefs*

The religious (predominantly Christian) beliefs of community members appeared in some cases to have guided their health-seeking behaviour. Some respondents had the attitude that God would protect them; therefore, there would be no need to seek health care services. Other respondents describe a reliance on God in addition to HEWs and other health professionals (including, on some occasions, TBAs) for their health and well-being:

*“I first of all believe the advice of Jesus; I also received the advice of people, from health extension worker, health professional, also TBA. I believe the advice of all of them.”*  
(ETH-BZ-IDI-M2)

Providers recognized that community members’ religious faith was sometimes a barrier to seeking health services, and several HEW respondents recounted stories of a child or maternal death due to a family’s reluctance to allow referral to a health facility:

*“The problem is, even though some people have awareness, they don’t want to show this behaviour in practice. They say ‘God will help.’”* (ETH-DL-IDI-HEW1)

Maternal and child death was sometimes justified as ‘due to the will of God’, rather than something over which community members felt they have control. References to religion influencing health-seeking behaviour were common; however, many respondents clearly recognized the importance of health service provision, and their behaviour did not seem to be negatively influenced by their faith. Some male respondents felt that those who are not educated were likely to put more faith in God.

### *Delivery*

Many women in this study continue to choose to deliver at home, and this may, in their minds, be safe (sometimes due to the help of God). One of the contributory factors for this is the fear that some women feel about going somewhere different. For example, if they have delivered a child safely at home in the past, they are accustomed to it, and, despite current advice to deliver in facilities, they are worried about delivery in an unfamiliar setting. Some women would rather have their husband and relatives present at delivery than an HEW or other health professionals, and the prospect of involving health staff or trainee assistants scares some women. Respondents suggested that most women would only start to consider going to the health facility if their labour is long.

Fear of costs was also a factor for some; both women and providers talked of the potential costs related to receiving maternal health care at health facilities. Ambulances are provided free of charge to take women to deliver at health centres or hospitals, but in reality fuel costs are sometimes sought. Hospitals are obliged to provide free delivery services to those who have a ‘poorest of the poor’ letter from their *Kebele* administration, but respondents described how they did not have the required documentation, and others assumed they would need to pay; rumours about these costs abound.

### *Antenatal care*

The concept of ANC is strongly associated with vaccinations, so much so that some women use the word vaccination to refer to ANC. Some are not aware of their pregnancy for several months until they notice that their abdomen has grown. Some respondents chose not to seek ANC, or had only started to use ANC for recent pregnancies. Others described how they immediately sought advice and ANC from the HEW on learning of their pregnancy. It was also mentioned that some women were not able to attend the ANC due to the influence of their husbands or mothers-in-law:

*“Some of the women don’t take ANC; some women after being identified and registered by the voluntary community health workers may not want to come to the health post. They complain about their husband and mother-in-law: ‘My husband and mother-in-law don’t allow me to go for ANC.’” (ETH-DR-IDI-HEW1)*

### *Community engagement*

The HEP guideline indicates that the community has to be involved during HEW recruitment. The HEW who will be serving the community after the completion of training has to be a member of the *Kebele*. Selection committees comprise many actors, including representatives of the local community. However, in our study the involvement of the community during recruitment was found to be minimal, except giving a letter of support during recruitment through the *Kebele* administration:

*“We were six when we competed to be a health extension worker. All of us were residents of this Kebele. The Kebele gave us a support letter and sent our documents to the Woreda health office.” (ETH-DL-IDI-HEW1)*

The recognition and thanks which the HEWs receive from the community were found to motivate them to work hard and increase their commitment to serve the community. The majority of the HEWs indicated that they were receiving thanks and acknowledgement from the community for the service they were delivering:

*“When I see the result I feel happy, and the community also thanks us after we saved their life: Health extension workers are doing a great job. Health extension work is great.” (ETH-DL-FGD-HEW)*

Since HEWs are expected to come from the community and serve the community, they are indirectly accountable to the community in which they are serving. Therefore, the community has the right to monitor and evaluate and give feedback to the HEWs on their performance. Many of the HEWs indicated that the community had been evaluating and monitoring their performance through public meetings. However, the community tends to give positive feedback to the HEWs, even though they see some gaps in their service, since the community tends not to want to expose the faults of HEWs:

*“Even though there are problems in our services, the community doesn’t talk about the negative issues. Mostly they talk about the positive part of our work and about HEWs. Since the HEWs are from the community, they don’t say negative things about them.” (ETH-SH-KII-HCH)*

### *Community trust*

The fact that HEWs are generally recruited and assigned to the same community where they are born appears to have an impact on community trust and service utilization, and the HEWs also value the community and do what they can to support it:

*“I can say that they have a good attitude. As you know, the HEWs are employed from their own Kebele; the community thinks that they are their own. Because of this they*

*respect them, and the HEWs also have great value for the community. If the labouring mother couldn't come to the health post, there are times that the HEW goes to the mother's house in the middle of the night using a solar torch to help her during her labour."* (ETH-SH-KII-HCH)

#### *Confidentiality and familiarity*

A concern about not wanting to be seen by unfamiliar health professionals affects some women's utilization of maternal health services. The reason why some of the expectant mothers did not want to deliver at the health facility is because they are not comfortable exposing their body to someone they do not know closely. Moreover, some HEWs mentioned that women do not want to deliver in facilities because they believe they will be required to use the delivery bed, which they believed would expose them and make them vulnerable to illness. One of the HEWs mentioned:

*"I think it's because the mothers don't want to expose their body to other people. They say: 'We don't want to, because we have seen when we take someone they [the health centre] are putting them [the mother] on the bed, exposing their body, I will deliver at home. Let God not bring such a thing on me. I want to be inside my blanket and deliver freely, so I don't want to go.'" (ETH-BZ-IDI-HEW2)*

Another issue in relation to privacy and confidentiality that was raised by some HEWs and delivery case team leaders was a preference to use female health professionals over men. The reason stated for this was that some women are afraid to consult or confide in male health professionals at health centres, so they refrain from visiting them:

*"At the time when I chose HEP, the maternal health [centre] services in this vicinity were given by male health workers. These people gave the services in clinics in the past, but the women refrained to give them the information and didn't want to go there for family planning, because of fearing to tell the secret regarding menstruation to men health workers, so they gave birth beyond their capacity to grow up. But after we started this work the women told us all the secrets because we approach them friendly; for example, they never revealed the day of menses for males to receive the injectable contraceptives, so they gave birth without wanting it (because of a lack of family planning)." (ETH-DR-FGD-HEW)*

#### **Summary**

This study finds important community-related factors which have an effect on HEWs' performance and the community's utilization of health services. The desire to have many children persists in the community, even though there is a change in women's behaviour about using contraceptives. The practice of women in seeking maternal health care is heavily

influenced by the advice they receive from elder family members and village elders, and women follow the same practices as their mothers and ancestors. The trend of hiding pregnancy until it becomes evident, low perception of the risk, unwillingness to be seen by unfamiliar health providers during labour and relaying on God, rather than seeking medical support, influence women's attitudes to maternal health services.

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#### 5.2.2. HEALTH SYSTEM FACTORS

##### *Client costs*

Legally maternal health services are provided free of charge in Ethiopia. However, most of the participants indicated that maternal health care services provided in the hospital were not free of charge, whereas services provided at health posts and health centres were being provided free of charge. In addition, HEWs encountered problems when making referrals to hospitals, and the community was reluctant to accept referral due to rumours and experiences of payment being demanded for hospital services:

*"...the government said the maternal services are free of charge, but women pay in Bona hospital for delivery services, so I refrained from referring patients to this hospital. ...The hospital always discourages our mothers to get maternal services. ...But the hospital always gets money for delivery services." (ETH-BZ-FGD-HEW)*

##### *Logistics, supplies and infrastructure*

Quality service provision needs the availability of the necessary drugs, medical equipment and utilities such as water and electricity and other infrastructure such as roads to the health post. Most of the HEWs mentioned the absence of the necessary logistical support, supplies and infrastructure at their health post. Water, electricity and medical equipment were commonly mentioned as absent from health posts, which has a significant impact on the capacity to provide maternal health services, and women's willingness to seek those services at the health post:

*"...Lack of water is a great challenge according to my understanding because if there is water we can clean our set and our home...so lack of water in the health post is one of the great challenges." (ETH-DL-FGD-HEW)*

Most HEWs complained that they were not able to perform their work properly due to the lack of important supplies in the health post. The absence of these was also mentioned as a reason for HEWs' lack of interest in their work and one of the reasons mentioned for not providing a 24-hour service:

*"...when we say training, we trained on safe and clean delivery, but the room of the health post is not enough, and the health post itself is not clean. The other thing is that*

*what we were trained but really implementing is quite different. Our bed is not clean and safe; no surgical gloves and no full delivery set are available...” (ETH-DL-FGD-HEW)*

#### *Monitoring and evaluation and information system*

M&E is an integral and important component of the HEP and contains both technical and managerial purposes. Monitoring helps to regularly review achievements and progress towards goals and contributes to effective decision-making at all levels.

HEWs are accountable to the *Kebele* administration. The *Kebele* administration is expected to jointly evaluate the performance of HEWs with the *Woreda* health office. The HEWs reported that they evaluate the quality of the service they were providing in the community with the *Woreda* health office, *Kebele* administration and the community. This was done by joint meetings of the *Woreda* health office, the *Kebele* administration and the HEWs:

*“We’ve a time of meeting in which people from the Woreda health office and the Kebele administrators gather with me, for I am a cabinet health extension worker, and during this meeting we evaluate our activities.” (ETH-SH-IDI-HEW2)*

Health centres are responsible for supporting and evaluating the performance of HEWs. One health centre in a *Woreda* is responsible for supporting and evaluating five health posts. Again a health centre is supported and evaluated by the *Woreda* health office. Currently, there is a system known as a ‘community–health facility forum’ through which the community regularly evaluates the performance of the health centre.

The HEP coordinator from the zonal level, a delivery case team leader and a head of a health centre mentioned that the performance of health centres was evaluated by community–health facility and ANC forums:

*“...in every district we have started community to health facility forums, and this should be strengthened and continued. This is the media where community can talk about the health service which is given at hospital and health centre level.” (ETH-KII-HEPC-Z)*

#### *Reporting, data collection and feedback*

HEWs mentioned that they collect reports from the leaders of the HDA, incorporate them as part of their activities and take action based on the information they contain:

*“The leader of the HDA provides us a weekly report, and we add this and our work into the monthly report and put this information in the book. I collect information every week but send the report monthly.” (ETH-BZ-FGD-HEW)*

An HEW in Dara mentioned that she received reports from the 'one to five' leaders and used this information to contact pregnant women:

*"Yes, after we receive the report from the one to five leaders, we go to the pregnant mothers to know her status, to give an appointment for ANC and to register her on the pregnant mother format. After we receive the report from the leaders, we will also visit newly delivered mothers to give them PNC. We check the weight and the temperature of the baby. We go for PNC on the second and fourth day. But the leaders visit the delivered mother on 1st, 3rd, 7th and 28th day."* (ETH-DR-IDI-HEW1)

Most HEWs indicated that they started to use the new Health Management Information System (HMIS), which helped them keep records in a manageable way and decreased their work load:

*"Now, we are working with HMIS approaches."* (ETH-DL-FGD-HEW)

*"... the government has introduced to use the HMIS. We use folders for mothers, children and all other ill persons, and this decreases the workload now. Previously we used different cards for all, so it was difficult to handle this at that time. So it is good to work by putting all work together."* (ETH-SH-IDI-HEW2)

One of the HEWs in the FGD in Chire Woreda mentioned that the previous procedure of reporting to the Woreda health office had changed and that they had started reporting to the health centre:

*"Our records themselves tell something about our activities. We put them in the file. The reports should be communicated with the Woreda health office. Previously we used to report to the Woreda health office; now we report to the health centre. Then the health centre, after evaluating our report, sends the report to the Woreda health office."* (ETH-CH-FGD-HEW)

Many HEWs mentioned that they use the information for tracing defaulters, evaluating their performance and for further planning. However, one HEP coordinator indicated that HEWs had problems of proper registration and reporting in family planning services:

*"But they have also a gap in FP. They give the service, but they have problems with registration: they don't know which clients to be registered and reported and the like."* (ETH-MA-KII-HEPC-W)

## **Summary**

Maternal health services are provided free of charge at health centres and health posts, whereas patients pay for the services at hospitals. An absence of logistics, supplies and infrastructure at health posts seems to form barriers for HEWs' performance.



The performance of HEWs is jointly monitored by the *Woreda* health office, catchment health centre, *Kebele* administration and the community. This is commonly done as a public meeting, community–health facility forum or command post. HEWs use information for defaulter tracing, performance evaluation and planning purposes.

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### 5.2.3. INTERVENTION DESIGN FACTORS

#### *HEP intervention focus*

HEWs are expected to deliver the 16 HEP packages; however, most of the HEWs interviewed seemed to be particularly interested in providing maternal health services. Even though most agreed on this, HEWs are also often interested in other curative services such as providing treatment for TB and diarrhoea or preventive and health promotion activities such as personal hygiene and environmental sanitation:

*“The most interesting thing is saving the life of women and children. I feel happy when one mother calls me at her delivery. Previously, I was attending delivery at their home. Now I am attending in the health post since the bed is available. From my job, I feel happy by attending delivery. They trust us, and we are attending delivery at day as well as night. In addition, they are using vaccination; they are giving birth with space.”* (ETH-BZ-IDI-HEW1)

*“...I am interested in working in the activities of prevention and control of communicable diseases like TB, acute watery diarrhoea. I am also interested in personal hygiene and environmental sanitation.”* (ETH-CH-FGD-HEW)

#### *Remuneration and incentives*

Incentives were found to have an effect on the HEWs’ motivation and performance; they can be divided into financial and non-financial incentives.

#### *Financial incentives*

HEWs receive a monthly salary from the government. Some HEWs that were interviewed or participated in FGDs mentioned receiving a salary as an important reason for becoming and remaining an HEW:

*“Since I am paid my salary, I am committed to serve the community. I am happy when I work hard and take my salary.”* (ETH-DL-IDI-HEW1)

*“We joined the programme to support ourselves.”* (ETH-MA-FGD-HEW)

*“Without a salary, I don’t think I will serve the community. This will help us to work more.” (ETH-MA-IDI-HEW2)*

Regarding the amount of money they receive, many HEWs expressed dissatisfaction. Several HEWs mentioned a discrepancy between their salary and workload. HEWs worked on the 16 health extension packages, had a heavy workload but receive a small salary, according to their perception. Different HEWs reported that the insufficiency of financial incentives influenced their motivation:

*“The workload and the salary do not match.” (ETH-BZ-FGD-HEW)*

*“Our salary is very unfair, with our responsibility and the services we are giving for our society.” (ETH-SH-FGD-HEW)*

*“We have a lot of workload, but the payment is not equal to the workload. This always discourages us to work hard.” (ETH-BZ-FGD-HEW)*

Moreover, HEWs reported their monthly income to be insufficient to cover the costs they incur. HEWs said the salary they receive is not enough for 30 days, they were unable to cover their expenses and it was hard to take care of their families. In contrast, one HEW from Chire Woreda said she was happy about the salary she receives. The zonal HEP coordinator shared the opinion that the salary of HEWs is good:

*“When we come to our salary, we are getting below 30 birr per day. With this salary I can’t cover my expenses, and I am not able to support my family with my money. If I prepare a coffee to sell in town I can make 50 birr per day.” (ETH-MA-FGD-HEW)*

*“My salary is good since I worked for seven years and am getting a good salary.” (ETH-CH-IDI-HEW2)*

Different HEWs compared their salary to other government employees. They argued that, compared to other government employees, they are receiving a lower salary and are not treated similarly to their colleagues working in others districts. For some HEWs, financial considerations were a reason to change jobs or move to NGOs:

*“The workload is also my problem. Two health extension workers with different work and we don’t get paid properly, meaning we do more than other government employees do, but the payment discourages me a lot.” (ETH-BZ-FGD-HEW)*

*“Yes, you know the reason why most HEWs are leaving their work and being hired in other NGOs and other places is because of the government is paying a small amount of money.” (ETH-DR-IDI-HEW2)*

#### *Non-financial incentives*

For many HEWs, serving the community was a reason for becoming an HEW. Often, they were motivated by their own personal experiences and things that happened in their community. Besides serving the community in general, some HEWs had specific motivations and explained that they chose to be an HEW because they wanted to work on a certain health issue. In the FGDs, for example, HEWs reported wanting to work as an HEW to protect children from malnutrition and pneumonia, to prevent maternal mortality due to pregnancy or to save children’s lives:

*“...they are our mothers as well, and we are serving our own community. Their children are our children, and the community is my community.” (ETH-BZ-IDI-HEW2)*

*“I choose child health to decrease child mortality, because these children will be the future leaders of this country. The other thing I want to add, I chose to be a HEW to decrease neonatal mortality. In the second place I help tuberculosis patients.” (ETH-BZ-FGD-HEW)*

Many HEWs reported that seeing the results of their work — for example, the community adopting healthy practices — was a strong motivational factor to do their work. The community’s satisfaction with the HEWs’ services is also a strong motivational factor for HEWs:

*“What motivates us is our community protects themselves, and they are preventing themselves from the disease. ...When we see these changes, we are glad. Before the health extension program was started, people defecated on the road, as well in the open area, so it hindered us to function well, during home to home visits, but now this problem has been solved, so this motivates me to do more.” (ETH-BZ-FGD-HEW)*

The community’s appreciation of the HEWs (giving thanks and recognizing their activities) motivates the HEWs to work hard and increase their commitment to serve the community. The majority of the HEWs indicated that they were receiving thanks and acknowledgement from the community for the services they were delivering:

*“When I see the result I feel happy, and the community also thanks us after we saved their life. Health extension workers are doing a great job. Health extension work is great.” (ETH-DL-FGD-HEW)*

In addition to appreciation from the community, support from the *Woreda* is encouraging

HEWs. One HEW from Bona Zuria mentioned that she would be happy when the *Woreda* supervisors came to see their work. She stressed that HEWs need encouragement from the *Woreda* officials:

*“If the Woreda supervisors come and see our work, we will be happy. We need encouragement from the Woreda officials. We will be encouraged by the appreciation for our good work, but our morale will be affected if our good work is ignored. We will be motivated by the encouragement, and we might affect the work by low motivation.”*  
(ETH-BZ-IDI-HEW1)

#### *Career advancement and educational opportunities*

Regarding career advancement, there is an upgrading opportunity available for HEWs, but this is available only for selected HEWs, and the number of HEWs that can go for upgrading differs per district:

*“Six health extension workers are selected from each district for the upgrade program, but this is not true in Dale district. Only two are selected; we don’t know what is going on.”* (ETH-DL-FGD-HEW)

Sometimes HEWs reported even a discouraging role of the higher level regarding career advancement:

*“The government is not providing us education to develop ourselves and also prevents us from learning by ourselves even during the weekends. The government is taking one or two health extension workers per year to the school. The other problem with the education is the health extension worker should pass the examination of COC [Centre of Competence], but many health extension workers are failing to pass the examination. The way they are recruiting for education is not fair. They need to consider our documents, efficiency and experience. The health extension workers sitting for COC are not told in advance to prepare themselves for the exam.”* (ETH-MA-FGD-HEW)

*“We are working properly, the district also follows us, but we don’t have an educational chance. Two years back we were given a letter that dictated no health extension worker participates in the upgrade program. There are workers who upgrade their profession secretly.”* (ETH-DL-FGD-HEW)

One of the difficulties with the COC examination is the fact that it is held in English. This poses a problem for many HEWs. Many HEWs also report demotivation because of the perceived difference in career advancement opportunities between them and other government employees:

*“If you see teachers, they may be certificate holders when they were hired initially, but through time the government provides them with an educational opportunity, and they become degree holders within a short period of time.” (ETH-MA-FGD-HEW)*

Even HEWs who were able to attend upgrading courses were not guaranteed career advancement regarding their position. One respondent from the FGD with HEWs in Dale reported that she was disappointed with the upgrading programme, because she did not see the difference between those who upgraded and those who did not:

*“...those who did not get an educational chance are lucky because I got the chance and no new thing I have learnt. It’s only what we knew already. Before this chance my intention was clinical nursing or laboratory. It’s better to participate in other trainings rather than going to upgrade in health extension.” (ETH-DL-FGD-HEW)*

*“Even if we get an educational opportunity and make improvements in our level, there is no difference to me. Because the health extension worker who upgrades her status will again be assigned in the Kebele. No transfer is given to her, just as if she had not joined the school.” (ETH-MA-FGD-HEW)*

#### *Opportunities to transfer*

HEWs are to be recruited from the community which they serve. They are also expected to serve the community residing within the community. In practice some HEWs were found to be recruited from different *Kebeles* and did not reside in the *Kebeles* in which they have been serving. Some HEWs were initially recruited from the *Kebele* they are serving but, due to different reasons, are no longer living there.

Due to this, the majority of the HEWs that participated in the interviews and FGDs complained about the need for transfer opportunities and mentioned that it was impossible for them to transfer. They mentioned a lack of transfer opportunities as being demotivating. However, some HEWs mentioned that they do not support transfer requests, since it is against the policy. They also complained that there were some HEWs who were being given unfair transfers due to the support given to them by the *Woreda* health office and other officials:

*“The transfer is against the government policy. When we joined the programme we knew that the health extension workers can’t claim transfers. However, those health extension workers who are the relatives of influential people and officials are getting transfers. I am not comfortable about this thing, and it affects my motivation.” (ETH-DL-IDI-HEW1)*

### *Supervision*

Supervision is one of the major mechanisms used to support the health system and professionals working in it. It is also useful to identify gaps and take the necessary measures and support for future planning. The HEP implementation guideline indicates that HEWs receive supportive supervision from health managers and health professionals working at different levels. The HEWs are accountable to the *Kebele* administration and to the catchment health centre.

### *Woreda health office supervision*

The *Woreda* health office is responsible for providing the overall support to the HEWs in addition to the support they receive from the catchment area health centre. The majority of the HEWs interviewed mentioned that supervision motivates them to work hard. They also considered the supervision they receive from the *Woreda* as a recognition and acknowledgment of their work. They also mentioned that if they are not supervised by the *Woreda* health office, it demotivates them from working hard:

*“If the Woreda supervisors come and see our work, we will be happy. We need encouragement from the Woreda officials. We will be encouraged by the appreciation for our good work, but our morale will be affected if our good work is ignored. We will be motivated by the encouragement, and we might affect the work by low motivation.”*  
(ETH-BZ-IDI-HEW1)

It was commonly mentioned by the HEWs that the support they received from the *Kebele* administration was minimal because the *Kebele* administration considered the work of HEWs as only the business of HEWs.

The aim of supervision of the HEWs from any level should be to offer support and fill any gaps for better performance. Yet, many HEWs mentioned that the *Woreda* health office focused on fault-finding when conducting supervision, rather than appreciating their strengths and supporting their weaknesses. They also stated that the supervision they received from the *Woreda* health office and the health centre was not regular and focused on checking records and registers:

*“What makes us not work hard is, when the Woreda health office comes for supervision, they leave our strong parts and take very minor things and discourage us due to those things. The supervising team takes very minor mistakes of ours and brings them to the Woreda health office. This prevents us from working hard. As to my knowledge, the supervising person or persons themselves should be able to tell us our mistakes and help us to correct these mistakes, and also should give appreciation to our hard work.”* (ETH-MA-FGD-HEW)

### *Catchment health centre supervision*

Different supervisory bodies were in place to support the HEWs. Previously, HEWs were supported and supervised by individual supervisors from the *Woreda* health office only. Currently this role has shifted to the catchment area health centre, and a group of health professionals or one health professional is assigned to support the health posts. This is known as a 'command post' and is responsible for supporting the HEWs regularly and providing feedback to the *Woreda* health office. However, the majority of HEWs who participated in the interviews and FGDs stated that the command post system was not strong or functioning well:

*"In the past there were supervisors. Now this is replaced by a command post system; however, the system is not well strengthened. They come to the health post one day per week just to collect reports. Except this they don't give support to us."* (ETH-DL-IDI-HEW1)

*"There is a focal person to supervise and support our health post. But he is not supporting; he is doing nothing except looking at our records/registers. He should have supported us beyond this."* (ETH-CH-IDI-HEW1)

A lack of skills and knowledge among the HEWs' supervisors was one of the weak points mentioned by some participants in the study with regards to the quality of supervision. It was also mentioned that the health professionals who were sent to support the HEWs insulted and were not friendly to the HEWs. The majority of the HEWs interviewed mentioned that they did not receive written feedback after the supervision. This was also reported by the delivery case team leader interviewed at Dale *Woreda*: he mentioned that he was not giving written feedback to the HEWs after supervision.

### *Supervision and support from the Kebele administration*

At *Kebele* level, HEWs are accountable to the *Kebele* administration. The *Kebele* administration is also responsible for giving support and supervising the HEWs. Some of the HEWs reported that the supervision they received from the *Kebele* administration was adequate, whereas others considered it minimal. Those who complained about the inadequacy of supervisory support from the *Kebele* administration mentioned that the administration did not offer support but paid less attention to the HEWs' work and left the whole activity at *Kebele level* to be performed by the HEWs only. They also stated that the *Kebele* administration gave less support to the HEP than to other sectors:

*"We get supervision and support from the Kebele administration and leaders of health development army."* (ETH-CH-FGD-HEW)

*“...the Kebele administration helps us after many negotiations and begging. Otherwise they don’t support us by their own initiative. They consider many things as our business.”* (ETH-DL-IDI-HEW1)

### *Workload*

HEWs work on 16 health extension packages, providing services both at the health post and the community level. In general their workload was reported to be heavy, due to the nature of the work and the extensive number of tasks:

*“Some days we get crazy because of workload. As you know, previously the people said the health extension worker does not work hard, but now the work itself pushes the health extension worker to work hard. For example, I have an ANC forum on Friday, OTP on Tuesday, CBN on Monday and immunization on Wednesday, so the work by itself pushes me to work hard.”* (ETH-BZ-FGD-HEW)

HEWs mentioned workload as a demotivating factor. For some HEWs, the fact that there was often only one HEW at a health post due to different reasons was also mentioned as one of the reasons for a heavy workload. Some HEWs explained that they were working in *Kebeles* which are very vast and hard to reach, making it a challenging working environment. Sometimes they walked long distances carrying many things on their back:

*“I work in Danache Kebele alone. Previously there was one health extension worker assigned to work with me. But the Woreda health office gave her a transfer without informing the Kebele. After that I have been working alone in the Kebele, which is known by its large area. I can’t address and cover all the Kebele population alone. The topography is also very difficult. The Woreda health office didn’t assign another HEW to work with me and didn’t support me properly.”* (ETH-MA-FGD-HEW)

With regard to the number of tasks, several HEWs reported conducting different tasks at the same time:

*“It is not customary to go for a home visit to perform one activity. We go to villages to provide integrated services. For instance, if I go home to search for defaulter children for vaccination, I visit and do follow-up for TB patients who are taking drugs. At the same time I visit pregnant mothers and provide PNC for delivered mothers. On my way I teach the community about insecticide-treated bed nets and latrines.”* (ETH-DL-IDI-HEW1)

The workload of HEWs is increasing, due to the addition of new tasks. During a FGD in Dara the HEWs reported that additional and extra activities are being added to the existing ones. Sometimes, when they were ready to provide vaccinations, they were told to do other things. One HEW explained that they were always angry, as they received extra work all the time.



Another HEW also raised the issue that they were given extra work and were told that their salary would be cut if they did not conduct the task:

*“In other times additional and extra activities are being added on the existing ones. We are not working only on the 16 health extension packages. Sometimes we are involved in the activities coming from women’s affairs and the education sector. We are also involved in political matters. We are quarrelling many times with people about these things. If we are not involved in these activities, they cut our salary. We are overloaded with these things, so we don’t have enough time to accomplish our tasks.” (ETH-DR-IDI-HEW1)*

In the FGDs and during the interviews, HEWs were asked whether they had adequate time to accomplish the activities for 16 packages. Some HEWs answered that they had sufficient time, while others, sometimes even working in the same district, considered the time not enough. Introduction of the new HMIS was mentioned as decreasing the workload by some HEWs, and as increasing it by others:

*“Our daily work, as you know, is on the 16 health extension packages, which is vast and with work overload. In order to decrease this, the government has introduced to use the HMIS. We use folders for mothers, children and all other ill persons, and this decreases the workload now. Previously we used different cards for all, so it was difficult to handle this at that time. So it is good to work by putting all work together. We both work together, and one comments to the other if we miss something. Now we are familiar with the work and work overload, so it is not difficult for us.” (ETH-SH-IDI-HEW1)*

The issue of the HEWs’ heavy workload was recognized by the HEP coordinators at the *Woreda* level in Bone Zuria and Malga. During the interview, the HEP coordinator from Bona Zuria reported:

*“Probably, most tasks are decentralized to HEWs. This has created a workload on HEWs. We have seen this, and sometimes there are situations when we go and help HEWs due to the high number of service users.” (ETH-BZ-KII-HEPC-W)*

### *Referral system*

Different service providers in the community refer cases which are beyond their capacity to the next level up. The referral could be from the community level — i.e. from the TBAs or HDA — to the health post, from the health post to the health centre, or from the health centre to the hospital. Sometimes this chain of referral may not be maintained: one level may refer to the higher level by passing its immediately higher level.

Most of the HEWs interviewed mentioned that they commonly refer cases which are beyond their capacity to the health centre, but in rare conditions some HEWs send clients to the hospital.

*"If a risky labouring mother comes to me, I refer her to the health centre; the health centre also refers her to hospital."* (ETH-BZ-FGD-HEW)

*"I send complicated women always to the health centre."* (ETH-BZ-FGD-HEW)

HEWs also indicated that TBAs and 'one to five network' leaders and members were also involved in the referral system. They refer cases either to the health post or to the health centre:

*"...the TBAs mostly refer mothers directly to the health centre or sometimes they bring the mothers to us without giving their own support."* (ETH-DR-IDI-HEW1)

*"This one to five structure is important to make a chain among them. We order them at that time to give a call to us and come to us if a problem happens to them. After they come to the health post we refer them to the health centre. The health centre also refers them to the hospital if the case is above their capacity."* (ETH-SH-IDI-HEW1)

A delivery case team leader from one health centre mentioned that there were self-referrals in the community, even though there are TBAs and HDA in the community:

*"The clients sometimes come themselves; even the HDA and the TBAs also bring them to us. Because we have already told the TBAs to refer clients rather than attending the delivery at home."* (ETH-DL-KII-DCTL)

HEWs stated that they referred pregnant women to the other health institutions for different reasons. Among the commonly mentioned reasons were vaginal bleeding, abnormal position of the foetus, swollen legs or body, hypertension and fistula:

*"... these are the conditions for which we refer the pregnant mother to the hospital: if she has the following manifestation: vaginal bleeding, vaginal discharge, abnormal position, severe headache of mother, bad odour of vaginal discharge, the baby comes feet first, and so on."* (ETH-SH-IDI-HEW1)

One HEW identified the lack of skills to conduct deliveries as a reason to refer expectant mothers to the health centre:

*"The other thing is that when I took the training of delivery I couldn't practice anything. I only attended the delivery of retained placenta. Because of this mostly I refer labouring women with normal labour to the health centre."* (ETH-MA-IDI-HEW1)

*“... we don’t have good skills to attend the delivery services. If it is not normal I will send the mother to the health centre.” (ETH-MA-IDI-HEW1)*

A lack of supplies was one reason for referral in the health posts. One HEW referred a mother due to the absence of adequate material to conduct a delivery. For proper care and management, the patient has to be sent with a referral paper to the next level of institution. Some HEWs use referral papers for referring patients; however, most of them reported the absence of referral papers at their health post.

One HEW said she used to refer the patients orally:

*“We don’t write; we just send them orally, but sometimes we also write on a piece of paper what their problem is.” (ETH-MA-IDI-HEW2)*

The same problem was reported by a health centre head, who mentioned they rarely received written referrals:

*“We receive written referrals very rarely; mostly they call on the phone and say to us: ‘I have sent such a women or such a mother’ and the like. We don’t have a formally prepared format.” (ETH-DR-KII-HCH)*

The HEP coordinator at zonal level indicated that the referral record-keeping system was poor:

*“...so the gap which I am observing is that we don’t have records of referrals. Who referred? For what reason? When? Many things are not being registered by HEWs.” (KII-HEPC/Z/)*

### *Uptake of referral*

It was mentioned by different participants that there were different problems which affected the implementation of referral. Most of the participants identified the inaccessibility of roads, the lack of available ambulances and the fee which the referred patients pay as major challenges for referral:

*“I face challenges due to rain; at this time there is no road for ambulances. In the second place, the government said the maternal services are free of charge, but women pay in Bona hospital for delivery services, so I refrain to refer patients to this hospital.” (ETH-BZ-FGD-HEW)*

The majority of the HEWs in FGDs and interviews mentioned that the health professionals working in the health centre did not treat women well and were not friendly to them, and the

mothers were not happy about the operation performed on their abdomen or the payment they were asked for in the hospital:

*“...they don’t want to go when we refer them. They say ‘In the health centre the health professional don’t show respect to us; because of this we don’t want to go.’ They also say ‘If we are going to the hospital they will cut our stomach; therefore, we don’t want to go. We want to die in our home.’”* (ETH-BZ-IDI-HEW2)

*“...the clients say ‘We don’t want to go to the other place out of our Kebele, because if we go there they will ask for payment.’”* (ETH-IDI-HEW2)

Some HEWs also faced a problem of referring expectant mothers due to the bad information disseminated in the community due to previous experiences of health centre referral:

*“One time I sent a pregnant woman who had some problem to the health centre. They sent her back without giving her any help. Another time I met this woman while I was telling another woman to go to the health centre to give birth. She said ‘I will never go there’ and doesn’t recommend others to go.”* (ETH-CH-FGD-HEW)

Other participants in an HEW FGD said they encountered roadside delivery and even the death of a woman due to improper handling in the health centre:

*“...the major problem I faced is in the health centre. They are not handling our referrals properly. I had an experience: I sent a woman to the health centre. They sent her back to her home, but she delivered on the road without getting support.”* (ETH-CH-FGD-HEW)

*“The basic thing we have to consider is a woman should not die giving birth. Sometimes even death can happen in a health centre. I knew a woman died in the health centre from Bantarbo Kebele, because the health centre didn’t refer her to the hospital as early as possible. Unnecessary delays in the health centre have to be avoided.”* (ETH-CH-FGD-HEW)

Some participants indicated that the ambulance was giving a good service during referral of expectant mothers. They also said the *Woreda* was supporting the system by providing its own car and allocating a budget for ambulance fuel costs. On the other hand, some participants indicated that the ambulance service had problems and that the ambulances were being used improperly by the *Woreda*. They also stated that the ambulance only took expectant mothers to the health facility but did not take them back to their home:

*“...even if the ambulance was on another duty like taking another mother to the hospital or health centre, the Woreda council also sent their car to us. They also come very fast.”* (ETH-BZ-IDI-HEW2)

*“Some problems are associated with an ambulance. When we call for the ambulance we don’t get it immediately; they say ‘we are in another place to bring mothers.’ The ambulance is meant for mothers and for any emergency cases, but the Woreda uses the ambulance for other purposes. The Woreda officials use the ambulance for their own purpose even though the aim is not to serve individuals.” (ETH-IDI-HEW1)*

#### *Quality assurance*

The HEP is based on expanding the physical health infrastructure and a cadre of HEWs who provide basic curative and preventive health services in every community. An absence of equipment in the health post was found to affect the quality of service provided by the HEWs:

*“But I am not sure about the delivery; they may not have enough equipment. I don’t think they do it in the sterile field. For example, here we have electricity, and even in the absence of electricity we have another solution, but in the health posts, the line is not established to get electricity, so they face difficulty to sterilize the equipment, so my fear is on the quality.” (ETH-BZ-KII-DCTL)*

The HEP places two government-salaried female HEWs in every *Kebele*, with the aim of radically shifting the emphasis of the country’s health care system to prevention and to improve uneven resource distribution. Key informants believed that the fact that two HEWs are deployed in one health post will have a positive impact on the quality of the service they are providing; if only one HEW is available, the quality of the work will be compromised. The number of HEWs was associated with the quality of service at health posts:

*“There is a place where only one health extension worker is present. In this place this one HEW does not conduct all the work. The quality is protected where two health extension workers are available, and this is not the case if one only is available.” (ETH-MA-KII-HCH)*

One of the best ways of giving the community a quality health service is to offer a safe service. To do so, sterile equipment and the appropriate skills and knowledge among service providers are needed. One of the delivery case team leaders mentioned the need for sterile equipment to offer a quality service for the community:

*“If a woman comes to me, I should prepare my equipment appropriately. It should be sterile and kept properly. One mother should not use the equipment which is used by another person; it will be dangerous for her. One equipment should be for one person; after that the material again should be sterile. Even if a mother doesn’t come and uses the equipment, we don’t have to store it thinking that the equipment is sterile; we need to sterilize it again. We don’t have to expose them to another health problem using non-sterile equipment.” (ETH-BZ-KII)*

One of the HEP coordinators said that the quality of service provided by the HEWs is not good, since they lack adequate skills:

*“Regarding the quality, it’s not yet good. Because they provide good quality if they have good skills, and this comes through repetitive practical work. Next to coverage, we can see the problem we have on quality.”* (ETH-BZ-KII-HEPC-W)

#### *Initial training*

HEWs receive one year of initial training after recruitment. They are trained on all 16 health extension packages, including on delivery. The HEWs who participated in interviews and FGDs complained about the lack of practical training in the initial training. Also, they complained that certain things (among them, delivery skills) are forgotten, because the necessary equipment was not available when they started to conduct their jobs in the health post. Therefore, they stressed the need for refresher training:

*“We took delivery training in our initial training, but we forget all things about it since we were not doing it in the health post.”* (ETH-MA-FGD-HEW)

None of the HEW respondents reported in detail on the quality of the initial training. One HEP coordinator did:

*“But the capacity of HEWs cannot make them enough to treat adults with one year of training. To truly speak, this time those activities which should be delivered with nurses and health officers are being carried out by HEWs at HP level. I don’t believe that one year of training will give them a general knowledge and make them adequate enough to deliver all these services which need to be managed by nurses and health officers. Rather it gives them stress, since they cover broad areas in a short and tight schedule. .... I suggest improvement to be effected on the training method, and I hope the government will take actions in the future, since the government prepared it.”* (ETH-BZ-KII-HEPC-W)

#### *Continuous and on-the-job training*

HEWs receive several different types of training during the execution of their jobs. Mostly, this training focuses on a certain area and is offered by NGOs. The regional level of the MoH also organizes trainings. The training could be an incentive for HEWs, as it gives them new knowledge and sometimes brings in some extra money. A lack of training opportunities, on the other hand, can lead to lower motivation among HEWs:

*“...Whenever there is training always the one who works in the urban area gets the training, and they have already developed themselves because of that. We are lacking information; we are doing the same as we were doing before. If you go to other districts, they have already finished delivery training and about ANC, since lots of NGOs are*

*supporting them. Even when we meet with them we can see that they are doing better than us. It's the same for nurses, since they get the chance every time [to get education]. This thing draws us back from the other districts."* (ETH-CH-IDI-HEW2)

Regarding continuous training received on delivery, many HEWs in various districts also reported the lack of a practical component. It was also clear that not all HEWs have received continuous training on delivery services. This was confirmed by other types of respondents, such as the HEP coordinator from Shebedino district:

*"The training was not adequate because it was not supported by practical work. In order to decrease mortality these two should complement each other, so we need the same training which other health professional take."* (ETH-BZ-FGD-HEW)

However, an HEW from Dale Woreda said the one-month training she took was adequate:

*"Since I am working on maternal and child health I don't see the inadequacy of training. I took one month of training in delivery; after that I have been conducting deliveries. If I work and practise I believe I will work effectively."* (ETH-DL-IDI-HEW1)

But this same HEW reported that she would love to receive more training to be able to also conduct complicated deliveries. Information from various respondents suggests that the training on delivery services from NGOs are including practicals, whereas those of the *Woreda* do not. The 'Safe and clean delivery' training was often reported to be a combined effort of Save the Children and the government. In Bona Zuria district, BICDO has been offering delivery training for HEWs. One HEW interviewed reported that, by the end of this training, HEWs were supposed to have conducted five deliveries. In Chire, MSF had trained HEWs in ANC. In Dare this was done by Save the Children. In some districts (for example, Shebedino), HEWs had been trained on IMCI and were treating childhood illness in the health posts. Also in Malga, an NGO called NSL offered HEWs training on treating diseases in under-five children.

In general, HEWs reported continuous training to be not insufficient. They said they required more training on ANC, delivery and PNC. Several respondents referred to the need for training in PMTCT (HEWs and a health centre in-charge from Shebedino). This service is currently only provided by health professionals. Another specific reference was made to the need for training for removing Implanon (by both HEWs and also the HEP coordinator at the zonal and district (Shebedino) level). HEWs have been trained in insertion, but removal needs to be done in the health centre, which is inconvenient for clients (due to transportation costs and the availability of health professionals in the health centre). Also, training for TB and HIV treatment were mentioned (by an HEW), because after testing positive, clients are referred to the health centre as well. The district-level HEP coordinator from Shebedino mentioned the desire to train HEWs

in basic laboratory skills so that they will be able to conduct basic tests such as haemoglobin tests during ANC at health posts.

The Malga HEP coordinator reported on the downside of too many different training courses and recommended integrating them:

*“Concerning training, I suggest that they need to take integrated training, rather than taking different trainings at different time. For example, they will be called for delivery; immediately after a short time they will be called for ANC and the likes. To save time I suggest trainings to be given in integrated way...”* (ETH-MA-HEPC-W)

#### *On-the-job training*

One HEW from Dale reported receiving on-the-job training from the health centre head and other health professionals when they came to the health post, regarding child health and PMTCT.

#### *mHealth*

The most common uses of mobile phones cited by the HEWs were to contact health professionals at the health centre during referral, to seek help from them during screening and management of TB patients, to provide/send their reports to the *Woreda* or the health centre, to communicate with the HDA leaders, to request drugs, to call the ambulance during an emergency and to communicate with expectant mothers:

*“When a labouring mother comes to the health post, we may manage if the delivery is normal; otherwise we have to refer the mother to the health centre. At that time we use a mobile to communicate with the health centre. When we want to send a mother to the hospital, we call the driver of the ambulance to take the mother.”* (ETH-DL-IDI-HEW1)

The majority of the HEWs indicated that they bought the mobile apparatus themselves and that they paid for the airtime for most of their activities. In certain programmes or projects they received some money from NGOs:

*“...we ourselves buy the mobile. ...After TB reach programme comes, they give us 75 birr for mobile fee. ...Sometimes an NGO called BIKIDO fills the fee for mobiles every four months if we conduct delivery services.”* (ETH-BZ-FGD-HEW)

#### *HEWs’ coordination and relationships with the HDA*

The HDA is a new concept and strategy which started around mid-2012. Previously, HEWs were being supported by VCHPs to deliver health extension packages to the community. Currently, the government has replaced VCHPs with the HDA, in which the leaders of the HDA are trained on the health extension packages by the HEWs and graduate to become a model family



when they have implemented the packages in their lives. Then after they have graduated, they themselves will train their members/followers:

*“...we have a development army in the Kebeles. For each HDA we have one team leader. This woman gets education from us, and she passes the information every week to the women under her control.”* ETH-BZ-FGD-HEW)

The majority of HEWs reported that the leaders of HDA have been supporting the HEWs and are involved in providing health services such as referral of pregnant women to the HEWs, conducting PNC follow-up, mobilizing the community for immunization and other campaigns:

*“Previously there were volunteers who brought pregnant women to us, and also when we did home-to-home visits we also met with them, we registered then and informed them to come to us for immunization and follow-up. And also some of them came on their own initiative. But currently most pregnant women come with the help of the 1 to 5 network.”* (ETH-DL-IDI-HEW2)

Both HEWs and leaders and members of the HDA mentioned that HAD leaders had been providing maternal health service in the community:

*“We (HDA) teach women in our community. We the leaders of one to five network give our advice to convince pregnant mothers. When their labour starts we call to the health extension worker ‘Adanech’ to inform and conduct the delivery.”* (ETH-BZ-FGD-WO)

The majority of the HEWs stated that they had been conducting regular meetings with the HDA leaders, exchanging feedback on their work and receiving reports of activities performed by the HDA:

*“We meet every month with the leaders of one to five network. We discuss our work, what is going on in the community; they also bring their report and discuss it. These one to five network leaders do have their own meeting. Thirty leaders gather together and discuss many issues. The leaders have their own chairman who leads the meeting and is responsible for submitting their reports.”* ETH-DL-IDI-HEW1)

Some HEWs mentioned the advantage of the HDA over the previous VCHPs. They indicated it was a problem for VCHP to reach many households, whereas it became easy for leaders of the HDA to teach and communicate a manageable number of households:

*“At previous time one voluntary health worker served about 50 households. But now in one to five network one leader is responsible for five mothers.”* ETH-DL-IDI-HEW1)

Some HEWs said that there had been a change in the community’s awareness of maternal health issues after the start of the HDA.

*“There is a change in the awareness of the community. The community takes ‘health’ as its own matter. The attitude and knowledge of the community towards health becomes broader. If we support them by follow-up and we expect more results from the community. One to five network is a good way to expand health issues in the community.” (ETH-CH-FGD-HEW)*

Some HEWs reported that the HDA increased the community’s access to services in areas where the HEWs were unable to reach the community due to distance and lack of time:

*“We used to go home to home, which was difficult for us to cover the whole community. We don’t have enough time to counsel one family and get them convinced. After the introduction of one to five networking, this problem got solved. The leader of one to five network discusses with her members and informs us of any mothers to get services from our health post.” (ETH-CH-IDI-HEW1)*

The regional HEP coordinator recommended the HDA as a good strategy for providing maternal health services and accessing each pregnant mother in the community:

*“...to improve maternal health services, it is better if we start from the community; to organize them in the 1 to 5 network, to make them armies and identify pregnant mothers in the area, arrange for learning from each other and make them attend antenatal care. With the 1 to 5 network, development teams and HEWs, it is better if every pregnant woman is reached, registered and advised to have her delivery at the health institution.” (ETH-KII-HEPC-R)*

Some HEWs reported that not all the HDA leaders are active and carry out what is expected of them. They indicated that the current HDA are women and have a workload in their home. Therefore, they were still communicating and working with the previous VCHP:

*“In my Kebele, we have some strong one to five network leaders, and some are weak. Those who are weak can’t teach their followers. So we strengthen the weak ones. The previous community health workers are replaced by the one to five network, and we are using them to work together in the community. However, I don’t stop working with the previous community health worker, since one to five leaders or members are women and have a workload in their home and don’t have time to be involved in health issues. But the previous community health workers were commonly males, and they are devoted to work with us.” (ETH-MA-FGD-HEW)*

#### *HEWs’ coordination and relationships with TBAs*

TBAs continue to be a choice for maternal health service provision to the rural community of Ethiopia. TBAs were often VCHPs and were involved in a range of service provision in the

community, supporting the HEWs on services such as ANC, delivery, PNC, referral and community mobilization for immunization and other campaigns. TBAs could be trained or untrained. Currently, the TBAs are not formally supported to provide maternal health services by the government. Their role has been replaced by the HDA, and the TBAs are expected to become part of the HDA. Although the TBAs were banned from conducting deliveries, they are still providing maternal health services in the community including delivery, since they are more popular than the HEWs in some areas and are trusted more by the community. Some of the TBAs also have a good working relationship and good communication with the HEWs:

*“The TBAs only receive little information from the government, but they are famous in Kebeles, so people say ‘the known devil is more than unknown God’, and the people believe in them. We also communicate with the TBA, because this TBA is more popular than me in the Kebeles, so I use her to access women.”* (ETH-BZ-FGD-HEW)

Some HEWs mentioned that they were not able to provide delivery services at the health post because of the absence of a health post in the *Kebele* and that TBAs were performing deliveries in women’s homes:

*“After we came from the training we did nothing because the health post was not available. Because of this reason I always use the TBA during delivery services.”* (ETH-BZ-FGD-HEW)

The majority of the HEWs interviewed mentioned that the TBAs stopped conducting deliveries, since they were told to do so, but they indicated that they have been involved in referring expectant mothers to the health post and health centre:

*“The relation we have with the TBAs is changing. They already stopped conducting delivery. However, they are involved in referring mothers to the health post and to the health centre.”* (ETH-DL-IDI-HEW1)

There should be a good relationship and communication between the HEWs and the TBAs to coordinate the service in the community. However, some TBAs stated that they encountered a problem, since the HEWs were not accepting and supporting their work:

*“I don’t communicate/meet with health extension workers. If I want to communicate with them they won’t allow me to communicate with them. I referred all cases to them, expecting to be known by them, but they are not good for me. As I have told you, the HEW does not want to communicate with me, but I continue to attend the deliveries. This is also known by many people. Even though I did such a thing, they don’t allow me to meet with them through their daily work.”* (ETH-CH-IDI-TBA)

Some HEWs indicated that they had been calling the TBAs to manage delivery when labouring

women came, since they considered themselves lacking in confidence and skills to conduct deliveries:

*“...we call the TBAs to assist labour due to the skill gap and confidence we have. ...TBAs stopped attending deliveries now, but because of a lack of skills we attend the deliveries with their help. We fear attending deliveries. ...We call them and they help us.” (ETH-MA-IDI-HEW1)*

#### *Coordination and support of NGOs with HEWs*

NGOs play an important role in health service provision by complementing and supporting the services given by the government. In our study, we found that different NGOs working in the study area had been supporting the HEWs’ provision of health services to the community. They were commonly involved in activities such as providing capacity-building training for the HEWs, logistics, supplies and equipment and incentives to the HEWs and VCHPs, supporting the referral system and conducting supervision.

Some HEWs mentioned that the HEWs who received delivery training organized by NGOs were more exposed to practical work and obtained good skills compared to those HEWs who were trained by the government:

*“In this Woreda the NGO called Bikido also gave the training for health extension workers. The health extension worker that received the training from Bikido attends more than five deliveries, but we didn’t attend the delivery — only theory.” (ETH-BZ-FGD-HEW)*

*“Save the Children gives us refresher training on delivery and special training on postnatal care for seven Kebele health extension workers out of 36 Kebeles. So we have better skills when compared with those untrained Kebele health extension workers.” (ETH-DL-FGD-HEW)*

The HEWs interviewed indicated that they had been getting mobile phone airtime for use on the specific health programme supported by the NGOs:

*“Sometimes an NGO called BIKIDO fills the fee for mobiles every four months if we conduct delivery services.” (ETH-BZ-FGD-HEW)*

Some HEWs mentioned that they received training on curative services for children, which helped them to save lives and enabled them to make the services more accessible, because previously they were only given by high-level health professionals:

*“There is a non-governmental organization in seven Kebeles of Dale Woreda, Save the Children, which gives training on IMCI in Sidama Zone. We started treatment for*

*children; we started to give Gentamycin. We are treating children that could be treated by doctors.” (ETH-DL-FGD-HEW)*

The HEWs reported that some organizations had been encouraging pregnant women to give birth at health facilities by arranging meetings for pregnant women and providing incentives and other motivations after their delivery in a health facility:

*“Beza youth organization is doing well by facilitating monthly meetings covering tea and coffee costs during monthly meetings. In this meeting pregnant mothers discuss with each other, they are also trained on the importance of antenatal care, about cost and benefits of delivering at home and its complications. In addition to our training they discuss and link each other and encourage themselves for institutional delivery. During delivery time this organization provides soap for homes.” (ETH-DL-FGD-HEW)*

Some HEWs mentioned that certain NGOs were involved in providing supplies, logistics and items of stationery which were important to the work of the HEWs, and other HEWs also reported receiving supportive supervision from NGOs:

*“The ‘SNL’ [saving newborn life] project is doing good things in our Kebele. They support us in maternal and newborn health-related activities. They bring medicines, missing equipment, wall chart paper and writing materials.” (ETH-DL-IDI-HEW1)*

*“Sometimes we may get support and supervision from non-governmental organizations in our health post. We have supervision regularly from GOAL Ethiopia once in eight days.” (ETH-SH-FGD-HEW)*

HEWs who participated in the FGD in Chire Woreda stated that an NGO based in that Woreda had been playing a major role in supporting the referral of expectant mothers to the higher-level health institution:

*“After the MSF came to our Woreda, we are getting good support in referral; they respond for any call and take the mothers wherever needed. They not only take mothers to health institutions but also they bring them back to their home for those who are unable to do so by themselves.” (ETH-CH-FGD-HEW)*

Some HEWs said that the introduction of a certain health programme by the NGO and the training they received on that programme helped them to provide the service and make it accessible to the community:

*“We have the chance to take trainings from a NGO. They equip us by providing training and refresher training. Previously, people in this Kebele went to Yirgalem hospital for TB investigation and treatment. But now they get very many things from the health post*

*through the help of the TB REACH programme, so the community in here is happy now.”*  
(ETH-MA-IDI-HEW1)

Some of the *Kebele* administrators interviewed and heads of the health centres mentioned that phasing out the NGO-led projects and activities brought the sustainability of the activities into question and required other organizations to take over the programme:

*“...Save the Children, who provided any drug for the health post, stopped at this time. So we need another organization that provides such services for us.”* (ETH-DL-KII-KA)

*“...previously there was some kind of thing which is given to a mother when she delivers at the health facility. This thing, called the Mama kit [towel and baby cap], was provided by Save the Children. The rural mothers were coming to deliver at the health facility and at the same time to receive the mama kit. But now this is not happening anymore, and I recommend such kinds of benefits to be given to the mothers so that they are motivated to come for delivery at health institutions.”* (ETH-SH-KII-HCH)

## **Summary**

The majority of HEWs seem particularly motivated to provide maternal health services, but there are some who mostly enjoy providing curative services and being involved in environmental health activities. A number of influences on CTC providers' performance have been identified in the qualitative study. Both financial and non-financial incentives influenced the motivation of HEWs both to choose the profession initially and to work hard. Financial issues were also a source of dissatisfaction, with HEWs complaining that they are being paid a low salary compared with their workload and the salaries paid to other government employees. A strong sense of duty to serve the community and an underlying interest in working on health-related issues are also motivating factors that attract HEWs to their profession. They gain ongoing motivation when they see positive change in the community as a result of their work and when they receive appreciation and thanks from the community and supportive supervision from the *Woreda* health office.

Continuing education and training has an important impact on the HEWs' capacity to perform their role well. The government has started providing educational opportunities for HEWs to upgrade their education; however, the number of HEWs who are able to enrol each year is limited compared to the high number of HEWs who need education. Most HEWs are unable to pass the COC examination which is a pre-requisite for further training; the examination is conducted in English, and very few HEWs have sufficient English language skills. Opportunities to transfer are much sought by HEWs, and the system's refusal to allow this is an additional demotivating factor for a majority of them.

Good-quality supervisory structures were recognized as a motivating factor and as improving performance. Our study found that supervision was irregular, and feedback mechanisms were poor or not constructive. Improving the supervisors' knowledge and skills can improve the quality of supervision to be given to HEWs.

The 16 health extension packages for which HEWs are responsible can result in heavy workloads and multiple tasks. HEWs reported being overloaded, and sometimes they were required to be involved in other sectors and political activities. Each health post has two HEWs, yet absence of one HEW was quite common, due to training or other commitments; this contributed to HEWs' heavy workload, as did challenges of topography and large catchment areas.

HEWs refer expectant mothers with issues that are beyond their capacity to manage to the health centre or hospital. Leaders of the HDA and TBAs are also involved in the referral system. Sometimes HEWs referred pregnant women when they considered they lacked the necessary skills and knowledge to handle their cases and when important logistics and supplies were not available at the health post. HEWs reported a number of challenges for the implementation of an effective referral system, including: a lack of accessible roads, the absence of transport, the cost of ambulance fuel, the unfriendly behaviour of health workers to the women at the referral institutions, the absence of referral forms, and the lack of feedback exchange and a referral tracking system.

Initial training of the HEWs for maternal health services lacked a practical component, and, as a result, HEWs lacked confidence and had limited skills. The quality of services was also compromised due to inadequate supplies and equipment at the health posts. Training on safe and clean delivery provided to the HEWs to build their skills also lacked a practical component, and the poor condition of the health posts was reported to be a particular problem for providing safe delivery services.

The HDA is a new strategy introduced by the government to support the HEWs by replacing the previous VCHPs. They have been trained on the health extension packages, and when they graduate they will train the members of the HDA in their 'one to five network'. This qualitative study found that the leaders of the HDA have been supporting HEWs and were involved in providing health services such as referral of pregnant women to the HEWs, conducting PNC follow-up, mobilizing the community for immunization and other campaigns. It was also evident that the HDA increased community awareness and the community's access to services and was

able to reach the community where the HEWs could not due to their workload and the large distances between communities to health posts.

Previously, TBAs were often VCHPs and had been providing a variety of health services to the community; however, TBAs are not currently supported by the government to conduct delivery services. They have been replaced by the HDA, are supposed to become part of the HDA and are expected to work in line with the HDA's principles. In our study we found that the TBAs were still providing maternal health services, including assisting delivery, because they are well trusted in the community. In addition, the HEWs' lack of confidence and skills on delivery made TBAs a preferable choice for the community, and they were consulted by some of the HEWs.

This study witnessed that many NGOs working in the study area had been supporting HEWs' provision of health services to the community. They were commonly involved in capacity-building activities, supplying logistics and supplies, giving incentives to motivate the HEWs and VCHPs, supporting the referral system and conducting supportive supervision. Delivery training which was given by NGOs was found to be of good quality and including a practical component.



## CHAPTER 6 – DISCUSSION

In this section the findings of the desk review and qualitative study are discussed. The first part of the discussion focuses on the effectiveness of the HEP/HEWs. Then factors that form barriers to or enablers of the performance of the HEWs in general and maternal health services in particular are discussed.

### 6.1. EFFECTIVENESS OF THE HEP/HEWS

As stipulated in the HEP guideline, HEWs are expected to provide different preventive and promotive health services in the community. Provision of immunization and treatment of diarrhoea and malnutrition are some of the services provided to children. ANC, delivery, the promotion of breastfeeding and family planning are the most common services provided to women. At household/family level, HEWs work on adequate hygiene and sanitation services and access to adequate and safe water. They also provide disease prevention and control activities for major communicable such as TB, malaria and HIV.

The literature review revealed that the introduction of the HEP demonstrates promising results in the provision of promotive and preventive maternal and child health services in the community. Especially regarding family planning, ANC and immunization services, the HEP has brought about positive changes in access, coverage and utilization. However, evidence on the effect of HEWs on the access, coverage and utilization of institutional delivery and PNC is lacking.

The low contribution of HEWs to institutional delivery can be explained by the level and focus of their initial training on institutional delivery, the lack of adequate and effective refresher training on delivery and the limited availability of the necessary logistics and supplies in health posts.

Previously, the HEWs were encouraged to provide safe and clean delivery at health posts, which is different from skilled delivery at the institutional level. However, though not measured, they may have contributed to the improvement of general community awareness of the health services, which could include understanding the use and importance of institutional delivery.

Regarding the control and prevention of major communicable diseases, our literature review found that HEWs played a vital role in the prevention and control of TB, malaria and HIV. The ownership and utilization of mosquito bed nets have improved in the community, which has

contributed to a decrease in the occurrence of malaria epidemics in the country. Remarkable results have been registered in improving case detection and the treatment success rate of TB where the HEWs were involved in identifying TB suspects, screening and providing treatment. The HEWs' provision of treatment for TB patients at health posts was also more cost-effective than treating them in other health facilities. Promising results have been registered on the role of HEWs in improving environmental hygiene practices relating to safe water and ownership of toilet facilities in the community.

## 6.2. FACTORS AFFECTING THE PERFORMANCE OF THE HEWS

In our literature review and from the qualitative study, we found different factors affecting HEWs' performance and the community's utilization of maternal health services. There were a range of community-related and other contextual factors, health system factors and intervention design factors which were found to affect HEWs' performance, and they are discussed below in detail based on the conceptual framework developed (see Figure 1).

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### 6.2.1. COMMUNITY CONTEXT

#### *Culture*

In our desk review we found that some of the community's cultural practices affected their utilization of health services. The desire and value of having more children, compounded by the influence of husbands, was found to be affecting women's utilization of family planning services. The findings of the qualitative study indicated that women were found to follow the same practice as their mothers and relatives (by giving birth at home) and were heavily influenced by advice from elder family members and village elders. In our study, the majority of the respondents indicated that the role of men in maternal health-seeking behaviour tends to be supportive; however, some participants stated that the husbands were not in favour of delivering in a health facility. Involving men, elders and relatives during community awareness creation and mass mobilization activities, including the strengthening of the HDA, could address some of these cultural practices and improve community awareness and the utilization of maternal health services.

Burying the placenta inside the home as a cultural value is still being practised. Because of this, some women may not be willing to deliver at a health facility. Providing the placenta to the family after delivery in a health facility could increase the number of institutional deliveries.

We found that many women in this study continue to choose to deliver at home. They considered delivering at home to be safe and giving birth at the health facility to be risky, and associated it with serious health problems. Mothers delivering in health facilities are considered

to be more at risk and having more health problems, which has negative implications for the well-being of mothers and babies. Women delivering at the health facility are assumed to end up dead or undergoing an operation. Another contributing factor is the experience of the previous pregnancy. A woman who previously gave birth safely at home also tends to have the following births at home, despite the current advice to give birth in health facilities. Creating awareness in the community about the importance of institutional delivery and addressing some of the cultural customs and beliefs could increase the uptake of institutional delivery.

In our desk review we found that some women chose traditional healers over the HEWs, due to the prevailing cultural beliefs in the community and the proximity and attachment that the community had with the traditional healers. Strengthening the link between TBAs and the HDA and then with HEWs will improve the provision of maternal health services in the community.

The culture of hiding pregnancy until it becomes evident is common practice in the community. Women rarely expose their pregnancy at an early stage, because to do so is uncustomary. Keeping it secret is a common practice, until their abdomen becomes evident. Expectant mothers do not want to expose themselves because they may have problems and may abort or have a stillbirth, which is negatively perceived. This practice can prevent women from seeking maternal health services, especially ANC, as early as possible. Encouraging and educating pregnant women to seek maternal health services at an early stage may improve their health-seeking behaviour. HEWs are trained on ANC and communication skills so that they can convince expectant mothers to attend ANC as early as possible. Early identification and teaching of pregnant women by the HDA and TBAs could be strengthened.

In our study we came across the idea that home delivery is a sign of braveness. Women who visit a health facility were sometimes considered weak and could not bear the pain of labour. Due to this reason, some women tend to give birth at home and do not expose themselves, even though they experience difficult and prolonged labour. Therefore, activities to improve the community's awareness are necessary in this regard.

#### *Privacy, confidentiality and familiarity*

In our literature review we found that women were not willing to use maternal health services due to the issue of privacy — i.e. not willing to be seen by other people, including health professionals, but only by their relatives. This finding is consistent with the findings of the qualitative study: we found that some women prefer the presence of their husband and relatives at delivery rather than an HEW or other health professional. Also, women were found to be unwilling to hang their legs on a delivery couch, since this exposes their body and makes them susceptible to contracting an illness. This could be a reason for preferring home delivery

rather than giving birth at a health facility. The inability of the family members or relatives to attend the delivery can also affect the utilization of institutional delivery. Involving relatives or husbands in attending delivery, maintaining the privacy of expectant mothers and conducting labour in a position which seems friendly to women could encourage women and change the community's attitude, which could lead to increased uptake of facility delivery.

Not only do the setting and privacy issues affect the utilization of maternal health services, but so does expectant mothers' preference for female health workers. In this study we found that women prefer female health professionals over men, since they consider that female health professionals maintain their privacy and confidentiality. Some women are afraid to consult or confide in male health professionals at health centres, so they refrain from visiting them. Employing female health workers at sites that offer maternal health services could increase their utilization.

### *Religious beliefs*

With the dominant Protestant religion in the community, there is an attitude of relying on God rather than seeking health care services. Preachers or religious followers can discourage women from seeking medical services. Some women stay at home during labour, considering that God would protect and support them to give birth at home. The reliance of expectant mothers on God to help them could be one of the reasons for delaying seeking services. We did not come across the Protestant religion prohibiting the community from seeking modern medical services; however, we found that the majority of women were not seeking maternal health services such as ANC and delivery, since they rely on God by themselves and are sometimes influenced by preachers. Involving religious leaders as key stakeholders in community awareness creation and mobilization activities by HEWs, so that they can provide the followers of the religion with accurate information, could bring about a change in the utilization of maternal health services such as ANC and delivery.

### *Community expectations*

The HEP is designed to provide promotive, preventive and some basic curative health services in the community. In our literature review we identified that the acceptance of the HEP had declined in the community due to the lack of availability of curative services at health posts. This could be either because the existing curative services were not being provided effectively or the community needed more curative services. The community may expect services which are similar or equivalent to the services being provided at health centres. Sometimes the community perceives the health facilities as being established purely to provide curative services rather than providing preventive health services. This can affect the utilization of health services provided by the HEWs at health posts. Creating understanding in the community

about which services are provided in health posts has taken time. Currently, due to the decentralization of health services to the health posts, HEWs have been providing some curative services which were not initially provided at health posts. It is assumed that this will improve the community's access to basic curative services and partly solve the problem of high community expectations.

#### *Knowledge, awareness and perceived risk*

The community's knowledge and awareness of certain health-related issues and programmes influence its practice of adopting and utilizing the service. In addition, if there is a low perceived risk in the community regarding certain health problems, there is a lower probability of practising the desired behaviour to improve the prevailing health problem. In the desk review, women were found to utilize family planning methods less, due to a lack of awareness of a particular family planning method. We also found this in our qualitative study, where some male respondents felt that women's health-seeking behaviour was low because they (women) lacked knowledge and had a low awareness of maternal health issues.

Low perceived risk and little expectations of the benefits of medical care can affect the utilization of maternal health services. In this study we found that women were sometimes not seeking maternal health care due to low perceived risk. If a woman is not unwell she may just stay at home rather than seek ANC services. Moreover, most women would only start to consider going to a health facility if their labour is of long duration.

Community awareness creation and mobilization, proper counselling during ANC, strengthening the link between the HDA and HEWs to inform and teach expectant mothers and educating the community using local mass media on maternal health could improve the knowledge and understanding of the community and increase the uptake of services in health facilities.

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#### 6.2.2. HEALTH SYSTEM FACTORS

##### *Client costs*

Maternal health services, including delivery services, are expected to be provided free of charge in government institutions; however, in this study we found that women are asked for payment for maternal health services in hospitals. Services provided at health posts and health centres were provided free of charge. Different participants, including service providers, mentioned that payments were incurred at hospitals for maternal health services. As a result, some women were not willing to go to the hospital for maternal health services after referral. Not only do hospital service payments create a problem, but so does the fee required for fuel for ambulances following referral. Some patients were requested to pay for fuel for the ambulance

when referred, even though ambulances are assumed to provide referral services free of charge to take women to health centres or hospitals. Additional expenses for people accompanying the expectant mothers can also affect the utilization of the service. The Regional Health Bureau and its line offices have to ensure that maternal health services are provided free of charge in hospitals by allocating a budget to cover the cost of the services provided. In addition, zonal and *Woreda* administrations need to allocate a budget for fuel and maintenance of the ambulance and monitor proper utilization of ambulances at the *Woreda* and health facilities.

#### *Logistic, supplies and infrastructure*

Supplies, logistics and basic infrastructure such as electricity, water and roads affect the performance of HEWs. The desk review identified that different logistics and supplies were absent in health posts and that the majority of health posts did not have basic infrastructure and tools such as electricity, water and a road connecting the community to health centres and *Woreda* health offices. Similar findings were observed during the qualitative study, where the majority of HEWs were unable to provide maternal health services due to the absence of a water supply, a delivery couch, an ANC examination bed and medical equipment. The absence of supplies, logistics and basic infrastructure in the health post can also create a problem for the HEWs by preventing them from practising what they have learned during their initial or in-service training and improving their skills and knowledge accordingly. This was also found to be a demotivating factor for HEWs to provide proper services to the community.

The HEWs' housing conditions and workplace — i.e. the health post — can have a direct effect on their performance. The majority of the HEWs complained that the health posts were not adequately built to provide health services, and some mentioned the need to maintain health posts. Health posts have to be built with good-quality materials and get timely maintenance when this is required. In addition, they should have a room for delivery and other maternal services.

Even though the HEWs are expected to live within the community from which they were recruited, due to the vast nature of the *Kebeles*, they are unable to provide the services stationed at their own home and need a residence inside the compound of the health post to provide services to the community day and night. Building the health post and residence of the HEWs is primarily the responsibility of the *Kebele* administration with the support of the *Woreda* health office and the *Woreda* administration. In this study we found that there were *Kebeles* which did not have health posts, and the number of *Kebeles* with an HEW residence was very low in Sidama Zone. HEWs who are not living within the community are not providing health services at night. Therefore, improvements regarding their housing are needed.

Providing the necessary logistics, supplies and infrastructure at health posts will improve their provision of maternal health services. Moreover, the building of health posts in *Kebeles* where there are none needs urgent action, given that health posts are the functional service delivery place for HEWs.

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### 6.2.3. INTERVENTION DESIGN FACTORS

#### *HEP intervention focus*

The HEWs work on the 16 health extension packages under four thematic areas: disease prevention and control, family health, hygiene and environmental sanitation, and health education and communication. The literature assessed in our study indicated that the HEWs were found to enjoy performing immunization, family planning and ANC. This is consistent with the findings of our qualitative study, where most of the HEWs interviewed seemed to be very interested in providing maternal health services. The HEP policy also prioritizes maternal and child health services in the country. There were also some HEWs who were interested in other curative services such as providing treatment for TB and acute watery diarrhoea and preventive and health promotion activities such as personal hygiene and environmental sanitation. Delivery, IMCI and PNC were among the services provided less frequently by the HEWs. The limited provision of PNC and delivery services by the HEWs can be explained by their lack of adequate skills, knowledge and confidence and the absence of logistics, supplies and basic infrastructure at health posts.

Providing basic and refresher training to the HEWs on PNC and delivery and the necessary logistics and supplies to health posts could improve the HEWs' performance in delivering maternal health services.

#### *Remuneration and incentives*

HEWs need motivation to perform their work properly. In this study different financial and non-financial incentives were found to affect their motivation.

#### *Salary*

The HEWs receive a monthly salary from the government. The findings of the two studies — the desk review and qualitative study — were similar concerning the HEWs' salary. The majority of the HEWs complained that they had been receiving a small salary compared to their workload and to other government employees. For some HEWs, financial considerations were a reason to change their jobs or move to NGOs. Even though the HEWs perceived that they were paid too little for the work they deliver to the community, their commitment to serve the community resulted in their remaining in their role.

### *Non-financial incentives*

#### *Transfer*

HEWs are expected to be recruited from the community they serve and live within that particular community. However, some HEWs, even though they were residents or born in the community for which they were trained, were not currently staying in the community and needed to travel daily. As a result they requested a transfer. In some cases, solutions were being sought to solve this problem. Some HEWs were transferred, and this has prompted complaints from others who were not transferred. A lack of transfers sometimes demotivated the HEWs and affected their performance. Therefore, the transfer process should be standardized and existing policies harmonized.

#### *Educational opportunities*

The HEWs received one year of initial training which contained both theoretical and practical components. The government has now started to offer educational opportunities to upgrade the HEWs' education. However, the majority of the HEWs who participated in the qualitative study mentioned their dissatisfaction with the educational opportunities. One of the complaints was that the number of HEWs who are offered an opportunity is very limited when compared to the number of HEWs who need to upgrade their education. Given that the number of HEWs who need to attend a college to upgrade their education is very high, the government has to look for options and strategies to enrol them within a short period of time so that they can be motivated to deliver a better performance.

The other complaint concerning education was the difficulty of the Centre of Competency (COC) qualifying examination. The exam is taken in English, which the majority of the HEWs reported as being beyond their educational capacity. The HEWs suggested that increasing the number of HEWs joining colleges, adjusting the COC examination to the level of the HEWs and taking into account their years of service and performance in the selection of those that can upgrade could solve some of the problems related to education.

#### *Recognition and motivation*

Appreciation and recognition given to the HEWs by the community, such as in the form of giving thanks, were found to increase the motivation and commitment of the HEWs to serve the community.

Motivation to serve the community was a reason for many HEWs to take on the role. HEWs were commonly found to be motivated by their own experience and the change that had



happened in their community after the community practised what the HEWs had taught them. For some HEWs, working on certain health issues was the reason to become an HEW. Encouragement and appreciation from the *Woreda* supervisors was also seen as a motivating factor. Strengthening *Woreda* supervision could motivate the HEWs and improve their performance. The health system could also stimulate community recognition by arranging public ceremonies involving HEWs.

Supervision and review meetings held with the partners seemed to encourage and motivate the HEWs and improve their performance. Conducting regular performance review meetings to evaluate and support the HEWs could improve their performance.

Even though the HEWs often mentioned financial incentives, they also stressed the importance of non-financial incentives. Therefore, considering and offering non-financial incentives to HEWs could bring about a great change in their performance and motivation.

#### *Supervision and support*

This study assessed important aspects of supervision which affected the performance of HEWs. Supervision has to be aimed to empower the supervisee and should be conducted regularly according to a planned schedule, with the provision of feedback to the supervisee. Our qualitative study found that there were different supervisory bodies in place within different managerial and technical hierarchies to support and supervise the HEWs. Previously, health posts were accountable to the *Woreda* health office, and the *Woreda* health office used to give immediate supervisory support to the health posts; however, this role has shifted to the catchment health centre. The health centre evaluates the performance of the health posts through the command post approach, even though the approach is not well developed and needs strengthening.

Our literature review also showed that the supervision conducted was found to be lacking feedback. We obtained similar findings in the qualitative study, where the majority of the supervision had implementation and approach problems. Most of the supervision focused on fault-finding, checking registers and collecting reports, according to the majority of the HEWs. They also mentioned that the supervision provided by the *Woreda* health office and the health centre was not regular.

The *Kebele* administration is expected to support the HEWs in community mobilization, resource allocation and ensuring the implementation of the programme in the *Kebele*. However, the support of the *Kebele* administration was found to be minimal, since it had stopped providing support to the HEWs, leaving all health-related activities to be performed by

the HEWs alone.

Some HEWs supervisors lacked the necessary skills and knowledge of supervision and of the health extension packages as well. Therefore, provision of training on the basics of supervision and the health extension packages should be considered. Supervision is found to be one of the (de)motivating factors for the HEWs and should be planned, conducted effectively and regularly with the provision of feedback, to enhance the performance of the HEWs. The supervisory roles of the *Kebele* administration, *Woreda* health office and health centre should be clarified in all areas. Coordinated supervision should be carried out so that each party involved in the supervision can play its role to support the HEP.

### *Workload*

HEWs perform their work on the 16 health extension packages by spending 25% of their time at the health post and the remaining 75% conducting outreach activities at households in the community. We found that the HEWs' perceptions about the amount of time they needed to perform their work varied. Some HEWs believed they had sufficient time, while others, even working in the same district, thought there was not enough time. However, in general, the majority of HEWs believed that they were overloaded by their work, which can be explained by the nature of the work and the extensive number of tasks which they are expected to perform.

There were some contributing factors observed for the workload of the HEWs. The absence of colleagues (other HEWs) from the health post because of attending training and other reasons, the geographical size and difficult topography of the *Kebeles* and involvement of the HEWs in other sectors and political activities were some of the reasons mentioned as causes for their heavy workload by different participants in the study.

Theoretically, the HEWs may have a huge workload, but in practice some of them are not executing all the required tasks. They usually become busy and are taken away by many campaigns, community mobilization and unplanned activities.

Proper time planning and management for the activities performed at the health post and outreach services, avoiding/minimizing the time spent training which takes the HEWs away from their workplace and decreasing the involvement and engagement of the HEWs in other sectors and political activities could increase their efficiency and consequently decrease their workload. This can be done by replacing extended training courses with short-term and on-the-job training and assigning additional HEWs to *Kebeles* where there is a challenge due to difficult topography and a large population.

### *Referral*

We found that there is a referral system from the community up to the hospital level. Leaders of the HDA and their members, including the TBAs, are involved in the referral system. It was found that HEWs commonly refer patients to the catchment health centre and sometimes to the hospital.

Most of the referral cases are sent orally due to the absence of referral forms in the health post, and again the HEWs do not receive feedback concerning the patients they have sent to the health centre or hospital. The absence of the necessary equipment, supplies and logistics in the health post were mentioned as a reason for referral by the majority of the HEWs. HEWs also make referrals because they lack adequate skills and knowledge to conduct delivery and manage complications during labour.

The community was sometimes found unwilling to accept hospital referral, since they are requested to pay for the health services at the hospital and sometimes for the expenses incurred for fuel for the ambulance.

In general, a referral system is in place, but we found a lack of feedback exchange and preparedness in health facilities to accept referred cases. This can affect the uptake of referral and be a reason for the dissatisfaction of the community.

Difficult topography and road and transportation problems can also affect the referral system. A lack of a positive attitude towards the referred patients and poor handling of referrals by the health professionals at the referral health institution could have negative effects on the uptake of referral. Providing referral forms at the health facilities, developing positive attitudes for referrals and handling them properly among the health professionals in health centres and hospitals and instituting proper referral case recording and a referral tracking system could improve the referral system.

### *Quality assurance*

HEWs receive one year of initial training before they start their formal assignment at the health posts. In our study the quality of the initial training was not addressed in detail, but various respondents stated that the training lacked an adequate practical component. Different in-service training courses are organized and provided by the government and NGOs to equip the HEWs with adequate knowledge and skills; however, they need harmonization and standardization. The training on safe and clean delivery provided to the HEWs to improve their skills and knowledge on delivery was found to be lacking a practical component, and a significant number of HEWs still have not received the training. The quality of the safe and

clean delivery training given by the NGOs was considered better than the training organized by the government by some of the HEWs who participated in the study.

The skills, knowledge and confidence of the HEWs to conduct delivery and manage complications during pregnancy and labour are inadequate, which can be explained by the lack of adequate training and exposure equipment, supplies and logistics at health posts. The HEWs' level of knowledge on the content of ANC counselling was also low. Guidelines and manuals were not found in the majority of the health posts, which can affect the quality of care. Improving the quality of initial and in-service training and the provision of supplies, logistics, manuals and guidelines at health posts could improve the HEWs' performance.

### *mHealth*

In our qualitative study we found that HEWs had been using mobile phones for different health-related activities. They use mobile phones for verifying the availability of health professionals at health centres during referral, calling health professionals from the health centre to the health post to provide health services which are not provided by the HEWs, communicating with the leaders of the HDA, communicating with the *Woreda* health office and health centre during emergencies and outbreaks, sending reports to supervisors and ordering logistics and supplies. The use of mobile technology for maternal health services was highly recommended by the HEWs. A lack of money to cover airtime and the limited availability of network coverage in some districts were problems for mobile phone use.

### *HEWs' coordination and relationships with the HDA*

According to the HEP implementation guideline, VCHPs were in place to support the work of the HEWs and to extend health extension package services to the community. VCHPs have now been replaced by the HDA. In our literature review we found that the VCHPs had increased the community's knowledge of prevention and control of HIV, contraceptive use, ANC attendance, immunization coverage, access to toilet facilities and utilization of mosquito bed nets.

This finding is consistent with the finding of the qualitative study, where members of the HDA were involved in and improved the provision of health services such as: the referral of pregnant women, PNC follow-up and mobilization of the community for immunization and other campaigns. Moreover, it was found that the HDA improved the community's awareness of health problems and made health services accessible to the community in areas where the HEWs were not able provide the services due to their workload and the large distances involved. The fact that the HDA is networked through the 'one to five networks' with a manageable number of families makes it possible to exchange experiences among the members, monitor the performance within the HDA and have frequent interaction with the

HEWs. The HDA is assumed to be a good strategy to bring about behavioural change in the community which could enhance the utilization of maternal health services. Strengthening the links between the HDA and the HEWs could extend maternal health services in the community and improve the performance of the HEWs.

#### *HEWs' coordination and relationships with TBAs*

The findings of our qualitative study showed that TBAs had been providing maternal health services in the community, though they are not currently supported by the government to conduct delivery, but just referring pregnant and labouring mothers to health posts and health centres.

The community still has a high level of trust in TBAs, and there is evidence that the community still seeks maternal health services from them. The community's common belief that the HEWs are inexperienced and too young could be a reason for seeking maternal health services from the TBAs. Involving the TBAs in the provision of maternal health services and making them coordinate and collaborate with the HEWs, rather than banning them, will improve the provision of maternal health services and the performance of the HEWs in the community. Strengthening the links between TBAs and HEWs as part of the HDA could improve the referral coordination of expectant mothers between the TBAs and the formal health system, including health posts.

#### *Coordination and support of NGOs with the HEWs*

Different NGOs were found to be active in the study area, supporting the health system by providing a range of health services in the community. The NGOs were playing major roles in health-related activities such as building the capacity of HEWs, providing important logistics and supplies to the health facilities, supporting the referral system, offering incentives and conducting supportive supervision.

Since NGOs have ample experience of best practices to be shared and knowledgeable expertise and resources to mobilize, it is necessary to coordinate and collaborate with the NGOs to improve the performance of the HEWs and to increase the utilization of maternal health services in the community.

## CHAPTER 7 – IMPLICATIONS

### 7.1. FOR THE DRAFT FRAMEWORK

The factors which we found in our study act in accordance with the factors presented in the draft framework. Community-related contextual factors such as cultural beliefs, religion and the preference for privacy and female health professionals were found to affect the community's health-seeking behaviour and thus indirectly the performance of HEWs. A lack of suitable roads was among the broad contextual factors affecting the delivery of maternal health services in the community.

An important health system factor influencing HEWs' performance is the availability of HEP implementation guidelines and manuals, developed based on the country's decentralized health policy. These guidelines clearly indicate the roles and responsibilities of the HEWs and how the HEP integrates with and is implemented within the formal health system.

In our study we did not come across evidence on all the building blocks of the health system. However, some of the health system factors such as client costs incurred at hospitals for maternal services, and logistics, supplies and basic infrastructures such as electricity and water, were absent at the health facilities. These factors were found to be affecting both the provision and utilization of maternal health services and the motivation and performance of HEWs.

Different intervention design factors presented in the framework were also found to affect the performance of HEWs. Incentives, the supervisory system, educational opportunities, transfers to a different workplace, workload, community links through the HDA and the referral system were the main intervention design factors that were found to be affecting HEWs' performance and motivation. The coordination and communication between and among the HEWs, the HDA and TBAs was also found to influence their performance. Different NGOs led programmes, and the communication and coordination of these programmes with the HEP had an effect on the activities and performance of the HEWs.

### 7.2. FOR THE QUALITY IMPROVEMENT CYCLES

The focus of REACHOUT Ethiopia is to improve the low uptake of maternal health services — i.e. ANC, institutional delivery and PNC — by enhancing the performance of HEWs. There is no evidence that HEWs improve the utilization of institutional delivery and PNC. However, there is evidence that the HEWs provide ANC in a better way, though the service needs improvement.

Even though the majority of the HEWs were trained on delivery during their initial and in-service training, many were not able to provide the service effectively. The level of their training on delivery, the little or no exposure to real cases during training and the lack of important logistics and supplies to provide delivery services at the health posts were reported as contributing to the poor performance of HEWs on delivery.

The study found that most women prefer to give birth at home, because they consider home delivery safe and a common practice. They are influenced by the practice and advice of their relatives and elders, and they trust in TBAs. Even if they decide to give birth at a health institution, they prefer delivering at a health centre, thereby avoiding health posts, because they think the HEWs lack experience and are too young.

Bringing about significant change in institutional delivery requires a high level of investment, which is beyond the scope of REACHOUT. Therefore, we will be focusing on interventions which are feasible and capable of changing institutional delivery by improving the performance of the HEWs. Previously, the country has been implementing and supporting safe and clean delivery conducted at community level by the HEWs. However, recently the emphasis has changed to improved skilled delivery, which needs to be conducted at least by a nurse. Thus HEWs are entitled to refer expectant mothers to health centres.

Therefore, considering the existing situation in the area, we will be focusing on addressing the problems revealed by the study by improving factors related to supervision, referral and the community. We will also use mobile technology to strengthen the interventions and improve ANC follow-up, referral, coordination of health post services with the health centre and the HMIS.

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#### 7.2.1. CAPACITY-BUILDING

In our study we found that HEWs were lacking adequate skills and knowledge to provide quality ANC services and identify danger signs of pregnancy and labour. Therefore, capacity-building training will be given to the HEWs on comprehensive ANC provision, including counselling skills and danger signs of pregnancy and labour. After the provision of the training, the HEWs are expected to be able to provide quality ANC and identify and refer high-risk expectant mothers during pregnancy and labour.

The other area of capacity-building in which REACHOUT will intervene is improving the supervisory skills of HEP coordinators and HEWs supervisors at health centres. Health centre focal persons will be trained on supportive supervision and HEP packages. The thematic areas of the training could be supportive supervision including feedback mechanisms, supervision

checklists, follow-up, integration and referral. HEP package training will also be given, with an emphasis on maternal health services (ANC, delivery and PNC).

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#### 7.2.2. SUPERVISION

Supervision is supposed to be conducted to monitor the performance of programmes and activities, support the supervisee and strengthen the overall health system. In our study we found that HEWs did not receive regular supervision, and, if conducted, written feedback was either not provided or focused on fault-finding and checking registers rather than filling gaps and supporting the HEWs. In REACHOUT we will train health centre focal persons and the HEWs on basic supervisory skills and related problems so that they will be able to carry out effective supervision on their respective areas.

During the implementation period of the improvement cycle, it is expected that planned and regular supervision with the standard checklist will be conducted, including providing the necessary feedback at each level. HEWs are also expected to supervise and support the HDA so that the community's utilization of the HEP package and maternal health services will improve. By training supervisors, we expect that HEWs will receive onsite training during supervision and that necessary measures will be taken to solve any problems identified during supervision.

A memorandum of understanding will be signed by zonal health departments, the *Woreda* health office and REACHOUT to share responsibilities and roles to support the HEP. In addition to this, REACHOUT will initiate a reward mechanism for HEWs in the form of certificates for good performance. This reward system should be used by the government and implemented by *Woreda* field supervisors, the health centre focal persons.

To address the problems identified on supervision during the context analysis, we will divide the *Woredas* in Sidama Zone into an intervention and a control group to conduct the research and then evaluate the results of our intervention by comparing them.

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#### 7.2.3. REFERRAL

HEWs refer patients for health services which they do not provide and/or which are not available at health posts. Proper communication and coordination among and between the referring and referral-accepting health facilities is crucial to provide an effective health service.

In our study we saw that there is a referral system, even though there were certain drawbacks in its implementation. The exchange of feedback and coordination among the referral actors is weak. The readiness of the referral health facilities to accept and manage referrals was not strong, and also the health professionals who were expected to manage the cases were not



always accepting and managing the referred patients properly and sometimes were not friendly to them. The absence of referral forms at the health facilities is another problem negatively affecting the referral system in the study area.

REACHOUT will work to strengthen the referral system in the area so that proper care and management can be given to referral cases. REACHOUT will coordinate its activities with the Zonal Health Department, *Woreda* health offices and the health centres to solve the existing problems at health facilities and tackle other challenges facing the referral system. Not only will we focus on improving the formal referral system, but we will also work to strengthen the referral network at community level by improving the coordination and collaboration of the HEWs with the HDA and TBAs.

We will also employ mobile technology to send referrals and to coordinate maternal health services at health facilities and in the community. A referral tracking and documentation system will be established. We will work with and coordinate the Zonal Health Department and *Woreda* health offices to supply referral forms to the health facilities, allocate a budget for fuel and maintenance of the ambulance and monitor proper ambulance utilization at grassroots level.

Baseline data on referral will be gathered before intervening in problems of referral. The following information will be collected during baseline data collection: who is referred, and when; when did the referred person reach the health facilities; what action was taken; was feedback given to the referring facility; what happened to those who did not reach the facility; documentation of the referral data; and the time spent between referral and action.

Then, based on the results of the baseline data, *Woredas* will be divided into an intervention and a control group to measure the effect of the intervention.

The following activities will be performed during the implementation phase: awareness creation among HEWs about early identification of high risk; preparation of tools for documenting the referrals made; following the referred person and those who reached the facilities; identifying those who did not go, and taking action; measuring the time spent between referrals; and ensuring that documentation is provided.

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#### 7.2.4. COMMUNITY MOBILIZATION AND AWARENESS CREATION

In our study we found that community-related factors such as traditional and cultural beliefs, religious practices and privacy-related issues were affecting the utilization of maternal health

services. The low risk perception of expectant mothers and the lack of awareness on maternal health services were also found to influence the community's health-seeking behaviour.

HEWs will be trained on how to communicate with and coordinate HDA members, including the TBAs, to carry out community mobilization activities within the community. REACHOUT will adapt the successful experience of TB REACH in community mobilization and awareness creation. HEWs will be in continuous touch with the leaders and members of the HDA during awareness creation and community mobilization activities at community level.

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#### 7.2.5. USE OF MOBILE TECHNOLOGY

In our study we observed that HEWs have been using mobile telephones for TB prevention and control activities, referring patients, sending reports and requesting logistics and supplies. The use of mobile technology was also highly recommended by the HEWs and other participants in the study. Therefore, in REACHOUT the HEWs will be using mobile phones for registering and following up pregnant women, referring high-risk and labouring women, coordinating health services between health facilities and improving the HMIS and reporting. Mobile technology is expected to be used at *Woreda*, zone and REACHOUT office level for exchanging and monitoring data through an improved HMIS. The purchase of the apparatus and the cost of airtime will be covered by an eHealth project which will be implemented during the second improvement cycle.

Baseline data will be collected to measure the understanding of eHealth among the community, health workers and policymakers. This includes the operational feasibility of eHealth for maternal health. Then this will be linked to the referral system during its implementation.

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#### 7.2.6. HEWS' COMMUNICATION AND COORDINATION WITH TBAS AND THE HDA, AND COORDINATION OF NGO-LED PROGRAMMES

In our study we found that coordination and collaboration of the HEWs with the HDA and TBAs can enhance the performance of the HEWs and improve their links with the community. The leaders and members of the HDA carry out referrals of pregnant and delivering women, PNC follow-up and counselling of expectant mothers in the community. REACHOUT will strengthen the established HDA system through supervision and community mobilization activities conducted by HEWs to integrate the HDA with the HEP on maternal health.

The HEWs will be given training on how to supervise, follow and support the HDA. Therefore, to strengthen the coordination and communication of the HDA with HEWs, the HEWs shall attend regular meetings of the HDA and arrange review meetings for the HDA to support the system. HEWs will be capacitated to regularly supervise and train the leaders of the HDA. Information

exchange mechanisms, including reporting between the HDA and HEWs, should be strengthened. The HDA will be involved and play a key role in community mobilization and awareness creation activities.

As part of the HDA, REACHOUT will involve TBAs to support the provision of maternal health services. HEWs will be stimulated to communicate with and coordinate the TBAs so that they will be actively involved in the HDA system. TBAs will work with the HEWs, approaching them through the strategies mentioned above for the HDA.

The findings of the study showed that there were a lot of NGOs running different programmes with the aim of supporting health service provision to the community. The major areas in which NGOs have been intervening were provision of capacity-building training to HEWs, carrying out supportive supervision and delivery of logistics and supplies. Considering the remarkable inputs which the NGOs have been providing for strengthening the HEP, we shall collaborate with and coordinate the NGOs working in Sidama Zone to improve the provision of maternal health services and the performance of HEWs. We will work together with the NGOs in capacity-building trainings, supervision, referral, community mobilization and awareness creation, and the supply of important logistics and supplies. We will also share their best practices and adapt our implementation when needed.

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#### 7.2.7. LOGISTICS, SUPPLIES AND EQUIPMENT

In this study we identified that the majority of health posts were lacking important logistics and supplies. The absence of logistics and supplies affects health service delivery and the motivation and performance of HEWs. A lack of basic infrastructure such as electricity, roads, transport and a safe water supply was also another serious challenge affecting the provision of maternal health services to the community.

Providing supplies, logistics, equipment and infrastructure is beyond the scope of REACHOUT. However, REACHOUT will communicate with politicians, administrators, health managers, NGOs and partners and show them the existing situation to try to convince them to take the necessary measures to improve the delivery of maternal health services and the performance of HEWs.

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## ANNEXES

### ANNEX 1: Topic guides

#### In-depth Interview-Mother (IDI-M)

1. Gain consent
2. Fill in information sheet for each mother

#### Information sheet IDI-M

Respondent identifier	
Age	
Name of village	
Attended ANC? How many times?	
How long ago last contact with HEW?	
How often had contact with HEW in last 12 months?	
Number of living children and age?	
Position in HDA? (Leader or member)	
How many pregnancies?	
<i>If pregnant</i> , when is your baby expected?	

#### Background of the interviewee

1. Please tell us about yourself and your family.  
What is your occupation? Who is the main income earner in your household? Do you have your own personal income? What is the household income? Who controls the household expenditure?
2. What is the level of your education?

#### Critical incidence

Now we would like to speak with you about your own experience in pregnancy, we would like you to describe what happened in your most recent pregnancy from the time you knew you are pregnant, until the time you delivered your baby, (or in the case of pregnant women on first pregnancy) until now.



3. For the most recent pregnancy, how did you find out you were pregnant, and what did you do when you found out?  
Probes: Did you recognize the signs, did you go for a test? If yes, who gave you the test? What did the person who give the test say?
4. What did you do after you were sure you are pregnant?  
Probes: told the husband, relatives, went to health post/ANC, changed normal behaviour
5. Did you do anything to make your pregnancy safe?  
Probes: did you seek advice? From whom? (Relatives? TBA? HEWs? Health professionals? Other members of the community? Leader of HDA?) why did you ask this person? What advice did they give you?
6. What did you do next? Did you follow their advice?
7. Did you go to the health centre during your pregnancy? Why/why not?  
*If they went to the health centre, Why did you go to the health centre? Did the HEW refer you or did you make the decision to go yourself? Why?*  
*If they have not yet mentioned ANC say:*
8. What do you think about ANC? Why did you go to ANC?/ or Why not? Do you think it is important?  
Probes: Were you advised to go to ANC? By whom? What do you think about the ANC services? Why?  
*If they received ANC:*
9. What happened at your ANC visits? How many did you have?
10. Last year there was a community mobilization about maternal health and institutional delivery, do you remember it? Can you remember talking with the HDA leaders about this?  
**Probe:** Can you remember what they told you? What do you think about it?
11. For those who are HDA leaders: how did your community respond? How can we improve the messages to families about maternal health?  
*Only for women who have more than one pregnancy before:*
12. How did your recent experiences with ANC compare to your previous pregnancies? Did you have ANC for all of your pregnancies? What influenced your decisions for this?
13. What did you do when your (most recent) labour started?  
**Probe:** who did you contact (HEW??TBA)? Why?
14. What happened next? Where did you give birth? Why did you decide to give birth there?  
**Probes:** if at health centre, how did you get there? Who helped you? How long did it take? Were you referred (by whom?)Were there any problems? Were there any costs?

15. How long was your labour, and how did you feel about it at this time? Did you have any problems associated with your labour (abnormal bleeding, other complications). If yes, what happened, and what did you do? Who advised you? Who helped you?  
*Only for women who are pregnant right now:*
16. Where are you planning to give birth? Are there any things you will do differently compared to the other time(s) you were pregnant?
17. What happened after you gave birth?  
**Probe:** What advice did you receive? (nutrition, hygiene, breast feeding, long term contraceptive, post partum IUCD, anything else), are you advised about family planning and spacing of children?
18. Who gave you advice after childbirth? When? Did anyone visit you? When?
19. You told me you have xx children? How do your experiences of pregnancy and childbirth compare? Have you ever experienced complications in previous pregnancies, how many of your children are living now? (If some are dead – at what age? If neonatal: what happened? Were you offered referral? Did you accept to be referred? Why?)
20. How did you feel about the advice and services that you received during your pregnancy, during labour and after labour (PNC)?  
**Probe:** Which services do you think are useful during pregnancy? What do you think can be done to improve the maternal health services?

***All women can be asked (first pregnancy and women with more than one pregnancy)(Q21-26)***

21. Who do you feel should be present when you give birth? (probe: family, TBA, HEW, midwife?) why?  
**Probe:** comfort, profession person with skills in childbirth)
22. Whose advice do you trust the most about your pregnancy?  
HEW? TBA? Midwife? Relative? Other health professionals or HDA? Why?
23. How do you feel about the attitude AND PERFORMANCE of the providers (HEWs/HPs like midwives)?
24. What could be improved? Which ones are the most useful for you:  
**Probe:** e.g. have the best skills and knowledge? Convenient? Close to home? Useful. Which ones have limitations? Why?
25. Have you experienced any costs for maternal health services?  
**Probes:** what for? Tests? Drugs? Consultation fees (from TBA or HEW?), transport? Other?  
*If no, do you know if other people sometimes are asked to pay? Do you think that service payment have an impact on the service utilization?*  
*If these areas have not yet been covered ask:*

26. What do you think is expected from the Government to improve the maternal health services (probe at levels: health facilities, district health office and zone health department)?

## In-depth- Interview-Health Extension Worker (IDI-HEW)

1. Take individual consent
2. Fill in information sheet for each respondent

***For this interview maternal health services refer to ANC, delivery and post-partum services including FP.***

### Information sheet IDI-HEW

#### Introduction

1. Please introduce yourself, and how did you become HEW.
2. What made you decide to join the program? What attracted you?

Respondent identifier	
What is your age?	
How long have you been a HEW	
Did you get additional training since you qualified?	For what:                      How long:
Where do you live?	
Do you work in your home <i>Kebele</i> ? If not how far is your home?	

3. What was the selection process for becoming HEW?
4. Who are your clients? Please draw a map of the *Kebele* and show where the clients come from? Are there some areas where you have less contact with the community? Is it more difficult to provide services in some areas of the *Kebele*? Why?

#### Incentives and motivation

1. You work on 16 health packages. Which packages do you like to do the most? Why?
2. What things make you and other HEWs feel good or not so good about your work? Why? **Probing**, salary, transfer, leave, housing condition, logistic supplies, personal development, working for the community, job security etc.)
3. What other incentives do you have for your work

**Probe:** social status, livelihood support, economic benefits, other rewards? Concerns?

4. How could your daily tasks be improved?

Probe for equipment and supplies, workload, working environment, communication, equipment and transportation, safety, career perspective, supervision, community, clients, colleagues, other health workers.

5. Which of the 16 packages takes most of your time? Why?

6. Do you have enough time to do all of the 16 packages in your routine?– are there times when you cover more than one task when you do house to house visits?

5. What are the things that you like about providing maternal health services? And what do you not like about maternal health services? Why?

### **Supervision**

1. Who supports and supervises you? (Probe: *Kebele* leaders, HCs or *Woreda* health office?)

2. How often do you receive supervision?

3. How is the quality of your work evaluated? By whom? How? How do you feel about this? Do you get feedback?

4. Do you have enough support and supervision? What could be better?

5. Do you communicate with colleagues (including supervisors *Kebele* HCs and *Woreda* Health Office, volunteers and TBAs) and if yes, how does it help you to do your job?

6. How do you ensure that the community is satisfied with your service?

**Probe:** do you evaluate yourselves, suggestion box or book. What do people suggest?

### **Maternal health work**

7. What services do you currently provide for pregnant women and delivering mothers?

8. How do you approach a pregnant woman? What do you do first?

**Probe:** do you go from home to home, do you wait until they visit you themselves?

9. What training and skills have you been given for maternal health? When did you get this training?

10. Are you confident that the training is enough to provide a high quality of MH service? Why? In which area do you need more training (probe out of ANC, Delivery and PNC)?

11. Who do you work with in delivering maternal health service? (probe HCs, HEP coordinators...)

Probe who supervises and guides you in this work? How do they guide you? What additional guidance would help you in your work?

12. What are the challenges in implementing MH services?

Probe ANC, delivery, post- partum

13. What do you think goes really well in your maternal health work? Why?

14. What do you think does not always go well? Can you give an example? What things are influencing that this work does not go well?
15. Thinking about your work and what can be done to improve it what would you suggest? How could this be done?

### Referral

16. What do you do when a client has a problem you cannot solve? Who do you refer to? How does the referral process work?
17. What is the referral mechanism for high risk pregnant women?  
**Probes:** Are there any difficulties in making referrals? (Transport, costs, referral system, distance, attitudes of clients?)
18. What goes well and not so well in referral? Why?

### Community attitudes to MH and health seeking

19. How do you know what the community or clients think about the services you provide? What do they like best? What do they complain about?
20. Who do women normally contact when they are pregnant? At what stage of pregnancy do they normally seek health advice?
21. At what stage of pregnancy do you think that women should come for ANC?  
**Probe:** Are there any difficulties in encouraging women to seek ANC? Which difficulties? How can they be encouraged to come at the right time? What does the community think about the need for MH services?
22. Where do people in this community feel they should go for delivery?  
**Probe:** home? Health post? Health centre? Why? Attended by whom? TBA, HEW?
23. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?
24. Do you face challenges in encouraging women that they should deliver in a health facility?  
**Probe:** Why? What/who influences the decisions women make about their maternal health seeking?
25. How do you communicate with community members on maternal health issues?  
**Probe:** contact with committees, *Kebele* leaders, HDA, TBAs).
26. How could the communication be improved ? **Probe:** who should be involved? If TBAs are mentioned: how do they work together, what is the advantage or disadvantage?
27. Which are the challenges at community level which make women not access ANC/Delivery/Post-partum services?
28. Last year the HDA did community mobilization to promote institutional delivery, how did they do this in your *Kebele*?

29. What was the impact of the community mobilization?
30. Do you have ideas for additional activities that would help?  
**Probe:** what about increased communication and monitoring of pregnant women between HEWs and other maternal health services, using mobile phone technologies? What impact could this have on your work? Would you favour this type of intervention?
31. What can be done to improve women's maternal health seeking?  
**Probe:** trust, education, community activities

#### **Monitoring and evaluation, quality of care**

32. What records do you or others keep of your work? How is this information collected?
33. What happens with this information? Do you get feedback about the results of your work?
34. Do you use mobile phones for your work? What do you use it for?  
**Probe:** for different use: to collect and send information; to coordinate things; to seek advice from others, to contact clients. For each find out what with who how often.
35. Who bought the device? Who pays for the costs of use, air time, charging etc.?
36. How do you feel about the use of these devices: advantages, disadvantages?  
**Probe:** Do you use it for your MH work?
37. Do you think there is potential for using mobile phones in your MH work? how?  
**Probe:** what about for making referrals of high risk mothers, sending monitoring data? What sort of challenges do you think there will be?

### Focus Group Discussion HEWs (FGD-HEW)

Take consent

Fill in information sheet

Explain process

Ensure that ground rules are discussed

### Information sheet FGD-HEW

Date:	District:	Location of FGD:		
Respondent ID	Responsible for which Kebele	Home Kebele	Age	How many years as HEW

### Introduction

1. Please introduce yourself.
2. What made you decide to join the program? What attracted you?

### Incentives and motivation

3. You work on 16 health packages. Which packages do you like to do the most? Why?
4. What things make you feel good or not so good about your work? Why?  
**Probing**, salary, transfer, leave, housing condition, logistic supplies, personal development, working for the community, job security etc.)
5. What other incentives do you have for your work? **Probe**: social status, livelihood support, economic benefits, other rewards? Concerns?
6. How could your daily tasks be improved? **Probe**: for equipment and supplies, workload, working environment, communication, equipment and transportation, safety, career perspective, supervision, community, clients, colleagues, other health workers.
7. Which of the 16 packages takes most of your time? Why?
8. Do you have enough time to do all of the 16 packages in your routine?— are there times when you cover more than one task when you do house to house visits?
9. What are the things that you like about providing maternal health services? And what do you not like about maternal health services? Why?



### Supervision

10. Who supports and supervises you? (Probe: *Kebele* leaders, HCs or *Woreda* health office?)
11. How often do you receive supervision?
12. How is the quality of your work evaluated? By whom? How? How do you feel about this? Do you get feedback?
13. Do you have enough support and supervision? What could be better?
14. Do you communicate with colleagues (including supervisors *Kebele* HCs and *Woreda* Health Office, volunteers and TBAs) and if yes, how does it help you to do your job?
15. How do you ensure that the community is satisfied with your service? **Probe:** do you evaluate yourselves, suggestion box or book. What do people suggest?

### Maternal health work

16. What services do you currently provide for pregnant women and delivering mothers?
17. How do you approach a pregnant woman? What do you do first? **Probe:** do you go from home to home, do you wait until they visit you themselves?
18. What training and skills have you been given for maternal health? When did you get this training?
19. Are you confident that the training is enough to provide a high quality of MH service? Why? In which area do you need more training (**probe** out of ANC, Delivery and PNC)?
20. Who do you work with in delivering maternal health service? (**probe** HCs, HEP coordinators...) **Probe:** who supervises and guides you in this work? How do they guide you? What additional guidance would help you in your work?
21. What are the challenges in implementing MH services? **Probe:** ANC, delivery, post-partum
22. What do you think goes really well in your maternal health work? Why?
23. What do you think does not always go well? Can you give an example? What things are influencing that this work does not go well?
24. Thinking about your work and what can be done to improve it what would you suggest? How could this be done?

### Referral

25. What do you do when a client has a problem you cannot solve? Who do you refer to? How does the referral process work?
26. What is the referral mechanism for high risk pregnant women? **Probes:** Are there any difficulties in making referrals? (Transport, costs, referral system, distance, attitudes of clients?)

27. What goes well and not so well in referral? Why?

### **Community attitudes to MH and health seeking**

28. How do you know what the community or clients think about the services you provide? What do they like best? What do they complain about?
29. Who do women normally contact when they are pregnant? At what stage of pregnancy do they normally seek health advice?
30. At what stage of pregnancy do you think that women should come for ANC? **Probe:** Are there any difficulties in encouraging women to seek ANC? Which difficulties? How can they be encouraged to come at the right time? What does the community think about the need for MH services?
31. Where do people in this community feel they should go for delivery? **Probe:** home? Health post? Health centre? Why? Attended by whom? TBA, HEW?
32. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?
33. Do you face challenges in encouraging women that they should deliver in a health facility?  
**Probe:** Why? What/who influences the decisions women make about their maternal health seeking?
34. How do you communicate with community members on maternal health issues? **Probe:** contact with committees, *Kebele* leaders, HDA, TBAs).
35. How could the communication be improved? **Probe:** who should be involved? If TBAs are mentioned: how do they work together, what is the advantage or disadvantage?
36. Which are the challenges at community level which make women not access ANC/Delivery/Post-partum services?
37. Last year the HDA did community mobilization to promote institutional delivery, how did they do this in your *Kebele*?
38. What was the impact of the community mobilization?
39. Do you have ideas for additional activities that would help? **Probe:** what about increased communication and monitoring of pregnant women between HEWs and other maternal health services, using mobile phone technologies? What impact could this have on your work? Would you favour this type of intervention?
40. What can be done to improve women's maternal health seeking? **Probe:** trust, education, community activities

### **Monitoring and evaluation, quality of care**

41. What records do you or others keep of your work? How is this information collected?

- 42 What happens with this information? Do you get feedback about the results of your work?
- 43 Do you use mobile phones for your work? What do you use it for? **Probe:** for different use: to collect and send information; to coordinate things; to seek advice from others, to contact clients. For each find out what with who how often.
44. Who bought the device? Who pays for the costs of use, air time, charging etc.?
45. How do you feel about the use of these devices: advantages, disadvantages? **Probe:** Do you use it for your MH work?
- 46 Do you think there is potential for using mobile phones in your MH work? how?  
**Probe:** what about for making referrals of high risk mothers, sending monitoring data?  
What sort of challenges do you think there will be?

## Women Focus Group Discussion (FGD-WO)

(exclude women who do not have close relations contact with women with babies)

Take consent

Fill in information sheet

Explain process

Ensure that ground rules are discussed

### Information sheet FGD-WO

Respondent ID	Age	Role in community or occupation	Education None/primary/secondary/tertiary

### MH services

1. What services are available for pregnant women in your *Kebele*?  
**Probe:** Where are these services: in health centres, health posts? Who provides these services (TBA? HEW?). When and how often do pregnant women receive these services?)
2. Are all the maternal health services that women need available in your community? What other services are needed?

### Perceptions about maternal health and health seeking behaviour

3. In your community what does a woman normally do when she finds out she is pregnant?  
**Probes:** Go to health post? Get a test? Where?
4. What do women do to make sure their pregnancy safe?  
**Probes:** where can do they seek advice? From whom? (Relatives? TBA? HEWS? Health professionals? Other members of the community? Leader of HAD?) what sort of person is preferable?
5. Do you think is it important for pregnant women to attend antenatal care? Why? When do you think the first ANC visit should be? How many ANC visits should be done? Why?
6. What makes some women decide to attend ANC with health professionals, HEWs and others to seek advice from TBAs?  
**Probe:** about family advice, costs, time, traditional beliefs etc.

7. What would encourage mothers to go for antenatal care with a HEW?  
**Probes:** what are your friends and family members (mother, husband, mother in-laws and sisters) experiences and other women you know?
8. Why do you think some pregnant women in your community deliver in the health facilities? Why do other women decide to deliver at home? Do you think there is a difference in delivering at home and HC? What kind of difference?  
**Probes:** if at health centre, how can you get there? Who helps you? How long does it take?
9. How does referral to the health centre happen (by whom?) are there any costs?
10. How can women be encouraged to give birth in a health facility?
11. Is advice available after childbirth?  
From whom? When? What advice do they give?  
**Probe:** What advice do women receive? (nutrition, hygiene, breast feeding, long term contraceptive, post partum IUCD, anything else), are you advised about family planning and spacing of children
12. Are there some women who don't have access (physical, financial) to maternal health advice (from HEW or other providers)
13. Are there any costs for maternal health services?  
**Probes:** what for? Tests? Drugs? Consultation fees (from TBA or HEW?), transport? Other? Do you think MH service cost have an impact on the utilization of service?
14. Whose advice do women trust the most about pregnancy?  
HEW? TBA? Health professionals? Relative? Why?
15. Which ones are the most useful:  
**Probe:** e.g. have the best skills and knowledge? Convenient? Close to home?

#### **Perceptions of HEWs service quality**

16. How do you feel about the maternal health services provided by HEW in this community? **Probe:** for availability, adequacy, distance, usefulness, and limitations. How do you feel about the skills and knowledge of HEWs? What are they good at? How are their maternal health skills?
17. How do you feel about their attitude towards the community? Ask for examples.
18. What would you like to see improved?
19. What services do you expect to be delivered to mothers by the HEWs?
20. Who do you feel should be present when you women give birth? (probe: family, TBA, HEW, midwife?) why?  
**Probe:** comfort, profession person with skills in childbirth?

- 21.** Last year there was a community mobilization about maternal health and institutional delivery, do you remember it? Can you remember talking with the HDA leaders about this?

**Probe:** Can you remember what they told you? What do you think about it?

For those of you who are HDA leaders: how did your community respond? How can we improve the messages to families about maternal health?

- 22.** Do HEWs and other providers use mobile telephones or other technology to coordinate with health centres and other MH services? Do you think this important? Why?
- 23.** What do you think the Government can do to improve the maternal health services (probe at levels: health facilities, district health office and zone health department)?
- 24.** Do you think there is enough infrastructure, materials and logistic to give an adequate and high quality MH service at HP level?

## Men Focus Group Discussion (FGD-MEN)

(Men, married to women with small children)

Take consent

Fill in information and recording sheet

Explain process

Ensure that ground rules are discussed

### Information sheet FGD-MEN

Respondent ID	Age	Role in community or occupation	Education None/primary/secondary/tertiary

### MH services

1. What services are available for pregnant women in your *Kebele*?

**Probe:** Where are these services: in health centres, health posts? Who provides these services (TBA? HEW?). When and how often do pregnant women receive these services?)

Are all the maternal health services that women need available in your community? What other services are needed?

### Perceptions about maternal health and health seeking behaviour

2. In your community what does a woman normally do when she finds out she is pregnant?

**Probes:** Go to health post? Get a test? Where?

3. What do women do to make sure their pregnancy safe?

**Probes:** where can do they seek advice? From whom? (Relatives? TBA? HEWS? Health professionals? Other members of the community? Leader of HAD?) what sort of person is preferable?

4. Do you think it is important for pregnant women to attend antenatal care? Why? When do you think the first ANC visit should be? How many ANC visits should be done? Why?
5. What makes some women decide to attend ANC with health professionals, HEWs and others to seek advice from TBAs?  
**Probe:** about family advice, costs, time, traditional beliefs etc.
6. What would encourage mothers to go for antenatal care with a HEW?  
**Probes:** what are your friends and family members (mother, husband, mother-in-laws and sisters) experiences and other women you know?
7. Why do you think some pregnant women in your community deliver in the health facilities? Why do other women decide to deliver at home? Do you think there is a difference in delivering at home and HC? What kind of difference?  
**Probes:** if at health centre, how can you get there? Who helps you? How long does it take?
8. How does referral to the health centre happen (by whom?) are there any costs?
9. How can women be encouraged to give birth in a health facility?
10. Is advice available after childbirth?
11. From whom? When? What advice do they give?  
**Probe:** What advice do women receive? (nutrition, hygiene, breast feeding, long term contraceptive, post partum IUCD, anything else), are you advised about family planning and spacing of children
12. Are there some women who don't have access (physical, financial) to maternal health advice (from HEW or other providers)
13. Are there any costs for maternal health services?  
**Probes:** what for? Tests? Drugs? Consultation fees (from TBA or HEW?), transport? Other? Do you think MH service cost have an impact on the utilization of service?
14. Whose advice do women trust the most about pregnancy?
15. HEW? TBA? Health professionals? Relative? Why?
16. Which ones are the most useful: **Probe:** e.g. have the best skills and knowledge? Convenient? Close to home?
17. How do you support your wife during pregnancy and delivery?

#### **Perceptions of HEWs service quality**

18. How do you feel about the maternal health services provided by HEW in this community? **Probe:** for availability, adequacy, distance, usefulness, and limitations. How do you feel about the skills and knowledge of HEWs? What are they good at? How are their maternal health skills?
19. How do you feel about their attitude towards the community? Ask for examples.
20. What would you like to see improved?



21. What services do you expect to be delivered to mothers by the HEWs?
22. Who do you feel should be present when you women give birth? (**probe:** family, TBA, HEW, midwife?) why? **Probe:** comfort, profession person with skills in childbirth?
23. Last year there was a community mobilization about maternal health and institutional delivery, do you remember it? Can you remember talking with the HDA leaders about this? **Probe:** Can you remember what they told you? What do you think about it?
24. For those of you who are HDA leaders: how did your community respond? How can we improve the messages to families about maternal health?
25. Do HEWs and other providers use mobile telephones or other technology to coordinate with health centres and other MH services? Do you think this important? Why?
26. What do you think the Government can do to improve the maternal health services (**probe** at levels: health facilities, district health office and zone health department)?
27. Do you think there is enough infrastructure, materials and logistic to give an adequate and high quality MH service?

## Key Informant Interview- *Kebele* Administrator (KII-KA)

Take consent

Fill in the information sheet

### Information sheet KII-KA

<b>Respondent identifier</b>	
<b>Gender</b>	
<b>Educational level</b>	
<b>What is your role in this <i>Kebele</i></b>	
<b>For how long did you serve in this <i>Kebele</i></b>	

### MH services

1. What maternal health services are available in your *Kebele*?  
**Probe:** Where are these services? (health centres, health posts). Who provides these services (TBA? HEW?). When and how often do pregnant women receive these services?
2. Do you think all the maternal health services that women need are available in your community? What other services are needed?
3. What is your role in facilitating quality maternal health service in the community?

### Maternal health and HEW program

4. In your community where do women choose to get MH services?  
Probe: Health Post? HC? Or from TBA or HDA. Why?
5. Why do you think some pregnant women in your community deliver in the health facilities? Why do other women decide to deliver at home? Do you think there is a difference in delivering at home and HC? What kind of difference?
6. Do you think the HEW program has changed the maternal health service coverage? (utilization, quality,) in what way? Ask for examples.
7. Are there some women in your community who don't have access (physical, financial) to maternal health advice (from HEW or other providers)? How are they getting the maternal health service?
8. Does your Keble have special support for women's who can't afford to get MH during referral? What kind of support?
9. Are there limitations to the maternal health services provided by HEWs? Are they available 24 hours? Does their MH work sometimes not go well? Why do you think that is?
10. Are there things that go well in maternal health services provided by HEW? Can you give an example? What makes this success?

11. What do you think are the main challenges in maternal health services?
12. What do you think are the main reasons for maternal mortality in this district? How do you think maternal mortality can be reduced?

### **Monitoring and Evaluation**

13. How do you monitor and evaluate the HEWs program? (**Probe:** Plan, Report, using data for decision making)
14. Do you have meeting with HEWs regularly? How often? What do you discuss during that meeting?
15. In what way do you support HEWs program while they are giving MH services? (**Probe:** Do you have supervision program? How often? What do you do? Is there feedback mechanism)

### **Perceptions of service quality**

16. What is the importance of the work done by HEWs?
17. How do you feel about the maternal health services provided by HEW in this community?  
**Probe:** for availability, adequacy, distance to HC, usefulness, and limitations.
18. How do you feel about the skills and knowledge of HEWs? What are they good at? How are their maternal health skills?
19. How do you feel about their attitude towards the community? Ask for examples.
20. What do you think is the community perception regarding the HEWs service on MH?
21. Whom do you think the community chooses to seek for an advice or to get service? Why?
22. What services do you expect to be delivered to mothers by the HEWs?
23. How does referral to the health centre happen (by whom?) are there any costs?
24. What do you think the role of the Keble Administrator should do to improve the maternal health services (**probe:** at levels: health facilities, district health office and zone health department)?
25. Do you think there is enough infrastructure, materials and logistic to give MH service is adequate to give high quality MH service? If no; why not?

### **Health seeking behaviour**

26. In your community Normally what does a woman do when she finds out she is pregnant  
**Probes:** Go to health post? Get a test? Where?
27. What do women do to make sure their pregnancy safe?  
**Probes:** where can do they seek advice? From whom? (Relatives? TBA? HEWS? Health professionals? Other members of the community? Leader of HAD?) what sort of person is preferable?

28. Who or what are the most important influences on the services a woman accesses during pregnancy? **Probe:** TBA? Family? HEW? Media (radio etc)?
29. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?
30. From your experience where do you think women in your Keble commonly go to give birth? How do they decide where to give birth? How can they be encouraged to give birth in a health facility?  
**Probes:** if at health centre, how can you get there? Who helps you? How long does it take?
31. Last year the HDA did community mobilization to promote institutional delivery, how did they do this in your *Kebele*?
32. What was the impact of the community mobilization?
33. Do you have ideas for additional activities that would help?  
**Probe:** what about increased communication and monitoring of pregnant women between HEWs and other maternal health services, using mobile phone technologies?

## Key Informant Interview-Health Centre Head (KII-HCH)

Take consent

Fill in the information sheet

### Information sheet KII-HCH

<b>Respondent identifier</b>	
<b>Gender</b>	
<b>Educational level</b>	
<b>What is your profession</b>	
<b>For how long did you work in the Health centre?</b>	

### Perceptions of HEWs services

1. What services are available for MH services in your health centre?  
**Probe:** Who provides these services (midwife or other clinical nurses). When and how often do pregnant women receive these services?)
2. How do you feel about the maternal health services provided by HEW in this community? **Probe:** for availability, quality, adequacy, distance, usefulness, and limitations.
3. How do you assist the HEW's in providing quality MH services in the community?
4. How do you see your communication/relation with HEWs?  
**(Probe:** Is it strong? Weak? In what way you want to improve it?)
5. Is there referral linkage between HEWs and HC?  
**Probe:** how do you receive? Written? Oral? See if there is written referral slip
6. What challenges do HEW have in making referrals? How could the referral mechanism be improved?
7. What services do you expect to be delivered to mothers by the HEWs?
8. What is your role in facilitating quality maternal health service in the HC/community?
9. Where do you think women would like to give birth (TBAs, HPs/HCs)? Why?
10. Is there payment for MH services? (for which? How much? Did you take this as a challenge women's not to seek maternal health service?)

### Monitoring and Evaluation

11. How do you monitor and evaluate the MH service delivered by HEWs? **(Probe:** Plan, Report, using data for decision making)
12. In what way do you support HEWs program while they are giving MH services? **(Probe:** logistic? Materials? Transportation for community work?)

13. Do you have supervision program? (**Probe:** How often? What do you do? Is there feedback mechanism?)
14. How do you monitor women's satisfaction on MH services in the health facility? (**Probe:** do you have suggestion box, book or interview clients? What do they say? Do you check the suggestions and make change?)
15. What do you think is women's perception regarding the service your health facility is giving?
16. Do you have regular meeting with HEWs? (How regular? Why do you meet? Probe: plan, report, data for decision making)
17. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?  
**Probe:** Why do you think some pregnant women in your community deliver in the health facilities? Why do other women decide to deliver at home?
18. How do you feel about the idea of HEWs using mobile technology to link their services to the HC and to monitor their work?
19. Do you think the HEW program has changed the maternal health service coverage? (utilization, quality,) in what way? Ask for examples.
20. What is the importance of the work done by HEWs?

#### **Perceptions of service quality**

21. How do you feel about the skills and knowledge of HEWs? What are they good at? How are their maternal health skills? Is there anything done at your facility to support them? Ask for example
22. How do you feel about their attitude towards the community? Ask for examples.
23. What would you like to see improved?
24. What do you think is your role as a health centre head you should do to improve the maternal health services (**probe:** at each level district health office, zone health department and RHB)?

## Key Informant Interview- Delivery Case Team Leader (KII-DCTL)

Take consent

Fill in the information sheet

### Information sheet KII-DCTL

<b>Respondent identifier</b>	
<b>Gender</b>	
<b>Educational level</b>	
<b>What is your profession</b>	
<b>For how long did you work in this Health centre</b>	

### Perceptions of HEWs services

1. What services are available for MH services in your health centre?  
**Probe:** When and how often do pregnant women receive these services?
2. What is your role in providing MH services?
3. How do you feel about the maternal health services provided by HEW in this community? Probe for availability, quality, adequacy, distance, usefulness, and limitations.
4. How do you assist the HEW's in providing quality MH services in the community?
5. How do you see your communication/relation with HEWs?  
**(Probe:** Is it strong? Weak? In what way you want to improve it?)
6. What services do you expect to be delivered to mothers by the HEWs?

### Perceptions about maternal health

7. What is your role in facilitating quality maternal health service in the HC/community?
8. Where do you think women would like to give birth (TBAs, HPs/HCs)? Why?
9. Is there payment for MH services? (for which? How much? Did you take this as a challenge for women's not to seek maternal health service?)
10. Why do you think is the reason women come for ANC follow up and they don't come for delivery? (the number is not consistent) What needs to be done to improved?

### Monitoring and Evaluation

11. In what way do you support HEWs program while they are giving MH services? **(Probe:** technical assistant, training, orientation?)

12. Do you have supervisory role to support the MH program at health post level? (**Probe:** How often? What do you do? Is there feedback mechanism?)
13. How do you monitor women's satisfaction on MH services in the health facility? (**Probe:** do you have suggestion box, book or interview clients? What do they mostly say? Do you check the suggestions and make change?)
14. How do you think we can improve the performance of HEWs in maternal health services?
15. What do you think is women's perception regarding the MH service your health facility is giving?
16. Do you have regular meeting with HEWs? (How regular? Why do you meet? Probe: plan, report, data for decision making)
17. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?
18. How do you feel about the idea of HEWs using mobile technology to link their services to the HC and to monitor their work?
19. Why do you think some pregnant women in your community deliver in the health facilities? Why do other women decide to deliver at home?
20. What is the importance of the work done by HEWs?

#### **Perceptions of service quality**

21. Have you participated in giving training for HEW's on Clean and safe delivery  
**Probe:** how did it go? Do you think the time allotted for the training is adequate? How do you see the performance of the HEWs in getting the skill? Are you confident to tell that HEWs can do their work independently? If not why?
22. Aside from the delivery, How do you feel about the skills and knowledge of HEWs on other MH services? What are they good at? Is there anything done at your facility to support them? Ask for example
23. How do you feel about their (HEWs) attitude towards the community? What do you hear from community about the service they get at HP level? Ask for examples.

#### **Referrals and management**

24. Have you received any referral in the last 2 months? Is it orally or written? How many? What kinds of cases are commonly referred from HEWs? Do you give feedback to the HEW?
25. Have you recently faced complicated cases with delay of referral by HEWs or TBAs? What happened?
26. How do high risk mothers come to the health facility (local transportation, ambulance? do they come escorted by HEW/TBAs or they come alone??)



- 27. Do you get other referrals other than HEWs? (**Probe:** TBAs or HDA)
- 28. What would you like to see improved?
- 29. What do you think is your role as delivery case coordinator you should do to improve the maternal health services ?
- 30. How do you see your communication/linkage with HEWs? Do you think you have strong connection or weak? What would you like to improve?

## In-depth Interview-Traditional Birth Attendants (IDI-TBA)

Take consent

Fill in the information sheet

### Information sheet IDI-TBA

Respondent identifier	
What is your age?	
How many years education did you receive	None, Primary 1-3; primary 4-6; Jun secondary ....yrs; senior secondary ...yrs Tertiary .....yrs
What is your role in this community?	(e.g. HDA)
Title of CTC provider	TBA
How many deliveries do you assist each year	
Are you receiving an income from this work?	Yes/No If, how much per delivery? ..... local currency
Have you any training for delivery?	Describe

### Introduction

1. Please introduce yourself, and tell us how you became a TBA?
2. How long have you been working as a TBA? And why did you decide to do this type of work?
3. Do you have any other occupation? What is it?

### Maternal health work

4. What services or advice do you currently provide for pregnant women and delivering mothers?
5. How do you approach a pregnant woman? What do you do first? How?  
**Probe:** do you wait until they visit you themselves??
6. Are you confident that you have the skills to provide a high quality service at delivery?
7. Who do you have contact with during your work as a TBA?  
**Probe:** HEWs? HC midwives? HDA? Others?
8. Under what circumstances do you contact the HEW?
9. How is your communication with the HEW?
10. Do you think HEWs are well equipped to do their work in maternal health?
11. Do HEWs have the right skills for delivery services? What other services do they do?

12. What goes well and what doesn't go so well in the work of an HEW and why?

### **Facilitators and Barriers for maternal health work**

13. What thing can be improved to give women higher quality maternal health services?
14. What do you think does not always go well in your work? Can you give an example?
15. What do you think about the quality of care in general for MH services provided in the community?

### **Referral**

16. What do you do when a pregnant woman has a problem you cannot solve? Who do you refer to? How does the referral work?
17. What is the referral mechanism for high risk pregnant women?  
Probes: Are there any difficulties in making referrals? (Transport, costs, referral system, distance, attitudes of clients?)
18. Do you refer women to HEW? When?  
Probe: Only if they have a problem? If they are high risk? Always?

### **Community attitudes to MH**

19. Who do women normally contact when they are pregnant? At what stage of pregnancy do they normally seek health advice?
20. Do you think that women should seek ANC? At what stage of pregnancy?  
Probe: Are there any difficulties in encouraging women to seek ANC? What? How can they be encouraged to go at the right time?
21. Why do women choose to call you during labour?
22. What does the community think about the need for MH services?  
**Probe:** home? Health post? Health centre? Why? Attended by whom? TBA, HEW?
23. Do you face challenges in encouraging high-risk women that they should deliver in a health facility?  
**Probe:** Why? What/who influences the decisions women make about their maternal health seeking
24. Do you think it's important for a women to get advise after delivery? when? from whom? what kind of advise should be given  
**Probe:** about nutrition, hygiene, breast feeding, family planning.
25. What can be done to improve women's maternal health seeking?  
**Probe:** trust, education, community activities
26. How do you communicate with community members on maternal health issues

### Key Informant Interview- HEP Coordinator-District (KII-HEP/D)

Take consent

Fill in information and recording sheet

Explain process

#### Information sheet KII-HEP

Respondent identifier	
Sex HEP coordinator	
Year served as HEP coordinator	
Educational level	

#### Perceptions of provider services

1. Please tell us about your work
2. What has been your involvement with HEP? How do you support HEP?  
Supervision, training, guidance, provision of Supplies.
3. What services are available for mothers in your district?  
**Probe:** Who provides these services (TBA? HEW? Health workers?). When and how often they get?)
4. How do you feel about the maternal health services provided by HEW in HPs?  
**Probe** for availability, distance, usefulness, and limitations, quality, skill
5. What would encourage mothers to go antenatal care with a HEW?
6. Are all the maternal services that women needed available at HPs? What other services are needed?
7. What services do you expect to be delivered to pregnant women by the HEWs at HP level?

#### Perceptions about maternal health

8. How do you see the importance of providing maternal health service at HP level? (Decrease maternal mortality, community utilization service, increase referral links.)
9. What MH services are available for women in the health centres? And the health posts?
10. What makes some women decide to attend ANC with HEWs, some in health centres and others to seek advice from TBAs?  
**Probe** (service quality, cultural belief, skill and knowledge of providers, family advice, costs, time)

11. Why do you think some pregnant women deliver in the health facilities? Why do other women decide to deliver at home?
12. Do you think the number of mothers attending ANC matches with those attending institutional delivery? If not; why?
13. Are there some women who don't have access to maternal health advice in your district? Why?
14. How do you see the role of HEWs in providing maternal health services?  
**Probe:** Are there limitations to the maternal health services provided by HEWs? Does their MH work sometimes not go well? Why do you think that is?
15. What maternal health work HEWs do well? Why?
16. What maternal health work HEWs do not do well? Why? How can it be improved?
17. What do you feel about the different maternal health service providers?  
**Probes:** TBA, HEWs, health centre midwives. How useful are the different providers' services?

#### **Monitoring and evaluation**

18. How would you support HEP? (supervision, training, reporting, feedback ...)
19. How the integration between health centre and health post strengthened? (training by HC to HEWs, supply of logistics, reporting, meetings)
20. How would the HEWs get logistic and supplies for MH services (frequency, stock outs, types)
21. Do you have a meeting with HEWs (how frequent, what agendas discussed...)
22. In this area the proportion of women receiving ANC is quite high, but the proportion of women choosing institutional delivery is low, why do you think this is?
23. How do you feel about the idea of HEWs using mobile technology to link their services to the HC and to monitor their work?

#### **Perceptions of service quality**

24. How do you feel about the skills and knowledge of HEWs? What are they good at? How are their maternal health skills?
25. What would you like to see improved?
26. How do you see the quality of MH services provided by HEWs?
27. How do you see the availability of guidelines and manuals at HP to support HEWs (type, number, language they are written...)
28. How do you evaluate the trainings provided to HEWs to provide MHs (duration, type, scope) and how can be improved?

#### **Motivation**

29. How do you see the motivation of HEWs to provide MH services?

30. What do you think motivates and de motivates HEWs to provide MH services? (salary, continuing education, transport and other infrastructures, logistics
31. What do think the government should do to motivate HEWs?

### **Referral**

32. How is the referral system being coordinated in you districts? (Community to HP, from HP to HC and HC to hospital)
33. What support is given by the *Woreda* to the referred mothers for maternal health service? How it is organised?
34. What problems affecting the referral system in your district? (Infrastructure, cost, fuel, budget, transport.)
35. Do HEWs and other providers use mobile telephones or other technology to coordinate with health centres and other MH services? Do you think this important? Why?
36. What do you think the Government can do to improve the referral system?

## Key Informant Interview- HEP Coordinator-Zone/Region - (KII-HEP/Z/R)

### Consent

### Information sheet

<b>Gender</b>	
<b>Educational level</b>	
<b>What is your profession</b>	
<b>For how long did you work in this position</b>	

### Background

1. Can you tell me a bit about your work in relation to MH services?
2. What has been your involvement with HEP?
3. Are you in direct contact with HEWs? If in direct contact what is your role?
4. What do you think goes really well in HEP? Give examples? What things help to make this go well?
5. What do you think does not always go well? Can you give an example? What things are influencing that this does not go well? Can you give an example?
6. Are you familiar with the planning of HEP? If yes, how is this organised? Probe for population provider ratio; criteria/process for the selection of areas where they are used? Process for task identification and legislation of tasks, workload assessment, integration with health system.
7. What do you think about each of these measures? If you had to decide what should happen for a new program what would you include and what would you do different?
8. How are HEWs recruited and the criteria for selection? What are their incentives, remuneration, career perspectives, training, continuing education, supervision?
9. What things influence job satisfaction and motivation of HEWs and how? What motivates or de motivates them?

### Perception of MH service

10. What do you think is the importance of HEP in implementation of MH services? What is their potential contribution towards MH services? Do you see any downsides of this MH program?
11. What can be done to improve the maternal health service? what would you suggest? How could this be done?

12. What policies, strategies, guidelines for HEP are you aware of related to MH services? What are the most important aspects of these policies in your opinion? What are strong points in the MH policies what could be improved? (Clean and safe delivery training, and other maternal health related trainings?)
13. What do you think about the readiness of Health post in providing MH services ( infrastructure, materials, equipment)

#### **Referral**

14. How referral of is MH services are organised? (What do you think about the integration of the HP to HC, anything to be done to improve?)
15. What goes well and not so well in referral? Why? Examples?
16. How is the communication and interactions with colleagues (all cadres including supervisors, in charges, volunteers and TBAs organised?
17. How is this information about performance of programs collected? What communication channels are used? What happens with this information? Do you give feedback about the results of the work? If so, how is this communicated by whom?



## ANNEX 2: Overview of interviews and FGDs

Type of informant	Detail	Method	Name topic guide	Number	Total
Community	Women	FGD	FGD-WO	1 per district	6
	Men (including community leaders)	FGD	FGD-MEN	In 2 districts	2
	Mothers	Interview	IDI-M	2 per district	12
Provider	HEW	Interview	IDI-HEW	2 per district	12
	HEW	FGD	FGD-HEW	1 per district	6
	TBA	Interview	IDI-TBA	1 per district	6
Key informants	<i>Kebele</i> administrator or chairperson	Interview	KII-KA	In three districts	3
	Health centre head and delivery case team leader	Interview	KII-HCH KII-DCTL	Each in three districts	6
	HEP coordinator or Health promotion department head	Interview	KII-HEPC/D KII-HEPC/Z KII-HEPC/R	3 at district, 1 zone, 1 regional level	5
<b>TOTAL</b>					<b>58</b>

### ANNEX 3: Overview of districts and their outputs

District	District code	Outputs	Number of outputs
Chire	CH	CH-FGD-WO CH-IDI-M1, CH-IDI-M2 CH-IDI-HEW1, CH-IDI-HEW2 CH-FGD-HEW CH-IDI-TBA CH-KII-KA CH-KII-DCTL	9
Bona Zuria	BZ	BZ-FGD-WO BZ-IDI-M1, BZ-IDI-M2 BZ-IDI-HEW1, BZ-IDI-HEW2 BZ-FGD-HEW BZ-IDI-TBA BZ-KII-KA BZ-KII-DCTL BZ-KII-HEPC/D	10
Dara	DR	DR-FGD-WO DR-FGD-MEN DR-IDI-M1, DR-IDI-M2 DR-IDI-HEW1, DR-IDI-HEW2 DR-FGD-HEW DR-IDI-TBA DR-KII-HCH	9
Dale	DL	DL-FGD-WO DL-IDI-M1, DL-IDI-M2 DL-IDI-HEW1, DL-IDI-HEW2 DL-FGD-HEW DL-IDI-TBA DL-KII-KA DL-KII-DCTL	9
Malga	MA	MA-FGD-WO MA-IDI-M1, MA-IDI-M2 MA-IDI-HEW1, MA-IDI-HEW2 MA-FGD-HEW MA-IDI-TBA MA-KII-HCH MA-KII-HEPC/D	9
Shebedino	SH	SH-FGD-WO, SH-FGD-MEN, SH-IDI-M1, SH-IDI-M2 SH-IDI-HEW1, SH-IDI-HEW2, SH-FGD-HEW SH-IDI-TBA, SH-KII-HCH, SH-KII-HEPC/D	10

## **ANNEX 4: Coding framework**

### **1. Close-to-community provider description**

- a. Types (HEW, trained volunteer, TBA)
- b. Residence in relation to catchment area
- c. Client characteristics

### **2. Community**

- a) Community context
  - a. Cultural, religious, social norms and beliefs
  - b. Gender norms, values
  - c. Stigma and discrimination

### **3. Community engagement**

- a. Recruitment and selection (how the community is involved in recruitment and selection)
- b. Community support to implementation (e.g. in referral, helping regarding tasks)
- c. Incentives (financial and non-financial)
- d. Community governance (available mechanisms regarding supervision, monitoring, accountability)
- e. Community capacity to claim rights (the intrinsic capacity/ skills that make a community have a voice)
- f. Community expectations (e.g. of CTC provider roles and tasks, client groups etc.)

### **4. Valuing of CTC provider**

- a. Recognition and trust
- b. Importance of CTC provider

### **5. Health seeking behaviour**

- a. Understanding and knowledge (about certain health issues, needs)
- b. Health practice (habits in healthy behaviour)
- c. Decision making (how and by whom is decision made to seek care)
- d. Reasons for using/ not using health care

### **6. HR management and planning**

- a. Selection and recruitment, qualifications and attributes considered at selection
- b. Initial training (length and focus, MoH or NGO specific, content, appropriateness etc.)
- c. CTC provider role and tasks
  - I. Focus of the work(16 packages)
  - II. Location (health post or community)
  - III. Competencies (skills needed)
- d. Work load of CTC provider
- e. Continuous training (refresher training; on-the-job training)

- f. Career advancement (upgrading)
- g. Incentives/ disincentives
  - I. Financial incentives and disincentives (salary, allowances, air time)
  - II. Non-financial incentives and disincentives (nature of job (helping others), community recognition, goods, materials, transport, transfer, supervision, training)
- h. Supervisory systems
  - I. Approach (fault-finding, checklist, problem solving, mentoring etc.)
  - II. Implementation (who, hierarchy of reporting, feedback mechanism, frequency)
- i. HDA formation and support (including 1 to 5 networks, development groups)
- j. Motivation, job satisfaction and attrition (general)
- 7. Program management and implementation**
  - a. Access
    - I. Transport
    - II. Distance (hard to reach areas, road conditions)
    - III. Client's costs
    - IV. Equity of access (gender, age and vulnerable groups)
  - b. Service delivery (broad category on how services are delivered)
- 8. Role of NGOs**
  - a. Staff availability (provider-client ratio's etc.)
  - b. Reporting, data systems, registers
  - c. Referral
  - d. Coordination and communication
    - I. Between CTC providers (between HEWs)
    - II. Between CTC providers and health professionals (nurses, clinicians)
    - III. Between CTC providers and HDA/ volunteers
    - IV. Between CTC providers and TBAs
    - V. Between CTC providers and the *Kebele* administrators
    - VI. Between CTC providers and the *Woreda* health office
    - VII. With/ between NGOs
    - VIII. MHealth (mobile health)
  - e. Logistics and supply chain (incl. infrastructure)
  - f. Sustainability (e.g. when a NGO left, measures to promote sustainability, doubts about sustainability)
- 9. Quality of care**
  - a. Protocols and manuals
  - b. M and E loops and feedback
    - Client feedback mechanisms
  - c. Problem solving mechanisms (quality assurance systems)

- d. Perceptions of quality (from clients, from health workers or others)
- e. Recommendations and suggestions (regarding quality improvement)
- f. Confidentiality and privacy
- g. CTC provider's attitude
- 10. Policies and strategies**
- 11. Governance** (any issues about responsibilities of *Woreda* or upper level)
- 12. TBA related**
- a. Ban, TBA's perspectives on policy and practice, Perceptions regarding TBAs
- 13. Health issue** (Family planning, ANC, Delivery, PNC (incl. neonatal care) Child care
- Great quotation**

## ANNEX 5: Ethical Clearance



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South Nations Nationalities and Peoples Regional  
State Health Bureau

ቁጥር 9026-19/17014  
Ref. No  
ቀን 18/10/08  
Date



### Southern Nations Nationalities and Peoples Regional State Health Bureau Health

#### Research Ethical Clearance Form (Office use)

Name of researcher/s: - Daniel Gemechu and Aschenaki Zerihun

Name of the institution: - REACH OUT Consortium

Topic of proposal:-Factors affecting maternal Health service Utilization

Dear/Sir/Madam,

The Regional Health Bureau Research Ethical Review Committee has reviewed the  
aforementioned project proposal with special emphasis on the following points;

1. Are all ethical principles considered?

1.1 Respect for person:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
1.2 Beneficence:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
1.3 Justice:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

2. Are the objectives of the study ethically achievable? Yes ☒ No ☐

3. Are the proposed research methods ethical sound? Yes ☒ No ☐

4. Comments of the ethics committee:

Based on the above mentioned ethical assessment the regional Ethical clearance  
committee has

A. Approved the proposal for implementation ☒

Date of the review

Date \_\_\_\_\_ Month \_\_\_\_\_ Year 2013

D. Conditionally approved ☐

☑ 140

☎ 390.07.003

☎ 390.57.07

E-mail

enadhl@telecom

net at

Code 951.0163





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South Nations Nationalities and People's Regional  
State Health Bureau

ቁጥር 926-19/17014  
Ref. No  
ቀን 18/10/05  
Date

E. Not approved ☐

Name አንዳሻው ሽብሩ አሰጋኸኝ  
**Endashaw Shibru Asegahegn**  
Date ሰኔ 18/2005  
**Health research and technology transfer support process owner**

Signature

South Nations Nationalities and People's Regional State Health Bureau Health Research Ethics  
Review committee Memmbers

**Reviwe committee Member**

Sr.Fekert Abera

Ato Lopiso Erosie

Ato Samson Tadeos

Tsehay Assefa

Signature



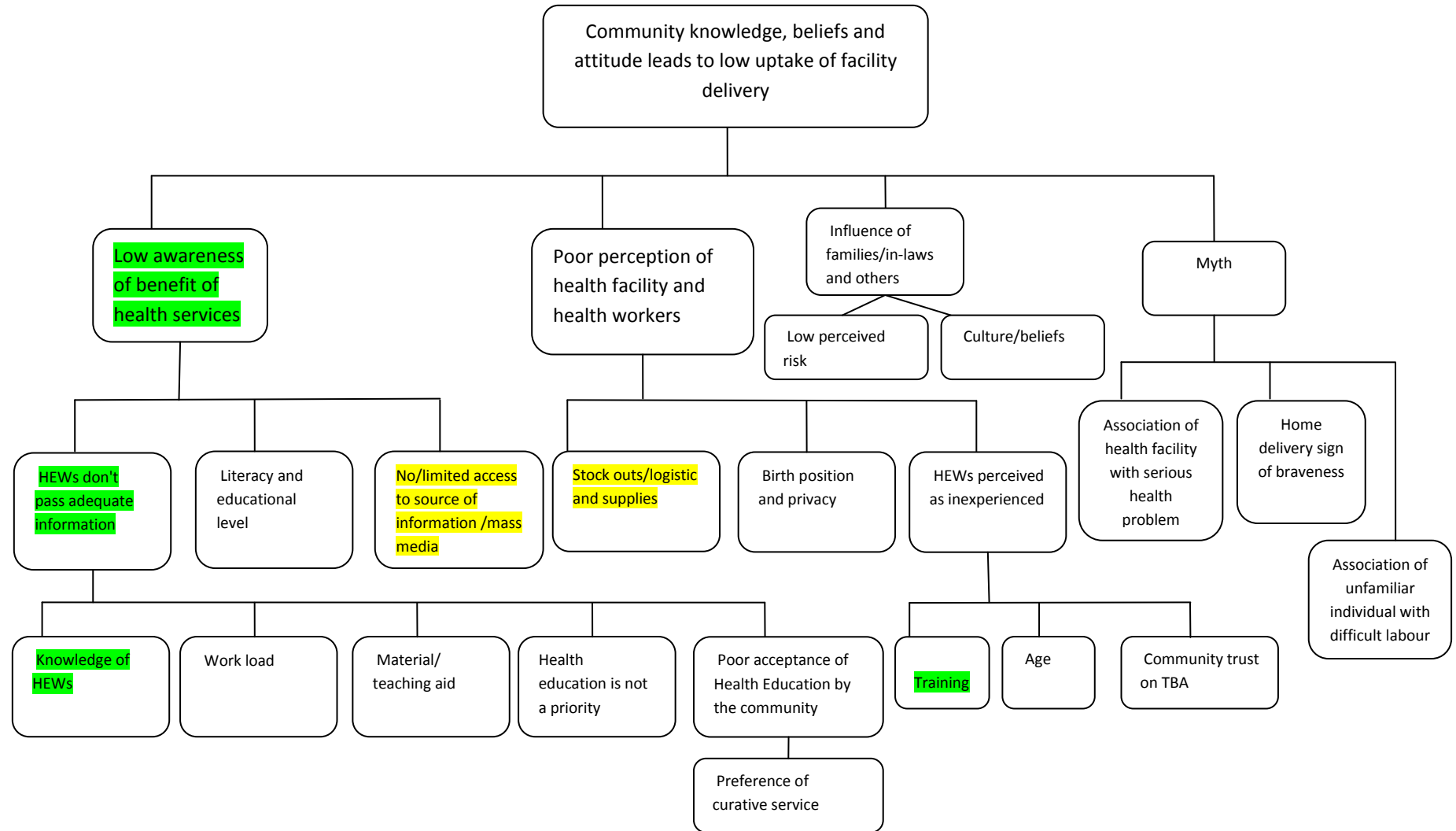
## **ANNEX 6: Problem statement and Root Cause Analyses**

1. Community knowledge/Beliefs/attitude leads to low uptake of facility delivery
2. Ineffective referral system leads to poor maternal health service provision
3. Ineffective supervision leads to less motivation and poor performance of HEWs



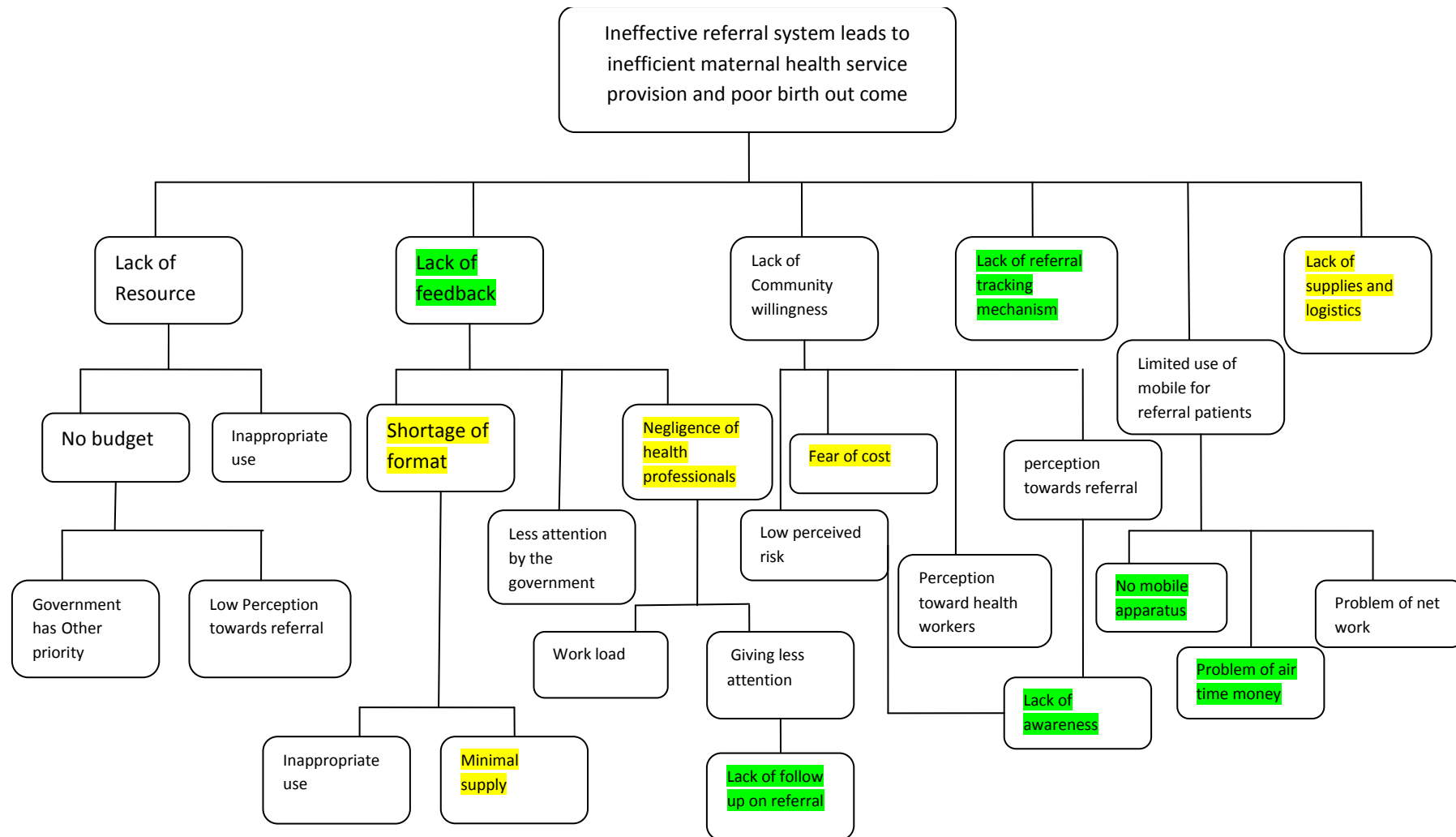
# Annex-6.1. RCA of Community Beliefs and Culture

Key: Green Box: REACHOUT Intervention area, Yellow Box: Areas where REACHOUT will work others to intervene



## Annex-6.2. RCA of referral uptake

Key: Green Box: REACHOUT Intervention area, Yellow Box: Areas where REACHOUT will work others to intervene



### Annex-6.3. RCA of supervision

Key: Green box: REACHOUT intervention area

