



CONTEXT ANALYSIS: CLOSE-TO-COMMUNITY HEALTH SERVICE PROVIDERS IN KENYA



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EXECUTIVE SUMMARY

Background

Kenya has a national policy known as the Community Health Strategy (MOH, 2006) aimed at reforming primary health care at the community level as a result of declining health indicators. The strategy is based on the use of volunteers referred to as Community Health Workers (CHWs) linked to primary health facilities through Community Health Extension Workers (CHEWs). The programme has been implemented with varying degrees of success in government-run primary health services as well as in vertical programmes run by non-governmental organizations (NGOs). The strategy is currently undergoing review with the aim of increasing the number of CHEWs and their responsibilities and revising the role and number of CHWs, to address shortcomings of the current strategy and align it with successful models in other countries.

‘REACHOUT: Reaching out and linking in health systems and close-to-community services’ is a five-year multi-country project funded by the European Union (EU) whose aim is to maximize the equity, effectiveness and efficiency of close-to-community (CTC) services in rural areas and urban slums in six countries: Bangladesh, Ethiopia, Indonesia, Kenya, Malawi and Mozambique. This study represents the first phase of REACHOUT, which aims to identify contextual factors that influence the performance of CTC providers and services in Kenya. The results will inform implementation of two improvement cycles to test interventions for improving CTC performance and their contribution to CTC services.

Methods

We conducted the study through a desk review, qualitative study and stakeholder mapping.

The desk review was done by reviewing secondary data on programmes that involve CTC providers in Kenya. We reviewed journal articles, policy documents, grey literature, programme reports and stakeholder consultations with partners and the Division of Community Health Services.

Stakeholder mapping: We identified stakeholders involved in community health programmes through consultations with LVCT staff and other local partners/NGOs and input from the country advisory group members and the Division of Community Health Services.

The qualitative study adopted a descriptive exploratory design.

Study sites: We conducted the study in Nairobi and Kitui, selected due to the presence of functional community units and LVCT’s history of working with them.

Study respondents: We identified qualitative study participants from those involved in or linked with the Community Health Strategy at various levels including services users (clients of CTC and home-based testing and counselling (HBTC) services), service providers (CHWs, CHEWs and HBTC counsellors), health managers and policymakers at the national level.

Sampling: We used purposive sampling.

Data collection tools: We collected data using focus group discussion (FGD) guides, semi-structured interview (SSI) guides and semi-structured questionnaires.

Data management: The data collection staff were trained in FGD facilitation and SSI techniques. We piloted the tools prior to data collection and coded the data to ensure confidentiality. We counterchecked transcribed data against the audio files.

Data analysis: We uploaded all collected qualitative data into Nvivo version 10 for analysis. We held a data analysis workshop with all the data collectors, facilitated by senior researchers from the Liverpool School of Tropical Medicine (LSTM) and the Royal Tropical Institute, Netherlands (KIT). Data were triangulated across methods to further explore and understand the findings. We made a presentation of preliminary findings to the local stakeholders during an operations research technical working group meeting to validate the outcomes.

Key findings

We found that generally the Community Health Strategy was being implemented to deliver primary health care services, but there was some variation from the policy in the areas of training, supervision and incentives. CHWs were accepted and appreciated by the health workers and communities, and community members reported that they had been linked to health services by the providers and that communities had adopted healthy practices.

The Kenyan Community Health Strategy: policy vs. practice: The Community Health Strategy was the national policy being used during implementation but with variations in the number of CHWs utilized, the training offered, data collection tools utilized and supervision mechanisms. CTC services were mainly in the areas of maternal and child health, water and sanitation and vertical programme focus areas of HIV and tuberculosis. The facility managers and District Health Management Team (DHMT) members who were not directly involved with the CTC providers did not have adequate knowledge on the guidelines and were not aware of the ongoing review.

Community engagement and expectations: The qualitative study revealed that the community was involved in the recruitment and selection of the volunteer CHWs, but not CHEWs. The dialogue and action days for the community to give feedback were not always

carried out and were dependent on partner (NGO) support. The community was not adequately aware of its role or that of others in the Community Health Strategy, which hampered its ongoing support and participation. Community members expected curative services and supplies such as bed nets from CHWs, which were not available, resulting in frustrations among the community and CTC providers.

Supervision: We found that the supervisors at community level did not have a clear guideline, with inconsistency in the methods and frequency of supervision. The challenges in supervision included inadequate transport provision, a heavy workload for supervisors and inadequate training on supervision (see '[Root cause analysis and problem statements](#)').

Integration of HIV in the Community Health Strategy: We found that there was support at all levels for a trained CTC provider providing HBTC services to the community. The literature showed its potential to address stigma associated with facility-based HIV testing and counselling. Challenges identified included a lack of training for CHEWs in HBTC, inadequate test kits and possible community rejection due to stigma and a fear of breaches of confidentiality by CTC providers.

Incentives: Though there was a policy on stipends for CHWs, the volunteer CHWs received minimal monetary incentives or none at all and were sometimes forced to use their own resources to subsidize services. Non-monetary incentives included community recognition and positive changes in the health of the community. The lack of financial rewards was a major disincentive for the volunteer CTC provider and was perceived as having led to attrition among CHWs.

Workload: We found that CHEWs played a double role and that often facility-based responsibilities were prioritized over community work. The CHWs' workload was not clearly defined, and practice differed from one unit to another. The number of households per CHW was clearly stipulated in policy but did not factor in the different population densities across the country. CHW attrition, the small number of CTC providers and multiple workloads from vertical programmes contributed to the heavy workload for CHWs.

Referral: We found that CTC programmes resulted in higher utilization of some facility-based services, as CTC providers were involved in client referral to and from the link health facility. The community expected transport to the link facility and preferential treatment on arrival. The referral process was hampered by long distances to health facilities, a lack of transport and inadequate supplies or services at the link facility.

Discussion: It is evident that CTC providers are well accepted and play an important role in health service provision at the community level. As the new strategy is being developed and

rolled out, it is important to close the gap between policy and practice by ensuring that the users and beneficiaries are involved in its development and it is widely disseminated.

There is a need to increase community participation during programme design, recruitment and implementation and to improve ways of mobilizing available material and non-material resources in the community to assist implementation. CHW and CHEW training should incorporate community engagement to increase community support beyond recruitment.

CTC providers' capacity should be built and supplies offered to provide additional preventive, basic curative services and simple rapid diagnostic tests such as malaria and HIV. Referral systems should be strengthened by addressing health systems challenges such as the quality and availability of services, supplies in the facilities and transport through ambulances or other locally available options. CHWs and CHEWs were willing and should be trained to deliver HBTC, thereby ensuring the integration of HIV services in the strategy. Training and quality assurance of providers and community education on confidentiality can help to address HIV/AIDS stigma.

Standardized training of supervisors and community health committee members accompanied by harmonized guidelines and standard operating procedures for supervision should be provided as part of a broader quality assurance package for the strategy. Lessons can be drawn from the HIV testing and counselling programme, which has a national quality assurance component. The multiple reporting lines should be eliminated.

CHEWs' workload should be eased by avoiding the double role of working in the health facility and the community. Workload levels should be systematically calculated considering the package of care to be offered and the population and geographical area to be covered. The workload of voluntary CHWs needs to consider their personal family responsibilities.

Non-material incentives should be identified and strengthened to motivate CTC providers and reduce attrition. Financial incentives should be realistic and based on what the government or communities can afford to sustain. Income-generating activities that allow CHWs to earn a stipend should be encouraged. Policy guidance on incentives should avoid being prescriptive, to allow communities to develop practical suggestions.

Implications and ways forward for quality improvement cycles

Our study identified three key areas as gaps in CTC service provision for which we aim to pilot interventions through two quality improvement cycles within the scope of REACHOUT. These key areas include:

- promotion of the community engagement component — this is especially critical for gaining community support for the upcoming revised Community Health Strategy;

- strengthening supervision and quality assurance through the development of training packages, supervision guidelines and tools; and
- integration of HIV in the strategy through the inclusion of HBTC training within the CHEW training and the implementation of quality assurance mechanisms.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CHC	Community Health Committee
CHEW	Community Health Extension Worker
CHIS	Community Health Information System
CHS	Community Health Strategy
CHW	Community Health Worker
CORPS	Community-Owned Resource Persons
CTC	Close-to-community
CU	Community unit
DCHS	Division of Community Health Services
DHIS	District Health Information System
DHMT	District Health Management Team
FGD	Focus group discussion
GOK	Government of Kenya
HBC	Home-based care
HBTC	Home-based testing and counselling
HIV	Human Immunodeficiency Virus
HTC	HIV testing and counselling
ITNs	Insecticide-treated (mosquito) nets
KAIS	Kenya AIDS Indicator Survey
KEPH	Kenya Essential Package of Health
KII	Key informant interview
KIT	Royal Tropical Institute
LSTM	Liverpool School of Tropical Medicine
MCUL	Master Community Unit List
MOH	Ministry of Health
MSM	Men who have sex with men
M&E	Monitoring and evaluation
NASCOP	National AIDS and STD Control Programme
NGO	Non-governmental organization
PMTCT	Prevention of mother-to-child transmission
SSI	Semi-structured interview
TB	Tuberculosis
TBA	Traditional Birth Attendant
VCT	Voluntary counselling and testing

CHAPTER 1 – INTRODUCTION

1.1 BACKGROUND

Kenya is an East African country with a population of approximately 43.18 million people (<http://data.worldbank.org/country/kenya>). It is striving to achieve the Millennium Development Goals (MDGs) and universal health coverage to address the poor health indicators that have been in evidence since the 1990s. There are multiple public health care priorities: according to the Kenya Demographic and Health Survey (KDHS) 2008–09, the maternal mortality rate was 488 deaths per 100,000 live births (KNBS & ICF Macro, 2010), and the infant and under-5 mortality rates were 52 and 74 per 1000 live births, respectively. HIV is a priority health concern in Kenya: HIV prevalence according to the Kenya AIDS Indicator Survey (KAIS) of 2012 stood at 5.6% (NASCO, MOH, 2013), with 1.4 million people living with HIV, and 53% of those infected with HIV not knowing their status. There has been a strong push towards scaling up access to health care through the use of Community Health Workers (CHWs). Kenya has developed Vision 2030, a blueprint for transforming the country into a middle-income economy by 2030 through economic, political and social change, where the use of CHWs has been described as a flagship project (GOK, 2007).

KENYAN COMMUNITY HEALTH STRATEGY

The involvement of close-to-community (CTC) health service providers was put into practice in Kenya following the recommendations of the World Health Organization Alma-Ata conference (WHO, 1978), which called for a shift of focus from hospital to community-based health service delivery. However CTC providers' involvement declined due to financial constraints in the 1980s.

The Kenyan Community Health Strategy (CHS) was developed in 2006 as a response to deteriorating maternal and infant mortality rates despite increased investment in health (MOH, 2006). Regional disparities in health services and shortages of human resources in the health sector affected the availability and accessibility of health services. These challenges generated a renewed interest in CTC providers in Kenya in 2006, and a definitive plan for the training and involvement of CTC providers was rolled out in 2008. The involvement of CTC providers was also defined in the first and second National Health Sector Strategic Plans under the Kenya Essential Package for Health (KEPH). The KEPH introduced six levels of health service provision, with level 1 (the community) being the largest and the lowest in the hierarchy of health services, and level 6 (the referral hospitals) the highest level. According to the Ministry of Health (MOH, 2006), level 1 aims to empower Kenyan households and communities to take charge of improving their own health.

The CHS defined the training and support for volunteers referred to as Community Health Workers (CHWs) who are linked to primary health facilities through Community Health

Extension Workers (CHEWs) who were trained health workers employed in primary health care facilities. It defines the roles and functions of the CHEWs and CHWs, selection and recruitment, training, supervision, governance and monitoring and evaluation (M&E).

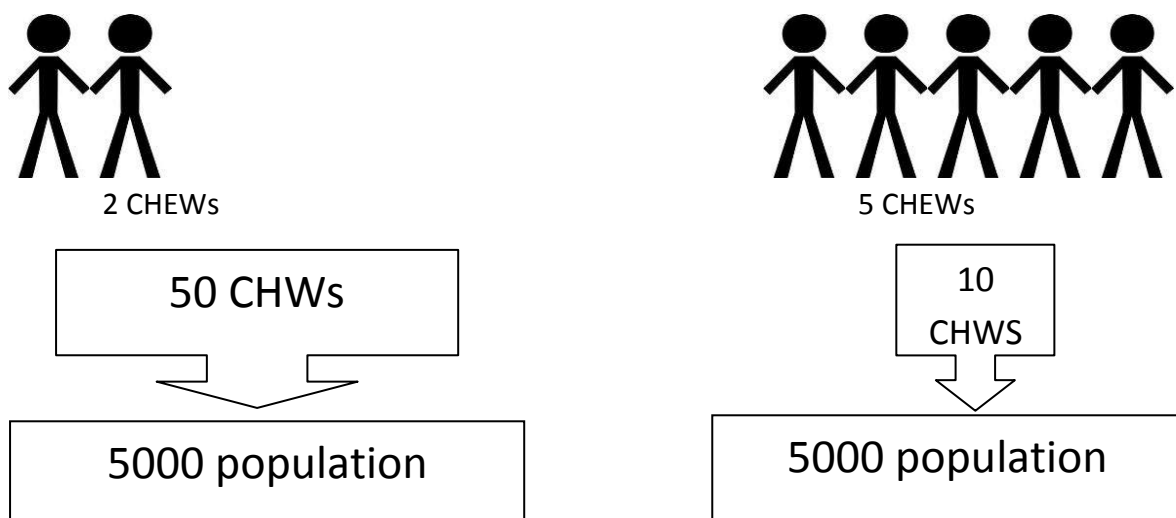
Since then, the strategy has been rolled out nationally, with 2943 community units (CUs) formed as at the beginning of 2013 (MCUL, 2013). The programme has been implemented with varying degrees of success in government-run primary health services (immunization, maternal and child health, water, sanitation and hygiene) as well as in vertical programmes run by non-governmental organizations (NGOs) delivering HIV, tuberculosis (TB) and malaria and other services.

Gaps have been identified with the implementation of this strategy during the scale-up by the Division of Community Health Services and implementing partners. These include high attrition rates among the voluntary CHWs and a conflict of workload for CHEWs between facility and community tasks. A critical evaluation carried out by JICA in conjunction with the MOH (JICA, 2013) confirmed some of the challenges such as the double role of CHEWs, a lack of supplies and logistics and inadequate supportive supervision. As a result the MOH is in the process of revising the CHS, informing its development plans with community health programmes in Ethiopia, Ghana and India.

STRUCTURE OF THE COMMUNITY HEALTH STRATEGY: CURRENT AND PROPOSED

In the current CHS, a CU of 5000 people is served by up to 50 CHWs with basic training offering basic promotive and preventive tasks. In the revised strategy there will be five employed CHEWs who will carry out promotive, preventive and curative tasks for every CU of 5000 people, supported by 10 CHWs who will now act as mobilizers for health-related activities and support referrals and linkages. The CHEWs will be a new cadre in the MOH.

Figure 1: Structure of the Community Health Strategy



Current strategy

Revised strategy

With the revised strategy the CHEWs will be trained for six months (compared with the present setting where CHEWs must have a health background such as nursing or public health and then undergo five days of training). The new six-month training will be a mixture of classroom and field training carried out in phases offered to individuals with a basic certificate course in social studies or community-related studies, including HIV testing and counselling providers.

PROGRESS ON AND CHALLENGES FACED IN THE ROLL-OUT OF THE REVISED STRATEGY

To introduce a new cadre into the Government of Kenya (GOK) workforce, the MOH needs to seek approval of the scheme of service for this cadre. This has been drafted and is awaiting approval by the Public Service Commission. The implementation plan for the revised CHS (2013–2017) has been developed and explains how it will achieve the aim of increasing the present 2100 CHEWs to 25,000 CHEWs by 2017. At present the timeframe for the roll-out of this strategy is unknown, as it depends on a number of factors, including receiving approval for the scheme of service, budgeting of CHEW salaries within the GOK budget, and seeking funds from donors for training and salaries of CHEWs.

The CHEW curriculum is in the final stages of development, and a validation workshop has been held. The Community Health Unit of the MOH has conducted a mapping of suitable institutions which could carry out training (including LVCT). An accreditation system for the training institutes is being developed. It is expected that partners and the government will finance the training of CHEWs, and the government will employ the CHEWs. The training of CHEWs is expected to start by July 2014, depending on the availability of funds. There is currently an ongoing debate regarding whether or not a community midwife should be included in the CHEW team for each CU.

CHEWs' salaries as specified in the revised scheme were not included in the central government budget for salaries for 2013–2014, as the scheme of service had not been approved. The process is, therefore, currently awaiting the employment of the first batch of additional CHEWs. However, with the devolved government¹ there is uncertainty over the status of CHEWs, as decisions on whether to budget for CHEWs will be made at the county level. The Community Health Unit is developing an advocacy plan for county governments to

¹ Kenya adopted a devolved system of government from March 2013 as per the constitution adopted in 2010 whereby counties will manage their own health, including the recruitment and payment of health workers.

prioritize their level 1 services. The old cadre of CHWs will continue to provide community-level services in the interim period.

SCALE-UP PLANS

Kenya, through the Community Health Unit, has this year formally been included in the 1mCHW campaign, which will assist in achieving the scale-up goals. The campaign is a UN Sustainable Development Solutions Network initiative launched in 2013 and working with governments and partners to close the gap in achieving systematic health care coverage across rural sub-Saharan Africa by catalysing the rapid training, real-time management and large-scale deployment of CHWs throughout sub-Saharan Africa by the end of 2015. REACHOUT will contribute to Kenya's 1mCHW goals of improving health systems through the Global Health Workforce Alliance (GHWA) network and the recently convened Kenyan chapter of the 1mCHW Technical Working Group of which LVCT is a member.

HIV IN KENYA AND THE COMMUNITY HEALTH STRATEGY

According to the KAIS 2012, HIV prevalence in Kenya is 5.6% (NASCO, MOH, 2013). It is anticipated that the total number of HIV-infected individuals in Kenya will continue to increase, approaching 1.8 million by 2015 (NACC, NASCO, 2012). KAIS 2012 reports that HIV prevalence in Kenya varies by regions, and while some regions recorded a decrease in prevalence in comparison to KAIS 2007, Nyanza region recorded an increase in prevalence. The preliminary report also showed that 53% of the persons with HIV were not aware of their HIV status.

HIV interventions that have been used include HIV testing and counselling (HTC), evidence-based prevention interventions, voluntary medical male circumcision (VMMC), prevention of mother-to-child transmission (PMTCT), HIV care and treatment and TB/HIV interventions. The majority of these interventions are offered at facility level but require strong linkages with the community. Only through CTC services can the health service providers find those individuals who have missed appointments.

Other HIV interventions such as mobile HTC, home-based testing and counselling (HBTC) and voluntary testing and counselling sites which are at the community level require community mobilization and strong linkages to facilities for those diagnosed with HIV or requiring follow-up services. The other interventions depend on the community for linkage from testing, partner linkage, home-based care, adherence counselling and tracing defaulters. Despite the CHS being coming into effect in 2005, there has been limited success with the establishment of functional CTC services.

In the provision of HIV care there has been limited engagement by the HIV players in the strategy, with a parallel system of community engagement being employed. CHWs are often employed by HIV service organizations to mobilize, link and follow up their patients. This parallel system is not sustainable in the long term and results in large numbers of CHWs trained to deliver a single service. To bring comprehensive HIV testing, care and treatment to scale, they need to be integrated into the CHS through the existing CUs. For this to be successful, there is a need to identify the gaps in CHS systems and barriers that hinder the integration of HIV into the strategy.

REACHOUT RESEARCH PROJECT

REACHOUT ‘Reaching out and linking in: Health systems and close-to-community services’ is a five-year multi-country project whose aim 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. REACHOUT consists of two phases:

- **conducting a context analysis through an international literature review, six national desk studies and six qualitative studies to identify contextual factors that influence the performance of CTC providers and services; and**
- implementation of two improvement cycles in six countries to test interventions for improving CTC performance and their contribution to CTC services.

REACHOUT is a consortium of eight organizations from eight countries led by the Liverpool School of Tropical Medicine (LSTM). The Royal Tropical Institute, Netherlands (KIT) is leading the context analysis component.

REACHOUT uses the following definition for CTC providers:

“A CTC provider is a health worker who carries out promotional, preventive and/or curative health services and who is first point of contact at community level. A CTC provider can be based in the community or in a basic primary 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.”

In Kenya, REACHOUT is being implemented by LVCT, a Kenyan NGO that has been delivering HTC services in community settings in Kenya for over 10 years, utilizing CHWs as well as lay counsellors to deliver the services. LVCT has implemented the CHS in a vertical programme to strengthen linkages and the tracing of defaulters within HTC and care and treatment programmes. Through this interaction with community health systems, LVCT has been able to identify gaps that need to be further evaluated through REACHOUT and inform the revision of the strategy.

LVCT works closely with the MOH in the implementation of its programmes and has extensive experience with getting research into policy and practice in Kenya as a member of various technical working groups. For this study, LVCT is working closely with the MOH through the Community Health Unit as well as other stakeholders involved in the delivery of community health services to ensure that the results from the study are used to inform policy and practice for the delivery of community health services as a key deliverable for REACHOUT.

For the first phase of REACHOUT, the context analysis, LVCT carried out a desk review, a mapping of stakeholders and a qualitative study to identify contextual factors that influence the performance of CTC providers and services in the CHS as well as HBTC services offered within the CUs. These are described in the chapters that follow.

1.2 CONTEXT ANALYSIS

The context analysis, the first phase of REACHOUT, was designed to inform the development of an analytical framework that was planned to support the design and analyse the improvement cycles of the second phase. The context analysis consisted of four components:

- an international literature review carried out by KIT that was used to develop a draft conceptual framework that informed the specific country context analyses;
- a desk study of documents related to Kenya about health system support and details of CTC providers' programmes obtained from in-country offices (and websites) from government, universities, UN organizations and international and national NGOs conducting or researching programmes that include CTC providers;
- a mapping of CTC providers to identify the type of CTC providers in the country and specifically the study sites through consultation with stakeholders including the government and NGOs; and
- a qualitative exploratory study to fill in gaps in knowledge about the factors influencing the specific aspects of what works well and why.

The objectives of the context analysis were:

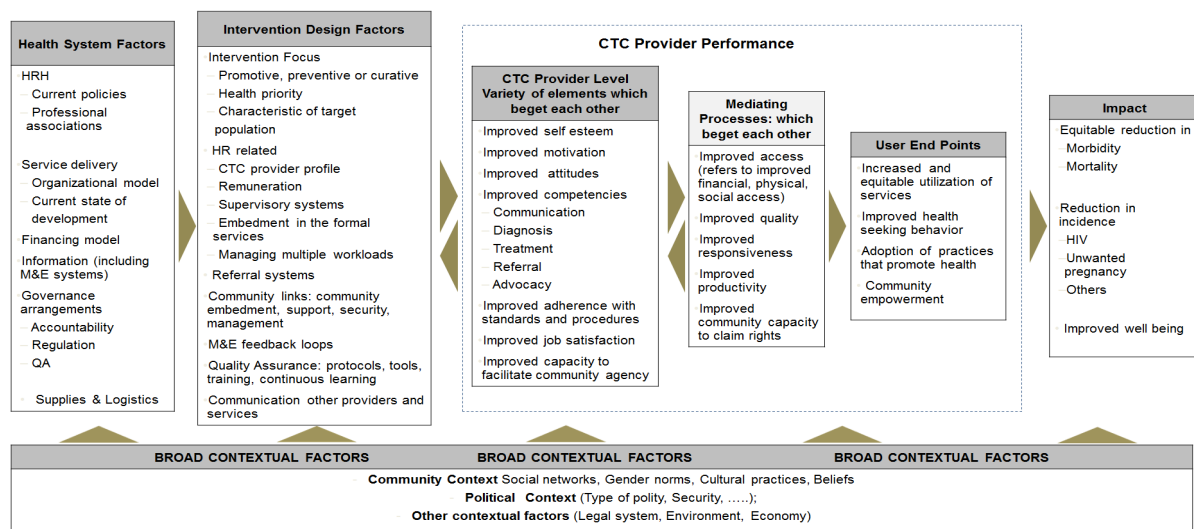
- to identify evidence for interventions which have an impact on the contribution of CTC providers to the delivery of effective, efficient and equitable care;
- to map the types of CTC providers;
- to assess structures and policies of the health system for strengths and weaknesses regarding organization of CTC services and management of CTC providers;
- to identify and assess contextual factors and conditions that form barriers or facilitators to the performance of CTC providers and services; 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 CTC services.

METHODS

To ensure compatibility of findings between countries a generic protocol was developed by KIT and LSTM. This was then adapted to the country context. A methodology workshop was held in Liverpool where a training of trainers was conducted aimed at the development of a generic approach to the training of data collectors and familiarisation and adaptation of generic instruments for the stakeholder workshop and data collection. An additional consortium meeting was held in Amsterdam where preliminary results of the country analysis reports and root cause analysis for identified problems were drafted for further discussion in country stakeholder workshops.

DRAFT CONCEPTUAL FRAMEWORK

A draft conceptual framework (see below) was developed by KIT based on systematic review of international literature relating to CTC providers. It was presented, discussed and adopted by the consortium partners. The conceptual framework provided the basis under which findings of the context analysis were to be reported under the headings of broad contextual factors, health systems factors and intervention design factors, as shown below:



Reference is made to this draft conceptual framework throughout this report.

1.3 REPORT SECTIONS

The report is divided into four broad sections: introduction (Chapter 1); findings (Chapters 2, 3 and 4–5); discussions and implications (Chapters 6 and 7) and annexes.

Chapter 1 provides a background, justification and purpose of the study. It also introduces the project’s draft framework. The findings chapters describe the different study findings for each major theme based on the draft framework with regards to activities undertaken — i.e. 2: desk review; 3: stakeholder mapping; and 4–5: qualitative research findings. Chapter 6

triangulates and brings together Chapters 3, 4, and 5. Chapter 7 discusses the implications of the findings on the draft framework and the quality improvement cycles. The annexes include the relevant tables, including comparative analysis for the two study sites, problem statement and root cause analyses, additional reports and the study tools.

CHAPTER 2 – DESK REVIEW

2.1 INTRODUCTION

The desk review was carried out as part of the first phase of REACHOUT and represents the Kenyan national desk study. The objectives of this desk review follow the general objectives for the context analysis focusing only on the Kenyan context. The aim of the desk review was to assist in gathering evidence on the factors that influence the performance of CTC providers in Kenya.

The focus was on CTC providers directly working under CHS — i.e. the CHWs, CHEWs and Community Health Committees (CHCs). We also extended our focus to other cadres of CTC providers providing services vertical to CHS programmes but having the characteristics of CHWs — i.e. recruited from the community they serve, based in the community and providing linkage to local facilities.

2.2 METHODS

We collected secondary data from international and local health-oriented websites such as PlosOne, Medline, Popline, PubMed and HENNET. We also reviewed online journals such as East African Medical Journal, Oxford and Sciencedirect. Other reference items were from websites of organizations which involve CTC providers such as World Vision, CDC-Kenya, AMREF, Pathfinder, KEMRI, Care-Kenya, AMPATH and ICAP. Terms such as ‘community health worker’, ‘community health work’, ‘community health strategy’, ‘volunteer health worker’, ‘DOTS (Directly Observed Therapy)’ and ‘lay health worker’ were used for online searches.

We also gathered policy documents, unpublished reports, training manuals and other grey literature from the Kenyan MOH and other health organizations working with CTC providers.

We restricted ourselves to documents written in English from 2002 onwards. Our review was also limited to CTC providers linked to the CHS programme in Kenya. We focused on the CHS because it is the reference point that provides all vertical programmes with guidelines and is, therefore, an appropriate avenue through which recommendations for policy change can be made. All this information was compiled covering three areas: health system factors, intervention design factors, and broad contextual factors.

2.3 FINDINGS

This section represents the findings of the desk review organized using the REACHOUT framework introduced earlier. The desk review highlights services offered by CTC providers in CHS and vertical programmes and the facilitators and barriers to their work performance.

2.3.1 OVERVIEW OF CTC PROVIDERS

Since independence Kenya has worked to devise plans to improve the health of its people. The importance of involving communities in providing affordable, equitable and effective health care has been and still is expressed in the development of Kenya’s health policies.

One way of enhancing communities’ accessibility to health services is through task shifting, which involves the reassignment of roles to different cadres of health workers. In Kenya CTC health service providers have been involved in the provision of primary health care services, and the level of involvement has been well outlined by the government in its national health plans. CTC providers offer services ranging from health education to treatment of common and uncomplicated illnesses at home. Kenya has different types of CTC providers — for example, those with traditional vs. modern orientation and private service providers vs. those working under a larger organization.

The current Kenya Health Policy (MOPHS, 2008–2012) recognizes the role played by CHWs in health service provision which, according to the plan, ranges from informal community programmes to home-based interventions. Table 1 provides an overview of the types of CTC providers identified from the desk review (see [Table 1: Overview of CTC Providers in Kenya](#)).

2.3.2 FACILITATORS AND BARRIERS TO CTC PROVIDER PERFORMANCE

In this section we provide evidence from literature about the health system and intervention design factors that affect the performance of CTC providers.

HEALTH SYSTEM FACTORS

We used the WHO health systems building blocks under this section to describe the operational elements of the Kenyan CTC subsystem. In this section we provide evidence from literature on how health system factors influence the performance of CTC providers.

HUMAN RESOURCES FOR HEALTH AND GOVERNANCE ARRANGEMENTS

Under the CHS the health workforce directly involved in the provision of services at the community level includes the CHC members, CHEWs and CHWs. The KEPH indicates that the Community-Owned Resource Persons (CORPS) involved in CTC health services are to be volunteers. These are commonly referred to as CHWs in the CHS. The government provides policy guidance for community health services involving CHS providers through the CHS guidelines.

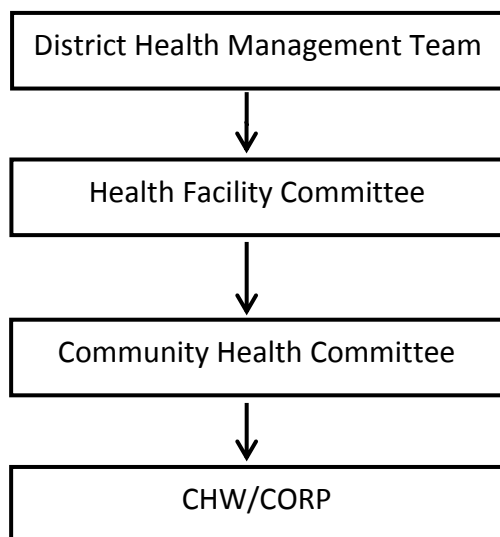
Management

According to the CHS guidelines (MOH, 2006) within the Kenyan community health structure are sub-locations referred to as level 1 CUs which should cover approximately 5000 people and comprise two CHEWs and 50 CORPs (CHWs). The CHWs should serve approximately 20

households or 100 people, and each CHEW should supervise and support 25 CORPs. CHEWs are trained health personnel who are based at a health facility and attached to sub-locations in the district to ensure acceptable standards of care at level 1. They are expected to provide training to CORPs through demonstration and instruction. CHWs report to CHCs and CHEWs, who are both linked to Health Facility Committees (HFCs) at levels 2 and 3 and subsequently linked to the DHMT. The members of HFCs at levels 2 and 3 include elected community representatives, with the officer-in-charge of the facility being the secretary to group. Their role is to oversee the management of the facility and its community health programme. The CHEW may, therefore, be a member of the HFC if they are facility in-charges and/or because they are staff working in the facility.

The DHMT is expected to coordinate all health activities in the district, which includes supervision of the HFCs at various locations (MOH, 2006). According to the CHS evaluation report done in October 2010, a member of the DHMT — particularly the District Public Health Nurse or the District Public Health Officer — is selected and trained to be the focal person of the CHS in the district (DCHS, 2010). The focal person supervises the CHEWs and links the community with the DHMT. Figure 2 shows a diagrammatic presentation of the management teams involved in CTC health service provision.

Figure 2: Management Structures in the Community Health Strategy



Supervision

According to the MOH (2006), the CHS structure involves two government-employed CHEWs, who currently have a supervisory role, supervising 50 voluntary CHWs.

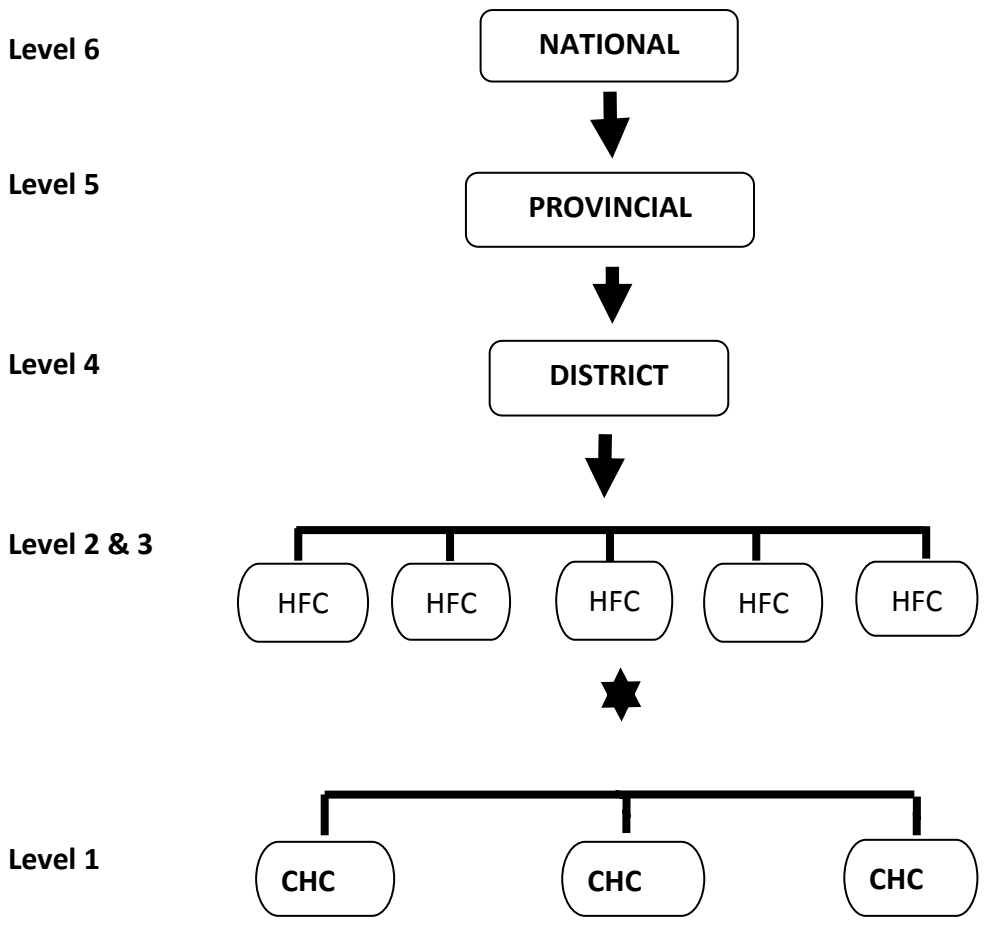
The CHC is the health governance structure adjoining the community; members are elected at the assistant chief’s *baraza* (administrative meeting with community elders) to allow for representation of all villages in the CU. The chairperson of the CHC should be a respectable

member of the community, and it is recommended that a CHW and a CHEW are elected as treasurer and secretary, respectively. The difference between the CHC and the HFC is that the former only exists where there is a CU and only deals with CHS matters, while the latter deals with both facility functions and broad community health programmes beyond those provided under the CHS. CHCs, therefore, provide feedback to the HFC of the facility acting as the CHS link facility in the locality. The CHC roles as outlined in the CHS implementation guide are:

- identifying community health priorities;
- planning community health actions;
- participating in community health actions;
- monitoring and reporting on planned health actions;
- mobilizing resources for health actions;
- coordinating CHW activities;
- organizing and implementing community health days;
- reporting to level 2 on priority diseases and other health conditions;
- leading community outreach and campaign initiatives; and
- advocating for good health in the community.

Policy guidelines call for level 1 structures utilizing the administrative units at the village/community, sub-locational and locational level, and all are supposed to be linked to the health facilities within them. As described above, linkage committees exist at each of the levels, and each has specific responsibilities. Figure 3 shows how community representation is enabled through different linkage structures.

Figure 3: Administrative Structures in the Community Health Strategy



CHC = Community Health Committee

HFC = Health Facility Committee

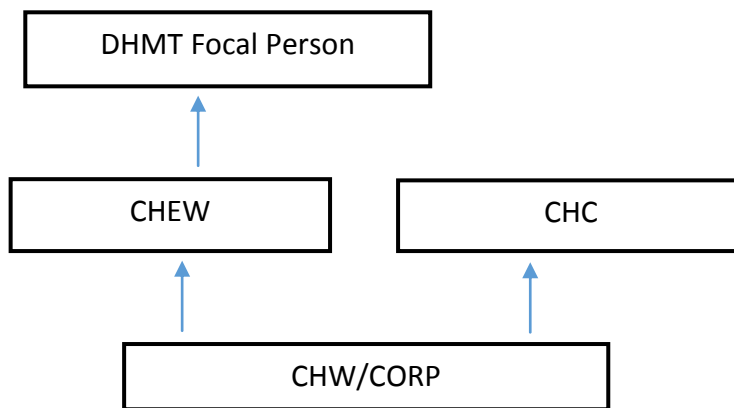
Provincial = currently called County

District = currently called Sub-County

Source: MOH (2006: 21)

The decentralization indicated above had the objective of creating a platform for effective community participation in health decision-making processes at levels 1, 2 and 3. The health committees are expected to represent all issues affecting the provision of services in their localities. Leadership at community level is provided by health facility in-charges with DHMT support, CHEWs, CHWs, village elders, chiefs and other extension workers. These leaders address health issues. Due to membership in the DHMT, the DHMT Community Health Strategy focal person is linked to the FHCs in the District.

Figure 4: Supervision in the Community Health Strategy



At the district (county) level the DHMT provides governance and technical support to level 1 activity such as planning, implementation, monitoring and supervision. CHEWs provide technical support to level 1 by facilitating activities, reporting to HFCs and providing support to CHWs. The HFCs subsequently submit reports to the district, and information is shared with other sectors through the facility in-charges. The HFC is responsible for overseeing the functioning of level 1 units, and it includes representatives from the community and facility in-charges. They are to hold monthly meetings to review progress using indicators that have been generated from information from the facility and the community. However, there have been reports of misrepresentation of community members by some of their representatives with political backgrounds who pushed for their own interests (AKHS, 2004).

At community or village (sub-location) level there are CHCs which form a linkage between the community and the household. They are composed of community representatives and are chaired by a respected community member; the CHEW is the secretary, and the CHW is the treasurer. CHWs report to the CHC on their day-to-day activities, while the CHC is linked to the HFC through the chairperson of the CHC and the CHEW. The community governance structure supports local specification, community-based selection and oversight.

An evaluation undertaken to assess the effectiveness of the district health management systems in meeting their responsibilities showed that there was a lack of guidelines for the functioning of DHMTs and that both the DHMTs and HFCs faced a lack of resources in carrying out their duties (Ndavi et al., 2009).

Devolution

In August 2010, 67% of Kenyans voted in favour of a new constitution which devolved functions and transferred authority for decision-making, finance and management of public services, including health service provision, to the 47 county governments (KPMG, 2013). This devolution process has been described as a ‘double-edged sword’, providing the opportunity to either reduce or increase health inequities within the country. For example,

devolution may enhance access to health care, since primary health care services have been devolved to the counties; however, existing spatial inequalities give some counties an unfair advantage over others, and this may thus increase the health inequalities (Africa Health, 2012). The Secretary-General of the Kenya Medical Practitioners and Dentists Association raised concerns that the devolution process took place in a rush, resulting in its politicization by county leaders who were demanding prioritization of locals in appointments and the provision of treatment, which led to discrimination in the provision of essential health services (Kisika, 2013). Further restructuring of the MOH followed the 2013 elections to create five directorates; within each directorate are divisions, and within each division are units. Under this restructuring the Community Health Unit sits within the Family Health Division, which sits within the Directorate of Preventive and Promotive Services.

SERVICE DELIVERY

The current Kenya Health Policy (MOPHS, 2008–2012) recognizes the role played by CHWs in health service provision which, according to the plan, ranges from informal community programmes to home-based interventions, with much of the responsibility of preventive health shifting to CHWs who are linked with local health facilities. CHS interventions could be broadly described as the extension of health care systems to the community through a combination of identifying and visiting vulnerable households with relevant frequency to monitor and give care; providing care to families who need care for a sick member at the community level; and referral to and from the link health facility.

Most CHWs manage multiple workloads because they participate in more than one intervention. This stems from NGO and CHS recruitment of existing CORPs who have previously participated in an intervention. The services provided by CHWs are those which are defined as level 1 service under the KEPH.

According to MOH (2006) guidelines, services to be provided by CHWs are generally divided into three broad categories:

- disease prevention and control;
- family health services; and
- hygiene and environmental sanitation.

Tasks carried out by CHWs under these broad functions are illustrated in Table 2 (see [Table 2: Policy Guideline on CHWs' tasks](#)).

Some studies have shown that CHWs have been particularly effective in linking communities to health care by providing information, assessing illness and conducting effective referrals (Wangalwa et al., 2012; Kisia et al., 2012). The effects of some of the CHW services are described under findings of intervention design factors in health priorities in Tables 3 and 4.

According to the evaluation report by the DCHS (2010), CHS services do not adequately address the needs of adolescents, particularly their psychological and reproductive health needs. There are also concerns of inadequate integration of HIV services into CHS service provision (Africa Link), and some efforts are/were being made by the National AIDS Control Council (NACC) through Total War Against AIDS (TOWA) to address this by initiating calls for proposals to support the integration of HIV/AIDS services into the CHS programme (Africa Link).

FINANCING MODEL

Funding of CTC services is one of the factors that influence CTC health service provision. In Kenya CTC services are funded by the government and local and international donors. CTC providers offer services for free to the community except for instances where they sell commodities as a way of generating income — for example, the sale of contraceptives by community-based distributors. Sources for funding for district health services include direct funds from the government (central/local) — for example, from taxation — revolving funds (from user fees) and donor funding (Ndavi et al., 2009). Literature shows that donors often assist government interventions (Kibua, 2009; Selke, 2010; Population Council, 2007).

The costs associated with CTC service provision depend on the intervention design. The funds go into commodities such as training, uniforms and the CHW kit. The government also recommends financing of CTC services through available structures in the community such as income-generating activities.

INFORMATION SYSTEMS

In the CHS, programme data are collected by CHWs and summarized by CHEWs through the use of standardized data collection tools and then finally uploaded into the District Health Information System (DHIS) (see ‘M&E feedback loops’ in the ‘Intervention Design Factors’ section). The information collected by CHWs and CHEWs entails what is referred to as a Community Health Information System (CHIS) and is eventually linked to the National Health Management Information System. The standardized tools used by CHEWs and CHWs are:

- MOH 513: household register;
- MOH 514: service delivery logbook;
- MOH 515: CHEW summary; and
- MOH 516: chalk board.

CHEWs are supposed to forward the information collected in these tools to the CHS District Focal Person, who then compiles and submits it to the District Health Records Officer.

Apart from contributing to the DHIS, the CHIS also contributes to the Master Community Unit List (MCUL). MCUL is a database of all listed and approved CUs in the country. The MCUL links CUs to link facilities. Unlike data in the DHIS, most of the MCUL data are

permanent and not collected routinely unless changes occur on the ground, such as staff transfers. CHEWs collect data for MCUL using an M&E tool called the Community Unit Checklist, and these are forwarded to the Sub-County Health Records Information Officer (SCHRIO) for entry into the MCUL by the CHS District Focal Person.

CUs are expected to monitor their own health by examining the health-related information in the CHIS. However, the DCHS 2010 evaluation report showed that some CUs had not been introduced to the CHIS and that some tools being used were those of NGOs running parallel programmes.

An evaluation by Ekirapa et al. (2012) showed that the DHIS was faced with poor data quality and that the data collection tools were inadequate due to frequent changes.

Literature shows that there are a few CTC programmes which have adopted the use of mobile technology to facilitate information collection and improve the quality and efficiency of decision-making. Existing phone- and PC-based applications are used by CTC programmes in an array of activities such as data management, decision-making guides, disease surveillance, and provider-to-provider communication to support treatment. Programmes such as ChildCount had CHWs using mobile phones to collect health data and receive treatment recommendation (Berg, 2009), and in the LifeStraw Carbon for Water campaign CHWs used smartphones to collect data to help set up water treatment units. Aside from data management, mobile technology is also utilized in monitoring the work of CTC providers. Mobile technology can enhance the tracking and management of work done by CHWs. A pilot mobile project called mCHW is being carried out by the African Medical Research Foundation (AMREF) and its partners in Kibera and Makueni to facilitate support between CHWs and the CHEWs (see www.mchw.org). mCHW provides guidelines to CHWs on tackling health issues and also assists CHEWs in identifying the training needs of CHWs.

Other mobile platforms used by CHWs in Kenya include:

- KimMNCHip, which links CHWs to pregnant mothers before and after delivery by facilitating referrals through the provision of updates and reminders for intervention (Germann et al.);
- Living Goods mobile technology, which assists in monitoring treatment by sending automated text reminders to clients and facilitating telephone interactions between CHWs and clients (www.livinggoods.org);
- The mHmtaani AphiaPlus project in Nairobi (Deep Sea slum), which assists in registering clients, following up prenatal care visits and counselling on maternal and newborn child health issues; and
- a USAID-AMPATH project in western Kenya, which uses mobile technology in its HBTC programme to collect clients' health information

Data collected by CTC providers are usually linked to electronic health records. This supports providers' objective of providing services which are needs-oriented. However, a study undertaken in western Kenya to determine the reliability of data collected by CHWs argued that such data should only be used to guide policy after being tested for reliability, since it showed only 90% concurrence between similar data collected by CHWs and Research Assistants, with the latter having a different level of education and receiving different training (Otieno et al., 2012).

Due to the different sources of health information, there is a need to integrate information systems from the various sources, and the AfyaInfo project is currently implementing this in conjunction with the MOH (see www.afyainfo.org).

SUPPLIES AND LOGISTICS

Logistical support is provided to CTC health service providers in a similar manner throughout the country by local health facilities, and in communities through locally available resources. According to government guidelines (MOH, 2007/2008; MOPHS, 2013b), a CHW health system should be supplied with the following items according to priorities:

- Drugs and supplies for first aid and treatment of common ailments:
These include items such as deworming medicines such as Albendazole; malaria drugs i.e. Amodiaquine; analgesics i.e. Paracetamol; basic dressing supplies such as absorbent cotton wool, adhesive tape, gauze bandage with selvedge, gauze compress and scissors; safety enhancement supplies such as Jik® (a common household bleach that contains sodium hypochlorite as the active ingredient) and gloves; first aid kit with items such as glucose powder, gentian violet, foldable hand stretcher, crêpe bandage and firm liniment ointment; and drugs for community case management of common ailments, such as oral rehydration salts, whitefield ointments, Moducare® capsules (a drug blend of plant sterols and sterolins), Nutrifit, aluminium hydroxide, Tetracycline eye ointment, multivitamins;
- Preventive and promotive materials and supplies:
This category includes items such as insecticide-treated nets (ITNs); WaterGuard® (a sodium hypochlorite solution used to disinfect water); condoms; contraceptives; treatment guidelines; indoor residual spray equipment and supplies; bar of soap; growth monitoring equipment; and information materials;
- Linkage facilitation mechanism i.e. transport system (bicycle/motorcycle); communication channels such as phones, airtime; advocacy kits such as banners and websites; a bag; and a battery torch and batteries; and

- Data collection/recording supplies i.e. ball pen; note book; referral forms; and data collection forms.

There were, however, concerns that CHWs and CHEWs faced inadequate supplies and logistics. Literature showed that the CHS faces a challenge of limited supplies and stock-outs (MOPHS, 2010a; 2010b; MOH, 2008). These shortages of supplies have been attributed to inadequate planning for supplies, especially due to a lack of capacity among planners, a lack of funds and a lack of knowledge of budget limits among planners (Republic of Kenya, 2010). According to Africa Rural Links (n.d.), CUs suffer from a lack of the required basic care kit and stationery such as the reporting tools and the referral forms including CHW identification items such as uniforms and badges.

INTERVENTION DESIGN FACTORS

In this section we provide evidence of our findings from a review of literature on how some aspects of CTC intervention design can influence its performance.

INTERVENTION FOCUS

CTC programmes contain interventions that target specific health issues depending on their priority areas. Therefore, CTC providers carry out specific tasks targeting health issues such as maternal and child health, HIV/AIDS, TB, malaria etc.

Tables 3 to 5 illustrate the evidence for the effects of CTC provider interventions in programmes with a specific health priority focus. For purposes of this review, maternal and child health includes interventions that aim to improve reproductive health, safe motherhood and interventions that target women in their role as caregivers for children below five years of age. HIV/AIDS interventions deliver HIV prevention, treatment and care to the population. Others include the rest of the interventions such as those targeting TB, malaria and other diseases.

Table 3: Evidence on Maternal and Child Health Service Provision by CHWs

Intervention Priority	Effects of Intervention	Location (Counties)	Literature
<i>Community HS</i> Maternal: promote four antenatal care visits, skilled birth attendance, immunization, use of ITNs, birth plan preparation and breastfeeding, and recognize danger signs and risk factors in pregnancy; Newborn and child health:	Increased essential maternal and neonatal care practices i.e. utilization of antenatal care, skilled birth attendance and postnatal care	Western: Busia	Wangalwa et al. (2012): non-randomized pre-test, post-test study

promote immunization, birth notification and registration			
Child health (nutrition): use of anthropometric measurements (MUAC) by CHW	Trained CHWs can take accurate and reliable MUAC measurements	Coastal Region: Kilifi	Mwangome et al. (2012): cross-sectional study
Vaccination and hygiene interventions for children under a year	Education and distribution of hygiene products during vaccination was feasible	Western: Homabay	Ryman et al. (2012): pre- and post-intervention population survey
Weighing of newborn babies	Case finding of pregnant women and taking birth weights tasks can be shifted to the community	Western: Teso, Bungoma, Mumias, Butula, Nambale and Busia	Gisore et al. (2012): prospective observational study
Birth referral to health facility by Traditional Birth Attendants (TBAs)	TBAs can be agents of birth referral and provide basic care to newborns in community	Rift Valley: Molo	Simpson, Itumbi & Lindoewood (2012): descriptive study
TBAs promoting skilled birth attendance through education and referral	Skilled birth attendance increased in health facilities	Eastern: Yatta	Tomedi, Tucker & Mwanthi (2012): experimental study;
Provision of birth kits to TBAs	Women increasingly seek TBA knowledge and expertise	Western Province	Dietsch (2010): post-intervention study
Evaluation of signs of severe illness in newborns	CHW home visitation of newborns is feasible	Eastern: Yatta and Kitui	Livingston et al. (2013): evaluation study
Use of TBAs and expert patients as peer counsellors, as PMTCT promoters and to provide psychological support	Significant increase in PMTCT knowledge, utilization of antenatal care and delivery in health facilities	Nairobi	Population Council (2007): experimental study
TBAs and CHWs used the WHO Haemoglobin colour scale to diagnose anaemia in children and pregnant women	Significant increase in proportions of sick children diagnosed with anaemia and given appropriate treatment	Western: Kisumu	Lindblade et al. (2006): evaluation study
Nutrition programme that utilizes CHWs in screening and weighing children and promoting exclusive	Early case detection of malnourished children, managing nutrition and preventing acute	Nairobi and Northern Kenya: Marsabit	Mulama (2013); Murunga (2013); World Vision articles

breastfeeding, complementary feeding and hygiene	malnutrition		
CHWs provide education about reproductive health and HIV/AIDS	Increased access to services and reinforced health messages	Western: Homa Bay and Rachuonyo	Undie et al. (2012): pre- and post-intervention study
Child health project utilizing CHWs in community maternal and newborn care	Increased proportions of women sleeping under ITNs; increased proportions of women attending four antenatal and postnatal care, seeking skilled birth attendance, delivering at a health facility, receiving intermittent preventive treatment, accessing HTC and practising exclusive breastfeeding	Western: Busia	AMREF (2010): evaluation report
Use of CHWs to distribute contraceptives and provide health education in a reproductive health programme	Significant proportions reached with family planning information, method and condoms; significant proportions referred for maternal and child health services	Rift Valley: Uasin Gishu; Coastal: Mombasa, Nyanza-Siaya	Casey, Onduso et al, (2005): post-intervention study

Table 4: Evidence on HIV/AIDS Service Provision by CHWs

Intervention Priority	Effects of Intervention	Area	Literature
Use of CHWs in HBC where they provide education and drugs, observe treatment and assist in household chores	Increased access to HIV testing and HBC enrolment; improved perception of people living with HIV; grassroots approach is effective in fighting HIV pandemic	Western: Rachuonyo, Nyando, Migori	Johnson & Khanna (2004): evaluation report
Antiretroviral delivery by people living with HIV	Task shifting and mobile technologies can deliver safe and effective community-based care, advance roll-out of antiretroviral therapy and increase access to treatment	Rift Valley: Nandi District	Selke et al. (2010): evaluation report

Home-based VCT (HBVCT) involving CHWs	HBVCT is feasible with high uptake and has the potential to expand access to HIV testing services	Western: Siaya	Negin et al. (2009): post-intervention study
Use of CHWs to reach people who have discontinued or not initiated antiretroviral therapy	Intervention was effective and led to risk reduction and increased uptake of antiretroviral therapy	Coastal: Mombasa	Sarna, Luchters & Musenge (2013): prospective cohort study
Community-based HIV counselling and testing where people living with HIV were used as navigators	Navigator approach may improve linkage to care	Western: Kisumu and Kisii	Hatcher, Turan & Leslie (2012): cross-sectional study
Use of peers in outreach for men who have sex with men (MSM)	Intervention reached stigmatized MSM and led to significant but limited improvements in HIV knowledge and prevention behaviours	Coastal: Mombasa	Geibel et al. (2012): cross-sectional survey
Use of peers in the prevention of sexually transmitted infections and HIV among female sex workers	Increase in protected sex	Coastal: Mombasa	Luchters et al. (2008): cross-sectional survey
Use of peers in HIV counselling and testing for deaf people	The majority of deaf clients sampled learned of services from peers. Deaf people are at risk of HIV, and there is an urgent need for user-friendly HIV services supplemented by peer education programmes	Western: Kisumu and Nairobi	Taegtmeier et al. (2009): comparative study
Home-based care and treatment (HBCT)	HBCT is effective in the enrolment of HIV-infected persons prior to illness	Rift Valley: Uasin Gishu; Western: Bungoma	Wachira & Kimaiyo (2012): retrospective observational study
Use of volunteer community visitors in comprehensive support for adolescent orphans	Prevented school drop-out, delayed sexual debut, reduced risk factors associated with HIV infection	Western: Kisumu	Cho et al. (2011): randomized control study
Expert patients as CHWs in community-based reproductive health and HIV interventions	Increase in patient enrolment	Western: Kisumu, Migori, Suba and	Agengo et al. (2009): descriptive study

		Rongo	
HIV programme with a community-based intervention utilizing CHWs	Better long-term treatment success and better adherence	Central: Kiambu	Achieng, Musangi & Ong'uti (2012): cohort study

Table 5: Additional Evidence on Other Services Provided by CHWs

Health Area	Intervention	Effects	Area	Literature
Malaria	Involving CHWs in presumptive treatment of children with AL	There is potential for utilizing trained and supervised CHWs in early and appropriate malaria treatment	Coastal: Malindi and Lamu	Kisia et al. (2012): cross-sectional survey
	Use of CHWs to provide information and distribute ITNs	Significant increase in knowledge about malaria and use of ITNs	Eastern: Machakos	Stromberg, Frederiksen et al. (2011): cross-sectional survey
TB	Use of CHWs to distribute drugs, observe treatment and identify TB patients	Decentralization of the intensive part of TB resulted in good programme performance and closure of the TB ward at the health facility	Eastern: Machakos	Kangangi, Kibuga & Muli (2003): operational study
	DOT approach utilizing community volunteer to observe treatment	Strong economic case for expansion of decentralization and strengthened community-based care	Eastern: Machakos	Nganda & Wang'ombe (2003): cross-sectional survey
Mental health	Use of CHWs in mental health education, treatment supervision and following up care defaulters	Strong economic case for expansion	National	Jenkins et al. (2010): operational study

HUMAN RESOURCES

CTC provider profile

The CHS identifies providers involved in the provision of services at the community level as including CHC members, CHEWs and CHWs. The CHS outlines the CTC providers' roles, selection and recruitment, remuneration, supervisory systems and training.

The CHS policy identifies CHWs under the broad term of CORPs. According to the MOH (2006), a CORP is a lay health worker providing basic health services in the community while providing linkage to formal health care with support from professional health workers.

As shown under [2.2 2.1 Health Priorities](#), there are other CTC providers who exist but are not necessarily CHWs; they include expert patients, client peers, lay home-based counsellors and TBAs linked to facilities. These fit into the CTC provider profile because, just like CHWs, they have basic health training, are lay workers, provide level 1 health care services in the community, provide linkage to formal health care and receive support from health professionals based at local health facilities.

These characteristics provide a general overview of which individuals would fit into the Kenyan description of CTC health providers. This is why TBAs who conduct deliveries at home are not considered CTC providers unless they encourage skilled birth attendance by referring pregnant women to deliver in health facilities.

Selection and recruitment

CHEWs

The cadre is recruited by the health system and consists of certificate holders in Public Health and Community Nursing who are trained to extend services to the community by bridging the gap between communities and health facilities. CHEWs are based at health facilities and support CHWs through supervision and coaching (MOH, 2007b). Changes proposed to the selection criteria for CHEWs stipulate that they are to be recruited from individuals with a certificate in Community Health, Sociology, Nutrition, Psychology, Counselling, Social Work or Community Development. Their role is also proposed to change to visiting households to help improve community health, collect and maintain household health data and refer patients to facilities for further care (DCHS, 2013).

CHCs

CHCs comprise community representatives whose duty is to spearhead community health actions at the CU level. They include CHEWs (technical advisor and secretary), CHWs (one is to be treasurer), HFC members (who chair the CHC) and representatives of community interest groups. They are selected by the community in a sub-locational *baraza*.² The selection criteria include: resident adult of sound mind and good standing in the community; able to read or write; leader and role model in health matters; and

² A *baraza* is a public meeting organized by chiefs/assistant chiefs (administrators of the lowest political units in Kenya, divisions and sub-divisions, respectively). Members attending these meetings include the village elders and representatives of different interest groups in the community. Organizations or individuals who are interested in attending to promote their agenda may ask to attend or may receive invitations. The meetings are generally tailored towards discussing matters affecting the community such as insecurity and health.

commitment to serve the community. The CHCs have three-year terms renewable once for a maximum of two terms unless the community specifically decides otherwise.

CHWs/CORPs

CHWs provide health care at the community level through health education and referral to and from the link health facility. The CHS recommends that CHWs/CORPs should be recruited by the community through a *baraza* (MOH, 2007b). There were interventions that indicated the involvement of the community in the recruitment of CHWs (Johnson & Khanna, 2004; Karanja et al., 2012; Kisia et al., 2012; MOH, 2006; Stromberg et al., 2011). However, in some interventions recruitment was carried out by study staff (Geibel et al., 2012) or the area chief (Karanja et al., 2012) or recommended by the local health facility to the implementing organization (Casey et al., 2005).

The selection criteria outlined by the CHS include: respected and literate community resident; approachable and able to motivate others; good example in health and development; and willing to volunteer for five years. Casey et al. (2005) indicated that CHWs are most effective where the community has been involved in their recruitment, when they have volunteer and/or leadership experience and when they are married and respected community members. There was also a tendency to recruit previous beneficiaries of services as CORPs in interventions. The most common occurrence was that of expert patients' participation in HIV programmes as peers in programmes for MSM or female sex workers or the use of peers to reach deaf people (Agengo et al., 2009; Geibel et al., 2012; Hatcher et al., 2012; Johnson & Khanna, 2004; Luchters et al., 2008; Selke et al., 2010; Taegtmeier et al., 2009).

Communities in Kenyan settings always have traditional medicine men/women who continue to provide services in the community concurrently with formal health care service providers (NCAPD, 2008; Mwangi, 2004). The role played by traditional medicine men/women in Kenya is more pronounced in delivery care, where 28% of deliveries are assisted by TBAs and only 44% are supervised by health professionals (KDHS, 2008–09). The remaining 21% of deliveries are assisted by friends and relatives. Some CTC programmes involve TBAs in activities that encourage skilled birth attendance — for example, by conducting referrals for antenatal care and encouraging pregnant women to give birth in hospitals (see '[Health Priorities](#)'). The provision of training and linkage to local health facilities ensures that such CTC providers do not work in isolation.

HBTC counsellors

National AIDS and STI Control Programme policy guidelines (NAS COP, 2010) recognize non-medical counsellors as HIV providers in facility and community settings in Kenya. They are recruited by HIV/AIDS programmes that have HBTC interventions. They need to be certificate holders in HIV testing and counselling and certified by NAS COP. They work closely

with other CHWs but are not recognized by the government as a cadre and are, therefore, not employed on a permanent basis.

Government policies on incentives

The CHS guidelines state that CHWs and CHCs are voluntary providers, whereas CHEWs are government employees (MOH, 2006). The government had approved performance-based incentives for CHWs at Ksh2000 (approximately US\$23) based on indicators developed from high-impact interventions including immunization, hand washing with soap, complementary feeding etc. (DCHS, n.d.). However, in practice monetary incentives given to CTC providers varied from one intervention to another, such as US\$80 per month (Earth Institute, 2011) and US\$13 honorarium (Hallfors et al., 2012). Undie et al. (2012) stipulate that incentives are necessary for effective service provision by CTC providers. The CHS (MOH, 2006) recommends that CHWs should be reimbursed for direct costs they incur in their work, although the same policy has not established a recommended frequency of visits or working hours per week for CHWs. The policy document identifies a lack of incentives as a demoralizing factor for voluntary CTC providers and recommends that, to encourage accountability, the incentives given to volunteers should be handled by local committees and not the central government. Some NGOs have a regular remuneration package for the CHWs with whom they work, and this has resulted in disillusionment for the CHWs working on government programmes (DCHS, 2010).

The CHS emphasizes incentives for CHWs but does not give guidelines on incentives for other non-voluntary CTC providers such as the CHEWs employed by the government.

Evidence on incentives

A mixed cross-sectional study by JICA (2013) indicated that CHEWs did not find their work to be adequately supported financially. The study, which evaluated the performance of CHEWs, reported that financial support for activities was provided in the following order from the highest to the lowest: monthly meetings, dialogue days, action days and supervisory visits.

AMREF (2010) indicated that CHWs considered reimbursements and materials such as bicycles, T-shirts and bed nets a motivation, as were recognition by community members, community demand for CHW services, opportunities for skills development, provision incentives and inclusive supervision schemes.

Additional non-monetary incentives recommended for CHWs by Were (2011) include appreciation events, exchange visits to neighbouring CUs, opportunities to upgrade their knowledge and skills, continuous lifelong training based on CHWs' expressed needs, needs-based support supervision and coaching, priority when there are paid jobs, logistical support and CHW associations including savings and credit.

Takasugi & Lee (2012) indicated that financial or non-financial rewards are necessary to retain and maintain the engagement and motivation of voluntary CHWs; where CHWs are recruited from socio-economically deprived populations with greater financial pressures, financial drivers are likely to be greater. It was further observed that large interventions that rely on CHWs are likely to be unsustainable in the long term. Casey et al. (2005) documented some disincentives for CHWs including use of their own money to buy contraceptives for the client and recommends that partial cost recovery can be accomplished where the CHWs sell contraceptives at a higher price to generate a small income and recuperate income to purchase more supplies in future.

Training

CHS-recommended training

Policy recommends that CTC providers should receive initial and continuous professional training such as: six weeks of initial training and quarterly refresher training for CHWs, initial training of six weeks for CHEWs, two weeks of training for lay HBTC counsellors and seven days of initial training for CHCs.

The CHC training curriculum includes: leadership, governance, personnel management issues, resource mobilization and financial management, monitoring and evaluation and ways forward, community health information systems and the role of CHCs in effective communication, advocacy, networking and social mobilization in the CU. The curriculum is based on their required competencies such as: leadership, management and communication skills, mobilization and resource management, networking, report writing, record keeping, basic analysis and utilization of data, basic planning and M&E skills, and performance appraisal and conflict resolution skills.

The CHW curriculum includes: concepts of health and development, initiating community-based KEPH, health promotion, maternal and child health, community nutrition, sexually transmitted infections, HIV/AIDS and TB, water safety, sanitation and hygiene-related conditions, disability, and M&E. However, the DCHS 2010 evaluation report showed that partner involvement in CHS resulted in discrepancies between the training offered and tasks expected of the CHWs.

The CHEW training curriculum includes: concepts of health and development, leadership in health and development, participatory methods and the community health linkage and governing structure.

CTC providers (CHEWs and CHWs) are trained by individuals from the sub-county and sub-locational level (smaller administrative units) who are in turn trained by a multidisciplinary team with a background in health and related sectors. Trainers for CHCs were to be

appointed by the DHMT and CHS Coordinator from public health officers, the registered nurse or clinical officer, and the choice of the third person was left at their discretion.

Policy recommends that HBTC providers should be exposed to the changing disease trends and new testing technology through pre- and in-service training as well as through continuous professional development.

Evaluation of training

AMREF (2010) indicates that refresher trainings for CHWs are a motivation to them. The study proposed that community leaders should be included in the CHW supervision scheme and continuous refreshers used to empower the CHWs and other community structures by the health care system. However, Rowe (2007), in a study on effects of refresher training on CHW adherence to protocol, found that the first refresher course was partially effective and that the second one had an effect contrary to what was intended. The study proposes that CHW interventions should find quality improvement measures that work within their setting. Africa Rural Links (n.d.) reported that CHEWs and CHWs had inadequate HIV/AIDS skills, which limited their ability to adequately serve HIV/AIDS clients and train caregivers.

Supervisory systems

According to policy the CTC service providers should be supervised by health professionals: CHEWs and CHCs for CHWs, the DHMT for CHEWs, and the DHMT and HTC Coordinator for the HBTC counsellors. The supervision of CHCs has not been mentioned in the policy documents (MOH, 2006; 2007b). In practice some CTC programmes utilized more experienced CHWs to supervise other CHWs (Casey et al., 2005), whereas other interventions utilized trained health workers as supervisors (MOH, 2006; Achieng et al., 2012; Earth Institute, 2011; AMREF, 2010).

No guidelines were provided on the frequency or avenues of supervision for CTC providers within the CHS. However, AMREF piloted supervisory checklists for maternal, newborn and child health care that was facing sustainability challenges due to a lack of transport in addition to DHMT staff shortages beyond the programme intervention period.

The JICA (2013) report indicates that CHEWs carried out supervision by accompanying CHWs to the households where they provided health education to caregivers, and also offering return demonstrations of health advice and medical treatment. DCHS (2010) indicates that staff shortages at the health facilities hampered supervision of CHWs by CHEWs (CHEWs are unable to leave the health facility).

Embedding CTC providers in formal services

CTC providers must be trained in the intervention and linked to a health facility whether public, faith-based or privately owned. Literature showed that there are CTC providers such

as TBAs, herbalists and medicine men who were not formally recognized because they had no formal training and were not linked to any intervention. However, there were some exceptions where interventions trained TBAs to refer women for skilled birth attendance and/or take care of newborns (Dietsch, 2010; Simpson et al., 2012; Tomedi et al., 2012).

However, the CHS guidelines (MOH, 2006) state that each CHW will serve 20 households or 100 people, and each CHEW supervises 25 CHWs irrespective of where they work. The policy guidelines do not consider the diverse population density. According to DCHS (n.d.), the population that is allocated to a CHW should depend on the population density of the area covered. This implies that a different number of households should be allocated to CHWs in each of the four different zones (see Table 6).

Karanja et al. (2012) also indicated that CHWs were involved in two or more interventions at the same time. Further research is required to address how large the workload of a CTC provider should be for productivity (i.e. ideal number or upper limit of tasks, target geographical and household coverage etc.).

Table 6: Guidelines on Population Allocation to CHWs (source: DCHS, n.d.)

Zone	Persons per km ²	Province
High density	54–4576	Nairobi, Central , Nyanza and Western
Densely populated	40–53	Rift Valley
Medium density	37–39	Coast and Eastern
Sparsely populated	11–36	North Eastern

M&E feedback loops

In the government-organized CHS, CHWs collect data on paper forms. The first data entry by CHWs is on form MOH 513, which is summarized in form MOH 512 by the CHW and submitted to the CHEW on a monthly basis. The CHEW summarizes data collected from all the CHWs and writes it out on a community chalk board. Data on the chalk board are collated by CHEWs in a standard tool called the CU checklist and form the agenda of discussion during monthly community dialogue days. The CHEW then submits these data to the Sub-County Community Focal Person, who verifies them with CHCs before submitting them to the SCHRIO for data entry into the MCUL and storage of the manual data. Data in the MCUL contain several elements that focus on the physical location of CUs, health personnel and service delivery, and they have restricted access.

Data from the MCUL are linked to the DHIS. These data are expected to be utilized for decision-making and also to provide feedback to the community on their health status. In an evaluation carried out by Ekirapa et al. (2012) it was reported that there were gaps in the demand for and use of data at the district level due to incompleteness of the data and a lack

of capacity for using the information. From the discussant notes, the CHWs also said that the CHEWs always summarized the reports they gave them and produced summaries and information that went to the community chalk boards. These were usually placed at the health facility or the chief's office. Some of the information contained in these reports included the number of pregnant women, people who had died, TB cases in the community, the number of referrals and any disease outbreak. The CHEWs also compiled data collected by the CHWs and wrote CU reports.

JICA (2013) indicated that information gathered by the CHEWs from the reporting tools (MOH 513 and 514) was disseminated during dialogue days, action days, the chief's *baraza*, the CU action plan, health facility meetings and budgeting sessions, outreach activities by other implementing partners and CHEW and CHW meetings.

COMMUNITY ENGAGEMENT

The CHS is based on a premise that communities are best placed to address equity gaps in health care coverage by identifying needs and involving them in resolving these gaps. There are individual and collective resources in the community which contribute to the performance of CTC health services. The involvement of community members in projects that target them requires programme implementers at conceptualization to understand the community context in which they are planning to operate. According to the CHS policy, it is important to work with communities to ensure the success and wide ownership of the projects (MOH, 2006).

The community is involved in creating awareness, providing volunteer members to be CHWs and labour and locally available materials and resources for construction, and in quality control by providing local leadership for supervision and coordination.

Some programmes have also explored the idea of utilizing institutions existing in the community as internal avenues for supporting health education (Kibua, 2009). The same institutions act as supervisory mechanisms for CHC membership, community feedback on CHS performance during dialogue days and membership of HFCs.

Through these links it is expected that communities will be involved in decision-making and will be able to acquire the necessary information, skills and experience in community involvement to help them take control of their own lives. However, the CHS evaluation report by the DCHS (2010) showed that communities had not been adequately empowered to provide feedback on their needs and that there was also a lack of clear structures for enhancing community participation.

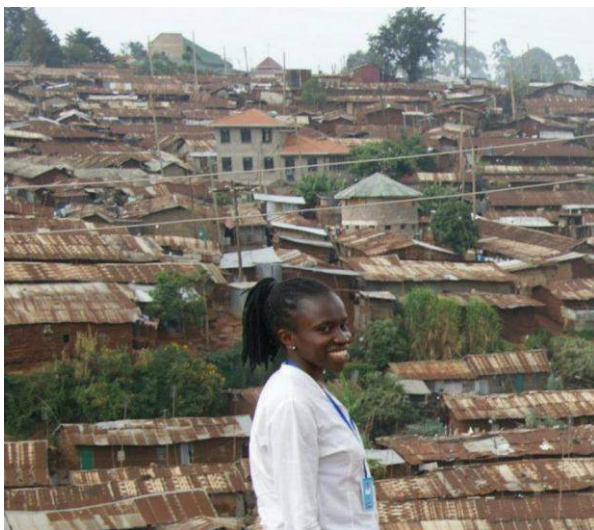
BROAD CONTEXTUAL FACTORS

There were other broad community factors which were perceived as affecting the performance of CTC providers. To enhance ownership and participation, communities are involved in decisions about how these CTC services are delivered in the CHS.

CHS ENVIRONMENT

CTC services are carried out in different parts of Kenya either by the government or by NGOs. However, these interventions are focused on rural and on low-income urban areas. Kisia et al. (2012) stipulates that poverty is linked to child-care givers seeking services from CTC providers as a result of the close association of poverty with the accessibility of cost-sharing services widely practised in public health facilities in Kenya. The areas where CTC providers operate have the following characteristics:

- shortage of human resources;
- inadequate health facilities;
- vulnerable/marginalized populations for HIV infections, such as female sex workers, MSM and deaf people;
- underfunding of primary health systems;
- inappropriate supply provision;
- inadequate transport systems; and
- high disease prevalence.



Aerial view of Gatweekera Community Unit
Source: LVCT REACHOUT Photo Collection

The CTC programmes attempt to overcome the above challenges in a number of different ways including:

- They provide easy access to crucial services and products.
- The community is not required to spend resources on transport to access health care.

- The use of peers overcomes stigma for vulnerable populations such as MSM and female sex workers.
- Internationally recognized standards for algorithms such as Integrated Management of Childhood Illnesses (IMCI) training and new rapid diagnostic tests for HIV and malaria have created opportunities for disease assessment at the community and household level.
- Mobile technology in rural areas (voice, SMS and data) create a platform for improved remote management and monitoring of service delivery by CTC providers.

CHAPTER 3 – STAKEHOLDER MAPPING

3.1 METHOD

LVCT staff members involved in community health service implementation were consulted to identify key partners in the CHS implementation and research using the template provided for all REACHOUT partners and rating them. The list included all partners involved in the DCHS taskforces and technical working groups and partners working in the mapped districts. Further consultations were undertaken with the DCHS on the partners, to reach agreement on the relevant stakeholders. This also provided the forum to identify the members of the Country Advisory Group (CAG) and plan for the first meeting.

Stakeholders were categorized as government, donors, implementing partners, health systems projects and universities and according to their key functions — policy, research or implementation.

3.2 OUTCOMES

The following is a summary of key stakeholders identified who are significant for the success of REACHOUT:

- Government/policymakers — the Ministry of Health through the DCHS was the most important partner recognized, along with members of the County and District Health Management Teams
 - a. National level — Division of Community Health Services, NASCOP
 - b. Sub-national level — county governments and County and Provincial Health Management Teams (Nairobi, Nyanza, Eastern)
- NGOs — AMREF, APHIAPlus, Capacity Project. They are involved in the scale-up of CUs in the country as well as strengthening community health systems through research and implementation (members of AMREF and the Capacity Project are in the CAG). In addition, World Vision is a major partner involved in the scale-up of CUs in Kitui County.
- Donors/bilateral partners — JICA, USAID, Global Fund, UNICEF. They provide funding and technical support for scaling up the CHS. JICA and UNICEF are working closely with the DCHS in revising the strategy and are members of the CAG.
- Universities — GLUK, Moi University (AMPATH project). They are involved in research and technical support for the CHS and are also members of the taskforce.
- Health systems projects — Health Policy Project, Capacity Project, AfyaInfo. AfyaInfo is involved in strengthening the community-based health information system and linking it with the national health management information system.
- Media houses — LVCT has links with various media houses which will be used to disseminate study findings as appropriate.

CHAPTER 4 – QUALITATIVE RESEARCH METHODOLOGY

4.1 OBJECTIVES

The aim of REACHOUT overall is to maximize the equity, effectiveness and efficiency of CTC services in rural areas and urban slums. The qualitative study in Kenya is part of a context analysis whose purpose is to develop an analytical framework that will be used to design improvement cycles and to explore barriers and facilitators, opportunities and constraints in existing CTC programmes in Kenya.

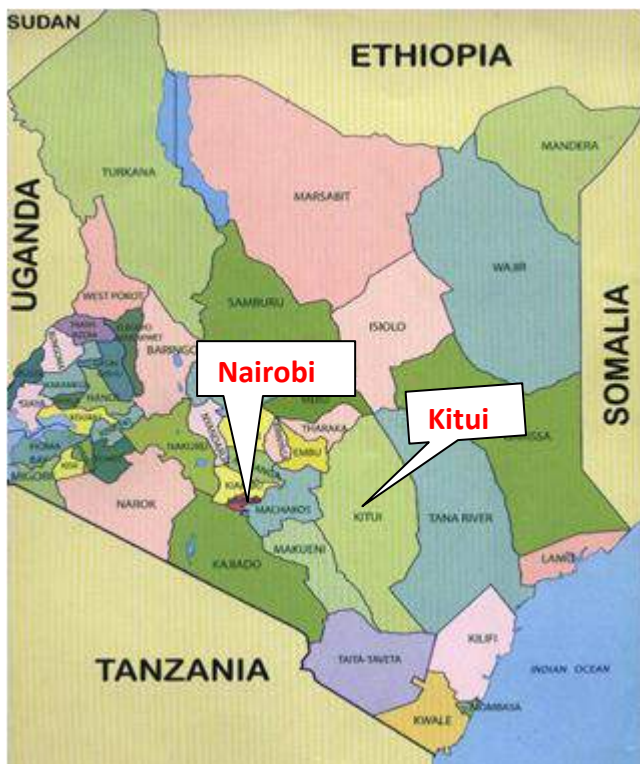
4.2 STUDY DESIGN

The study adopted a descriptive exploratory design.

4.3 DESCRIPTION OF RESEARCH SITES/DISTRICTS

The study was conducted at two sites: Nairobi and Kitui counties. In Nairobi the participants were from Njiru, Kasarani, Dagoreti and Langata sub-counties; in Kitui they were from the South (in Mutomo), Central and West sub-counties. Nairobi and Kitui were chosen because they represent urban and rural contexts, respectively, because of the existence of CUs and also because LVCT was providing health services in the two locations.

Figure 5: Map of Kenya Showing Nairobi and Kitui Counties



4.4 SAMPLING, PARTICIPANT SELECTION

Purposive sampling methods were used. Inclusion criteria for participants factored in a variety of aspects.

CTC providers sampled included CHEWs, lay HBTC counsellors and CHWs. CHEWs and CHWs had to be part of a CU, whereas the lay counsellors were selected from LVCT employees who had offered services in the study areas. Gender and the level of experience informed selection to ensure the diversity of respondents. The CTC providers included worked in different CUs in each of the sub-counties.

Health professionals were selected on the basis of their knowledge of the CHS and/or responsibility for policy developments. This category included DHMTs (decision-makers in health at sub-county level), health facility in-charges (in charge of link facilities) and policymakers at national level.

HBTC clients were recruited in areas where HBTC services were offered and comprised users and non-users, while the rest of the community members were selected for focus group discussions (FGDs) in areas where general CTC services were offered. Variations in gender, social, economic, cultural and geographical background were factored in the selection of community members (including HBTC clients).

Characteristics of Study Participants

Characteristics of health providers				
Type of provider	Number of interviews			Average duration in the CHS (years)
	Kitui	Nairobi	National level	
Policymakers	N.A.	N.A.	4 IDIs	5
DHMT members	3 IDIs	4 IDIs	N.A.	4
Facility in-charges	2 IDIs	2 IDIs	N.A.	3
CHEWs	8 IDIs	8 IDIs	N.A.	2
HBTC counsellors	12 SSQs	13 SSQs	N.A.	3 (HBTC service provision)

Characteristics of community members and CHWs							
County	Number of interviews	Female	Male	Education level			
				None	Primary	Secondary	Tertiary
Kitui HBTC clients	5 IDIs	4	1	0	5	0	0
Nairobi HBTC clients	5 IDIs	5	0	1	1	2	1
Kitui community members	2 FGDs	12	10	0	12	10	0
Nairobi community members	2 FGDs	15	5	0	10	7	3
Kitui CHWs	3 FGDs	25	11	0	19	15	2
Nairobi CHWs	3 FGDs	24	12	0	10	18	8

Note: IDI = in-depth interview; SSQ = semi-structured questionnaire; FGD = focus group discussion

4.5 DATA COLLECTION INSTRUMENTS AND TRAINING

Data were collected using FGD guides, semi-structured interview (SSI) guides and semi-structured questionnaires. FGD topic guides were tailored to identify attitudes and practices which influence the performance of CTC programmes. SSI guides contained questions which were used to obtain perceptions, critical reflections and insights that might not have been shared in FGDs. The HBTC counsellors received their questions online through a semi-structured questionnaire via Survey Monkey. The questions asked were geared towards gaining information about their practices and experiences in HBTC. The counsellors gave their verbal consent before the questionnaire was sent to them via email, although they also provided written consent before participating.

Topic guides were adapted to the context from generic inter-country topic guides and were translated into Kiswahili prior to use. The tools were piloted before actual data collection.

The data collection team undertook three days of training on the study protocol, FGD facilitation and SSI technique, including interviewing, open questioning and probing under the leadership of a competent Research Officer. The data collection team carried out a field trial and role plays to mimic the various settings likely to occur.

4.6 DATA COLLECTION PROCESS, DATA PROCESSING AND DATA ANALYSIS

Interviews and FGDs were recorded, transcribed and translated into English where applicable. No personal identifiers of respondents were recorded, and all data were securely kept in a locked cupboard or in a computer that could only be accessed by the lead researchers.

All data transcripts and online questionnaires were uploaded into Nvivo (electronic qualitative data management and analysis software) version 10 after development of a coding framework. A data analysis workshop facilitated by Korrie de Koning (KIT) and

Miriam Taegtmeier (LSTM) was held, where the study team shared experiences from the data collection exercise, to enable the participants to have a joint understanding of the process. The coding framework was developed based on reading the transcripts and workshop discussions emerging from issues explored in the interviews and FGDs, and linked to the objectives and the REACHOUT analytical framework. All transcripts were subsequently coded using the agreed coding framework (double coding where appropriate) in Nvivo. Further narrative writing for each theme and sub-theme was based on the development of queries from coded transcripts and applied in the writing of narratives and development of matrices to triangulate the data.

To finalize the process of data analysis, we identified patterns and connections within and between themes. This process was undertaken by a team of four researchers, with work divided among them but frequent meetings to discuss the output and give feedback. We found out which connections suggested a relationship of cause and effect, with careful identification of key variables and evidence that suggested connections. Queries were run in Nvivo to obtain similarities and differences in themes.

4.7 QUALITY ASSURANCE/TRUSTWORTHINESS

The team of data collectors was supervised by the Research Officer. The Research Officer had a Team Leader directly oversee the work done by other Research Assistants when she was not physically present on site. There were daily debriefings (by phone or face to face) to discuss field progress and challenges and prepare for upcoming appointments.

The selection of several sub-counties in each of the study sites was deliberate to accommodate divergent views. Efforts were made to avoid bias in the selection of CTC providers and their clients by choosing representative numbers for different populations — for example, by gender and CU representation. However, since participants were selected with help and guidance from the CTC supervisors, there is a possibility that some bias may have been created.

The team that collected data was different from those who carried out transcription and translation, and output was checked for consistency by listening to audio files while comparing them to written scripts. The Research Officer supervised this process. To protect the anonymity of participants, care was taken during reporting to ensure that transcripts were assigned unique codes and that the contributions could not be traced to individuals.

A second training was carried out with the guidance of experienced senior researchers from KIT and LSTM for preliminary analysis and to introduce the study team to Nvivo 10. The training was carried out as part of a data analysis workshop. The data analysis workshop included the entire study team, and they were involved in developing the coding framework, coding transcripts into Nvivo and writing narratives. The team was divided into

pairs, and each wrote first drafts of narratives for coding themes, developed queries for further analysis and gained skills in using Nvivo to code and run queries.

The preliminary study findings were presented at a DCHS Operational Research Technical Working Group meeting where the attendees validated the outcomes. The attendees of the meeting included staff from the DCHS and NGOs involved with CHWs in interventions.

4.8 STUDY LIMITATIONS

It was deemed appropriate for the study objectives to collect and present qualitative data. However, qualitative data cannot be generalized to define characteristics of the entire study population.

As the CHS is designed to meet the needs of communities with lower primary health indices, no data were collected from individuals from middle or high socio-economic settings. Also, HBTC has not been implemented countrywide, so this study was limited to only those settings where HBTC is provided.

The questionnaires were translated into Kiswahili; however, in Kitui some of the community respondents struggled to communicate in Kiswahili, which might have affected their ability to effectively provide the required information. However, the interviewers used probes and exercised patience to capture as much information as they could.

4.9 ETHICAL CLEARANCE

The study protocol was approved by the Kenya Medical Research Institute Ethics and Review Committee and the KIT Research Committee (Protocol No. S45B). Data collection did not start until after information about the study had been provided. Standardized consent forms were used to obtain permission from the study respondents.

CHAPTER 5 – QUALITATIVE RESEARCH FINDINGS

The findings are presented in the form of narratives with illustrative quotes aligned with the themes and sub-themes in the coding framework. Common findings are presented based on the analysis of issues emerging from various respondent groups, various settings and agreement in FGDs. Disagreements, contrasting findings or issues only emerging in one particular situation or from a few in-depth interviews or FGDs are indicated as such. Results are presented against the type of CTC provider interviewed — CHWs, CHEWS and HBTC providers — with some comparisons being made among them as well as the study sites (see '[Comparative Analysis](#)'). The report also attempts to link what existed in policy — as discovered from the desk review and interviews with policymakers — and what was found on the ground.

The results are presented in line with the draft conceptual framework as health system factors, intervention design factors and broad contextual factors as well as an overview of CTC providers. Facilitators and barriers to CTC service provision are presented and summarized in each sub-section.

5.1 OVERVIEW

The focus of this study was on CHEWs and CHWs as per the CHS, as well as HBTC counsellors as providers of vertical services in the community.

Characteristics of CTC providers

For each category there was a mixture of male and female CTC providers. Ages ranged from young to old, but all were over 18 years old. The CHWs were all members of the community they served, as described in the policy, while CHEWs and HBTC counsellors were employees of the government or LVCT and were not necessarily community members, though they were accepted by the community.

Tasks

CHWs identified in the study were involved in disease prevention and control at household level through health education, identification of common illnesses, referral to the link facilities and hygiene and environmental sanitation. The focus areas were maternal and child health, communicable and preventable diseases, HIV, TB and malaria. CHEWs performed the role of providing supportive supervision, assessing progress and solving CHWs' problems, while CHC members who were village elders were involved in the supervision and governance of CHWs and encouraging community participation. HBTC providers' main role was reported as HTC, linkage and referral for HIV-positive clients.

Selection and recruitment of CTC providers

CHWs were selected and recruited by community members. The CHEWs were selected and employed by the MOH, while the HBTC counsellors who participated in the study were those who were currently working or had previously worked under the LVCT HBTC programme. The selection criteria and process described in the interviews and FGDs are reported for CHWs and CHEWs separately below:

i) CHWs

The selection process for CHWs differed between villages and was carried out in a *baraza* (meeting organized by the local administrative officer: chief or sub-chief) attended by village elders, community members and representatives of link facilities and/or NGOs.

The communities followed the selection criteria for the CHWs described in the policy, including: age, ability to read and write, community residence and willingness to volunteer. The communities had additional selection criteria such as age and marital status (with one community not wanting to select young girls as CHWs), as reported by some CHWs in Kitui:

“I was selected through a baraza. The village elders, the chief, public health officers were present and gave a criterion for selection. They wanted people who were 30 and above, as they did not want young people who could get the job and leave being a CHW; they also looked for someone who could read and write and who lives in the community; they did not want a quarrelsome person, and lastly they told us that this is a non-paying job. Some refused, but I agreed to serve the community.” (KEN_FGD_KituiCentral_CHW2)

The chief and elders as representatives of the community facilitated the selection of CHWs:

“These people are selected from the village. They are selected by the chief or the assistant chief; he asks us to produce one person from every village.” (KEN_FGD_KituiWest_Community1)

In general, the community did not raise concerns regarding the transparency of the process. However, during an FGD in Nairobi a number of respondents reported that the recruitment process was not clear and that it seemed to be influenced by community leaders:

“I can’t say I know how they are selected. ...If an institution wants to recruit, they only go for a community leader who chooses one individual, then he will only bring in his dear ones. Like recently I heard that they were recruiting a few, and I was very interested being among them, but I later discovered that a list of names was forwarded...” (KEN_FGD_NBO_Langata_Community2)

ii) CHEWs

The recruitment of CHEWs was carried out in two ways: selection was made by the DHMT from existing health providers within link facilities, and in some cases adverts placed in the

local daily newspapers were followed by formal interviews carried out by the Public Service Commission. The community was not involved in selecting CHEWs, as this was perceived by health workers to be a role for the professionals in the MOH:

“...the health care workers...should be involved in choosing who should [be a CHEW]...but not the community.” (KEN_IDI_KituiMutomo_CHEW6)

A CHEW in Kitui gave an account of how the recruitment of CHEWs was carried out at the inception of the community strategy:

“When the community strategy was introduced...the District Public Health Officer who was in charge of this district by then...decided to recruit some of the public health officers and nurses to start the new strategy. So I was among the first people who were recruited to start the exercise. That was by 2009. ...We were not even asked; it was...more official. But it was not even forceful...it was a request and more so it was duty ...the community was not involved, so it was within the office.

The criteria used, it was said that the public health officers were to take the strategy to the community, and now the nurses who were by then in-charges of the link facilities...so if you are the nurse of a facility and that area has been identified to open a community unit...automatically that nurse...must become a CHEW. So there was not much choice.” (KEN_IDI_KituiMutomo_CHEW8)

The qualifications and attributes required for CHEWs were described as being a nurse, public health officer or CHEW (person holding a health-related certificate in post-secondary education) and fluent in English, Kiswahili and the local language; previous experience working as a CHW was desirable. One CHEW in Kitui described the ability to ride a motorbike as an asset. The recruitment process was detailed by some CHEWs as follows:

“...there was an advertisement in one of the daily newspapers, then I applied and later on I was called for an interview at the DC’s office. ...In the advertisement they were asking for those who have done certificate level in various fields such as records, community health, health specialists, pharmacists.” (KEN_IDI_KituiCentral_CHEW1)

5.2 FACILITATORS AND BARRIERS TO CTC PROVIDERS’ PERFORMANCE

There are a number of factors that influence CTC providers’ performance that emerged in the study. These are discussed in line with the draft framework in the sections below and summarized in the form of boxes. Several comparisons can be made between them. These were analysed comparing the two study districts — Nairobi and Kitui — and the type of provider. They are discussed in this chapter within the sections addressing the various factors and presented in a table in [Comparative analysis](#).

5.2.1 HEALTH SYSTEM FACTORS

According to the draft framework, these are factors within the health system through which CTC services are offered that influence service delivery. They include: current policies, CTC service delivery models, financing and sustainability, governance and coordination, as well as supplies and logistics.

CTC SERVICE DELIVERY

The type of services provided by CTC providers were pre-determined through standard operating procedures defined by the policy and by the tools supplied to providers.

According to the current policy, 50 CHWs were supposed to cover a CU of 1000 households by carrying out regular home visits for health education, promotion, prevention and basic curative services. The services provided are described in further detail in the role of the CTC provider; however, they were aligned with policy expectations, with the addition of vertical programme interventions such as mobilizing clients for HIV testing and Direct Observed Therapy for TB. The number of CHWs was affected by attrition, which influenced their workload: CTC providers faced with service implementation challenges were sometimes forced to prioritize their work according to the types of clients and problems faced in the community. This prioritization was also supported by a policymaker:

“...I visit 3 houses only in a week because I have so much work. For me I visit the mothers and I visit 3 households and I check if there is a problem. I visit those houses with problems; if there is a sick child, if there is a pregnant woman or a woman who has just given birth even if there is a sick man in that house, I visit and I record.”
(KEN_FGD_KituiWest_CHW1)

Availability of staff and services

Kenya generally faces a shortage of human resources in the health sector. There was a reported shortage of CUs in some communities. Some sub-counties (districts) in Kitui County reported that they did not have any CUs, with most of the units being centred in urban areas:

“There is poor distribution of the CUs: you might find the district has got only 1 CU; we have a district like Mumoni that does not have a CU at all.”
(KEN_IDI_KituiCentral_DHMT1)

The reported shortage of CTC providers was made worse by the general shortage of health professionals in facilities, which resulted in the already few CHEWs taking up duties in the facilities, hence having dual roles (see the ‘Workload’ section):

“You know I am the only CHEW, the only nurse, and closing up the facility is impossible, so it is quite a challenge.” (KEN_IDI-KituiWest_CHEW3)

Many respondents said that the coverage of services had improved with the introduction of the CHS, as the CHWs were able to reach patients that other health providers could not, thereby enabling access to these services:

“Also, when I see the health status of the community improving I feel good because those people whom I cannot reach, they are reached by the CHWs. Also many of the small ailments like diarrhoea don’t reach the hospitals; they are dealt with at the community level.” (KEN_IDI-KituiWest_CHEW5)

The frequency of household visits by the CHWs varied between households, often as a result of workload, transport and distance. CHWs were unable to complete all the planned visits in a month, and made visits to households without ‘priority issues’ only every six months. CHW training and the availability of supplies and equipment also affected the frequency of the visits.

Community respondents gave mixed descriptions of the coverage of CHW household visits, with some communities reporting that CHWs visited every household, while others reported that some households do not receive any CHW visits. One respondent stated that CHWs should visit all households, rather than just ‘major houses’:

“I have seen and visited, but there is a problem because they visit according to the houses they know, and there are some who have never gone to some houses.” (KEN_FGD_NBO_Langata_community2)

Community members felt that CHWs only visited households where someone with HIV was living, and they felt that they should visit other households as well:

“It is good to be visited frequently, but it is like the CHWS only concentrate on the HIV- and TB-affected patients mostly...” (KEN_FGD_NBO_Langata_Community2)

Some respondents felt that young people, men, deaf people, people with disabilities or people who use drugs do not receive adequate services from the CHWs:

“Okay I know that there are some groups that (CHWs) are not able to reach like the deaf; they don’t have the mechanism, like how they are going to communicate with them. Maybe the other group they are not able to reach are people who are abusing drugs because this is a community that lives in a different world and they are feared in the community.” (KEN_IDI_KituiCentral_DHMT1)

Some types of services were not available to community members in their localities, while a lack of public facilities resulted in a high cost of health services. One CHW was concerned that they had to refer their clients to private facilities where their clients found it difficult to pay for services:

“...the hospitals that are present are private, and as I earlier told you, we as CHWs contribute to pay the medical bills of our community members. I would like them to

improve on the issue of taking a patient to hospital and by having a public health facility in my community.” (KEN_FGD_NBO_Kasarani_CHW1)

Insecurity made it difficult for CTC providers to visit community members. It was reported that some areas were insecure and that this made it difficult for CHWs and their supervisors to reach all community members:

“The only problem we get, just like Community Health Workers...unless we go with some security we are not able to reach some places.” (KEN_IDI_KituiMutomo_DHMT3)

HBTC service provision by CTC providers

Due to the experience of and appreciation of door-to-door health services being implemented in their communities, the community felt the need for HIV testing to be made available to them at home. According to some respondents, HBCT was necessary and would enhance access to the service:

“And how do you find the idea of home-based counselling and testing?”

“It’s a good idea and should be implemented here and will really help, as the men will be tested when they are found in the homesteads.” (KEN_FGD_KituiMutomo_Community2)

“Now, what is your opinion on the idea of training the Community Health Workers to offers the HBTC services?”

“Oh my goodness. I don’t even have an answer; for that it is late. It ought to have come yesterday. I completely agree. All of them should be trained to do that.” (KEN_IDI-KituiCentral_CHEW2)

Confidentiality and HBTC

Stigma existed in both study contexts and was indicated as a challenge to provision and uptake of HBTC and support groups for people living with HIV, although one HBTC counsellor felt that with information about disclosure and drug adherence things were improving:

“At first it was challenging with clients with stigma, but after giving the information needed and explaining the importance of disclosure and drug adherence, the response was good.” (HBTC survey)

Stigma influenced the participants’ opinions on volunteer CTC providers’ involvement in HIV service delivery; more so where CHWs were perceived to lack confidentiality. Most of the community members were of the opinion that CHWs could provide HIV services only if the issue of confidentiality was addressed, although some had concerns that even after training some CHWs could not maintain confidentiality:

“Let’s hear what (name withheld) has to say about the training of the CHWs to undertake the testing and counselling of people from their homes about HIV.”

“I could say that there are both advantages and disadvantages. Because that CHW is like my neighbour there at home, he might cross with me and then go round giving false information, and that can be a disadvantage to me. ...They should be trained to ensure confidentiality. They can visit us, give us counselling and test us. If we are

found to have the virus, they advise us on how to be assisted. That one I can agree. But as I agree, there must be some precautions on how they will be trained...”
(KEN_FGD_KituiWest_Community1)

There were mixed opinions on the confidentiality of the CHWs, with some clients feeling free to share personal information, while others were not comfortable. In general, confidentiality was cited as a concern more frequently in Nairobi than Kitui (see ‘[Comparative Analysis](#)’):

“I believe they keep the information confidential because even if they find out that you have a certain disease, they keep it to themselves; they don’t go telling people about it.” (KEN_FGD_KituiWest_Community1)

Some interviewees felt that HIV testing should not be the remit of CHWs, but rather of CHEWs, as these were not neighbours (considered more likely to be able to keep secrets) and had a higher educational level.

The need for additional training for CHWs if they are to be involved in HBTC was, however, identified:

“We have even trained our Community Health Workers in HIV-related issues, and they know what is expected of them when it comes to referral and linkages, when it comes to even follow-up because they follow up these clients in the community, when we have missed appointments...I think Community Health Workers need a lot of training when it comes to home-based counselling and testing so that they can assist the team that does the counselling and testing.”
(KEN_IDI_NBO_Dagoreti_FacilityManager2)

General HIV service provision

The CHS guidelines did not give much emphasis to HIV/AIDS service provision. Our study findings showed that the main role for the CHW in HIV/AIDS services was to provide health education and refer community members to the facility for additional or follow-up services where necessary.

According to some CHWs in both Kitui and Nairobi, the CHWs encouraged their clients to adhere to treatment through regular home visits:

“...they always go round visiting patients. They attend to them. Every morning they should come in to check the patient’s progress, and if he or she has been taking drugs on time, they check whether he or she is clean. They also clean the house...”
(KEN_FGD_NBO_Langata_Community2)

A community member from Kitui described how the CHWs offered health education on HIV prevention to couples:

“They [CHWs] usually visit us at home, and they tell us how we can protect ourselves from HIV. And if you know that you have HIV, if you have a wife and you are living together, you can use condoms.” (KEN_FGD_KituiWest_Community1)

According to some CHWs and community members, CHWs educated the community on PMTCT and the need to deliver in a health facility. Some CHW supervisors and community

members reported that home-based care for HIV patients was offered by CHWs, who also gave information to caregivers on how to take care of their ill relative at home and encouraged HIV-positive clients to join support groups.

HBTC counsellors reported their role as providing HTC in the households and linkage for the clients who test positive. Linkage for clients included support groups and health facilities for antiretroviral therapy. The clients gave their consent before their details were given to a CHW for follow-up to enhance uptake of care:

“Clients who test HIV-positive are linked to Community Health Workers with a mandate to ensure that they access care...” (HBTC survey)

In Kitui the CHW supervisors and facility manager indicated that some CHWs were not involved in tracing defaulters. There were other community-based providers; peer mothers and peer educators employed by partners offered those services. Some supervisors felt that the training received by CHWs was not sufficient for tracing defaulters. In Nairobi, however, CHWs were involved in tracing defaulters (see [‘Comparative Analysis’](#)). The health facility provided a list of clients such as PMTCT defaulters to the CHEW for follow-up.

Effect of transport and distance on access and referral

The community members had difficulty accessing distant link health facilities, and a lack of money for transport further complicated the situation — for example, pregnant women would deliver on the way to the health facility. Some link facilities lacked services required by community members.

In some instances, the presence of CTC providers improved community members’ access to the referral facilities, as the CTC providers tried to organize a vehicle for those unable to walk to the health facility. Sufficient availability of adequate transportation for emergencies was, however reported to be a challenge (see ‘Referral’ in the ‘Intervention Design Factors’ section):

“We have one vehicle for the whole Mutomo district. It’s not practical for all of us to use it because the area is very wide. Most of us are not able to take the sick to hospital.” (KEN_FGD_KituiMutomo_CHW3)

“These CHWs should have vehicles because our place is so far from the hospital. When the expecting mother is about to deliver, it is so far from the hospital, and they end up delivering on the way to hospital.” (KEN_FGD_KituiWest_Community1)

SUPPLIES AND LOGISTICS

Logistics

CTC providers work in regions where access to health services for community members is a challenge due to poverty, poor road networks and either vast or sparsely distributed populations. The CTC providers require supplies and logistical arrangements to assist them in carrying out their duties. According to policy, CHWs and CHEWs were to be provided with

bicycles and motorbikes, respectively, to enable them to move around the community. As described above, bicycles and motorbikes were only available to some CHWs and CHEWs. The following was reported by a DHMT member:

“...though we received some bicycles for the CHWs, they are few...like say in a district like 20, out of 500 CHWs...” (KEN_IDI_KituiWest_DHMT2)

Those who lacked means of transport were forced to either walk or pay for their transportation. CHWs were sometimes given money for transport — for example, when they attended their monthly supervision meetings — but this was dependent on NGO support and was inconsistent (see the ‘Financing’ section below). Although some CHEWs received motorbikes, they were unable to fuel them, as the link facility would sometimes fail to provide this due to inadequate funds.

Supplies

CHWs were supposed to have a kit with all the equipment and supplies — including drugs, thermometers and weighing scales — they required to help them to carry out their duties during home visits. However, none of them had ever received the contents of the kit:

“... the challenge is the CHW kits. ...The kits have never been provided; we are working with partners to see if they are able to provide everything, at least some of the things, and also the DHMT level.” (KEN_IDI_KituiWest_DHMT2)

A lack of supplies was a major disincentive for CHWs and sometimes forced them to use their own funds. CTC providers also mentioned consumables for their clients such as ITNs and water treatment supplies such as chlorine that they were unable to supply, which resulted in frustration:

“...they go to the households, and the families are using untreated water. They will just advise them to boil it, without firewood. You see, firewood is not available everywhere. You know without that chlorine for them to chlorinate it’s a problem.

They meet a child who has diarrhoea who can be restored with ORS [oral rehydration salt], and ORS is not in the kit. They want to use job aids when they are teaching, but they don’t have job aids in that kit. They want to conduct growth monitoring, but they don’t have growth-monitoring equipment.” (KEN_IDI_Policymaker3)

Health System Factor Barriers to CTC Services

- Inadequate CTC providers
- Lack of suitable supplies and equipment
- Lack of financial support from the government for the CHS
- Unclear funding pattern following partner exit
- Distortion of service provision and vertical programming due to partner priorities
- Lack of salary for CTC providers

PROGRAMME SUSTAINABILITY

In this section we cover financing of the CHS, the role of the government and NGOs/partners and their influence on sustainability.

According to the policymakers, this was happening partly because financing of the programme had not been well defined in policy and due to the national government's prioritization of curative over preventive health:

"You see, initially when this strategy was developed, it did not talk about how funding would be done. Funding is a main issue, and we have been trying to cope by strongly mobilizing our partners who have really helped us a lot."
(KEN_IDI_Policymaker3)

Government financing was mainly for recruiting CHEWs and procuring bicycles and tools. NGOs financed training, supplies and logistics, incentives and the development of M&E and other systems. However, due to poor coordination, NGOs focused on particular areas and vertical programmes, which sometimes resulted in duplication and a divisive effect (see the 'NGO' section below). The challenge of sustainability was instrumental in informing the ongoing review of the strategy.

Health facilities provided additional funding for logistics through cost-sharing funds — for example, fuelling and other site-specific activities such as Community-Led Total Sanitation (CLTS). However, there was competition for funds from other activities, which resulted in inadequate availability of fuel for community activities:

"...you know, there are so many projects within even the department. We have things like CLTS which is there, community sanitation. There are a number of projects which are actually done at the community level, but the issue of the funding is a problem. You find fuel is finished even before you are able to carry out some activities."
(KEN_IDI_KituiWest_DHMT2)

According to a DHMT member, the funding burden on cost-sharing funds has increased due to the current status of devolution in the country, which has resulted in increased funding responsibilities for counties (see 'Devolution' in the 'National Structures and Governance' section below).

Attrition has been identified as a consequence of a lack of sustainable financing and a dependence on voluntarism. It was reported that CHWs found it difficult to work without pay (see 'Incentives' in the 'Human Resources-Related Factors' section). The policy recommendation that the CHWs should receive a monthly stipend of Ksh2000 (US\$25) was not available to all CHWs either completely or regularly. Some CHWs quit when they realized there was no payment for their services:

"...when we were trained many people thought there would be payment, and after some years with no payments they dropped out..." (KEN_FGD_NBO_Njiru_CHW2)

Income-generating activities received from NGOs were identified as potential financial incentives and motivation for CHWs. In Kitui various income-generating activities for CHWs including greenhouse farming and keeping goats were seen as important because they motivated CHWs by offering them a steady source of income:

“...the defaulter rate [number of members failing to participate in the group] is very low because they feel now we are part and parcel of this; we have a project we are running together. So the way forward for me, I would say, is to empower these people to be self-sustaining. Yeah, they feel there is a project they are doing for themselves, rather than paying them a monthly allowance.”
(KEN_IDI_KituiWest_DHMT2)

National support and the role of NGOs/FBOs

As shown in this report, the government supports CHS programmes by developing policy guidelines and providing financing, training, supplies, logistics and supervision. However, a range of respondents felt that the government was unable to support the CHS without additional support from other partners such as NGOs:

“...the government is not able to support it. Most of the time it is supported through the partners.” (KEN_IDI_KituiCentral_DHMT1)

NGOs/FBOs provided support in various ways, including general funding, working with government and other partners in establishing income-generating activities, training, providing supplies and logistics including stationery, reporting tools, incentives and kit, lunch and transport allowances for CHWs, fuel for CHEWs to conduct supervision, and monthly allowances for CHWs. In some instances the supporting NGO also provided medical supplies, such as contraceptives.

“...like now APHIA plus, the facility they support they are able to give them bags, they are able to give them gumboots, they are able to provide them with umbrellas and t-shirts — that’s a motivator. Then when they have monthly meetings with the ones who are doing reproductive health they have a partner supporting them for lunch and transport...” (KEN_IDI_NBO_Dagoreti_DHMT3)

“...APHIA plus have really helped us by giving out the monthly stipend to the Community Health Workers. That has also made the Community Health Workers see that we care about them or something like that...” (KEN_IDI-NBO_Langata_CHEW4)

“...now those ten persons have family planning pills that were given to us by an institution called Tupange.” (KEN_FGD-NBO-Langata_CHW3)

Challenges with NGO/FBO support

NGO support was seen as taking a top-down approach informed by the NGO’s interests or preferences, regardless of the community’s needs:

“The partners usually come from the national office — I mean Nairobi headquarters. They are sent to areas where there is need; that’s how.”
(KEN_IDI_KituiWest_DHMT2)

Vertical programming resulted in the unequal distribution of CUs and in distortions in the services available, with many NGO programmes focusing on HIV services and not always aligned to government policy or coordinated by the government:

“The poor distribution goes through...our partnership with our stakeholders. They facilitate the formation of the CUs, and the majority of our stakeholders do not want to go far, including your LVCT; their CU is here in town. We are saying ‘who needs CU activities — is it a township here or would it be Malalani, where mothers are dying due to the inaccessibility of facilities?’” (KEN_IDI_KituiCentral_DHMT1)

“See you are like the Liverpool people, and we also have APHIA plus, we have World Vision. We have many other partners who are offering different services in the community and at their own level. Like you, I know you do community testing and counselling. Yeah, there are others who are supporting those who are doing home-based care, those who are doing the follow-up of the patients and by maybe providing them with home-based care kits...” (KEN_IDI_NBO_Njiru_DHMT1)

The perception that the government is unable to fund the CHS generates concern and anxiety among the respondents as to who will provide support once NGO programmes end. They identified a need for the government to take responsibility for providing support once the development partners pull out:

“APHIA plus is leaving in the next 1.5 years. Whom will we remain with?”
(KEN_FGD_KituiCentral_CHW2)

“It is 2 years and then they [World Vision] go. So when they are done we are asking the government to come in and take over.” (KEN_FGD_KituiWest_CHW1)

In some areas, the DHMTs had started to put in place plans such as income-generating activities to cushion the withdrawal of development partners:

“...we have been getting a lot of support from the partners, when they come at the end of the month...like when having monthly meetings they are given transport of around 400 shillings. ...We have been trying to see how we are going to make sure that despite the fact that we will not be having this 400 shillings, still they move on, so they have been starting some activities that is generating some income...”
(KEN_IDI_KituiWest_DHMT2)

One CHEW also perceived the involvement of NGOs as increasing their workload, with different partners having different reporting requirements:

“...you may find that 1 CHEW’s different partners have got different health services, and they expect you by the end of the month to look at all these different reports and submit them.” (KEN_IDI_NBO_Langata_CHEW3)

NATIONAL STRUCTURES AND GOVERNANCE

CHS policy and programme

There are plans to change the current CHS programme which has 50 CHWs working under one CHEW to 10 CHWs working with five CHEWs in a unit (see the ‘Introduction’ section):

“We are envisaging recruiting CHEWS every year so that by 2017, we are able to have 25,000 CHEWs, which will be 5:5000 per Community Unit, and then they can be assisted by two community volunteers.” (KEN_IDI_Policymaker2)

Concerns about sustainability and workload, costs and weaknesses in the current system were the main negative drivers for change described, while the main positive drivers for change were the desire for a more integrated and holistic approach.

The current workload was seen as unsustainable with a volunteer workforce, and the integration of additional tasks would require additional skills and training. Policymakers expressed a willingness to learn from current mistakes:

“I think that it is very important that the lessons and the challenges should inform the decision to revise the community strategy so that it can work better. And the division is currently working on that....so that we can come up with something that can work well for us and we can remove what we feel did not work well for us.” (KEN_IDI_Policymaker2)

CHEWs were often described as not taking on an adequate role at community level, seeing themselves as supervisory only, although many CHEWs indicated heavy workloads (see ‘Workload’ in the ‘Human Resources-Related Intervention Design Factors’ section). CHWs mentioned that they were only collecting their data but not doing anything else. A policymaker saw the current CHEW system as weak:

“They [CHEWs] are not seeing themselves as the community health providers, but they are seeing the Community Health Workers as the providers and themselves as the supervisors, and these are the things we want changed.” (KEN_IDI_Policymaker1)

Recommendations for policy change

How this transition will be managed at community level remains unclear. The need for change, awareness of the change and uncertainty about how it will work out were all reflected in the interviews with policymakers, DHMT members, facility managers and, to a certain extent, CHEWs. Awareness of the change was low at the community level, with many CTC providers and some of their managers making recommendations for things that were in the current policy but were to be changed in the new programme (such as

integrating first aid into CHW tasks). The community, which had only recently embraced the strategy, would now face new changes again. Community engagement in the development of the new policy is required.

The expectations from health system and community perspectives were of more services at community level, and there was a recognition of the benefit of integrated approaches among policymakers, DHMT and CHEW respondents:

“So that when we are attending to this client, we attend to all issues of nutrition, home-based care issues, issues of TB, like that, so that when I come I come fully, not I come then another person comes for TB then another person comes. I just want to go and do everything...because these people in the community need care, they need people, who can follow them up; you know some of them are very difficult, so we need the integration.” (KEN_IDI_NBO_Dagoreti_CHEW8)

A number of policymakers, DHMT members and facility managers felt that additional tasks could be undertaken at community level, but opinions varied on whether CHEWs or CHWs should conduct them. While community members and CHWs were ambitious about what could be achieved, with some mentioning assisted deliveries, DHMT members and policymakers were more conservative in their feelings on this subject:

“Personally, I think that the task that they are undertaking currently is within their mandate and I don’t see them doing anything that they are not supposed to be doing.” (KEN_IDI_Policymaker1)

A range of possible additional tasks included rapid testing and treatment for malaria, family planning and TB screening, among others. While there was a sense of reluctance among policymakers, discussions about integrating HBTC into the new CHS dominated the interviews from DHMT level to CHWs and community FGDs (see the ‘HIV Services’ section).

Devolution

Kenya adopted a new constitution in 2010 which has devolved governance and health services, including recruitment and remuneration of health workers, to 47 counties. The national MOH is responsible for policy formulation, with the counties carrying out planning and implementation. The effects of devolution on planning and financing were already being experienced in the counties:

“...I don’t arrange for the teachings. That one is arranged maybe from ahh, sometime it was from Embu when it was the province; this time it is the county. You know, we have to get funds.” (KEN_IDI_KituiMutomo_DHMT3)

The revision of the CHS needs to consider these changes, ensuring that the proposals are cost-effective, sustainable and can be financed by the counties. The Community Services Unit has developed an advocacy plan for the counties which needs to be implemented.

5.2.2 INTERVENTION DESIGN FACTORS

This section presents findings of facilitators and barriers to CTC service delivery due to the strategy that has been selected for implementation. They include human resources-related issues of CTC provider workload, remuneration, quality assurance and supervision, community links, referral and M&E mechanisms.

One of the common themes running through many of the intervention design factors is the difference in the depth of discussion relating to CHWs and CHEWs. The vast majority of discussion focused on CHWs, with limited discussion about CHEWs, particularly during discussions with community respondents. This is an extremely important feature of the findings, given the government’s plans to revise the CHS, which will entail reducing the role of CHWs and increase the number and community role of CHEWs. It will be vital to take into account intervention design factors relating to CHEWs when finalizing and rolling out the revised strategy, to ensure that community services are of high quality, readily available, accessible and acceptable to the target population.

INTERVENTION FOCUS

With some exceptions, such as reported earlier, there was a common consensus among respondents that interventions should focus on vulnerable populations such as those in need of maternal, newborn and child health services and those requiring health care follow-up, including those on medication. The services provided were in the area of reproductive health and family planning, pregnancy, immunization, prevention of diarrhoeal diseases, environmental sanitation and hygiene, as well as vertical programmes such as HIV. The community demanded more than the CHWs could offer, including malaria tests, supply of basic drugs, treatment of minor ailments and home deliveries. The community was also supportive of HBTC carried out by CHWs (see ‘HBTC Service Provision by CTC Providers’).

COMMUNITY ENGAGEMENT IN THE COMMUNITY HEALTH STRATEGY

Community engagement and participation

According to the CHS, the community should play a major role within its CU, making decisions on matters pertaining to its own health. This was captured through responses from a CHEW:

“Before the strategy, health was owned by the Ministry of Health, but after the strategy, health is owned by the community. ...We don’t make any decisions nowadays. ...We dialogue with the community, the CHCs and the CHWs, and then we [the CHEWs] come up with a solution, if there is a problem.” (KEN_IDI-KITUICENTRAL_CHEW2)

Communities were engaged through public forums (*barazas*) where CHW recruitment took place. Dialogue days are regular meetings held quarterly where the community members and health workers meet to discuss health issues and share feedback. These forums and

action days for joint community activities such as clean-ups were held infrequently. They were extensively described by the CHEWs, but interestingly there was no discussion about them by the community members, indicating a possible disconnect between the community and the CHEWs. The differences in discussions about community engagement by the community, CHWs and CHEWs are documented in 'Comparative Analysis'.

"This is where the community comes together and discusses the problems that they have and comes up with the solutions themselves. I don't have to go and tell them to dig a latrine. ...We discuss everything in the dialogue meeting, and they come up with a timeline for when they want every community member to have a pit latrine."
(KEN_IDI-KITUICENTRAL_CHEW2)

The community provided support in various ways including escorting CHWs or CHEWs, particularly in areas of insecurity, providing venues for meetings and supporting improved services, as reported by a CHEW and a facility manager. However, unlike other countries where communities even hosted CTC providers, the communities did not extend material support to the CHWs and CHEWs and, instead, demanded it from them (see 'Community Expectations' below).

Community capacity to claim rights

Through the CHS the community is empowered to demand their health rights based on their perceptions of the responsibilities of the CHWs and facilities. However, there was very limited discussion on this — it was mentioned by only one CHEW and no community members — indicating an area in need of strengthening:

"And even the community themselves, if they have a challenge with a particular Community Health Worker, they are able to come down and say 'we have a problem'..." (KEN_IDI_KITUIMUTOMO_CHEW6)

Community expectations

The CHWs were introduced to the community as 'community doctors', to encourage pride in the CHW and the community. The community held the CHW accountable for this title with a wide range of expectations.

Both CHW and CHEW respondents reported that there were community expectations that CHWs could not meet because they were not equipped to do so. They include providing ITNs, painkillers, water treatment, HBTC, first aid, and food for vulnerable households. In addition, one community also mentioned that it would like the CHW to provide non-health-related services such as children's rights protection.

Some CHWs mentioned that managing the community's expectations could be difficult. A sense of mistrust was created by the belief held by some community members that the CHWs were withholding what should rightfully belong to the community. One CHEW related

this to the fact that the community had been informed about what the CHWs would provide, but since the CHWs had not been provided with kits, they were unable to fulfil all the roles which the community now expected of them:

“We had a baraza before the community strategy, and we told them all those things that the Community Health Workers will be doing for them, but due to lack of equipment and finance, they see the CHWs not doing all that they should be doing. So they keep asking: ‘When will you start treating us?’ That tells you that they expect more from the CHWs.” (KEN_IDI-KituiWest_CHEW3)

The inability to meet community demands was a disincentive for the CHWs, with one CHW expressing a concern that he felt he was not helping the community because he did not have the supplies the community was requesting.

Perceptions of CTC providers

In general, communities were extremely positive about the CHWs and felt that they could depend on them:

“They have become our friends, so we don’t fear when we get a problem. You just rush to them.” (KEN_IDI_NBO_Njiru_Client1)

There were few negative comments about CHWs’ technical skills and attitudes, such as gossiping, arrogance and not performing duties well. The CHEWs and DHMT seemed to be aware of these mixed perceptions with regard to the CHWs:

“They do a good job.” (KEN_IDI_KituiCentral_Client1)

“I think there are so many things they don’t know. Maybe they were partially taught what to do. For example, if you may ask the symptoms for malaria, they have no idea. They don’t know how to give first aid, which is very important.”

(KEN_FGD_NBO_Kasarani_Community1)

The CHWs expressed the opinion that the community only had a positive perception of them:

“They look at us as people who help them a lot because if you listen to them talking they say that earlier on they were very sick and had many problems but now the outbreak of diseases is rare, now they know the importance of sleeping under treated nets and boiling drinking water and giving lots of fluids

Barriers to Access and Uptake of CTC Services

- CTC providers unable to fulfil all community expectations
- Negative perception of CTC provider
- Lack of trust in CTC provider
- No CU in place
- CTC provider discriminates which households to visit
- Limited access by young people, men, deaf clients, people with disabilities or people who use drugs
- Inadequate transport and long distances
- Rejection of CHEWs
- Limited community involvement in community services

to a child if he or she has diarrhoea.” (KEN_FGD_KituiWest_CHW1)

One CHEW described the community as being satisfied with CHWs due to the community’s involvement in recruitment.

“They are satisfied with the quality of the Community Health Workers because when we were recruiting the Community Health Workers we did it in a baraza. And we had all the community members in the baraza, and they are the ones who chose the people to work with them.” (KEN_IDI-NBO_Langata_CHEW4)

Additionally, some CHEWs described having experienced rejection from the community, which caused difficulty in reaching community members, even when accompanied by the CHW, because the CHEW is a government representative, and as a result the community felt that the CHEW’s visit was solely for the benefit of the CHEW and did not assist them or provide any information. This is a very important consideration for the ongoing review of the strategy:

“...you may have an appointment with the CHW so that today you are supposed to go and visit household no. this and this. To your surprise you may find out that by the time you reach the household, the members are not there, because the public generally do feel like any time a government representative visits, they always feel that there is something benefiting this government official and not them, so they can resist loudly by saying ‘we are not giving you the information you want’ or they can leave you there. That is usually in the urban set-up.” (KEN_IDI_NBO_Langata_CHEW3)

The community expressed gratitude for CTC providers’ work. Our study findings, however, showed that, since community members were not fully aware of the roles to be played by CHWs, they had some perceptions of them which were contrary to the norm. In some cases the community expected CHWs to carry out curative services and provide community-based distribution of contraceptives and other social work services such as post-rape counselling, although this was not included in CHW training and policy is unclear as to the role of the CHW in the provision of these services. It was also reported that the community would in some instances feel that the CHWs were benefiting from the services they provided:

“...They [the community] claim that these people are being paid and they are benefiting from this, so they are just using us for their own good. ...They were claiming that we have been given money to build the latrines, and yet we are not using the money on that.” (KEN_IDI_KituiCentral_CHEW1)

The CHW was generally regarded as a ‘doctor’ in the community; however, there was little discussion on the role of CHEWs by community respondents.

HUMAN RESOURCES-RELATED FACTORS

Participants identified a range of human resource factors which they felt affected the quality of services delivered by CTC providers: training, supportive supervision and adherence to protocol. Interpersonal skills of CTC providers were also mentioned, including humility and the ability to interact, interviewing skills, willingness to help, being understanding and ‘having a good heart’. CHWs and communities also considered being a role model a factor which affected service quality:

“A good CHW should also be a good role model. ...So you have to preach what you do yourself.” (KEN_FGD_KituiWest_CHW1)

HBTC counsellors also identified a willingness to provide client-centred services and client satisfaction as key traits.

The following is a summary of human resources-related factors that were most extensively discussed as the key facilitators of and barriers to quality service delivery by CTC providers.

Training — initial training and continuous professional development

The vast majority of discussion on training related to the initial training of CHWs, with limited discussion about CHEW training. There was no mention of continuous professional development for CHEWs or career opportunities for CHWs. For CHWs, discussions on continuous professional development centred on refresher training, which CHWs were keen to receive, although there was lack of clarity regarding whether this happens for most CHWs at present.

Initial training

The CHS states that all CHWs and CHEWs should undergo an initial standardized training. All respondent groups recognized the importance and value of initial training for the performance of CTC providers:

“...this [training] has really helped my community be healthy and free of disease.”
(KEN_FGD_KituiCentral_CHW2)

It was reported that some CTC providers had not been trained on the CHS:

“...like now having the Community Health Workers not trained, that the Community Units have been formed and the members have not been trained. You know they are just there like anybody else. It is only that they are given a name that they are in the community strategy. So training, that is a weakness because I think the support has not been there. The support is not enough for capacity-building of the CHWs and also equipping them.” (KEN_IDI_NBO_Njiru_DHMT1)

Some CHWs made suggestions regarding additional subjects on which they felt it would have been beneficial to have received training. These included HBTC, rape counselling,

disaster management, first aid (which was already included in the 2010 curriculum), care for pregnant mothers, nutrition, mental health and disabilities. Many CHEWs also felt that report writing also needed to be emphasized more strongly in the initial CHW training.

Some CHEWs felt that it was important for the training to include ‘field-specific’ training, since some new CHEWs had never previously worked at community level.

Refresher training

There seemed to be a disconnect between policy and practice as regards CHW refresher training, with one policymaker stating that there are refresher trainings for CHWs, while the CHWs stated that they had never been refreshed. There was no evidence that regular refresher trainings were carried out; the only trainings reported were those carried out by NGOs for their specific vertical programme areas.

Notable for its absence was any discussion relating to refresher training or any form of continuous professional development for CHEWs, with the exception of one policymaker who stated that it did not exist:

“Yes we do [have refresher training for CHWs] once in a while; however, the CHEWs are not really factored in the system.” (KEN_IDI_Policymaker4)

Following training, relevant tools, policies and guidelines are required for quality service delivery. One CHEW felt that having more tools would improve the CHWs’ performance:

“I think it [manuals, guidelines and pamphlets] is not enough. If we had guidelines maybe it would enhance their work.” (KEN_IDI_KituiMutomo_CHEW6)

Workload

In general, all respondents across both districts considered the workload for CHWs and CHEWs too heavy. For CHWs, one of the major factors relating to workload was the need to balance their voluntary CHW work with their own paid work or family responsibilities, as mentioned in the ‘Non-Financial Incentives’ section below:

“...the workload is big, and then they are volunteers who have children at home and they need to fend for them.” (KEN_IDI_Policymaker2)

Reasons given by CHWs in Kitui for the heavy workload included the distance they needed to travel, the lack of transport and the large number of households which needed to be visited (see ‘[Comparative Analysis](#)’).

The number of households for which each CHW was responsible varied greatly, even within rural areas: the distribution of households to CHWs was not necessarily based on the policy guidelines but on the size of the population. CHW attrition resulted in the redistribution of tasks, which increased the workload for the remaining CHWs:

“What causes the difference is if you were 2 CHWs in a village then 1 CHW decides to step down so you end up being left with many households because you have to cover his or her households. Maybe he has 20 and I have 20; if I add them together they become 40.” (KEN_FGD_KituiWest_CHW1)

A DHMT member suggested assigning each CHW fewer households and setting aside one day each week for CHW activities, as a way of managing their workload.

Many CHEWs considered themselves to be overburdened with responsibilities and workload, with CHEWs in Kitui describing how they were solely responsible for two CUs — more than the policy stipulates (see [‘Comparative Analysis’](#)).

CHEWs expressed the opinion that their dual role of providing services at the health facility and carrying out CHEW activities made the workload too heavy. This opinion was more commonly expressed for CHEWs in Kitui than in Nairobi:

“...CHEWs find a lot of challenges because they are now torn into two. They attend to the community and to the facility as well.” (KEN_IDI_KituiWest_CHEW4)

Some CHEWs expressed a lack of clarity about their workload, as they had the dual role of providing services both at health facilities and in the community. Some CHEWs did not know how best to manage their time, with one CHEW admitting that sometimes this resulted in all their time being devoted to facility work and none to community work:

“Also, things are not clear because we were employed as CHEWs but we are working in the health centre. Like myself, I am working at the lab. So, it is like we have two roles. We actually don’t know our job descriptions because we are usually there at the health facility, we do the job we studied, and we also do the CHEW work. ...I am usually very busy in the laboratory to the point that I don’t have any time for the Community Health Workers.” (KEN_IDI_KituiCentral_CHEW1)

Recommendations on how to manage CHEWs’ heavy workload included recruiting CHEWs to engage in community tasks only and recruiting enough CHEWs so that each has responsibility for no more than one CU. One policymaker described the new CHS, which seeks to increase the number of CHEWs working only in the community across the country (see the [‘National Structures and Governance’](#) section).

Motivation and incentives

The CHS policy recommends that, though voluntary, CHWs should be motivated and incentivized. Government funding for activities at community level is limited, with no official salary for CHWs and no additional regular incentives to CHEWs, who are salaried. Despite these challenges the study revealed that there were material, non-material and financial incentives that motivated CHWs and CHEWs to continue to work.

Non-material incentives

Non-material incentives included what were described as inner motivation and external recognition that encouraged CHWs and CHEWs to work.

Many CHWs stated that they took up the work due to what they described as a ‘calling’ or noble vocation. Other reasons described by a number of CHWs related to a CHW or his/her family having been helped in the past and a desire to reciprocate. Additionally, one CHW described the desire to leave behind a legacy:

“I saw that it was a calling and I accepted, and I was once helped and I want to return the favour.” (KEN_FGD_NBO_Kasarani_CHW1)

A number of CHEWs mentioned that certain CHWs were able to stay the course over time. They linked this to personality and to low expectations of material or financial rewards, describing it as strength or ‘resilience’.

The CHEWs and CHWs both stated that they felt very motivated by a sense of achievement in seeing ‘behaviour change’ shown by the increased uptake of services and adoption of new practices to promote health. CHEWs gained a lot of satisfaction from working with CHWs and communities. CHWs felt pride in being seen as ‘doctors’ and community role models:

“It motivates you. Even the households will see you and say ‘my doctor is here’. They start calling you ‘doctor’.”
(KEN_FGD_KituiWest_CHW1)

CHWs and CHEWS both felt motivated by recognition and respect from supervisors, their juniors and/or the community. Some CHEWs and CHWs viewed a lack of recognition, a poor reception from the community and a heavy workload as demotivating factors:

“What makes me feel less good about my work as a CHEW is the workload. It is

Facilitators for CTC Providers’ Performance

- Initial training for CTC providers
- Regular refresher training
- Inner motivators such as a sense of ‘calling’, sense of achievement from behaviour change, satisfaction from working with other CTC providers and the community
- Pride from being a role model and community ‘doctor’
- Recognition and respect from supervisors and the community
- Peer support
- Availability of uniform and transport
- Payment of an adequate, regular salary
- Regular supervision with the ability for supervisees to request assistance to solve problems
- Clear referral pathway and tools, including feedback
- Sufficient, easy-to-use, harmonized reporting tools
- Feedback of reporting for CTC providers and the community
- Good communication between the community and CTC providers and other health workers through formal (e.g. dialogue days) and informal (e.g. through other meetings such as church) channels
- Knowledge and availability of guidelines and tools

too much. Also there is a lack of recognition as a CHEW. You do so much work as a CHEW, but you are not recognized.” (KEN_IDI-KituiWest_CHEW5)

Teamwork and practical support from colleagues were reported as motivators for CHEWs and CHWs:

“...we have meetings as CHEWs, and we discuss our challenges and achievements. So we share a lot as CHEWs, and we solve each other’s problems.” (KEN_IDI-KituiWest_CHEW5)

CHEWs and CHWs showed exceptional commitment to their work and the desire to support others. Many described instances where they spent money from their own pockets to ensure that services were provided, reports delivered, meetings held and transport paid for:

“I have a motor bike. Sometimes there is no fuel, so you have to dig in your pocket and get fuel to go and meet the CHWs.” (KEN_IDI_KituiMutomo_CHEW7)

Material incentives

While a number of types of practical and material support are outlined in policy documents, in practice these were often missing on the ground. Most CHWs and communities were not in fact aware that these things were supposed to be part of their work package and recommended them as incentives. These included uniforms, kits, bicycles, motorbikes and fuel, among others.

A lack of transport was widely acknowledged as a limitation and a disincentive to the CHWs’ and CHEWs’ work, as many had to walk long distances to reach households. Most CHWs felt that bicycles could help them in their work. A few had received bicycles to facilitate their work, but these were a minority:

“So those with bicycles, you find they are active. Those who do not have, you find that they are challenged. So I would think if each had a bicycle, it would become a lot better.” (KEN_IDI_KituiMutomo_CHEW6)

Financial incentives

All respondents agreed that CHWs should receive some form of allowance. The official policy states that CHWs are entitled to KSh2000 (US\$25) allowance per month, but most CHWs were not aware of the policy. The results showed that the payment of this allowance was irregular and in some cases non-existent, and where it occurred, it was described as being provided from partner organizations rather than the government.

The payment of the stipend was described as a source of motivation by one CHW. However, the majority of those who received the allowance stated that it was inadequate, with a lack of consistency in terms of the amount and timeliness of payments, which was discouraging. Some CHWs were concerned that they had never received the allowance:

“We have never seen the budgeted CHW allowance of KSh2000 per month. Why?”
(KEN_FGD_NBO_Kasarani_CHW1)

In general the CHEW respondents were sympathetic and concerned by the fact that CHWs did not receive a salary. Both CHEWs and DHMT members drew links between the lack of salary and the attrition or loss of motivation among CHWs, stating that although CHWs were clear about the voluntary nature of their role, many hoped they would progress to paid employment or receive money in the future.

A range of respondents described the difficulties in holding CHWs accountable for their work when they are volunteers. In some instances, payment of allowances was dependent on meeting 80% of targets, which may result in some CHWs ‘fixing’ the data they report to gain the allowance. This has informed review of the CHS:

“Because CHEWs are paid by the government you can hold them to account, rather than the volunteer who can leave an important job half way and you cannot hold him/her accountable because they were volunteering.” (KEN_IDI_PolicyMaker2)

In general the CHEW and DHMT respondents felt that the salary for CHEWs was inadequate, with one CHEW making the link between salary and good performance:

“The amount that I am receiving cannot sustain me because you can only perform well if you are comfortable. For you to be comfortable you have to have all the basic needs, and everything goes with money.” (KEN_IDI_NBO_Langata_CHEW3)

Supervision and quality assurance

The CHS recommends a hierarchy of supervision, with CHWs being supervised by CHEWs and CHEWs being supervised by district or facility managers. No clear supervision or quality assurance guidelines were identified for the strategy. On the other hand, HBTC had a well-defined supervision and quality assurance guideline and mechanism which ensures that HBTC providers are supervised and quality is tested regularly.

There are a wide range of persons described as conducting supervision for CHWs, including CHCs, CHEWs, chiefs and informal supervision by other CHWs. Unfortunately, this resulted in a lack of clarity in the supervision roles — for example, any or all members of the CHC, community leaders and CHEWs would be involved in problem solving if a client complained about a CHW’s performance. The significance of the supervisory role played by these different supervisors varied between respondents, with a greater role for the CHC described in Kitui than Nairobi and CHW leaders in Nairobi which were not described in Kitui (see [‘Comparative Analysis’](#)).

Facility managers and DHMT members also described supervising CHEWs and CHWs. However, this was not described frequently by other respondents, and one CHEW expressed

the opinion that the DHMT should conduct supervision along with the CHEW as this would provide the CHEWs with learning opportunities. Significantly, how CHEWs are supervised was not widely discussed or very clear:

“I think it should be from the higher level downwards because we also want to learn something, so I think one of the coordinators should come and do the supervision with us.” (KEN_IDI_KituiCentral_CHEW1)

Supervision methods

CHEW respondents described a range of ways to supervise CHWs. The most commonly described methods for supervision of CHWs by CHEWs were through monthly meetings and household visits and by reviewing reports. Some CHEWs also described using community dialogue and action days as an opportunity to observe CHWs giving health talks.

Many CHEWs described assisting a CHW with problem solving and using this as a method for supervision, another described assessing client satisfaction during household visits, others used the monthly report to act as a guide for supervision, while others described observing the services and giving feedback to the CHW. One CHEW also described using supervision as a time to act as an arbitrator between the community and the CHW if there is a poor relationship between them:

“I go visit the households with them. Sometimes I just call a CHW, and I tell them I just want to visit your household, then we go visit those people in those households, to see if they are satisfied with the services the CHWs are providing, to see if they are satisfied with the way they are treated at the facility level. That is how I supervise them.” (KEN_IDI_NBO_Dagoreti_CHEW8)

The CHC role involves problem solving and acting as intermediaries between the CHW and CHEW, if required. In some cases this supervision was described as occurring through monthly meetings. For Kitui the CHC also played a significant role in conducting supervision of the CHW, with the CHC required to provide a report to the CHEW on the CHW’s progress:

“...CHC also has to report to the CHEW on our progress, and when we have the baraza the community is asked if indeed we visit with them.” (KEN_FGD_KituiCentral_CHW2)

There were no standard tools, guidelines or standard operating procedures described as those used by CHEWs, DHMTs or CHC members for supervision of CHWs.

There were three main forms of supervision for the HBTC counsellors, including supportive monthly group supervision meetings, direct observation of sessions conducted twice per year and administrative supervision. One researcher had the opportunity to observe a supportive supervision session where counsellors can share difficult experiences and receive peer support and advice. The HBTC supervisor had undergone supervision training and

referred to the National Quality Management Guidance for HTC services as the standard for HBTC provider supervision and quality assurance. This model should be replicated in the community settings and considered during the review of the CHS.

Perceived impact of supervision

A CHEW from Kitui stated that supervision allows the identification of training gaps and the CHW’s strengths and weaknesses, while another CHEW felt that supervision was having a positive impact on the performance of the CHWs:

“I can say that supervision helps a lot because at the end of the day we are able to see the impact that has been created by the Community Health Workers and ourselves as the CHEWs, and we are able to fill in the gaps if there were any and then we are able to move forward.” (KEN_IDI_NBO_Njiru_CHEW2)

Barriers to CTC Providers’ Performance

- CTC providers not trained
- Lack of regular refresher training
- Lack of recognition by the community or supervisors
- Lack of motivation due to the community’s failure to adopt the healthy behaviours promoted
- Lack of transport
- Lack of transparency for resource allocation
- Lack of regular, adequate allowances
- Lack of quality control guidelines
- Heavy workload with conflicting priorities (hospital/paid work versus community work)
- Poor services at referral facility
- Lack of easy-to-use, harmonized reporting tools
- Lack of allowances for communication
- Unclear job descriptions

Barriers to supervision

There is no quality control guideline in existence to aid the evaluation of CTC providers. A heavy workload and lack of transport (either a lack of motorbikes or a lack of fuel for them) were described as barriers by CHEWs to being able to carry out regular supervision through household visits.

Additionally, when CHEWs organize supervision meetings, sometimes CHWs do not attend due to a lack of financial incentives, and in some cases older CHWs refuse to listen to feedback from younger CHEWs.

These are all important considerations during the review of the CHS.

Referral processes

Referral was well organized in CTC providers’ service provision. It was documented through the use of referral forms and registers at link facilities. Community members were referred to the nearest health facilities and not necessarily to MOH dispensary facilities, as some dispensaries were far away, which is contrary to policy guidelines, though this was noted as a barrier to access (see ‘Access’ in the ‘Intervention Design Factors’ section).

CHWs received feedback on clients they referred to health facilities, and this motivated them in their work. Clients also appreciated referrals by CHWs, as sometimes it resulted in preferential treatment at the facility.

The HBTC counsellors referred all clients who test positive for HIV and who consent to the referral to a CHW, who then refers them to a link facility. HBTC counsellors also reported that the CHW or HBTC counsellor follows up with these clients, either by telephone or by examining the register at the link facility or by following up in person if the client did not have a phone and lived in the same village, to check whether the client accessed care following referral. Follow-up was also carried out for those clients who were receiving treatment, to ensure that they adhered to treatment and were well taken care of at home (this is described further in the ‘HIV’ section).

Some CHWs described referral and follow-up for non-health services, such as referrals to the police of women who had been raped.

Barriers to effective referral

One of the main challenges for referral relates to the availability of transport (see the ‘Transport and Distance Access’ section). In Nairobi some CHWs also reported that security was a challenge in the event that they needed to refer a patient at night (see ‘Insecurity’ in the ‘Broad Contextual Factors’ section and [‘Comparative Analysis’](#)).

The CHWs also described how referring the patient was sometimes viewed as the responsibility of the CHW, who was forced to pay for the transport. DHMT members and facility managers described the challenge of a lack of fuel available for transport forcing patients or their relatives to pay for the fuel in the event of an emergency.

There were reports that a lack of availability of services in link facilities acted as a barrier to referral:

“Now if you refer him or her there [to a link facility], the services that he or she will get are very minor, and you will find that they say even if you sent me to that facility there are no drugs. For example, I got one for hypertension, then getting there he told me that he is in pain and there is nothing they do, so it is better I go to private than these government facilities.” (KEN_FGD-NBO-Langata_CHW3)

Perceived sub-standard care following referral — a disincentive for CHWs — resulted, therefore, in some CHWs referring the community members to a chemist or private health facility rather than the government facility. This was made worse by a lack of facilities to refer clients at night, as most of the link facilities were open only during the day and any night referrals were sent to the district hospital, which was much further.

Reporting and monitoring and evaluation

Reporting was a major component of community services. Well-defined national reporting tools existed for CHWs, CHEWs and HBTC providers. CHWs' tools included a CHW register completed every six months, a CHW service log book completed monthly and a referral book. HBTC providers documented their work using data books and referrals, which the counsellors completed on a daily basis and which were reviewed weekly by their supervisors:

"Data forms, copy of referral forms, reports, screening tools, clients cards, referral follow-up register." (HBTC survey)

Barriers to effective reporting

Though the tools were readily available, occasional stock-outs were reported, and the providers were forced to improvise or use their own funds to buy them:

"...sometimes we have the data collection tools out of stock, and they end up getting disappointed a lot and end up using their own money." (KEN_IDI_Policymaker3)

Some CHWs state that the forms can be difficult for those with limited education to understand, which may result in the falsification of data. This was also described by a CHEW. Two of the researchers observed a CHW's difficulty in understanding the language of the form during a field visit to Kibera. While observing a CHW complete the monthly household report, the CHW had to ask the researcher to read the form (although he claimed this was due to poor light within the house). The form was written in English and used English acronyms and medical jargon, some of which the CHW could not explain:

"What about the data that you collect, could you say that there is an issue with that?"

"Yes, the language. They use a tool called 514, and the language that is there is not easy for them. So sometimes they give me wrong data." (KEN_IDI-KituiCentral_CHEW2)

"I get quality data but not from all CHWs because most of them might go and cook the data so it will be tampered with, and when I'm compiling the report something will go amiss or maybe it's just a few who have reported so the data won't go well." (KEN_IDI-NBO_Kasarani_CHEW6)

HBTC providers were trained and refreshed on using the data tools and reported no difficulty in understanding or utilizing them.

Different partners had developed a range of tools and indicators, which could create confusion, particularly when the CHEW and CHW tools are not harmonized and collect different indicators:

“Another comment that I forgot: the issue of harmonization of the tools the CHWs are using because the tool they use is not the same. I told you I use the CHEW summary, but the indicators on the CHEW summaries are not the same indicators the CHWs are using, so sometimes it’s very difficult to compile.”
(KEN_IDI_NBO_Dagoreti_CHEW8)

Monitoring and evaluation feedback loops

The CHS policy describes feedback on data as one of its core components. It describes the importance of submitting reports and receiving or giving feedback to the community on their health indicators.

Almost all HTC counsellors reported receiving feedback from their supervisor either from one-to-one sessions and/or through meetings. However for CHWs and CHEWs, there were mixed responses from respondents with many claiming that they do not receive feedback:

“Do you get feedback about the result of your work?”

“No, no, no. We don’t get feedback, but...we give feedback to the Community Health Workers when we compile our report. When we meet in the...monthly meetings we give them feedback of what we compiled the previous month. But when we bring it here to the district headquarters, there is no feedback.”
(KEN_IDI_KituiMutomo_CHEW7)

The chalk board (the visual display of the CU’s health indicators as collected by CHWs placed in the link facility) was regularly discussed by CHEWs as a means of facilitating feedback with the community. It was used by the CHEW to share the data reported with the CU, including CHWs, CHCs and with the community, which can then result in the community and health workers identifying negative results and trying to find solutions:

“Whatever we have listed on the chalk board is an indicator on the progress that we are making and what we can improve on, and we can gauge our delivery of services. And for the areas where we have performed dismally, we sit down as a unit and check the gaps that might have caused the dismal performance.”
(KEN_IDI_NBO_Njiru_CHEW2)

Communication and coordination

In general the majority of respondents considered communication to be good, with direct communication between CHWs, CHEWs and CHCs and between CHEWs and facilities or DHMTs. In most instances described, DHMTs reached the CHWs through the CHEWs. Most respondents reported that the CHWs provided a direct means of communicating with the community.

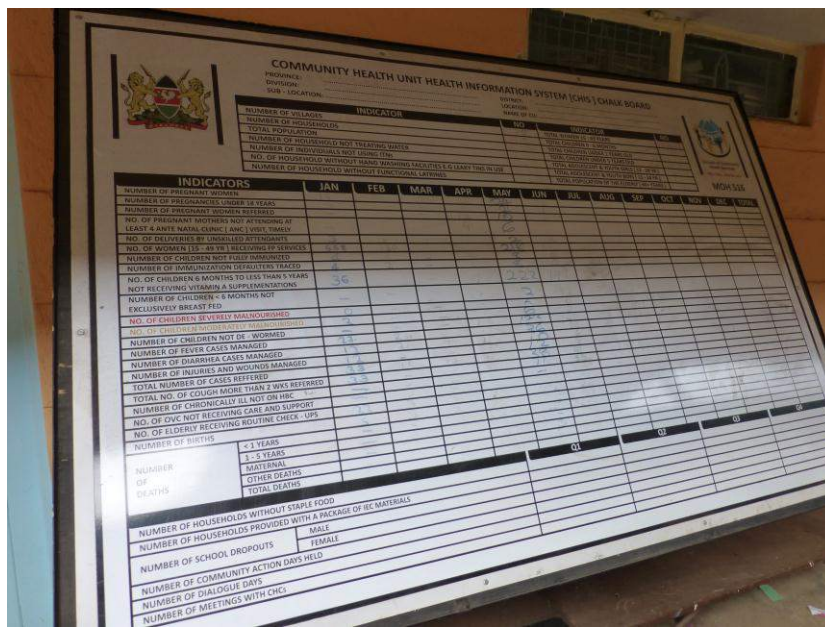
Communication with the community

CHWs and community members described a range of ways in which they communicated, including household visits, informal meetings (e.g. walking along the road), community gatherings (e.g. church), women’s groups, chief’s *barazas* and school meetings:

“Yes, they ask when you are having a group meeting, then they visit you and they speak to you.” (KEN_FGD_KituiWest_Community1)

There was also mention of the use of drama performances for health education. In addition, CHEWs described dialogue days and chalk boards as an important way to communicate with the community, although this was not described by the community members themselves. One CHW from Nairobi mentioned a range of different ways for communicating, including posters, megaphones and Facebook.

Figure 6: Chalk Board Used to Communicate Health Data



Communication between CTC providers and other health workers

The community and DHMT members felt that CTC providers did well in conveying important information to higher authorities, particularly in the event of an emergency. However, this was described in Kitui only and not in Nairobi:

“Another way is the passing of information. When there is an outbreak of a disease, they [CHWs] pass the information to the appropriate authorities. They pass on the information, and we get services urgently. So when they are there, apart from what has been said here, there are those services that they bring us.” (KEN_FGD_KituiWest_Community1)

A number of other forms of communication were described, including CHWs calling CHEWs for guidance, use of referral notes as a form of communication between the CHW and the facility staff and the use of monthly meetings as a way to share updates between the CHEW and the DHMT.

Challenges to effective communication

It was reported that some community members did not attend the dialogue days, which hampered communication and coordination.

In Nairobi, a DHMT member described poor communication between DHMTs and NGOs, resulting in a duplication of activities. The DHMT was an identified channel through which new activities were supposed to be shared prior to implementation. However, in practice this did not always happen.

A number of CHWs and CHEWs described using mobile phones to communicate with the community and each other. However, CTC providers did not receive airtime:

“And another thing that I think that we should be provided with is airtime. We find that we spend a lot on communication.” (KEN_IDI_NBO_Njiru_CHEW2)

5.2.3 BROAD CONTEXTUAL FACTORS

Gender norms

The role of men as breadwinners had an effect on their ability to volunteer as CTC providers, with higher attrition rates observed in both study counties as men dropped out due to other work responsibilities:

“...slum sectors where the guys are working in a casual business, you will find out that you have recruited so many guys, that is the men, but by the end of it all you will find that men do go for some job outside the area in the day time and come back at night. Women are the ones who most of the times stay around, so we have to consider that one.” (KEN_IDI_NBO_Langata_CHEW3)

One CHEW identified that gender and age can be barriers for young CHEWs or CHWs when they are working at community level.

Gender norms had an impact on community uptake of health services, especially family planning and HIV services. The community in Kitui was patriarchal, and men were the decision-makers; their attitudes to health affected their spouses' uptake of health services, with suggestions of gender-based violence occurring if a woman chooses to use family planning against her husband's will:

“Women fear their husbands. Some can agree with their husbands about family planning; others do it behind their husband's back, and when the husband discovers he might walk out on his family and leave the woman to take care of the children.”

“What else will happen if they find out?”

“You'll be battered.” (KEN_FGD_KituiMutomo_Community2)

Some community members in Kitui were of the opinion that men would be more receptive to family planning and VCT services if the volunteer CTC provider was a man or if a doctor was involved:

“Many Community Health Workers are women, and it becomes very difficult convincing the men about family planning. I’d suggest that more men become Community Health Workers. ...The best way is to add male Community Health Workers to explain to the men the importance of [HIV] counselling and testing. This will help a lot.” (KEN_FGD_KituiMutomo_Community2)

Migration

In urban areas migration impacted the CTC providers’ services because some of their clients moved in and out of the community, making continuity of households difficult:

“...the set-up in Nairobi, the work environment may be tricky whereby we have the mobile population,...whereby today you have this household and come the following week, we have a new tenant in that house...” (KEN_IDI-NBO_Dagoreti_CHEW7)

Insecurity

A CTC provider indicated that insecurity was a challenge to service provision and referral in the urban slums, especially at night. In addition, one CHW reported that some CHWs have even been attacked and raped as a result of carrying out their CHW duties:

“...Security for the CHWs is wanting; so many CHWs have been raped in the course of their work by the clients. CHWs need total security as they are also human beings, so we pray that if possible security should be provided. I know that at times it is not possible, for we pray if it is possible that this issue be looked upon.” (KEN_FGD_NBO_Njiru_CHW2)

Broad Contextual Factors — Barriers to CTC Services

- Gender norms dictate a need for more male CTC providers but higher male CTC attrition
- Highly mobile urban population
- Poor security for CHWs in urban areas
- Fear of VCT by men
- HIV-related stigma
- Confidentiality concerns with CHWs conducting HBTC

Insecurity was also cited by a DHMT member as a challenge in some parts of Kitui which meant that health workers needed to be accompanied by security officers in some of the regions.

5.2.4 DISCUSSION OF LIMITATIONS AND FINDINGS

Some of the limitations of the qualitative data include the following:

- discussions with community in Nairobi were with both men and women, whereas in Kitui they were segregated by gender to ensure the active participation of women, but this difference between settings may have influenced differences in responses between the locations;

- time restraints;
- the CHWs and community groups were identified by CHEWs, who may have selected active CHWs or those with whom they have good relationships;
- in general it was difficult to find enough male CHWs and clients for the FGDs;
- FGDs were held with active CHWs only. It would have been interesting to know more from those CHWs who had quit, to better understand the reasons why; and
- it would have been interesting to run a comparison between male and female CHWs, due to suggestions that more male CHWs quit due to a lack of financial incentives; however, this was not possible, as the FGDs for CHWs contained both men and women.

In summary, many of the key findings relate to the barriers to access and utilization and the facilitators of and barriers to CTC providers' services as summarized in the coloured text boxes throughout the report. Further discussion is included in Chapter 6. Another key finding was the lack of discussion by the community about CHEWs. These key factors will need to be considered and reviewed in light of the revised CHS.

CHAPTER 6 – DISCUSSION AND CONCLUSIONS

6.1 BROAD CONTEXTUAL FACTORS

There is limited literature relating to the broad contextual factors and their relationship to CTC providers' performance in Kenya. The qualitative findings provide some of the main broad contextual factors which emerged as being important to CTC service provision in the Kenyan context. Gender norms within Kitui County negatively influence women's ability to access family planning when their husbands are opposed to it. Men's role as the provider for the family means that they are not easy to reach in the daytime, and data show that female CHWs in Kitui County had difficulties reaching men for HTC. In addition, in Kitui county young unmarried girls are perceived as not being suitable to provide services, as they are considered inexperienced in family matters. From the desk review it is clear that young men are not considered appropriate as CHWs because of high attrition rates. This has implications for the selection of CTC providers and the sensitization or mobilization of community members to take up services. It is important to take on board the communities' demand for older CTC providers and their emphasis on having male CTC providers, particularly for providing education about family planning and HTC, to improve CTC providers' performance.

Other factors such as population mobility and migration were raised as contextual factors impacting CTC providers in Nairobi. For example, some CHWs moved between slum communities and created a gap to be filled after they left, and the mobility of community members made follow-up difficult for some CHWs. Further, insecurity was raised as a challenge in Nairobi, with CHEWs needing to be accompanied by CHWs in insecure areas, and there was one worrying report of CHWs having been raped in the course of carrying out their work! These are issues not directly within the power of CTC providers to address, but these issues may be raised during action days and with HFCs, CHCs, local administrations and the police to see what communities can do to address some of these issues and what type of support is required and feasible to provide.

6.2 HEALTH SYSTEM FACTORS

The national CHS policy and CHW training curriculum provided extensive information relating to official policy on CTC providers and their position in the health system. The structure of the CHS and CU are well defined in policy that is well known among policymakers and stakeholders.

A key challenge relating to health system factors identified through the qualitative research was the availability of staff and services, with some areas in Kitui not yet having established

CUs. Further, the number of CHEWs is presently too low, resulting in dual workloads for CHEWs needing to balance work at the health facility with community work.

CTC providers described inadequate availability of supplies and logistics as creating barriers to their performance. A lack of transport (bicycles for CHWs and motorbikes and fuel for CHEWs) and CHW kit were the most commonly cited barriers to performance related to supplies and logistics within the qualitative data.

A lack of financial support from the government and the support and influence of NGOs/FBOs emerged strongly in the qualitative data, with anxiety expressed relating to the availability of support once NGOs withdraw. A divisive effect of parallel programming was also highlighted. The involvement of NGOs/FBOs could result in the multiplication of tasks for providers, especially when these organizations are pursuing interests which are parallel to those of CHS programmes.

The financing of the CHS needs to be addressed urgently in the context of the devolved government structures to ensure that recruitment of CHEWs takes place as planned in the new strategy. The Community Health Unit needs to develop and implement an advocacy plan and costing of the new strategy to inform the county government budgets. The county governments should also be included as key stakeholders in the revision of the strategy to obtain their support.

CHWs' engagement in multiple tasks was shown in the desk review and even in the qualitative study, whereby CHEWs ended up with multiple reports to prepare as a result of partner involvement. There is, therefore, a need for the government to enhance its coordinating role in the CHS.

The proposed revision of the CHS was a major topic of discussion with policymakers, although there was a lack of awareness of this proposed revision among communities and often even CTC providers. This will result in an increased need for CHEWs, with the CHS changing from two CHEWs and five CHWs for every 5000 population to five CHEWs and 10 CHWs for every 5000 population.

How this transition will be managed at community level remains unclear. The need for change, awareness of the change and uncertainty over how it will work out were all reflected in the interviews with policymakers, DHMT members, facility managers and, to a certain extent, CHEWs. However, no formal policy documents or strategies have been finalized and released as yet. Concerns about sustainability and workload, costs and weaknesses in the current system were the main negative drivers for change described, while the main positive drivers for change were the desire for a more integrated and holistic approach.

The 2013 JICA report identifies the lack of standardization of the CHEW cadre (currently nurses, laboratory technicians, pharmacists, counsellors and others can work as CHEWs) and the conflict of a dual workload as challenges, and makes the recommendation that minimum entry requirements for the CHEW programme should be established and should include:

“a consultative forum with all stakeholders to establish the CHEW cadre, its placement within the Ministry, salary and remunerations, structured training curriculum, in-service training, appraisal, accreditation and certification to standardize the knowledge and skills of the CHEWs.” (JICA, 2013: Recommendations)

6.3 INTERVENTION DESIGN FACTORS

There are a number of key findings for intervention design factors identified through the desk review and the qualitative research findings, which must be interpreted in light of the ongoing revision of the CHS. The leading findings relate to:

- community engagement and participation;
- supervision; and
- HBTC.

I. COMMUNITY ENGAGEMENT AND PARTICIPATION

The CHS describes avenues for communication with the community and the community’s role within the strategy. When starting a CU, awareness should be raised through a district stakeholder meeting and then cascaded down to community level. A situational analysis and household registration should then be conducted, including asking the community to identify its priority issues, followed by planning health actions and establishing an information system to monitor changes. The whole community should also be involved as far as possible in the selection of CHWs. There was no role for communities to select CHEWs, with this being carried out by DHMTs, nor is there a role planned for communities to select CHEWs following the revision of the strategy (based on informal discussion).

The CHS describes a further role for the CHC, whose members should be representatives of their community. However, based on qualitative findings, in some areas the CHCs are no longer functional or never received training. Community representation is also expected through membership of FHCs. The desk review, however, showed that in some communities the members selected did not represent the community’s interests but their own.

A further community role identified through qualitative research was participation in action days and dialogue days which are supposed to be held on a quarterly basis, and some community members describe attending seminars or a chief’s *baraza* with a CHW. From the qualitative study, the frequency of the action days and dialogue days varied and depended

on partner support. Real involvement of the whole community in ongoing decision-making and action planning for health is not extensively discussed in the CHS or other literature, and this was reflected in the findings of the qualitative research, with CHEWs describing the community discussion during the dialogue days as times when decisions were made, but this action-planning role was not described by the regular community members themselves.

These findings also reflect data from a recent JICA survey, which found that, of 50 CHEWs surveyed, 72% were involved in interpreting data, and of these, the CHC was involved only 50% of the time. No data were collected on the percentage of times that the general population was involved in interpreting data. The data were disseminated in a number of ways, primarily through dialogue days (72%) and CU action plans (70%), although typical attendees at dialogue days and CU action plans were not described. Only 48% of the time were data disseminated through action days, or 26% through a chief's *baraza* (JICA, 2013).

The general perception of CHWs through the qualitative research was overwhelmingly positive. However, there was next to no discussion at all by communities regarding their perception of CHEWs. In fact, worryingly, one CHEW in Nairobi described how he was rejected by the community, and community members would not allow him to visit their homes because of the misconception that this was for his or the government's benefit alone. This lack of discussion of CHEWs and the potential rejection of one CHEW by the community will need to be adequately addressed if the revised strategy (which greatly increases the role of the CHEW) is to be acceptable to the community. A range of expectations were discussed in the qualitative data, which the community would like the CHW to be able to fulfil, including provision of ITNs and painkillers, first aid and HBTC, among others. CTC providers' capacity should be built to offer additional preventive, basic curative services and simple rapid diagnostic tests such as malaria and HIV in the household setting. It may be useful to consider some of these expectations when finalizing the roles and responsibilities and training for CHEWs as a means of making them more acceptable to communities.

The issue of community expectations also arose because the community had been informed of what it could expect from the CHS, but not all these expectations were met. When introducing the revised strategy it is important to inform communities of realistic expectations, to ensure that they can hold the CTC provider accountable against realistic performance targets. There is also a need to increase community participation during programme design, recruitment and implementation and improve ways of mobilizing available material and non-material resources in the community to assist in implementation. Training for CHWs and CHEWs should incorporate community engagement, with supervision and follow-up to ensure it is done according to the protocol.

Partnerships need to be developed and enhanced to support CTC health service interventions. Community interventions that are results-oriented, have positive outcomes and have the potential for attracting partnerships within the local community and other development partners should be enhanced. Partnerships with communities are developed by involving them from conceptualization of the CTC project onwards. Levels of participation among communities in marginalized areas may, however, be low, and project developers may need to come up with a plan that takes this challenge into consideration (Kibua, 2009).

II. SUPERVISION

Supervision of CHWs is conducted by a diverse range of stakeholders such as CHEWs, CHCs and chiefs, as described by the qualitative data. Literature also described other forms of supervision such as more experienced CHWs supervising other CHWs (PATH, 2008; Casey, 2005) and trained health workers working as supervisors (MOH, 2006; Achieng, 2012; Earth Institute, n.d.; and Anon., 2005–2010). While the CHS described “use of a multidisciplinary team for supervision which will include regular performance appraisals based on checklists to measure performance” (MOH, 2007a), it provided no guidelines on the frequency or methods of supervision or supervisory checklists for use with CTC providers. Some NGOs, such as AMREF, have piloted supervisory checklists for maternal, newborn and child health; however, transport and DHMT staff shortages hamper the use of such checklists beyond the programme intervention period (AMREF, 2010).

Challenges with the availability of fuel for transport to conduct supervision, supervisors’ heavy workload and the failure of some CHWs to attend supervisory meetings were some of the main barriers to effective supervision identified, which are in accordance with the barriers identified from the study by AMREF in 2010.

There was only one mention of the use of supervisory checklists by a CHEW in Langata, but this was due to a partner (APHIA plus) which developed a tool as a way of tracking performance for the provision of performance-based stipends to CHWs. There is, however, a clear and consistent supervision structure with a range of tools developed and used at regular intervals for HBTC counsellors, including observation of practice, an administrative checklist and supportive supervision where counsellors meet to discuss challenges and develop peer support in a supportive environment. A diverse range of methods were used for CHW supervision, including through monthly meetings and household visits and by reviewing reports. However, the qualitative data indicated the inconsistent use of the methods, with some supervisors selecting one or more methods.

During discussions about CHEW training there was no mention of receiving training on how to conduct supervision, although this was included as a component of CHEW training according to the CHS (MOH, 2007a). There was little discussion as to how CHEWs

themselves were supervised, and one policymaker admitted that this had not been planned. The revised strategy should prioritize the standardization of supervision and quality assurance mechanisms, lines of supervision, adequate training of supervisors and the provision of standard operating procedures. Lessons can be drawn from the national HTC programme, which has incorporated regular supervision, quality assurance and continuous quality improvement.

III. HOME-BASED TESTING AND COUNSELLING

There is very little in the existing literature about HBTC in Kenya. However, from the qualitative data, discussions on the integration of HBTC into the new CHS dominated the interviews from DHMT level to CHWs and community FGDs (although questions about HBTC integration were deliberately included in the topic guide).

The community, CHWs and CHEWs were all willing to accept HBTC and encouraged training of CHWs and CHEWs that will ensure its integration into the CHS. However, stigma and confidentiality remain problems, with community members fearing that their neighbours (CHWs) might divulge their HIV status. Training of CHEWs on HBTC needs to comprehensively address confidentiality, while community education and mobilization campaigns are required to minimize this fear.

At present, based on informal discussions regarding the revised strategy, it is understood that the new CHEW curriculum will include some training relating to HIV/AIDS but will not include full training for CHEWs to be able to conduct HTC. The government is, however, willing for HTC providers to be trained as CHEWs, and those CHEWs who had previously been trained to provide HTC services could provide HBTC as part of their CHEW role. Those CHEWs who have no previous training in HTC will not be permitted to conduct HBTC unless they undertake appropriate training.

How the HTC counsellors who later train as CHEWs will be managed, supervised, provided with kits or will report back on HBTC services provided is unclear. Also, since HTC counsellors are not available in every CU, it is uncertain how equitable HBTC service coverage will be.

IV. OTHER MAJOR INTERVENTION DESIGN FACTORS

Other intervention design factors described in literature and which emerged in the qualitative data that need to be addressed include incentives, workload and referral processes.

i. Incentives

The CHS identifies CHWs as voluntary workers. A study by AMREF (2010) stated that volunteer CHWs often requested financial support in terms of stipend, transport and expenses and that materials such as bicycles, t-shirts and bed nets were viewed as sources of motivation. This was supported by the qualitative findings, which highlighted the view that all respondents felt that CHWs should receive some form of financial allowance. A government policy of providing a standard stipend of Ksh2000 (US\$25) for all CHWs was implemented inconsistently, with some CHWs never having heard of it, while some were dissatisfied with the amount. Further frustrations were caused by inconsistencies in the payment of stipend or transport reimbursements during monthly meetings.

A JICA (2012) study indicated that CHEWs felt that their work was not adequately reimbursed financially, and this was supported by the qualitative findings. Some NGOs and DHMTs support the CHWs to set up income-generating activities as a means of sustaining their income and ensuring sustainability, and this should be scaled up as a best practice.

The CHWs themselves identified materials which would aid them in the course of their work (bicycles, uniform, kits) and be sources of motivation. Other non-financial incentives mentioned in the qualitative findings included a sense of pride from being a role model, a sense of achievement from seeing community behaviour change, recognition from supervisors and the community, and peer support. They were found to be a significant factor in CHW and CHEW work. These data reinforce findings from AMREF (2010), where community recognition, community demand for CHW services and skills development were identified as non-financial sources of motivation. Disincentives common to a study by JICA (2013) and the qualitative findings include the lack of adequate transport arrangements and reimbursement for expenses incurred.

The voluntary nature of the CHWs' work and the inability to hold them accountable for their work was cited as part of the reason for the review of the CHS. The revised strategy should provide an opportunity to continuously identify non-material incentives such as a good working environment, supplies, regular trainings and supervision, to enhance the motivation of CTC providers and reduce attrition. Financial incentives should be realistic, based on what the government or communities can afford to take on in the long term and avoid an over-reliance on NGOs that may not be able to sustain them. Policy development and revision on incentives should avoid being prescriptive, to allow communities to develop practical suggestions.

ii. Workload

Workload was frequently discussed during qualitative discussions. The general consensus was that the workload for both CHWs and CHEWs was too heavy. For CHWs this was described as being so because they are volunteers who needed to have their own time to

earn a living. CHEWs described a conflict in their role, with many of them having a role at a health facility as well as in the community. Further, some CHEWs described a lack of clarity regarding their workload and did not know how much of their time should be spent in the facility and how much in the community.

JICA (2013) identified the CHEWs' workload and logistical challenges as creating barriers to their performance. As a result, its report recommended: *"The Ministry should therefore consider ways of reducing this burden by increasing the number of CHEWs within each CU and hence reducing the administrative jurisdiction of the CHEWs in relation to the workload and logistical challenges faced by them"* (JICA, 2013: pg.14). The report also recommended standardization of the cadre of CHEWs and their training, with clear roles in community service delivery to address the issue of the dual role.

The recruitment of more CHEWs planned in the revised CHS, as described previously in the report, should help to combat the problem of a dual workload, with CHEWs to be solely based at community level in the revised strategy. However, with the revised strategy there will be a reduction in the number of CHWs working at community level (from 50 to 10 CHWs per CU) and an increase in CHEWs' work to include more promotive, preventive and curative tasks. The revised strategy needs to be piloted to identify the ideal number of CHEWs and CHWs for each CU, to avoid heavy workloads and low effectiveness. Workload levels should be systematically calculated considering the package of care against the population and geographical area to be covered.

iii. Referral and access to services

Though the CHWs ensured that they referred clients appropriately, and our findings reported that CTC programmes resulted in higher utilization of facility-based services such as HIV, TB and malaria, certain factors hampered uptake of referral services at the link facility. The community expected transport to the link facility and preferential treatment on arrival, which was not always the case. The referral process was hampered by long distances to health facilities, a lack of transport and inadequate supplies or services at the link facility, especially at night. In some cases community members were referred to private providers and chemists, as CHWs did not trust the quality of services at the referral sites. Discussions on strengthening referrals and services at referral points should be held regularly with community members, health workers, CHWs and CHEWs as well as the local administration to improve the quality of services and address multi-sectoral challenges. Members of the police force, justice system and educational sector need to be included to address additional challenges, such as rape and child safety, which emerged as key concerns of the communities.

Other issues highlighted through the data which will be important to consider when introducing the revised CHS include ensuring adequate transport for CHEWs by providing

motorbikes and sufficient fuel. This has already been raised as a challenge affecting their performance, and if this problem is not addressed, it will be further compounded by the introduction of the revised strategy. Furthermore, the consistent availability of reporting tools and work kits will also be necessary for good performance. Appropriate costing, forecasting and financing of these items is required as well as that of the new strategy and the 'hidden costs' which are likely to emerge or continue as the new strategy is implemented.

Reporting was also noted as being in need of further improvement, with reporting tools being difficult to use and with frequent revisions to tools by NGO partners resulting in a loss of harmonization of tools. Standard tools should be developed by all CTC stakeholders and translated into Kiswahili with adequate training for CTC providers in how to use them.

CHAPTER 7 – IMPLICATIONS

7.1 FOR THE DRAFT FRAMEWORK

From the Kenyan context analysis data there are a number of implications for consideration within the context analysis framework. These relate to sustainability, particularly with regards to NGOs and vertical programming, with implications for the sustainability of services when a donor or NGO withdraws from a programme. The coordination and sustainability of NGO-supported programmes should be more visible under health system factors.

Other implications that need to be highlighted in design factors include the importance of stigma and fears about CTC providers' confidentiality and how these could be reflected in the CTC providers' characteristics and training for the general inter-country framework. This is significant for any interventions for which stigma is a concern.

7.2 FOR THE QUALITY IMPROVEMENT CYCLES

Based on our study findings and our knowledge of the revised CHS, we identified three key gaps that have implications for the quality improvement cycles within the second phase of REACHOUT. We developed problem statements and root cause analyses from the three gaps which informed development of the three interventions discussed below:

- I. Strengthening of the community engagement component to promote community ownership, support and involvement in decision-making — this is especially critical for gaining community support for the upcoming revised CHS.

Problem statement: There is inadequate community support for CTC providers' functions.

This is a priority finding, as data has shown that the communities are mainly engaged in the recruitment of CHWs only and that there is a lack of community involvement in decision-making and support for the strategy. This could be due to two issues:

- the community's lack of interest due to apathy and inadequate or a lack of community engagement despite providers' expectations that the community should play a more active role; and
- inadequate implementation of the CHS due to inadequate training of supervisors and inadequate supervision.

This inadequate community involvement may be exacerbated with the upcoming revised CHS, as the recruitment of the CHEW, who will now be the primary provider,

will not involve the community and may lead to rejection of the CHEW by the community, particularly in urban areas.

Those causes which are within the scope of REACHOUT to address include inadequate training of CHEWs on how to conduct community engagement, which may be addressed by developing an additional module or revising the training curriculum in partnership with the Community Services Unit and other stakeholders. This intervention will be introduced, monitored and evaluated, with findings shared with policymakers and other stakeholders to inform roll-out of the new strategy. Dialogue will also be held with stakeholders to ensure that the top-down approach is minimized and community dialogue enhanced by all implementers.

II. Strengthening supervision and quality assurance mechanisms within the CHS

Problem statement: There is inadequate quality assurance and supervision of CHWs in the CHS.

At present the supervision of CHWs and CHEWs has been identified as an area of weakness. The underlying causes of this poor supervision which REACHOUT seeks to address are inadequate training of supervisors and a lack of supervision guidelines and tools. LVCT intends to address these gaps through the REACHOUT project. Tools and guidelines developed and training processes used by supervisors will be evaluated through REACHOUT and will then be shared with the government and other stakeholders for use nationally. Lessons from HIV programmes will be used to inform this evaluation.

III. Integration of HIV within the CHS

Problem statement: There is no implementation of HBTC within the revised strategy

The main underlying cause of this problem relates to the fact that HIV, and specifically HBTC, has not been explicitly included within the policy and the revised strategy. Although it will be possible for existing HBTC counsellors to be recruited as CHEWs, there are no plans for how this will occur, how they will provide services or be supervised or how to ensure provision of HBTC services in areas where there are no HBTC counsellors already trained. LVCT intends to address this gap by piloting the integration of HBTC training into the CHEW training, incorporation of HBTC providers as CHEWs and implementing quality assurance mechanisms for HBTC within the CHS.

Based on the context analysis findings and in light of the proposed introduction of the new CHS, expected to commence in July 2014, we have identified that interventions to improve community engagement and supervision should be developed and introduced during the first quality improvement cycle (July 2014 to June 2015), while interventions to ensure quality integration of HBTC within CHEW training and service provision should be introduced during the second cycle.

REFERENCES

- Achieng, L., Musangi, H. & Ong'uti, S. (2012). An Observational Cohort Comparison of Facilitators of Retention in Care and Adherence to Anti-Retroviral Therapy at an HIV Treatment Centre in Kenya. *PloS one*, 7(3), 1–7. doi:10.1371/journal.pone.0032727.
- Africa Health (2012). Kenya's New County Government Likely to be Hard-out fulfilling their Health Care Mandate, <http://africahealth.wordpress.com/2011/05/30/county-governments-likely-to-be-hard-put-fulfilling-their-health-care-mandate/>.
- Africa Rural Links. (n.d.). Nzoia Community health unit, www.afrilink.kalenjin.net.
- Aga Khan Health Service Kenya (AKHS) Community Health Department (2004). Health Facility Committees: The Governance Issue, *Policy Brief*, No. 4: *Best Practices in Community-Based Health Initiatives*, <http://www.who.int/management/healthfacilitycommitteesgovernance.pdf>.
- Agengo, G., Lewis-Kulzer, J., Nyabiage, L., Penner, J., Cohen, C. & Bukusi, E. (2009). Maximizing human resources by involving lay health care workers in HIV Service Delivery in Kenya, <http://www.faces-kenya.org/2009/01/>.
- AMREF (2010). *African Medical and Research Foundation Final Evaluation Report Busia Child Survival Project (BCSP)*, pp. 1–117, http://pdf.usaid.gov/pdf_docs/PDACL521.pdf.
- Casey, L., Onduso, P., Omuodo, D. & Wilder, J. (2005). *Community-based family planning in Kenya: meeting new challenges*, pp. 1–28, <http://www.ponline.org/node/256722>.
- Cho, H., Hallfors, D., Mbai, I., Itindi, J., Mlimo, B., Halpern, C. & Iritani, B. (2011). Keeping adolescent orphans in school to prevent Human Immunodeficiency Virus Infection: Evidence from randomized controlled trial in Kenya. *Journal of Adolescent Health*, 48(5): 523–526, <http://www.sciencedirect.com/science/article/pii/S1054139X10003964>.
- DCHS (n.d.). eHealth Kenya Community unit list as at May 22. Nairobi: Division of Community Health Services, pp. 1–6, <http://www.ehealth.or.ke/mcul/downloads.aspx>.
- DCHS (2010). *Evaluation Report of the Community Health Strategy Implementation in Kenya*. Nairobi: Division of Community Health Services, pp. 1–77.
- DCHS (2013). *CHEWs new roles*. Nairobi: Division of Community Health Services.
- Dietsch, E. (2010). The experience of being a traditional midwife: relationships with skilled birth attendants. *Rural and Remote Health Research, Education Practice and Policy*, 1–9, <http://www.rrh.org.au/articles/subviewnew.asp?ArticleID=1481>.
- Earth Institute (2011). *One million community health workers: technical task force report*. New York: Earth Institute at Columbia University, pp. 1–104,

http://www.millenniumvillages.org/uploads/ReportPaper/1mCHW_TechnicalTaskForceReport.pdf.

Ekirapa, A., Mburu, E., Kunyanga, E. & Moreland, S. (2012). *Data Demand and Use in the Health Sector in Central and Eastern Kenya*, <http://paa2013.princeton.edu/papers/132738>.

Geibel, S., King'ola, N., Temmerman, M. & Lutchers, S. (2012). The impact of peer outreach on HIV Knowledge and prevention behaviours of male sex workers in Mombasa Kenya. *Sexually Transmitted Infections*, 88: 357–362. doi:10.1136/sextrans-2011-050224.

Germann, S., Jabry, A, Njogu, J. & Osumba, A. (2012). The Illness of 'Pilotitis' in mHealth – Early Lessons from KimMNCHip Partnerships in Kenya. *Global Health Forum*, 2012 edition.

Gisore, P., Shipala, E., Otieno, K. et al. (2012). Community based weighing of newborns and use of mobile phones by village elders in rural settings in Kenya: a decentralised approach to health care provision. *BMC Pregnancy and Childbirth*, 12(1): 15. doi:10.1186/1471-2393-12-15.

GOK (2007). *Kenya Vision 2030: Popular Version*. Nairobi: Government of Kenya, http://www.vision2030.go.ke/cms/vds/Popular_Version.pdf.

GOK (2013). *Implementing the Master Community Unit List: HIS Training Package Module 2 Facilitator's Manual*. Nairobi, Kenya: Ministry of Health, AfyaInfo Project.

Hallfors, D.D., Cho, H., Mbai, I., Milimo, B. & Itindi, J. (2012). Process and outcome evaluation of a community intervention for orphan adolescents in western Kenya. *Journal of Community Health*, 37(5): 1101–1109. doi:10.1007/s10900-012-9548-x.

Hatcher, A., Turan, J. & Leslie, H. (2012). Predictors of linkage to care following community-based HIV counselling and testing in rural Kenya. *AIDS and Behavior*, 16(5): 1295–1307. doi:10.1007/s10461-011-0065-1.Predictors.

Jenkins, R., Kiima, D., Okonji, M., Njenga, F., Kingora, J. & Lock, S. (2010). Integration of mental health into primary care and community health working in Kenya: context, rationale, coverage and sustainability. *Mental Health in Family Medicine*, 7: 37–47, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2925163/>.

JICA (2013). *Performance of community health extension workers (CHEW): Operations research on strengthening community health strategy in Kenya*. Nairobi: Japan International Cooperation Agency.

Johnson, B. & Khanna, S. (2004). Community health workers and home-based care programs for HIV clients. *Journal of the National Medical Association*, 96(4): 496–502, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2594997/>.

Kangangi, J., Kibuga, D. & Muli, J. (2003). Decentralisation of tuberculosis treatment from the main hospitals to the peripheral health units and in the community within Machakos district, Kenya. *International Journal of Tuberculosis and Lung Disease*, 7(9): 5–13, <http://www.ingentaconnect.com/content/iuatld/ijtd/2003/00000007/A00109s1/art00004>.

- Karanja, D.M.S., Omedo, M.O., Secor, W.E. et al. (2012). Community Health Workers Experiences and Perspectives on Mass Drug Administration for Schistosomiasis Control in Western Kenya: The SCORE Project. *American Journal of Tropical Medicine and Hygiene*, 87(6): 1065–72. doi:10.4269/ajtmh.2012.12-0435.
- KNBS and ICF Macro (2010). *Kenya Demographic and Health Survey 2008-09*. Calverton, MD: Kenya National Bureau of Statistics and ICF Macro.
- KPMG (2013). *Devolution of Healthcare Services in Kenya: Lessons learnt from other countries*. Nairobi: KPMG, pp. 0–23, [http://www.kpmg.com/Africa/en/IssuesAndInsights/Articles-Publications/Documents/Devolution of HC Services in Kenya.pdf](http://www.kpmg.com/Africa/en/IssuesAndInsights/Articles-Publications/Documents/Devolution%20of%20HC%20Services%20in%20Kenya.pdf).
- Kibua, T.N., Muia, D.M. & Keraka, M. (2009). *Efficacy of Community-Based Health Care in Kenya: An Evaluation of AMREF's 30 years in Kibwezi*. Nairobi, Kenya: AMREF.
- Kisia, J., Nelima, F., Otieno, D.O. et al. (2012). Factors associated with utilization of community health workers in improving access to malaria treatment among children in Kenya. *Malaria Journal*, 11(1): 248. doi:10.1186/1475-2875-11-248.
- Kisika, S. (2013). Lawmakers warned against politicizing devolution of Health sector, *news24 Kenya*, 11 December 2013, <http://m.news24.com/kenya/MyNews24/Lawmakers-warned-against-politicizing-devolution-of-Health-sector-20131211>.
- Lindblade, K.A., Mwololo, K., van Eijk, A.M., Peterson, E., Odhiambo, F., Williamson, J. & Slutsker, L. (2006). Evaluation of the WHO Haemoglobin Colour Scale for diagnosis of anaemia in children and pregnant women as used by primary health care nurses and community health workers in western Kenya. *Tropical Medicine & International Health*, 11(11): 1679–87. doi:10.1111/j.1365-3156.2006.01721.x.
- LivingGoods (n.d.). Using Smart Mobile Tools to Empower Our Entrepreneurs, www.livinggoods.org/what-we-do/mobile-technology-2.
- Livingston, A. (2013). Community health worker home visitation Project to Prevent Neonatal Deaths in Kenya. *Journal of Tropical Pediatrics*, 59(1): 64–66.
- Luchters, S., Chersich, M., Rinyiru, A. et al. (2008). Impact of five years of peer-mediated interventions on sexual behavior and sexually transmitted infections among female sex workers in Mombasa, Kenya. *BMC Public Health*, 6: 1–10. doi:10.1186/1471-2458-8-143.
- MCUL (2013). eHealth Kenya Community unit list as at January 30, <http://www.ehealth.or.ke/mcul/downloads.aspx>.
- MOH (2006). *Taking the Kenya Essential Package for Health to the Community: A Strategy for the Delivery of Level One Services*. Nairobi: Ministry of Health, pp. 1–60.
- MOH (2007a). *Enhancing Community Health Systems – Partnership in Action for Health: A Manual for Training Community Health Extension Workers*. Nairobi: Ministry of Health.

- MOH (2007b). *Strategic Plan of Kenya Community Strategy. Implementation Guidelines for Managers of the Kenya Essential Package for Health at the Community Level*. Nairobi: Ministry of Health, pp. 1–50.
- MOH (2008). *Reversing the Trends – Year 2007/2008 Report on Implementation of Community Strategy: A Strategy for the Delivery of Level One Services (Taking KEPH to the Community)*. Nairobi: Ministry of Health.
- MOPHS (2010a). *Evaluation Report of The Community Health Strategy Implementation in Kenya*. Nairobi: Ministry of Public Health and Sanitation.
- MOPHS (2010b). *Report on The First Community Health Services Convention held on 6th to 8th December, 2010 at Kenyatta International Conference Centre Nairobi, Kenya*. Nairobi: Ministry of Public Health and Sanitation.
- Mulama, J. (2013). The high cost of malnutrition. Nairobi: World Vision International, <http://www.wvi.org/africa/article/kenya-high-cost-malnutrition>.
- Murunga, L. (2013). Malnutrition takes a toll on children. Nairobi: World Vision International, <http://www.wvi.org/east-africa-crisis/article/malnutrition-takes-toll-children>.
- Mwangome, M.K., Fegan, G., Mbunya, R., Prentice, A.M. & Berkley, J.A. (2012). Reliability and accuracy of anthropometry performed by community health workers among infants under 6 months in rural Kenya. *Tropical Medicine & International Health*, 17(5): 622–9. doi:10.1111/j.1365-3156.2012.02959.x.
- Mwangi, J.W. (2004). Integration of Herbal Medicine in National Health Care of Developing Countries. *East African Medical Journal*, 81: 497–498.
- NACC, NASCOP (2012). *Kenya AIDS Epidemic Update 2011*. Nairobi: National AIDS Control Council and National AIDS/STI Control Programme.
- NASCOP, MOH (2010). *Guidelines for HIV Testing and Counselling in Kenya*. Nairobi: National AIDS/STI Control Programme and Ministry of Health, pp. 1–60.
- NASCOP, MOH (2013). *Kenya AIDS Indicator Survey 2012: Preliminary Report*. Nairobi: National AIDS/STI Control Programme and Ministry of Health.
- NCAPD (2008). Seeking Solutions for Traditional Herbal Medicine: Kenya Develops a National Policy. *NCAPD Policy Brief*, No. 1. Nairobi: National Coordinating Agency for Population and Development.
- Ndavi, P.M., Ogola, S., Kizito, P.M. & Johnson, K. (2009). Decentralizing Kenya’s Health Management System: An Evaluation. *Kenya Working Papers*, No. 1. Calverton, MD: Macro International Inc.
- Negin, J., Wariero, J., Mutuo, P., Jan, S. & Pronyk, P. (2009). Feasibility, acceptability and cost of home-based HIV testing in rural Kenya. *Tropical Medicine & International Health*, 14(8): 849–855. doi:10.1111/j.1365-3156.2009.02304.x.

Nganda, B. & Wangombe, J. (2003). Cost and cost-effectiveness of increased community and primary care facility involvement in tuberculosis care in Machakos District, Kenya. *Journal of Tuberculosis and Lung Disease*, 7(9): 14–20,

<http://www.ingentaconnect.com/content/iuatld/ijtld/2003/00000007/a00109s1/art00005>.

Otieno, C.F., Kaseje, D., Ochieng, B.M. & Githae, M.N. (2012). Reliability of Community Health Worker Collected Data for Planning and Policy in a Peri-Urban Area of Kisumu, Kenya. *Journal of Community Health*, 37(1): 48–53. doi: 10.1007/s10900-011-9414-2.

Population Council (2007). *Community-Based Activities Complement PMTCT Programs in Kenya*. New York, Population Council, pp. 1–4,

http://www.populationcouncil.net/pdfs/factsheets/HIV_KenyaPMTCT_letter.pdf.

Republic of Kenya (2010). *Reversing the Trends – The Second National Health Sector Strategic Plan of Kenya: Annual Operational Plan 6, July 2010–June 2011*. Nairobi: Republic of Kenya.

Ryman, T.K., Briere, E.C., Cartwright, E. et al. (2012). Integration of Routine Vaccination and Hygiene Interventions : A Comparison of 2 Strategies in Kenya. *The Journal of Infectious Diseases*, 205(Suppl 1): S65–76. doi:10.1093/infdis/jir777.

Sarna, A., Luchters, S. & Musenge, E. (2013). Effectiveness of a community-based positive prevention intervention for people living with HIV who are not receiving antiretroviral treatment: a prospective cohort study. *Global Health: Science and Practice*, 1(1): 52–67, <http://www.ghspjournal.org/content/1/1/52.abstract>.

Selke, H.M., Kimaiyo, S., Sidle, J.E. et al. (2010). Task-Shifting of Antiretroviral Delivery from Health Care Workers to Persons Living With HIV/AIDS : Clinical Outcomes of a Community-Based Program in Kenya. *Journal of Acquired Immune Deficiency Syndrome*, 55(4): 483–490.

Simpson, B., Itumbi, M. & Lindoewood, R. (2012). From traditional birth attendant to birth referral agent- A pilot programme for improving newborn care in rural Kenya. *Welsh Paediatric Journal*, 37, 58.

Stromberg, D.G., Frederiksen, J., Hruschka, J., Tomedi, A. & Mwanthi, M. (2011). A Community Health Worker Program for the Prevention of Malaria in Eastern Kenya. *Education for Health: Change in Learning & Practice (Network: Towards Unity for Health)*, 24(2): 7.

Taegtmeyer, M., Hightower, A., Opiyo, W. et al. (2009). A peer-led HIV counselling and testing programme for the deaf in Kenya. *Disability and Rehabilitation*, 31(6): 508–14. doi:10.1080/09638280802133115.

Takasugi, T. & Lee, A.C.K. (2012). Why do community health workers volunteer ? A qualitative study in Kenya. *Public Health*, 126(10): 839–845. doi:10.1016/j.puhe.2012.06.005.

Tomedi, A., Tucker, K. & Mwanthi, M. (2012). A strategy to increase the number of deliveries with skilled birth attendants in Kenya. *International Journal of Gynaecology & Obstetrics*, 120(2): 152–155.

Undie, C., Birungi, H., Obare, F. et al. (2012). *Expanding access to comprehensive reproductive health and HIV information and services for married adolescent girls in Nyanza Province*. New York, Population Council.

Wachira, J. & Kimaiyo, S. (2012). What is the impact of home-based HIV counselling and testing on the clinical status of newly enrolled adults in a large HIV care program in western Kenya? *Clinical Infectious Diseases*, 54(2): 275–281. doi:10.1093/cid/cir789.

Wangalwa, G., Cudjoe, B., Wamalwa, D., Machira, Y., Ofware, P., Ndirangu, M. & Ilako, F. (2012). Effectiveness of Kenya's Community Health Strategy in delivering community-based maternal and newborn health care in Busia County, Kenya: non-randomized pre-test post test study. *The Pan African Medical Journal*, 13 (Supp 1): 12, <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3587017&tool=pmcentrez&rendertype=abstract>.

Were, M K. (2011). *Trainers Manual for Training CHC's in Kenya*. Nairobi: Ministry of Public Health and Sanitation.

World Bank. <http://data.worldbank.org/country/kenya>

WHO (1978). *Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September 1978*. Geneva: World Health Organization, http://www.unicef.org/about/history/files/Alma_Ata_conference_1978_report.pdf.

Winters, N. & Mbae, S. (2013). Working with community health volunteers to design and implement a mobile-based training tool for the assessment of child development. www.mchw.org, 22 November 2013.

ANNEXES

COMPARATIVE ANALYSIS

Table 7: Comparative analysis between Nairobi and Kitui

	Nairobi	Kitui
Gender Norms	<p>Within Nairobi there was no mention of resistance to family planning. However, rape was raised as a problem by a number of CHWs and as such rape counselling was identified as a training need for CHWs. There was also resistance of the community to acknowledge and combat rape, as described by a CHW:</p> <p><i>‘what my colleague has said has really touched me, in our communities you find that the child is getting violated by a relative or a neighbour who later come to an agreement with the child’s parents and they cover the issue. Later on you discover that the child starts to develop other issues in terms of health and which hamper normal development of the child, the parents or the guardians blame the child failing to understand that it is they that caused such, yourself as a CHW you try your best to help the child and when you refer the case to the appropriate institution they will require the guardians, and it is the guardians who have covered this matter, so we found ourselves at a standstill as we’d like to help but the community has put barriers’ (KEN_FGD_NBO_Kasarani_CHW1).</i></p> <p>In Nairobi, the gender of the CHEW was not described</p>	<p>In Kitui, gender norms were widely discussed. With men being identified as key decision makers and a need for greater involvement of men, particularly in maternal health was identified by one CHEW. Family planning and expectations for a woman to have many children were also highlighted. Gender based violence was also discussed as a consequence for those women who chose to practice family planning without their husband’s knowledge or consent:</p> <p>‘And why do women oppose family planning?’</p> <p><i>Women fear their husbands. Some can agree with their husbands about family planning others do it behind their husband’s back and when the husband discovers he might walk out of his family and leave the woman to take care of the children.</i></p> <p>What else will happen if they find out?</p> <p><i>You’ll be battered’ (KEN_FGD_KituiMutomo_Community2).</i></p> <p>In addition, there were gender and age related barriers identified by CHEWs, with young CHEWs describing not being respected by elders, young women’s advice about</p>

	<p>as being of importance. However, one frequently described challenge for Nairobi, which was not mentioned in Kitui was the mobility of the population was described as being challenging, both with CHWs being trained and then moving and also with the population moving frequently, making it difficult for CHWs to follow up patients:</p> <p><i>‘This one also limits the work of the CHW’s, because you come this month and you introduce yourself, but as you had started rapport with that household, you find that the family has shifted and there is a new family, so you have to re-introduce yourself to that family again. Before you are through with a pregnant mother, she goes, another one who you never had her records comes in, it is hell of work’ (KEN_IDI_NBO_Njiru_CHEW1).</i></p>	<p>family planning being disregarded and young unmarried male CHEWs being viewed with suspicion:</p> <p><i>‘There are gender and age barriers in the community. When you go there as a CHEW to speak to the older people they would feel like you really don’t know whatever you are talking because of your age or gender... For example the CHEW is a young man and they know that you are not married so when you visit the home the people will be wondering whether you are going after their daughters or their young wives.</i></p> <p>So there is that mistrust?</p> <p><i>Yes. And when you are young lady and you are coming to talk about family planning, they will feel that you don’t know what you are talking about since you are not married and you have never given birth to a baby’ (KEN_IDI-KituiWest_CHEW).</i></p>
<p>Community perceptions of CTC providers</p>	<p>Confidentiality was frequently raised as an issue in Nairobi, with many community members concerned about a lack of CHW confidentiality (see below section on confidentiality).</p> <p>Community members had mixed perceptions regarding CHWs relating to attitude, whether what the CHW practiced was consistent with the messages they gave, and to some extent their technical ability.</p> <p>Gender and age of CTC provider not raised as a concern by community members.</p>	<p>Confidentiality was not raised as a major issue in Kitui by the community members.</p> <p>Community members had mixed perceptions regarding the CHWs. As shown in the main report section these concerns were related to attitude and technical ability.</p> <p>Gender was also mentioned as it was described more frequently in Kitui of the need for more male CHWs:</p> <p><i>‘...the best way is to add male community health workers explain to the men the importance of counselling and testing, this will help a lot’ (KEN_FGD_KituiMutomo_</i></p>

<p>Access to services</p>	<p>There was no discussion in Nairobi interviews about some areas not having a community unit established. However, in Nairobi the absence of a public health facility was identified as a challenge, with patients having to pay for medical bills when referred. Some patients are unable to afford these bills and so in some cases CHWs try to help pay the bills on their behalf:</p> <p><i>'I would suggest that they try to make our work easier, in our location, there is no health Centre the hospitals that are present are private and as I earlier told you we as CHWs contribute to pay the medical bills of our community member I would like them to improve on the issue of taking a patient to hospital and by having a public health facility in my community'</i> (KEN_FGD_NBO_Kasarani_CHW1).</p>	<p>Community2).</p> <p>In Kitui, the DHMT described how some areas did not yet have any community unit:</p> <p><i>'The only thing is formation of community units, they are very few, I know there are areas that there is no community unit'</i> (KEN_IDI_KituiCentral_DHMT1).</p> <p>In addition, distance and access to transport were identified as challenges, which some community members faced if they needed to travel to the health facility:</p> <p><i>'...because you can find a mother coming maybe 5 to 8km from this facility then she may get into labour like at 10 in the morning but she doesn't have any funds (for transport and fees'</i> (KEN_IDI_KituiCentral_FacilityManager2).</p>
<p>Supervision</p>	<p>There was a difference in supervision practices between Nairobi and Kitui. In Nairobi, there were CHW leaders, which were not described in Kitui. These CHW leaders had supervision responsibilities for the other CHWs and also played a role in allocation of duties, forwarding instructions from CHEWs or lead facilities:</p> <p><i>'He supervises because once we get some information we give it to him then he gets it to the committee. He has some people whom he heads. Like I said we have</i></p>	<p>In Kitui, some CHWs described contacting the CHCs first in the event of a problem, unlike in Nairobi, where CHWs typically described contacting the CHEW directly in the event of a problem:</p> <p><i>'when I encounter a problem I tell the CHC who will tell the CHEW'</i> (KEN_FGD_KituiCentral_CHW2).</p> <p>However, this was perhaps exceptional as another FGD with CHWs reported that their CHC was no longer active:</p>

	<p><i>four units, we have four zones and among the four zones we have twenty five, twenty five (CHWs) whom the chairman heads. So the CHW leader has not been mentioned anywhere. The CHEW heads only the four (the four CHW leaders). If there is information, sometimes the information can come direct from the CHEW or from the facility or from langata health centre. It is easy for the information to pass through the four because it will reach the CHWs very fast...'</i> (KEN_FGD-NBO-Langata_CHW3).</p>	<p><i>'The committee from my area trained for one week and disappeared'</i> (KEN_FGD_KituiCentral_CHW2).</p>
Workload	<p>There was less discussion relating to workload for CHWs in Nairobi compared with Kitui. CHWs in Kitui described having around 20 household to visits, although this could increase to 40 households if another CHW quits. In a discussion between two researchers and two CHWs during a field visit in nairobi the CHWs described having over 100 households each which they were responsible for. It may be assumed however that the variation in household numbers could be due to the differences in population distribution in rural vs. urban areas especially in informal settlements.</p>	<p>Households were described as being far apart by CHWs in Kitui, making household visits more time consuming: <i>'because of the distance we have to cover at times we get lost hence spending a lot of the time as we have to visit the households'</i> (KEN_FGD_KituiCentral_CHW2).</p> <p>Attrition was described more frequently in Kitui, resulting in increased workload for those who continue to work as CHWs: <i>'What causes the difference is if you were 2 CHWs in a village then 1 CHW decides to step down so you end up being left with many households because you have to cover his or her households. Maybe he has 20 and I have 20, if I add them together they become 40'</i> (KEN_FGD_KituiWest_CHW1).</p>
CHEW workload	<p>In Nairobi the CHEWs felt that the workload varied with</p>	<p>Meanwhile for Kitui some CHEWs described having to be</p>

	<p>the area of coverage and the number of CHWs: <i>'It is a lot, initially I was alone and the job was overwhelming, but right now we are two. We have seven units each, so for our units I think that we have a big area so the workload varies depending on the size of the area...'</i> (KEN_IDI_NBO_Njiru_CHEW2).</p> <p>CHEW workload was described as being too high. In Nairobi it was mentioned that CHEWs often work for a range of programmes and services. It was also mentioned that they often have facility and community duties, although this was not mentioned as frequently as for Kitui: <i>'They have a heavy work load because they work for different services; they work for different programmes and having been in the community, for them being in the facility and the same time in the community, I believe they have a heavy work load'</i> (KEN_IDI_NBO_Dagoreti_FacilityManager2).</p>	<p>solely responsible for two community units, which was vastly greater than the policy recommendation: <i>'I think we need more CHEWs and one CHEW should be in charge of one community unit. ...like now in Mutomo we have one CHEW in charge of two community units so when you are following up there is a hard problem. you have a community unit on one end and one on the other end sometime when you what to pitch all of them you can't divide yourself. So we need more CHEWs'</i> (KEN_IDI_KituiMutomo_CHEW8).</p> <p>In Kitui the CHEW was so busy at the health facility that he/she did not have time to help the CHW in the event that a problem arose, although described in Nairobi this was more frequently discussed in Kitui: <i>'The working environment is not so conducive... The work load is so much given that I am the only nurse in this facility. I am also a CHEW in charge of 52 community health workers and 10 community health committees. Now, tomorrow we are having our monthly meeting, they are supposed to bring 50 monthly reports and I have 51 reports all from which I have to come up with a single report from all of those reports. So the workload is just too much due to understaffing'</i> (KEN_IDI-KituiWest_CHEW3). <i>'...CHEWs find a lot of challenges because they are now</i></p>
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		<p><i>...torn into two. They attend to the community and to the facility as well'</i> (KEN_IDI-KituiWest_CHEW4).</p>
<p>Referral challenges</p>	<p>For Nairobi, some CHWs reported that security would be a challenge in the event that they needed to refer a patient at night. In addition referring a patient at night became the responsibility of the CHW with the CHW having to pay for the transport:</p> <p><i>'The problem that I have on my side is security. I see there is a problem especially in night and cannot get help from those who cannot get up at late hours. So calling them to take a patient to Kenyatta you should find a way how to get transport means even if it is from your pocket and also to know how you will take the patient back'</i> (KEN_FGD-NBO-Langata_CHW3).</p> <p>In Nairobi, the quality of services available at the health facility was also described as a challenge:</p> <p><i>'The service in city council hospital is wanting as compared to the private hospitals and when I take a client to the city council hospitals they get substandard treatment and if this is to continue, I will leave this work'</i> (KEN_FGD_NBO_Kasarani_CHW1).</p> <p>For Nairobi, the lack of a public health facility was also described as being a challenge:</p> <p><i>'in our location, there is no health Centre the hospitals</i></p>	<p>Unexpectedly, most of the discussion of challenges with referral occurred with respondents from Nairobi. One of the challenges in Kitui, for referral relates to the availability of transport. This was also described in Nairobi.</p> <p>Some community members in Kitui reported on the fact that some pregnant women had to use a motorbike to reach the health facility which was not ideal:</p> <p><i>'...There is also another problem, when a mother is expecting and she is being taken to the hospital and she is carried on a motor bike, I don't see that as a good thing to do. If there could be some other way to assist so that she is not carried on a bodaboda (slang for motorbikes used for commercial transportation). They usually do that, not that they don't do it, they do it but it needs to be improved so that they can attend to people. Even if it is an emergency, they can still contain the situation before it gets to the problem'</i> (KEN_FGD_KituiWest_Community1).</p> <p>Quality of services available at the health facility was not described in Kitui discussions.</p>

that are present are private and as I earlier told you we as CHWs contribute to pay the medical bills of our community members. I would like them to improve on the issue of taking a patient to hospital and by having a public health facility in my community' (KEN_FGD_NBO_Kasarani_CHW1).

This may be part of the reason why some CHWs did not refer to the health facility, instead referring to chemists: *'for example you can have a problem; you find that they send you to chemist and not to advise you to visit a hospital'* (KEN_FGD_NBO_Kasarani_Community1).

In Nairobi, many CHWs described feeling that it was their responsibility to ensure the patient is referred and in some cases the CHWs assisted with fees involved with referring patients, such as transport: *'So that will be your responsibility to refer that patient to Kenyatta, do the follow up until the patient will get treatment'* (KEN_FGD-NBO-Langata_CHW3).

In some link facilities in Nairobi there were desks described as manned by a CHW to receive referral client, document and direct them to services but this was not described in Kitui: *'when they come here [health facility] we have a referral*

	<p><i>desk of which some of the CHWs, they rotate each day there must be a CHW at the desk, so these clients are received at the desk and are directed to which room they are supposed to go' (KEN_IDI_NBO_Dagoreti_CHEW8).</i></p>	
Confidentiality and HBTC	<p>There were mixed opinions relating to confidentiality but it was discussed as being problematic more often in Nairobi than in Kitui. However, when confidentiality was discussed as being problematic community members often tempered this with the opinion that there would always be some who couldn't be trusted with a secret while others kept confidence:</p> <p><i>'I found it hard to trust many people so you will find that when those CHWs come I can't say anything to them. I have identified one whom I trust and he is confidential'</i> (KEN_FGD_NBO_Kasarani_Community1).</p> <p>Confidentiality was also discussed more frequently in Nairobi relating to defaulter tracing, see below.</p>	<p>In Kitui, there were mixed opinions regarding CHW confidentiality. However the majority opinion was that CHWs kept confidentiality:</p> <p><i>'I believe they keep the information confidential because even if they find out that you have a certain disease they keep it to themselves; they don't go telling people about it'</i> (KEN_FGD_KituiWest_Community1).</p>
General HIV Service Provision	<p>In Nairobi CHWs were involved in defaulter tracing. The health facility provided a list of defaulters to the CHEW for follow-up such as PMTCT defaulters:</p> <p><i>'They (CHWs) also work closely with the facilities, like when the facilities need something from the community they ask us (CHEWs), like at the end of the month when they are doing their report; they give us a list of</i></p>	<p>In Kitui CHWs were involved in defaulter tracing in some areas and not in others. For some locations, there were other community based providers - peer mothers and peer educators- or CHEWs who conducted the defaulter tracing. Some supervisors felt that the training received by CHWs was not sufficient for defaulter tracing. A DHMT member suggested that people living with HIV should be</p>

	<p><i>defaulters of PMTCT'</i> (KEN_IDI_NBO_Njiru_CHEW1). In Nairobi confidentiality was of concern to the CHW supervisors: <i>'...just in case they need some follow ups like when they default and maybe when they (HIV positive clients) have agreed to disclose their status, because you see even with the follow-ups sometimes we are not able to tell them(CHWs) to follow our client because we don't want to disclose the status of the client'</i> (KEN_IDI_NBO_Kasarani_FacilityManager1).</p>	<p>involved in defaulter tracing: '(Do CHWs trace defaulters for care?)...we have peer educators... the peer educators really help us in defaulter tracing' (KEN_IDI_KituiCentral_FacilityManager2).</p> <p>A CHW supervisor in Kitui noted that CHEWs were involved in defaulter tracing because it was considered sensitive: <i>'...like my facility in XXXX (name withheld) there is a CCC section but the defaulter mainly us the CHEWs we are the ones who do defaulter tracing. Because you know HIV is very sensitive'</i> (KEN_IDI_KituiMutomo_CHEW7).</p> <p>A DHMT member in Kitui noted that HIV stigma was affecting involvement of CHWs in defaulter tracing. He shared that CHWs may still do it but they are not given a target to achieve: <i>'There are issues, they are still doing it (defaulter tracing), but now with the HIV stigma which is there, you find maybe, but they are still doing it, only that they don't have a number as such'</i> (KEN_IDI_KituiWest_DHMT2).</p>
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Table 8: Participant’s perceptions on community engagement in CHS

	Community	CHW	CHEW
Community engagement	<p>The community selected CHWs through the chief or assistant chiefs who facilitated the selection: <i>‘These people (CHWs) are selected from the village. They are selected by the chief or by assistant chief, he asks us to produce one person from every village’</i> (KEN_FGD_KituiWest_Community1).</p> <p>Although many community members were comfortable about the recruitment process there were some communities, particularly in Nairobi where there was reported lack of clarity and transparency on the recruitment process: <i>‘I can’t say I know how they are selected because we just find them already in job but it is whom do I know that organization, if an institution want to recruit they only go for a community leader whom chooses one individual then he will only bring in his dear ones. Like recently I heard that they were</i></p>	<p>The CHWs referred to community as ambassadors in spreading health messages. <i>‘The community helps us in our work as they serve as our ambassadors in spreading the message of good health to others’</i> (KEN_FGD_KituiCentral_CHW2).</p> <p>On the part of the CHWs the description of the recruitment process involved chiefs and existing CHC members who act as representatives of the community: <i>‘I wanted to say the same. We were chosen in a baraza and we were told it is volunteer work there is no financial payment but we said it is ok we will do the work. The baraza consisted of the</i></p>	<p>There was no community involvement in the recruitment of CHEWs: <i>‘is the community involved in the recruitment of CHEWs in any way?... No. The community was not involved’</i> (KEN_IDI_KituiMutomo_CHEW6).</p> <p>The CHEWs regularly described the dialogue days as ways of engaging with the community and of involving community in developing actions to improve health. However, CHEWs describe CHC members being the ones who invite the community to attend: <i>‘And the dialogue days that you are mentioning, how do you invite the community because do you invite everyone?’</i> <i>R. That is how it is supposed to work and remember health committee members of a community unit, the assistant chief and the chiefs, they are the committee members, through their office we are able to liaise with the</i></p>

	<p><i>recruiting a few and I was very interested being among them but I later on discovered that a list of names were forwarded and only three of them. So how they do the recruitment...'</i> (KEN_FGD_NBO_Langata_Community2).</p> <p><i>'That's why am saying they are not transparent fully... Their recruitment is done in the grass roots and we just find them at work with no idea what criterion was followed and you were not informed'</i> (ibid).</p> <p>There was mention of action days, where the CHW and community dug trenches and when the CHW carried out health education. When asked about their interactions with CHWs there was no discussion about the dialogue days on the part of the community.</p>	<p><i>assistant chief, the locals and people from community health committee. So they were looking at people who can address people, people who can keep a secret, there were so many things they were considering'</i> (KEN_FGD_KituiWest_CHW1).</p> <p>Community action days were also described by the CHWs as ways of engaging the community.</p>	<p><i>village elders to invite the rest of the community members to come to the meetings, where issues to do with health and development are concerned'</i> (KEN_IDI_NBO_Langata_CHEW3).</p> <p>Community dialogue was described extensively by CHEWs in both Nairobi and Kitui, but not at all by community themselves:</p> <p><i>'As a CHEW, in the community strategy, the community is involved in the health. So I could say that even the work is made easier by the community involvement. This strategy comes with many things. It comes with something called dialogue. This is where the community comes together and discusses the problems that they have and then they come up with the solutions themselves. So I don't have to go and tell them to dig a latrine, no, we discuss everything in the dialogue meeting and then they come up with a timeline for when they want every community member to have a pit</i></p>
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			<i>latrine. That is what I love about it because the community owns health. In the past, we used to take it to them but now they own it' (KEN_IDI-KituiCentral_CHEW2).</i>
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ADDITIONAL TABLES

TABLE 1: OVERVIEW OF CTC PROVIDERS IN KENYA

CTC Provider Type	Focus	Role	Training	Recruitment
CHW	Preventive; Promotive; and basic curative services – General services as stipulated in the CHS guidelines	observed treatment, identify and refer patients; health education; Promote FP, immunization and HIV/AIDS prevention. Sometimes involved in treatment of uncomplicated malaria, pneumonia and diarrhoea/ dehydration.	Initial 10 days training with some having refreshers.	Nominated by community but selection facilitated by community representatives. At times selected by NGOs e.g. for interventions or pilot studies
CHEW	Preventive; Promotive; and basic curative services	Supervision of the CHW and supporting them in the duties mentioned above	Initial two-week training and refreshers	Formal recruitment done by the government – need to have a health background
TBA	MNCH	Identify mothers and refer for ANC	Basic training	By implementers
Client's peers e.g. TB ambassadors, Expert patients, Peer educators	Treatment Adherence	dissemination of information, counselling on treatment adherence, referrals for care, defaulter tracing	Some training on counselling and motivational techniques	Previous experience on treatment

Specialist CHW e.g. Home Based Carers and Community Based Distributors	Preventive; Promotive; and basic curative services	home visits; dissemination of information; referral for clinical methods and sometimes treatment (see Tables 4 and 5)	Training is on the intervention to be carried out	priority given to existing CHWs recommended by local health facilities
Lay HBTC counselors	HIV prevention and treatment promotion	HTC; referral for care and support groups	10 days training on HBTC training and refresher training	Formal recruitment done by implementing partners – basic requirement include NASCOP approved certification as a HIV Counselor

TABLE 2: POLICY GUIDELINE ON CHWS' TASKS

Level One (1) Service	Task Description	Literature
Disease Prevention and Control	<p>Communicable Disease Control</p> <ul style="list-style-type: none"> • Health Education • Psychosocial Support • Defaulter Tracing • Referrals • HIV Home Based Care • Condoms supply • Supply of Information Education and Communication (IEC) materials • Supply of Insecticide-Treated Nets (ITNS) • Supply of Artemisinin-based Combination Therapy drugs (ACTs) • Diagnostic tests using RDTs • Adherence to treatment follow-up <p>Non-communicable Disease Control</p> <ul style="list-style-type: none"> • Health Education and Distribution of IEC materials • Referral and follow-up • Diagnosis 	<p>(Sarna, 2013) (Geibel, 2012) (Nganda, 2003) (Kangangi, 2003) (Negin, 2009) Millennium Village task force report³ (Cho, 2011) (Johnson, 2004)</p> <p>(Lindblade, 2006) (Kisia, 2012) (Jenkins, 2010) (Stromberg, 2011) (Suchdev, 2010)</p>
Family Health Services	<p>Maternal and Child Health/ Family Planning</p> <ul style="list-style-type: none"> • Health Education and Distribution of IEC materials • Counselling and distribution of short term contraception • Referral and follow-up for ANC and PNC • Nutritional assessments • U5 immunization follow-up • Community-based day care 	<p>(Casey, 2005) (Buket, 2006) (Mulama, 2009) (Murunga, 2011) (Dietsch, 2010)</p>

³ One Million Community Health Workers: Technical Task Force Report. Earth Institute University

	<p>center</p> <ul style="list-style-type: none"> • Adolescent Reproductive Health <p>Emergency Preparedness</p> <ul style="list-style-type: none"> • First Aid provision • Management of injuries • Management of trauma • Referral System 	
<p>Hygiene and Environmental Sanitation</p>	<ul style="list-style-type: none"> • Health Education and Distribution of IEC materials • Supply of Aqua tabs • Control of insects and rodents • Excreta solid waste disposal guidelines • Organizing community health i.e. action days 	<p>(Anon., 2007)</p>

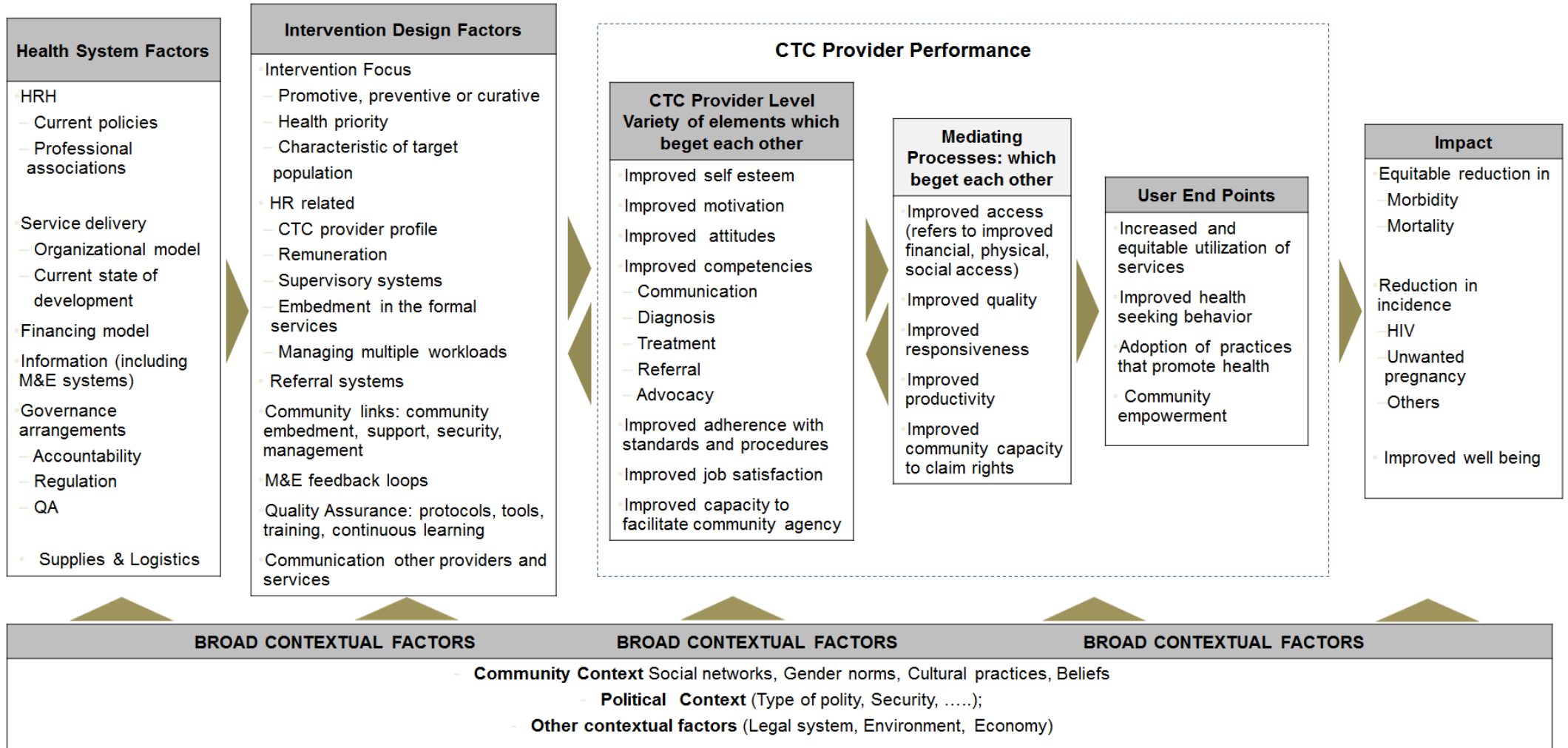
DEFINITION CTC PROVIDER

A CTC provider is an individual who has a role in enhancing linkage to formalized health services. This individual is based in the community in which he/she works in and is the first contact to formalized health service for the community members. Services provided by CTC providers are very basic and the provider receives some training for this. The CTC provider is also trained on identifying referral cases and following up those on health care in the community to ensure adherence. CTC providers are usually found in rural and low-income areas in where their services are mostly utilized due to challenges in accessing health services by the community.

DRAFT FRAMEWORK

Major themes from the framework (see diagram below) on factors influencing CTC provider performance:

- Broad contextual factors
 - Community factors
 - Policy factors
- Health system factors
- Intervention design factors
 - Human Resource Management
 - Quality Assurance
 - Monitoring & Evaluation



SEARCH STRATEGY

We used limited our search to items written about Kenya from the year 2003. We used the following terms related to CTC providers in Kenya:

- Community Health Worker
- Lay Health Worker/ Counsellors
- Volunteers Health Workers
- Expert Patients
- Community Health Extension Worker
- Community Health Work
- Community Midwives
- Community Nurses
- Traditional Birth Attendants
- Community Health Surveillance

For the organizations whose names came up in the searches, we followed for further information in their websites or via mail for queries.

DATA COLLECTION TOOLS FINAL VERSIONS

FOCUS GROUP GUIDE FOR COMMUNITY MEMBERS (ENGLISH)

Instructions for facilitators

1. Take consent
2. Fill in information and recording sheet
3. Provide introduction and explain process
4. Ensure that all participants understand and agree with the ground rules

Introduction

‘Good morning/afternoon. My name is (*facilitator 1*) and my name is (*facilitator 2*). We work for LVCT, a Kenyan organization that provides HIV testing and counselling as well as care and treatment. LVCT is conducting this study which aims to learn from the work that is carried out by community health workers (CHW) to help improve the health of the communities where they work. We understand that there are diferent kinds of CHWs in your community. Our discussion however will focus on those CHWs given responsibility to visit and provide health services at your homes and operate from a local health center. Your views, opinions and experiences as well as those of others are important to find out how community-based programmes can be best organised and improved in the future.’

This FGD guide aims to collect information on the following:

- **Community perceptions of CHWs**
- **Quality of care**

Introduction

1. Are you aware of any community health workers (CHW) providing services in your village?
2. What services do they provide?
3. Are there types of CHWs who only offer specific services in your community?
(probe for types of CHWs)
4. Do CHWs visit everyone in your community or just some homes and why?
5. Do you feel CHWs should visit everyone in the community?
6. How often do CHWs visit homes in your community?

Recruitment

7. Do you know how the CHWs were selected?
8. What makes a good CHW?
9. Were you involved in the selection of the CHWs?

Tasks

10. What do you think are the functions of a CHW?
11. Are there tasks they do that you think they should not be doing? Are there tasks they do not do that you think they should be doing?
12. If you were given the chance, would you want to be a CHW? Why? Why not?

HIV Services

13. What HIV services are provided in this district? Which of these services is carried out in the community?
(probe on VCT, Couple Counselling and Testing, HIV Care and Treatment)
14. Have you heard about home-based testing and counselling (HBTC)?
15. Do you think that CHWs should offer HBTC?

Quality of care

16. How is follow-up on services provided by CHWs done, how is their work supervised?
17. What is good about the services that CHWs offer in your village?
18. What changes would you like to see effected in the services that CHWs offer in your village?
19. Do you think that CHWs keep the information that they collect confidential? Would you be comfortable sharing personal health issues with a CHW?
20. Other than visiting households, what other interactions do you have with the CHWs?
21. Do you think that CHWs should offer more services?

FOCUS GROUP GUIDE FOR COMMUNITY MEMBERS (KISWAHILI)**Mwongozo wa mahojiano ya kikundi kwa wanajamii*****Maelekezo kwa wawezeshaji***

1. Kuchukua ridhaa
2. Jaza maelezo na fom ya kerekodi
3. Hakikisha ya kwamba wa shiriki wote wame helewa na kuhitikia na mikakati ya orodha

Habari za asubuhi / mchana. Jina langu ni Mimi nafanya kazi na shirika la LVCT, shirika la Kenya ambayo hutoa upimaji wa HIV na ushauri nasaha kama vile huduma na matibabu. LVCT kwa sasa hinafanya utafiti huu ambao una lengo la kujifunza kutokana na kazi ambayo hufanywa na wafanyakazi wa afya wa jamii (CHW) kusaidia kuboresha afya ya jamii kazi. Maoni yako, na uzoefu wako na wale ya wengine ni muhimu kutafuta jinsi jumuiya ya-msingi yamipango inaweza kuwa bora kupangwa na kuboreshwa katika siku zijazo.

Huu mwongozo unachukua majibu kutokana na;

- Maoni ya wanajamii kuhusu wahudumu wa afya kwa jamii
- Ubora wa afya

1. Je unajua wahudumu wa afya wa jamii (CHW) wowote wanaopatia huduma hakika kijiji chenu?
2. Wanapatiana huduma gani?
3. Je kuna aina ya CHWs wanaopatia huduma spesheli tofauti na wengine wanaopatia huduma zote katika jamii?
(uliza zaidi kuhusu aina ya CHWs walioko)
4. Je wahudumu wa afya ya jamii (CHWS) hutembelea kila mtu katika jamii ama huenda tu kwa nyumba zengine na kwa nini?
5. Je ni maoni yako kwamba CHWs wanatakikana kutembelea kila mtu katika jamii?
6. Ni mara ngapi wahudumu wa afya ya jamii hutembelea nyumba zenu?

Uchaguzi

7. Je, unajua jinsi wafanyikazi wa afya ya jamii (CHWs) walichaguliwa?
8. Nini inafanya mhudumu wa jamii wa afya kuwa bora?
9. Je, Wewe ulishiriki katika uteuzi wa CHWs?

Kuhusu Kazi

10. Unafikiria kazi ya wahudumu wa afya ni gani?
11. Je, kuna kazi ya wanayofanya ambayo unadhani hawapaswi kufanya? Je, kuna kazi wasiyofanya unayofikiria wanapaswa kufanya?
12. Kama ukipewa nafasi, ingetaka kuwa CHW/ mhudumu wa afya wa jamii? Kwa nini?

Huduma ya HIV

13. Huduma gani ya HIV hutolewa katika wilaya hii? Na ni gani hufanywa katika jamii?
(*Uliza zaidi kuhusu ushauri na kipimo ya virusi vya Ukimwi (VCT), ushauri na kipimo cha virusi vya Ukimwi kwa wapenzi, matunzo na matibabu ya virusi vya Ukimwi*)
14. Je, umesikia habari kuhusu kupimwa kwa ukimwi na ushauri maoni (HBTC)?
15. Je, unaonelea kama wahudumu wa afya ya jamii wanapaswa kupeana huduma ya ukimwi na mashauri makaoni (HBTC)?

Ubora wa huduma

16. Ubora wa huduma inayopatiwa na CHWs hufuatiziwa aje, kazi yao husimamiwa aje?
17. Ni nini kizuri kuhusu huduma ya wahudumu wa afya ya jamii (CHWs) katika kijiji yako?
18. Je, ni mabadiliko gani ungependa kuona katika huduma inayopatiwa na wahudumu wa afya ya jamii (CHWs) katika kijiji yako?
19. Je, unafikiri kwamba ya wahudumu wa afya ya jamii (CHWs) kuweka habari wanayokusanya kwa siri? Je, unaweza kuwa sawa kugawana binafsi ya afya ya masuala na wahudumu wa afya ya jamii (CHWs)?
20. Kando na kutembeleana nini inginezaidi unafanya na wahudumu wa afya ya jamii (CHWs)?
21. Je, unafikiri kwamba wahudumu wa afya ya jamii (CHWs) wanapaswa kutoa huduma zaidi?

FOCUS GROUP GUIDE FOR COMMUNITY HEALTH WORKERS (ENGLISH)

Instructions for facilitators

1. Take consent
2. Fill in information and recording sheet
3. Provide introduction and explain process
4. Ensure that all participants understand and agree with the ground rules

Introduction

‘Good morning/afternoon. My name is *(facilitator 1)* and my name is *(facilitator 2)*. We work for LVCT, a Kenyan organization that provides HIV testing and counselling as well as care and treatment. LVCT is conducting this study which aims to learn from the work that is carried out by community health workers (CHW) to help improve the health of the communities where they work. Your views, opinions and experiences as well as those of others are important to find out how community-based programmes can be best organised and improved in the future.’

This FGD guide aims to collect information on the following:

- Facilitators and barriers to providing services through the community strategy
- Lessons learned, opportunities, and constraints
- Recruitment, supervision, motivation, work load, and quality of care

Introduction

1. Please tell us what you do as a community health worker?
2. What are your key tasks during the week?
3. How much time do you spend each week carrying out your duties?
(Probe for whether there is an overspill of CHW work beyond the designated hours they are recommended to carry out their duties).
4. What do you spend most of your time on?
5. How do you feel about the amount of time you spend on carrying out your duties?

Recruitment

6. How were you recruited as CHW? What criteria were used for selection for your job?
7. How did you find out about the job of a CHW?
8. Did you receive formal training for your role as a CHW? Who carried out the training? How long did the training take?
9. How useful was the training in relation to the work you do?
(probe for what has been put to use from training and what has not been useful)
10. Which activities are you involved in that were not covered in training or require further training?

Motivation

11. What do you like about being a CHW?
12. What don't you like about being a CHW?
13. Why did you decide to take this job?
14. What is it about this job that encourages you to continue working as a CHW?
15. What would discourage you from continuing your job as CHW?

Supervision

16. Who do you report to?
17. How do they supervise your activities?
(Probe for whether there are any visits to households with supervisor, supervision meetings, etc.)
18. How frequently do you meet your supervisor?
19. Who do you go to when you have a problem in carrying out your duties?
(Probe for whether it is someone other than the supervisor)
20. What do you think about the supervision that you receive? How can this supervision be improved?

Tasks

21. What are the functions of a CHW?
(Use checklist of tasks)
22. Are there tasks that you are asked that you should not be doing? Are there tasks that you are not doing that you think you should be doing?
23. Do you think that CHWs can take on more duties?
(If yes, probe for examples of what these duties could be)

HIV Knowledge

24. What HIV services are provided in this district? Which of these services is carried out in the community?
25. Do you offer any HIV services as part of your work as a CHW? Which ones?
26. Have you heard about home-based testing and counselling (HBTC)? If yes, what does it consist of? Have you been involved in HBTC? In what capacity?
27. Do you think that you can offer HBTC as a CHW? What skills would you need to learn in order to offer HBTC?

Quality of care

28. What do you consider to be quality service? What do you think about the quality of the services you give the community?
29. How does your CHEW insure that you are providing quality services?
30. What do you think people in the community think about the service that you provide? Do you think that they want you to provide more services?
31. Other than visiting households, what other interactions do you have with the community in your role as a CHW?
32. What do you do when you have a problem in your work?

Facilitators and barriers

33. What do you think goes really well in your work as a CHW?
34. What do you think does not always go well?
35. What can be done to improve your work as a CHW?
36. What do you require to help you do your job?

Remuneration

37. What do you think about your remuneration?

M&E

38. What records do you keep of your work? How is this information collected?
39. What do you do with this information? Do you get feedback about the results of your work? If so, how is this communicated and by whom?
40. Who do you report your activities to?

FOCUS GROUP GUIDE FOR COMMUNITY HEALTH WORKERS (KISWAHILI)**Mwongozo wa mahojiano ya kikundi kwa wahudumu wa afya kwa jamii****Maelekezo kwa wawezeshaji**

1. Chukua ridhaa.
2. Jaza habari kwa fomu/hati ya kuandikia/kurekodi.
3. Toa maelekezi na pia eleza kwa kina utaratibu/mchakato.
4. Hakikisha washiriki wote wameelewa na kukubaliana na sheria zilizowekwa.

Maelezo

'Habari ya saubuhi/alasiri.jina langu ni(muelekezi 1) na jina langu ni(muelekezi wa 2). Tunafanya kazi na LVCT,shirika la hapa inchini Kenya ambalo hutoa huduma za kupima virusi vya ukimwi na mashauri pamoja na utunzi na matibabu.LVCT kwa hivi sasa tunafanya utafiti unaolenga kufahamu zaidi kazi inayofanywa na wahudumu wa afya kwa jamii (CHWs) ili kusaidia kuboresha afya kwa jamii. Tunaelewa ya kwamba kuna aina tofauti ya CHW katika eneo lenu. Majadiliano yetu lakini yatazingatia wale CHW waliopatiwa jukumu la kuwatembelea na kuwapatia huduma za afya katika nyumba zenu na wanaofanya kazi katika kituo cha afya kilicho karibu na nyinyiMaoni yako,mtazamo wako na uzoefu wako pamoja na yale ya watu wengine ni ya muhimu sana ili kusaidia kujua vile mipango misingi ya jamii inaweza kuandaliwa na kuboreshwa katika siku zijazo.

Utangulizi/Maelezo

1. Tafadhali tueleze ni nini unafanya kama mfanyakazi wa afya ya jamii?
2. Je, ni kazi/majukumu gani yako ni muhimu kila wiki?
3. Ni muda kiasi gani wewe hutumia kila wiki kutekeleza majukumu yako?
(ulizia zaidi kama kuna ongezeko ya kazi zaidi kupita masaa wafanya kazi wa afya kwa jamii wamewekewa ili kutekeleza majukumu yao).
4. Muda wako zaidi unatumia kufanyia/kufanya nini?
5. Unajihisi vipi juu ya muda wako unaotumia ukifanya majukumu yako?

Uandikishaji/uajiri

6. uliajiriwaje/ulisajiriwaje kama mhudumu wa afya kwa jamii?Ni vigezo gani vilitumiwa kukuteua/kukuchagua kwa kazi hii?
7. Unaonaje kuhusu kazi hii ya mhudumu wa afya kwa jamii?
8. Umepata mafunzo rasmi kama mhudumu wa afya kwa jamii? ni nani alikufunza?Mafunzo yalichukua muda kiasi gani?
9. Mafunzo uliyopata yamekuwa kwa manufaa/umuhimu mgani kwa kazi hii yako?
(ulizia zaidi kuhusu mafunzo yanayosaidia katika kazi na yasiyomuhimu kwa kazi)
10. Ni shughuli gani unazojihusisha nazo ambazo hazikuwa kwenye mafunzo au zinahitaji mafunzo Zaidi?

Motisha/hamasa

11. Ni nini kinapendeza kuwa mhudumu wa afya kwa jamii?
12. Ni nini haupendezwi nalo kuwa mhudumu kwa afya kwa jamii.?
13. Ni kwanini ulikubali kufanya kazi hii?

14. Ni nini inakupa motisha wa kuendelea kufanya kazi kama mhadumu wa afya kwa jamii?
15. Ni nini kinaweza kukuvunja moyo ili usiweze kuendelea kuhudumu kama mtoa huduma kwa afya ya jamii?

Usimamizi

16. Unaripoti kwa nani?
17. Wanasimamia kazi/shughuli zenu kivipi?
(ulizia kwa undani kama kuna ziara manyumbani pamoja na msimaizi, vikao vya usimamizi na zinginezo)
18. Ni mara nyingi kiasi gani unakuwa na kikao na msimamizi?
19. Wewe uenda kwa nani unapokuwa na shida yoyote ya kutekeleza kazi/majukumu yako?
(ulizia zaidi kama kuna mtu mwingine isipokua msimamizi)
20. Unaonaje kuhusiana na usimamizi unaopata? Usimamizi huu unaweza kuboreshwa vipi?

Majukumu

21. Kazi/majukumu ya mhadumu wa afya kwa jamii ni gani?
(Tumia orodha ya kuzingatia ya majukumu)
22. Kuna majukumu/kazi umeulizwa kufanya haufai kuwa unafanya? kuna majukumu haufanyi unadhani unafaa kuwa unafanya?
23. Unadhani watoa huduma wa afya kwa jamii wanafaa kuwa na majukumu zaidi?
(kama ndio, ulizia zaidi mifano ya majukumu/kazi hizi)

Ufahamu wa virusi vya ukimwi

24. Ni huduma gani za virusi vya ukimwi zinazotolewa katika wilaya hii? Ni gani kati ya huduma hizi hufanyika katika jumuiya hii?
25. Je, wewe unatoa huduma za virusi vya ukimwi katika jamuiya hii? ni gani?
26. Umeweza kusikia juu ya huduma za kupima na ushauri nasaha ya nyumbani? kama ndio, unahusisha nini? umeweza kuhusika na mpango wa kupima na kutoa mashauri nasaha ya nyumbani? Kwa kiwango gani?
27. Unadhani unaweza kutoa huduma hii kama mtoa huduma wa afya kwa jamii? Ni ujuzi gani unafaa kupata ili kutoa huduma hii ya kupima na kushauri kwa jamii?

Ubora wa huduma

28. Je, huduma bora unadhani ni nini? unaonaje/maoni yako ni gani kuhusu ubora wa huduma zinazopewa jamii?
29. Mtoa huduma mkuu wa afya kwa jamii huakikishaje unatoa huduma bora?
30. Unadhani watu katika jamii hii wanafikiriaje kuhusu huduma unazozitoa? unadhani wanataka uwape huduma zaidi?
31. Zaidi ya kutembelea boma/nyumba tofauti, ni maingiliano/ushirikiano mgani unakuwa nao na jamii hii kama mtoa huduma kwa afya kwa jamii?
32. Je, unafanya nini unapokuwa na shida/matatizo unapofanya kazi yako?

Wawezeshaji na vikwazo.

33. Ni ni unadhani unaendeleza/unafanya vyema zaidi kama mtoa huduma wa afya kwa jamii?
34. Ni nini unadhani haufanyi/hakifanyiki vyema?
35. Ni nini inapaswa kufanywa ili kuboresha kazi yako kama mtoa huduma wa afya kwa jamii?
36. Ni nini unahitaji iweze kukusaidia kufanya kazi yako?

Malipo

37. Maoni yako ni gani kuhusu malipo/mshahara wako?

Ufuatiliaji na tathmini

38. Ni rekodi gani unaweka kuhusiana na kazi yako? Ripoti/rekodi hizi unazikusanya vipi?

39. Unazifanyia nini rekodi/repoti hizi? unapata marejesho/majibu kuhusu matokeo ya kazi yako? kama ndivyo, basi, ni kupitia njia gani unaelezwa majibu hayo na ni nani hufanya hivyo?

40. Wewe unarepoti kwa nani kuhusiana na majukumu yako?

SEMI STRUCTURED INTERVIEW GUIDE FOR CLIENTS (ENGLISH)

Instructions for facilitators

1. Take consent
2. Fill in information and recording sheet
3. Provide introduction and explain process

Introduction

‘Good morning/afternoon. My name is *(facilitator 1)*. I work for LVCT, a Kenyan organization that provides HIV testing and counselling as well as care and treatment. LVCT is conducting this study which aims to learn from the work that is carried out by community health workers (CHW) to help improve the health of the communities where they work. . We understand that there are different kinds of CHWs in your community. Our discussion however will focus on those CHWs given responsibility to visit and provide health services at your homes and operate from a local health center. Your views, opinions and experiences as well as those of others are important to find out how community-based programmes can be best organised and improved in the future.’

Introduction

1. Do community health workers (CHW) provide services in your village?
2. What services do they provide?
3. How often do CHWs visit your homes?

Tasks

4. What do you think are the functions of a CHW?
5. Are there tasks they do that think they should not be doing? Are there tasks they do not do that you think they should be doing?

HIV Services

6. What HIV services are provided in this district? Are any of these services is carried out in the community?
7. Have you heard about home-based testing and counselling (HBTC)?

For those who have had HBTC in the past:

8. When did you have HBTC?
9. Can you tell me about the experience?
(Probe for positive and negative aspects of the experience)
10. Did you get your results immediately?

(Do not ask for result)

11. What happened after you received your results?
12. Would you recommend HBTC to someone else? Why?

For those who have NOT had HBTC in the past:

13. Would you be interested in HBTC being offered in your village?
14. Have you ever been offered HBTC?
15. (If yes) Why did you refuse?

Quality of care

16. What is good about the services that CHWs offer in your village?
17. What is bad about the services that CHWs offer in your village?
18. Do you think that CHWs keep the information that they collect confidential? Would you be comfortable sharing personal health issues with a CHW?
19. Other than visiting households, what other interactions do you have with the CHWs?
20. Do you think that CHWs should offer more services?

SEMI STRUCTURED INTERVIEW GUIDE FOR CLIENTS (KISWAHILI)

Mwongozo wa Idhini ya Mahojiano kwa Mteja

1. Kuchukua ridhaa
2. jaza habari kwa fomu/cheti ya kuandika/kurecodi)
3. Toa maelekezo na pia eleza kwa kina utaratibu/mchakato)

Utangulizi

‘Habari za asubuhi / mchana. Jina langu ni Mimi nafanya kazi na shirika la LVCT, shirika la Kenya ambayo hutoa upimaji wa HIV na ushauri nasaha kama vile huduma na matibabu. LVCT kwa sasa hinafanya utafiti huu ambao una lengo la kujifunza kutokana na kazi ambayo hufanywa na wafanyakazi wa afya ya jamii (CHW) kusaidia kuboresha afya ya jamii kazi. Tunaelewa ya kwamba kuna aina tofauti ya CHW katika eneo lenu. Majadiliano yetu lakini yatazingatia wale CHW waliopatiwa jukumu la kuwatembelea na kuwapatia huduma za afya katika nyumba zenu na wanaofanya kazi katika kituo cha afya kilicho karibu na nyinyi. Maoni yako, na uzoefu wako na wale ya wengine ni muhimu kutafuta jinsi jumuiya ya-msingi yamipango inaweza kuwa bora kupangwa na kuboreshwa katika siku zijazo.’

Utangulizi

1. Wahudumu wa afaya ya jamii hutembelea kijiji chako?
2. Ni huduma gani wanapatiana?
3. Ni mara nyingi kiasi gani wafanyikazi wa huduma ya afya hutembelea kijiji chako?

Majukumu

4. Unafikiria wafanyikazi wa afya ya jamii wanafanya kazi gani?
5. Je, kuna kazi ambayo wanafanya ambayo mnafikiria hawapaswi kufanya? Je, kuna kazi hawafanyi ambayo unafikiria wanapaswa kufanya?
6. Huduma gani za HIV hutolewa katika wilaya hii? Na ni gani hufanywa katika jamii hii?
7. Je, umesikia habari kuhusu huduma ya kupima ukimwi na na ushauri nyumbani (HBTC)?

Wale ambao wamepokea huduma ya kupima na ushaurihapo awali

8. Lini ulipata huduma ya kupima na ushauri nyumbani?
9. Unaweza kutuelezea uzoefu wa huduma ya kupima na ushauri nyumbani (HBTC)

Ulizia faida na ubaya wa uzoefu wa huduma ya kupima na ushauri nyumbani (HBTC)

10. Je ulipata matokeo yako ya virusi vya ukimwi mara moja?

usiulize matokeo

11. Nini kilitokea baada ya kupokea matokeo yako ya virusi vya ukimwi?
12. je ungependekeza watu wengine kuhusu huduma ya kupima na ushauri na nyumbani? Kwa nini?

Kwa wale hawakupata huduma ya kupima na ushauri nyumbani (HBTC)

13. Je, unaweza kuwa nia na huduma ya kupima na ushauri nyumbani inayotolewa katika kijiji chako?
14. Je umewahi kupata huduma ya kupima na ushauri ya nyumbani (HBTC)?
15. Kama la, Kwa nini wewe ulikataa?

Huduma bora

16. Ni nini kizuri kuhusu huduma za wahudumu/wafanyakazi wa afya kwa jamii katika kijiji chako?
17. Ni nini hupendi kuhusu huduma ya wafanyakazi wa afya kwa jamii katika kijiji chako?
18. Je, unafikiri kwamba wafanyakazi wa huduma ya afya ya jamii huweka habari wanayokusanya kwa siri?
19. Mbali na kutembeleana nini ingine zaidi hufanywa na wafanya kazi wa huduma ya afya ya jamii?
20. Je, unafikiri kwamba wahudumu wa afya ya jamii wanapaswa kutoa huduma zaidi?

SEMI STRUCTURED INTERVIEW GUIDE FOR COMMUNITY HEALTH EXTENSION WORKERS
(ENGLISH)

Instructions for facilitators

1. Take consent
2. Fill in information and recording sheet
3. Provide introduction and explain process

Introduction

‘Good morning/afternoon. My name is *(facilitator 1)*. I work for LVCT, a Kenyan organization that provides HIV testing and counselling as well as care and treatment. LVCT is conducting this study which aims to learn from the work that is carried out by community health workers (CHW) to help improve the health of the communities where they work. Your views, opinions and experiences as well as those of others are important to find out how community-based programmes can be best organised and improved in the future.’

Recruitment of formally engaged CHEWs

1. How were you recruited as CHEW?

(Probe

Semi structured interview guide for: role community, health professionals, ministry, NGO/CBO)

2. What criteria were used for selection for your job/role? Do you think this was the correct criteria for CHEW selection?
3. If you had to make the criteria for new providers what changes would you make, if any, in the criteria or process of recruitment?

(Probe for: skills and community involvement)

Incentives and motivation

4. What things make you feel good or not so good about your work?

(Probe for: the contribution they make through their work, the support or incentives they receive)

5. What things influence your job satisfaction as a CHEW?

(Probe for: workload, working environment, communication, colleagues, and other health extension workers)

(Kiswahili)

Tasks

6. What things influence how the CHWs feel about the tasks they carry out?

(Probe for: expectations of community and CHWs, supervision, what happens if something goes wrong?)

7. How do you supervise CHWs?

(Probe for: What do you like about supervision and what do dislike about supervision? How often are they supervised? When was the last time? What happened?)

8. How are you enabled and limited in your supervision of CHWs at work?

(Probe for: Influencing decision making, feeling powerless, problem solving process)

Quality of care

9. What do you think about the quality of services provided by CHWs?

10. How is the quality of their work evaluated? By who? How?

(Probe for: guidelines, protocols, monitoring of quality)

11. What do you think people in the community think about the quality of services CHWs provide? Would they want CHWs to provide more services?

HIV services

12. What HIV services do the CHWs in your community unit provide?

(Probe for: referrals and linkages, defaulter tracing)

13. What do you know about home based HIV testing and counselling (HBTC)?

14. Do you think that it is a service that should be integrated into the community strategy?

15. Do you think that CHWs should be trained to offer HBTC? Why?

(Probe for: skill set, training, quality assurance)

Facilitators and barriers

16. What do you think goes really well in your work as a CHEW?

(Probe for examples)

17. What do you think does not always go well?

(Probe for: CHEW and CHW workload, supervision structure, data use)

Lessons learned, opportunities constraints

18. What can be done to improve your work as a CHEW?

M&E

19. What records do you keep of your work?

20. How is this information collected?

21. What do you do with this information? What happens with this information?

22. Do you get feedback about the results of your work? If so, how is this communicated and by whom?

ONLINE QUESTIONNAIRE FOR HIV TESTING AND COUNSELLING PROVIDERS

Q1

To be signed by the respondent giving consent

I have read the information provided for the study. I understand that if I decide to be involved in the study I will fill in a questionnaire that will take about 45 minutes. I understand that I am free to withdraw from the study at any time. I am also aware of the fact that if I decide not to participate in the study this will not affect my position at LVCT.

Any questions or concerns about the study will be answered at any time by the study co-coordinator.

Select as appropriate

- I agree to take part in this study
- I do not agree to take part in this study

PAGE 3

3. General Information on Area of Operation

Q2

1. County

Q3

2. Type of health facility linked to

- Private
- MOH
- FBO
- Other (please specify)

Q4

3. Type of HTC service site

- Stand-alone
- Integrated
- Mobile
- Other (please specify)

PAGE 4

4. Participant Basic Information

Q5

4. What is your occupation?

- Nurse
- Doctor
- Counsellor
- Other (please specify)

Q6

5. Sex of respondent

- Male
- Female
- Other (please specify)

Q7

6. Do you provide HIV-related services?

- Yes

No

Q8

7. How long have you been providing HIV related services

Less than one year

1-3 years

3-5 years

Over 5 years

PAGE 5

5. HIV Testing and Counselling

Q9

8. What are your key tasks as an HTC provider? Please list your responses below;

Q10

9. Do you know what home based HIV testing and counselling (HBTC) is?

Yes

No

I don't know

[+ Add Question ▼](#)

PAGE 6

Q11

10. Please provide a brief explanation of what HBTC is?

Q12

11. Do you think HBTC should be provided everywhere?

Yes

No

Q13

12. Given reasons for your answer to question 11.

Q14

13. Have you ever offered HBTC services?

Yes

No

PAGE 7

Q15

14. How long have you been providing HBTC?

Less than one year

1-3 years

More than 3 years

Q16

15. How would you best describe your experience of providing HBTC?

Good

Mixed

Bad

Q17

16. Give reasons for the answer to question 15.

Q18

17. What is the community reaction to HBTC?

Good

Mixed

Bad

Q19

18. Give reasons to the answer in question 17.

Q20

19. How do you prepare the community for HBTC services?

Q21

20. Are there processes in place to follow up clients who test positive during HBTC?

Yes

No

PAGE 8

Q22

21. Kindly explain what these processes are.

Q23

22. Have you experienced any harm or felt unsafe when offering HBTC services?

Never

Sometimes

Always

PAGE 9

Q24

23. Please provide a brief explanation of the instances in question 22.

PAGE 10

10. Work Load

Q25

24. Do you think that HTC providers can provide additional services to the community?

- Yes
- No

PAGE 11

Q26

25. Please give examples of services mentioned in question 24.

Q27

26. Do you think that HTC providers are in a position to take up extra duties?

- Yes
- No

PAGE 12

12. Quality of Care

Q28

27. Can you describe what you understand to be quality service?

Q29

28. What do you think about the quality of services that provided by HBTC counsellors?

- Good
- Mixed
- Bad

Q30

29. How does your supervisor ensure that you provide quality services?

Q31

30. How does the community perceive services provided by HBTC counsellors?

- Good
- Mixed
- Bad

Q32

31. Do you think the community wants you to provide more services?

- Yes
- No

PAGE 13

Q33

33. Please provide examples of the services implied in question 32.

PAGE 14

14. Monitoring and Evaluation

Q34

33. What records do you keep of your work?

Q35

34. What do you do with this information?

Q36

35. Do you get feedback about your work?

- Yes
- No

PAGE 15

Q37

36. Who gives you feedback?

Q38

37. How is feedback communicated?

Semi structured interview guide for Policypolicy makers and DHMT members

Instructions for facilitators

1. Take consent
2. Fill in information and recording sheet
3. Provide introduction and explain process

Introduction

'Good morning/afternoon. My name is (*facilitator 1*). I work for LVCT, a Kenyan organization that provides HIV testing and counselling as well as care and treatment. LVCT is conducting this study which aims to learn from the work that is carried out by community health workers (CHW) to help improve the health of the communities where they work. Your views, opinions and experiences as well as those of others are important to find out how community-based programs can be best organized and improved in the future.'

Knowledge of CTC programmes

1. What do you know about the community strategy?
(Probe for: guidelines and policies)
2. Which community based providers are you aware of?
(Probe for: mentor mothers, peer educators etc.)
3. What guidelines for CHW and CHEWs are you aware of? In your opinion, what are the most important aspects of these guidelines? What could be improved?
4. What do you know about HIV Testing and Counselling services and Home Based Testing and Counselling services?
5. Is it possible to integrate HIV services into the community health strategy? How do you think this should be done?
6. What is the level of integration of HIV services in the community strategy?
(Probe for: HIV training for CHWs, referral and linkages, defaulter tracing, mobilisation, health education, other players)

For DHMT members only:

7. Are you in direct contact with CHW/CHEWs?
8. What is your role?
(Probe for: tasks, how often in contact, for what)
9. What is the role of the DHMT in ensuring delivery of the community strategy?
(Probe for: motivation, training, supervision, remuneration)

Facilitators and barriers

10. What do you think is the importance of the community health strategy?
11. Do you see any weaknesses in the community health strategy?
12. What do you think goes really well in the community health strategy?
(Probe for: a pathway, flow of events.)
13. How do you ensure that standards are being maintained in community based services?
(Probe for: supervision, quality assurance mechanisms)

Lessons learned, opportunities constraints

14. What are the challenges faced in implementing the community health strategy?
15. What can be done to address these challenges?
(Probe for: HRH and QA and M&E)

HRM

16. How are CHWs and CHEWs recruited and what are the criteria for selection?
17. What do you think about the tasks of CHWs and CHEWs?

18. What is your opinion on their workload? What tasks should be retained and which ones should be changed?

19. Tell me about their:

- Incentives
- Remuneration
- career perspectives
- training and continuing education
- supervision

Motivation

20. What factors influence job satisfaction and motivation of CHW and CHEWs?

(Probe for: equipment and supplies, workload, working environment, communication, equipment and transportation, safety and sexual harassment, career perspective, supervision, community, clients, colleagues, other health workers)

For DHMT members only:

21. What factors influence the perceptions of the providers on their tasks?

(Probe for: expectations of community, clients, other providers and supervisors; how they feel about meeting these expectations, worries, concerns, what happens if something goes wrong, if a client complains?)

22. Who are the clients of the CHWs? Is any group left out?

23. Are there issues around stigmatisation of clients, kindly explain?

Referral

24. How is referral organized in the community health strategy?

(Probe for: different referral processes for different condition, ask for examples.)

25. What goes well and not so well in referral?

M&E

26. How is the information about performance of community health strategy programmes collected?

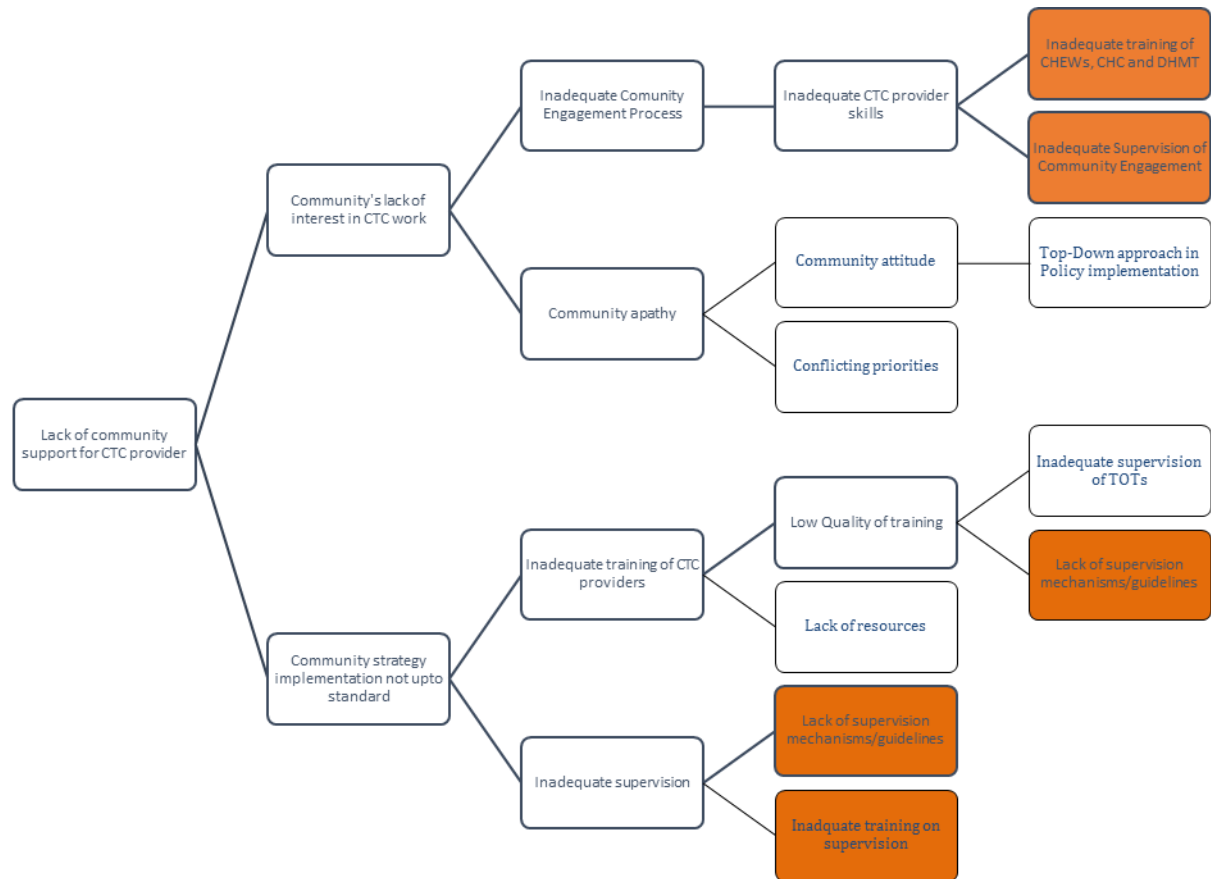
27. What communication channels are used?

28. What happens with this information? Do you give feedback about the results of the work?

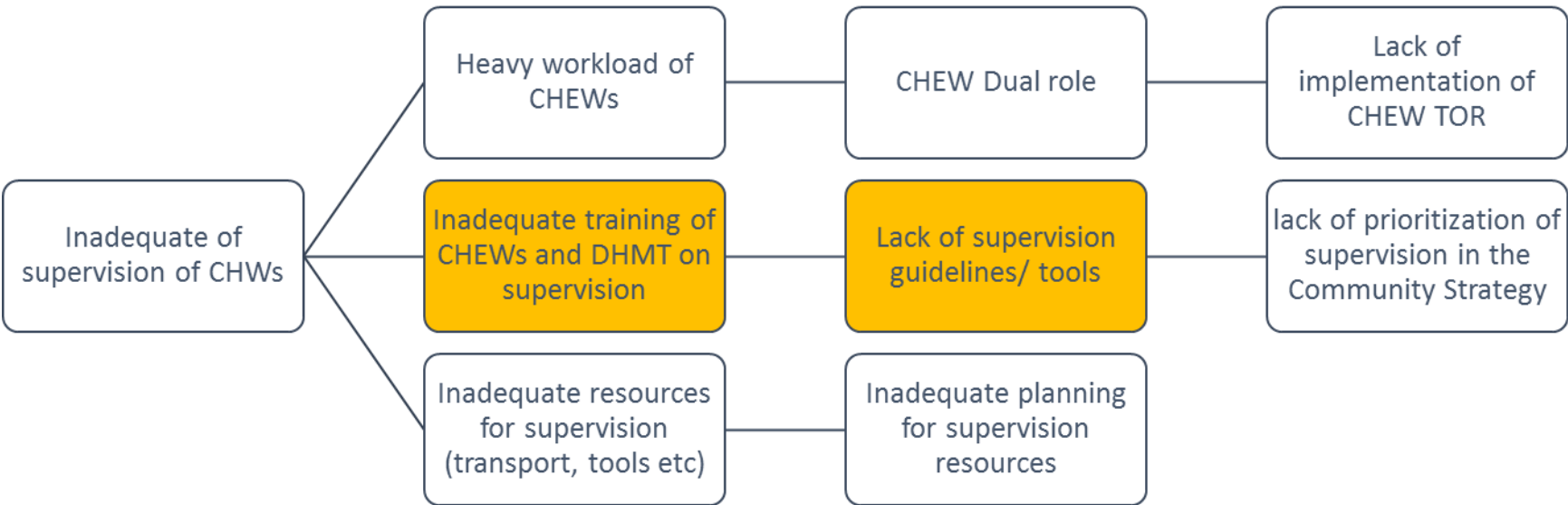
ROOT CAUSE ANALYSIS AND PROBLEM STATEMENTS

NB: The text boxes in color indicate selected areas for intervention for REACHOUT in Kenya

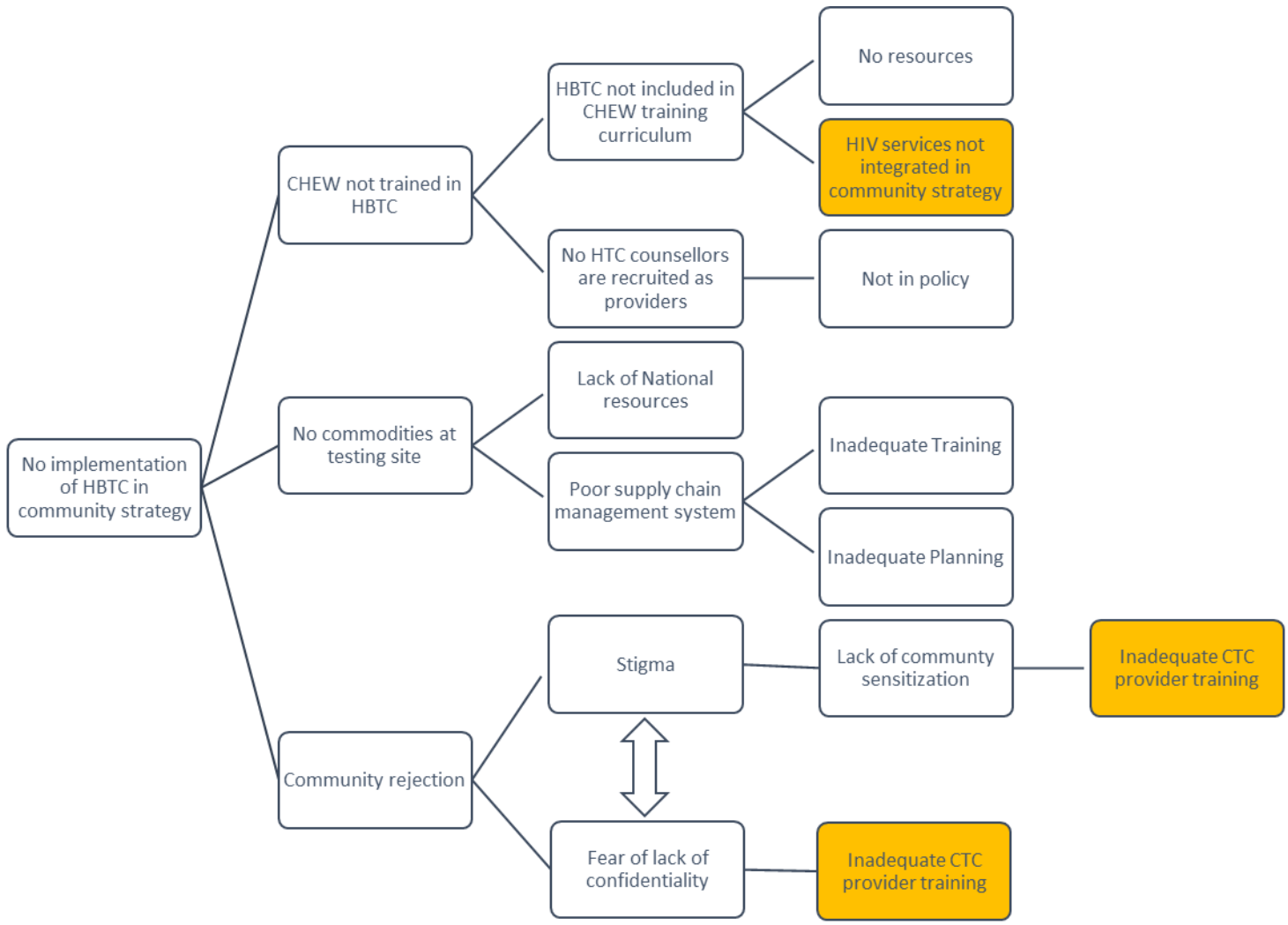
Problem statement 1: Inadequate community support for CTC providers functions



Problem Statement 2: There is inadequate quality assurance and supervision of CHWs in the community strategy program



Problem Statement 3: There is no implementation of HBTC in community strategy



FINAL CODING FRAMEWORK (FROM NVIVO)

1. Close to community provider description

- a. Types
 - i. CHEWs
 - ii. CHWs
 - iii. Other e. TBAs
- b. Characteristics
- c. Duration of practice as a CTC provider

2. Community links

- a. Community context
 - i. Cultural and religious, social, language
 - ii. Gender norms and values
 - iii. Stigma and discrimination
- b. Community engagement
 - i. Recruitment and selection
 - ii. Community support to implementation, incentives, communication and transport
 - iii. Community governance (supervision, monitoring, accountability)
 - iv. Community capacity to claim rights
- c. Community expectations (e.g. Of CTC provider roles and tasks, client groups, curative versus promotive etc.; expecting resources from providers)
- d. Community and client perceptions of providers and health services (e.g. Quality of care, valuing of CTC provider (e.g. recognition, trust, importance of CTC provider), CTC providers acting as role models)
- e. Community attitude to health
 - i. Understanding and knowledge
 - ii. Health seeking behaviour - service utilisation (e.g. what and why)
 - iii. Adoption of practices that promote health

3. HR management and planning

- a. Selection and recruitment
 - i. Qualifications and attributes considered at selection
 - ii. Gender dynamics
- b. Initial training – length and focus, MoH or NGO specific, content, appropriateness etc
- c. CTC provider role
 - i. Focus of the work (health intervention focus, e.g. HIV, maternal health)
 - ii. Official tasks (curative, promotive) and tension of policy versus practice
 - iii. Location of tasks (facility or community)
 - iv. Understanding of role (e.g. provider, client, others)

- d. CTC provider workload (includes multiple tasks; CTC-client ratio etc, time)
- e. Continuous professional development (refresher training; on-the-job training)
- f. Career prospects and advancement
- g. Financial incentives and disincentives
 - i. Allowances, subsidies and incidentals
 - ii. Salaries
 - iii. Selling drugs, supplies or services
- h. Non-financial incentives and disincentives
 - i. Material (e.g. uniform, transport such as bikes, accommodation)
 - ii. Non material external (e.g training, supervision, community recognition)
 - iii. Non material internal (e.g. personal motivation and satisfaction, nature of the job itself, status in the community, comparison with others, feeling bad when you can't give something or help)
- i. Supervisory systems
 - i. Approach and relationship (fault-finding, checklist, mentoring etc)
 - ii. Implementation (who, hierarchy of reporting, feedback mechanism, frequency)
 - iii. Problem solving
- j. Peer group formation and peer support

4. Programme Implementation

- a. Access
 - i. Transport and distance
 - ii. Equity of access (gender, age and vulnerable groups)
- b. CTC service delivery
 - i. CTC client characteristics (adults, children, pregnant women etc. whole households)
 - ii. CTC package of care (health education lectures, accuracy of diagnosis, appropriateness of treatment, kit contents)
 - iii. Frequency of visits
- c. Availability of staff and services (e.g. Doctors, nurses, CTC providers, volunteers, informal CTC providers, and coverage of services such as family planning, SRH, HIV, TB)
- d. Quality of care
 - i. Confidentiality
 - ii. Adherence to protocols
 - iii. Supervisor perceptions
 - iv. Client-centred approach and attitudes (see also under community)
 - v. Self-reflection (includes awareness of limitations)
- e. Reporting

- i.* data systems, registers
- ii.* M&E feedback loops (data analysis and use)
- f.* Referral

5. Programme management

- a.* Protocols, guidelines, tools and manuals
- b.* Coordination and communication
 - i.* With clients
 - ii.* With supervisors
 - iii.* With other health providers and CTC providers
 - iv.* With and between NGOs/sectors
 - v.* With informal providers
 - vi.* Technical methods (e.g. mHealth, credit for airtime)
- c.* Supplies and logistics (e.g. Drugs, test kits and consumables supply , infrastructure, storage safety and availability of required once off materials - IEC materials, bicycle, manual)
- d.* Sustainability
 - i.* Financing (e.g. user fees and funding mechanisms)
 - ii.* Role of other organisations, including donors, UN agencies, NGOs, CBOs, faith based organisations (e.g. dependence, departing NGOs, role and future commitment in co-financing)
 - iii.* Distortion caused by vertical programming and variation in incentives
 - iv.* National support
 - v.* Attrition
 - vi.* Income generating activities/kitty

6. National structures and governance

- a.* Programme quality assurance and improvement systems
- b.* Community strategy
 - i.* District and national level governance
 - ii.* Policy change at national level (e.g. impact on programme of re-structuring, re-orientation of tasks)
 - iii.* Integration of new tasks into the community health strategy (e.g. HIV services, Other RDTs, malaria RDTs and treatment, additional tasks)
 - iv.* Perceptions of the community health strategy (includes as a way of offloading facilities)
- c.* Recommendations and suggestions

7. HIV services

- a.* Home-based HTC
 - i.* Knowledge and attitude
 - ii.* CHW involvement
 - iii.* Linkage
- b.* General HIV services organisation

c. Defaulter tracing and linkage to ART

8. Fabulous quotations

COPIES OF ETHICAL APPROVAL LETTERS



Royal Tropical Institute
KIT Development Policy & Practice

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Our reference DEV Education

Amsterdam Tuesday, 25 June 2013

Subject Decision Research Ethics Committee on Proposal S45B

Dear Korrie de Koning,

The Research Ethics Committee of the Royal Tropical Institute (REC) has reviewed the revised proposal entitled "*Reachout: Context analysis for the performance and sustainability of close-to-community providers to improve CTC health services*" (S45B) that was resubmitted on June 18th, 2013.

The decision of the Committee is as follows:

The Committee has reviewed this revised version and is pleased to see that you have addressed the requested clarifications and amendments to our full satisfaction.

The Committee is of the opinion that the proposal meets the required ethical standards for research and herewith grants you ethical approval to implement the study as planned in the afore mentioned protocol.

Kind regards,

L. Blok, MD, MScCH.
Chair Research Ethics Committee, KIT

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KEMRI/RES/7/3/1

August 16, 2013

**TO: DR. CLEOPATRA MUGYENI, (PRINCIPAL INVESTIGATOR)
LIVERPOOL VCT, CARE AND TREATMENT
P.O. BOX 19835-00200
NAIROBI**

**RE: NON-SSC PROTOCOL No. 399 (RESUBMISSION 2): CONTEXTUAL ANALYSIS FOR THE
PERFORMANCE AND SUSTAINABILITY OF THE COMMUNITY HEALTH STRATEGY IN
KENYA: HOME-BASED COUNSELLING AND TESTING (VERSION 1.2. DATED 8TH AUG
2013)**

Reference is made to your letter dated 8th August, 2013. ERC Secretariat acknowledges receipt of the revised protocol version 1.2 dated 8th Aug 2013 on 12th August, 2013.

This is to inform you that the Committee determined that the issues raised are adequately addressed. Consequently, the study is granted approval for implementation effective this **16th August 2013** for a period of one year. Please note that authorization to conduct this study will automatically expire on **August 15, 2014**.

If you plan to continue data collection or analysis beyond this date, please submit an application for continuation approval to the ERC Secretariat by **4th July, 2014**. The regulations require continuing review even though the research activity may not have begun until sometime after the ERC approval.

You are required to submit any proposed changes to this study to the ERC for review and the changes should not be initiated until written approval from the ERC is received. Please note that any unanticipated problems resulting from the implementation of this study should be brought to the attention of the ERC and you should advise the ERC when the study is completed or discontinued.

Work on this project may begin.

Yours faithfully,


**DR. ELIZABETH BUKUSI,
ACTING SECRETARY,
KEMRI ETHICS REVIEW COMMITTEE**

In Search of Better Health