## Key project information

<table>
<thead>
<tr>
<th><strong>Title of research programme:</strong></th>
<th>Supporting decentralised management to improve health workforce performance (PERFORM)</th>
</tr>
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<tbody>
<tr>
<td><strong>Reference number:</strong></td>
<td>266334</td>
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</table>
| **Partners:**                 | School of Public Health, University of Ghana  
                               | Ghana  
                               | Institute of Development Studies, University of Dar-es-salaam  
                               | Tanzania  
                               | School of Public Health, College of Health Sciences, Makerere University  
                               | Kampala, Uganda  
                               | Swiss Tropical and Public Health Institute  
                               | Switzerland  
                               | Nuffield Centre for International Health and Development, University of Leeds  
                               | UK  
                               | Liverpool School of Tropical Medicine, UK |
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| **Authors:**                  | Institute of Development Studies, University of Dar es Salaam                       |
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## Acronyms and Abbreviations

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<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AKF</td>
<td>Aga Khan Foundation</td>
</tr>
<tr>
<td>AR</td>
<td>Action Research</td>
</tr>
<tr>
<td>BMAF</td>
<td>Benjamin William Mkapa HIV/AIDS Foundation</td>
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<tr>
<td>CCHPs</td>
<td>Comprehensive Council Health Plans</td>
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<tr>
<td>CHF</td>
<td>Community Health Fund</td>
</tr>
<tr>
<td>CSSC</td>
<td>Christian Social Service Commission</td>
</tr>
<tr>
<td>CTC</td>
<td>Care and Treatment Clinic</td>
</tr>
<tr>
<td>DMO</td>
<td>District Medical Officer</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
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<tr>
<td>HB</td>
<td>Haemoglobin</td>
</tr>
<tr>
<td>HFGCs</td>
<td>Health Facility Governing Committees</td>
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<tr>
<td>HMIS</td>
<td>Health Management Information System</td>
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<tr>
<td>HRH</td>
<td>Human Resources for Health</td>
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<tr>
<td>HRIS</td>
<td>Human Resource Information System</td>
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<tr>
<td>ITEC</td>
<td>International Training and Education Centre</td>
</tr>
<tr>
<td>LGAs</td>
<td>Local Government Authorities</td>
</tr>
<tr>
<td>MOFEA</td>
<td>Ministry of Finance and Economic Affairs</td>
</tr>
<tr>
<td>MSH</td>
<td>Management Sciences for Health</td>
</tr>
<tr>
<td>MTUHA</td>
<td><em>Mfumo wa Taarifa za Huduma za Afya</em></td>
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<tr>
<td>NHIF</td>
<td>National Health Insurance Fund</td>
</tr>
<tr>
<td>NW1</td>
<td>National Workshop 1</td>
</tr>
<tr>
<td>NW2</td>
<td>National Workshop 2</td>
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<tr>
<td>POPSMP</td>
<td>President’s Office Public Service Management</td>
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<tr>
<td>RCH</td>
<td>Reproductive &amp; Child Health</td>
</tr>
<tr>
<td>TRG</td>
<td>Technical Resource Group</td>
</tr>
<tr>
<td>VEO</td>
<td>Village Executive Officer</td>
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<tr>
<td>VHWs</td>
<td>Village Health Workers</td>
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Executive Summary

Introduction

The workforce crisis reflected in the lack of an adequate and well-performing health workforce is a challenge for sub-Saharan Africa (SSA). A number of complex factors including maldistribution of staff, inappropriate task allocations and poor working conditions (including training, management and support) affect workforce performance. These factors also lead to high staff losses (brain drain) from the public sector to the private sector or other countries. The PERFORM project focused on this challenge by designing research seeking to provide new knowledge as to how district managers can effectively intervene within their current constraints to improve the performance of their staff as a response to the workforce crisis.

The PERFORM project sought to design and implement a management strengthening intervention to enhance our understanding of how, and under what conditions, a management strengthening intervention can improve workforce performance. However, the design of the management strengthening intervention took into account the idea that in order to achieve effectiveness it is necessary for the managers to select strategies that respond to the factors that influence the behaviour of particular health personnel and to adopt the current thinking on health systems strengthening, which suggests integration of health workforce strategies with the other health system building blocks (i.e. service delivery, information, financing, leadership & governance, medical products, vaccines and technologies).

The PERFORM consortium conducted research in SSA countries (Ghana, Tanzania and Uganda) facing major health workforce performance problems and having decentralised management structures that permit management teams greater decision-making opportunities to improve workforce performance. The consortium comprised six partner institutions including: Liverpool School of Tropical Medicine, United Kingdom, School of Public Health, University of Ghana, Institute of Development Studies, University of Dar Es Salaam, Tanzania, School of Public Health, Makerere University, Uganda, Swiss Centre for International Health, Swiss Tropical and Public Health Institute, Switzerland, and Nuffield Centre for International Health and Development, University of Leeds, United Kingdom.

The main objective of the PERFORM project was to identify ways of strengthening decentralized management in order to address health workforce inadequacies by improving workforce performance in three districts each in Ghana, Tanzania and Uganda.
Tanzania is one of the countries that implemented the PERFORM project. Tanzania is one of the poorest countries located in East Africa. Tanzania’s economy depends on agriculture, which accounts for more than one-quarter of GDP, provides 85% of exports, and employs about 80% of the workforce. The country’s total population is 44,928,923 with high growth rate (2.7%), high fertility rate (5.4%) and children under 5 years constituting 21% of the total population. Tanzania’s health system is pyramidal, made up of rural dispensaries and health centers at the bottom, district/regional hospitals in the middle, and referral consultant hospitals at the top of the pyramid.

**Methodology**

In implementing the project, PERFORM adopted the Action Research (AR) approach. Action Research is an enquiry conducted by a group on a problem which is of importance to them. It aims at improving practice and generating knowledge about the processes and strategies that work best to create that improvement. The CHMTs worked through systematic cycles of planning, acting, observing and reflecting to:

- Describe and analyze the problem they face
- Identify and plan strategies to improve situation or solve problem
- Implement the changes needed
- Observe, explain and reflect on the process and the effects of changes made.

The research process consisted of three phases. In phase one the Country Research Team (CRT) in each country selected the study districts. Tanzania selected Kilolo, Mufindi and Iringa Urban districts. The districts are managed by the DHMTs, known as CHMTs in Tanzania. The CRTs and European Partners (EPs) also finalized the research methods. During this phase the CRT applied for, and obtained the ethics approval.

In phase two the CRT in collaboration with the CHMTs collected and analysed data and prepared a report for the initial situation analysis. The CRT presented the report in the National Workshop 1 for review of the problem analysis. During the National Workshop 1 the CHMTs identified priority problems and developed the problem trees to understand their causes. In the National Workshop 2 the CHMTs selected the strategies and designed the bundles of HR/HS strategies. During this phase the CHMTs implemented the bundles designed to address the identified work performance problems in each district as well.

Phase three focused on evaluation of management strengthening and HR/HS bundles. CRT collected and analysed data with input from the CHMTs, prepared a draft report based on the findings of the situation analysis and the ongoing analysis and presented it at National Workshop 3 aimed at validation of the findings of the final situation analysis.
Findings and discussion

There are a number of key findings of this research: First, the CHMTs received adequate support from the CRT through bi-monthly visits and review meetings. Second. In all districts the management strengthening intervention had an effect on the practices of the CHMTs:

- The CHMT members gained skills and knowledge on problem identification and analysis in all districts
- Teamwork improved in CHMTs in all districts
- Participatory decision making in CHMTs improved in all districts

Third, implementation of the bundles had several effects:

- Frequency of supervisory visits to health facilities increased and the quality of supervision improved
- It led to regular monthly CHMT management meetings
- It improved the quality of services in all districts through improvement of availability of staff in health facilities and raising the competences of staff
- It led to introduction of incentives to retain/motivate staff in Kilolo and Mufindi districts

Fourth, the context facilitated or constrained implementation of the bundles. In all districts, involvement of stakeholders and other projects implemented in the districts facilitated implementation of the bundles. However, there were factors that constrained implementation of bundles. These include:

- Delays in receiving funds from the central government
- Ad-hoc activities causing interference with implementation of the planned activities
- Long distances to health facilities and unreliable transport in Mufindi and Kilolo districts
- Geographical size of Mufindi and Kilolo districts making it difficult for the CHMTs to easily reach the health facilities

Conclusions and Recommendations

To a larger extent the PERFORM management strengthening intervention improved the practices of the CHMTs and workforce performance in general. It is recommended that:

- the District Council authorities in the districts should support the CHMTs to use the problem analysis skills and knowledge gained in management and planning of district health services
- the District Council authorities should support the CHMTs to continue improving workforce performance in their districts
- the CHMTs should continue involving relevant stakeholders to improve the district health systems and health workforce performance in general.
- District interactions through Inter-district meetings should continue to enable the districts to continue learning from each other and networking
1. Introduction and background

1.1 Project overview and members of the consortium

The single biggest barrier to scaling up the necessary health services for addressing the three health-related Millennium Development Goals for countries in sub-Saharan Africa (SSA) is the lack of an adequate and well-performing health workforce. Funding constraints are increasingly being addressed through international initiatives. However, such funding, to be effective, requires the availability of health professionals performing appropriately; this remains a major challenge for sub-Saharan Africa. The deficit in health professionals needs to be addressed both by scale-up through training more new health personnel and by improving the performance of the existing and future workforce.

Most development and research emphasis has been on the first of these – increasing numbers (such as the PEPFAR programme to train 140,000 new health workers in Africa). There has been a serious neglect of initiatives to address the complex area of workforce performance. Examples of poor workforce performance include high vacancy and turnover rates at the management level and poor clinical behaviour and frequent absenteeism at the individual level. The PERFORM project focused on this aspect of the human resource challenge by providing new knowledge as to how district managers can effectively intervene within their current constraints to improve the performance of their staff as a response to the workforce crisis.

A number of complex factors affect workforce performance. Of particular importance are the maldistribution of staff, inappropriate task allocations and poor working conditions (including training, management and support). These factors also lead to high staff losses (brain drain) from the public sector to other employers (particularly the private sector) or other countries. Understanding the nature of these factors and developing appropriate responses will both improve the performance of the existing workforce and reduce staff losses. It will also increase the effectiveness of future new health personnel trained and deployed under scaling up investments.

There are a wide range of measures which managers use to address human resource (HR) issues. Research has shown however, that these HR strategies may be more or less effective according to the nature of the factors that influence employee behaviour e.g. gender, career stage, level of responsibility. It is therefore necessary to select strategies that respond to the factors that influence the behaviour of particular health personnel.

In addition to choosing the right strategies, there is also a need for integration across human resource management (HRM) practices. For example, the effectiveness of the recruitment system may benefit from changes in the remuneration system. Current thinking on health systems strengthening suggests integration of health workforce strategies with the five other health system building blocks (i.e.
service delivery, information, financing, leadership & governance, medical products, vaccines and technologies). It is imperative to consider potential unintended as well as intended consequences of a strategy within the wider health system.

The most effective management strengthening approaches address real problems and use planning and management tools that managers are familiar with and for which they are likely to get support in future. The management strengthening intervention will employ locally available tools and draw on the concepts of action research. In particular the district managers will be supported in the conduct of a situational analysis of the workforce problem, identification of appropriate local strategies to respond to this, implementation of such strategies and evaluation – leading where appropriate to a redesign of the strategies. The research will assess the effectiveness of such an approach.

Health systems in SSA are increasingly decentralising authority to lower levels, and in particular to districts, in planning and management. Research has been conducted to understand how to allocate resources more efficiently at this level. However, there has been no equivalent research to understand how such decentralised authority can be effectively used, within available resources, to improve health workforce performance at district level. This research project will enhance our understanding of how, and under what conditions, a management strengthening intervention can improve workforce performance within their districts.

The research has been conducted in Ghana, Tanzania and Uganda. Each of these countries face major problems of inadequate health workforce. They also have decentralised management structures that offer management teams greater decision-making opportunities including in the area of human resources. The research will study how management strengthening interventions can be used, and under what conditions, to enhance workforce performance. A comparative analysis of the findings from three study districts in each country will add new knowledge as to the effect of different country contexts on these interventions. This will lead to insights into the application of the new approaches in different SSA country contexts. The overall structure of the research project is summarised in Figure 1.
Project partners

The PERFORM Consortium is made up of six partner institutions. Each partner is experienced in health systems strengthening and brings different research expertise to the Consortium.

The partner institutions are:

1. Liverpool School of Tropical Medicine, United Kingdom (LSTM).
2. School of Public Health, University of Ghana (SPHG).
3. Institute of Development Studies, University of Dar Es Salaam, Tanzania (IDST).
4. School of Public Health, Makerere University, Uganda (MUSPH).
5. Swiss Centre for International Health, Swiss Tropical and Public Health Institute, Switzerland (STPH).
6. Nuffield Centre for International Health and Development, University of Leeds, United Kingdom (UNIVLEEDS).

1.2. Objectives of the project

Aim

The overall aim of the PERFORM project is to identify ways of strengthening decentralized management in order to address health workforce inadequacies by improving workforce performance in three districts each in Ghana, Tanzania and Uganda.

Objectives

The specific objectives are:
1. To conduct a participatory situation analysis of the health system especially the health workforce and DHMTs and with particular focus on health workforce performance in each study district.

2. To identify, from the results of the situation analysis, areas of workforce performance which need to be improved in each district.

3. To develop and test context-specific management strengthening interventions and processes focused on the areas of workforce performance in need of improvement.

4. To monitor the implementation of the strategies and evaluate the intermediate processes and impact on health workforce performance, and the wider health system.

5. To conduct comparative analyses across districts and countries of the management strengthening intervention, the processes of implementation as well as the intended and unintended effects on health workforce performance and the wider health system.

6. To provide ongoing communication of the research process, findings and conclusions, in order to raise awareness and change attitudes of sub-national, national and international stakeholders.

7. To consolidate research capacity of research partners on integrated approaches to workforce performance improvement and contribute to strengthening capacities of decentralized management of district health systems.

8. To establish and maintain effective partnerships amongst academia, civil society, policy-makers and health managers in study countries and amongst partners.

1.3. Country overview, location and demography

i. Country Overview
Tanganyika and Zanzibar merged to form the nation of Tanzania in 1964. Tanzania is one of the world's poorest economies in terms of per capita income, however, it has achieved high growth based on gold production and tourism. The economy depends on agriculture, which accounts for more than one-quarter of GDP, provides 85% of exports, and employs about 80% of the workforce (Kwesigabo et al., 2012).

ii. Location and Demographics
Tanzania is bordered on the south by Mozambique, Malawi, and Zambia; on the west by Democratic Republic of Congo (DRC), Burundi, and Rwanda; on the north by Uganda and Kenya; and on the east by the Indian Ocean. Tanzania is the largest of the East African nations.

The key demographic indicators elaborated in Table 1 show that there is a high fertility rate, Maternal and under-five mortality rates. Also there is only half of deliveries taking place at health facilities.
Table 1: Health indicators of Tanzania

<table>
<thead>
<tr>
<th></th>
<th>Total population</th>
<th>44,928,923</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Growth rate</td>
<td>2.7%</td>
</tr>
<tr>
<td>3</td>
<td>Fertility rates</td>
<td>5.4</td>
</tr>
<tr>
<td>4</td>
<td>Children &lt;1 year</td>
<td>4.0%</td>
</tr>
<tr>
<td>5</td>
<td>Children &lt; 5 years</td>
<td>21%</td>
</tr>
<tr>
<td>6</td>
<td>Women: 15 – 49</td>
<td>18%</td>
</tr>
<tr>
<td>7</td>
<td>Maternal Mortality</td>
<td>454/100,000</td>
</tr>
<tr>
<td>8</td>
<td>Infant mortality</td>
<td>51/1,000</td>
</tr>
<tr>
<td>9</td>
<td>Under five mortality</td>
<td>81/1,000</td>
</tr>
<tr>
<td>10</td>
<td>Health facility deliveries</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: National Populations census (2012) and Tanzania Demographic and Health Survey 2010.

1.4. Description of Country health system and decentralisation

Health services and management

In Tanzania, health services are provided and managed through a number of complementary institutions. These institutions are rural dispensaries, health centers, district/regional hospitals and referral consultant hospitals. A typical rural dispensary is staffed by a Clinical Assistant with one or two nurse(s)/midwife(s). The Clinical Assistant receives a 2 year course of training in anatomy, physiology and hygiene with good grounding in diagnostic methods and treatment of common diseases. At this level there is a facility Governance committee to advice and oversee the health services at village level.

Supporting the dispensaries are health centers. These give priority to preventive measures and hygiene but in practice they are extensively used for the treatment of common diseases. Most health centers have a room for minor surgery and provide 20-30 beds for in-patients including maternity cases. A health centre is run by a Clinical Officer, who has undergone secondary school education and more elaborate education in diagnosis and treatment as well as training in minor surgery. The Clinical Officer is usually assisted by one or two Clinical assistants, a nurse/midwife, and a health assistant. At this level there is a facility Health Governance committee to oversee and advise on health services provided.
Above the health centre there is the district hospital. It is the base for staffing and supplying all rural units and a hospital where difficult or serious cases are referred to. Generally there is one district hospital per administrative district but in certain cases a district may have more than one hospital. District hospitals are provided with medical doctors (one or more according to size), stores for drugs and equipment, a diagnostic laboratory, x-ray, operation facilities and beds for referred patients. At hospital level there is a Hospital management team to oversee daily management of the hospital. At the district hospital there is a Council Health Management team responsible for overseeing district health services. There is also a Health Board that oversees the health services in the district.

District and Regional hospitals are in most cases similar except that regional hospitals are larger, have more facilities and are staffed by between 5-10 doctors including one or two specialists. Also there is a Regional Health Management team responsible for overseeing the regional health services. At the top there are four referral sophisticated consultant hospitals which serve the whole country. At the referral hospitals there are hospital boards that are responsible for overseeing their management functions.

**Medical and Drug supply**

The Medical Stores Department (MSD) created in 1993, is a semi-autonomous unit under the Ministry of Health and Social Welfare (MOHSW). It operates a self-sustaining revolving drug fund and its main customers are the Zonal Medical Stores which supply products to regional and district hospitals, health centers and dispensaries. Each store operates a separate Bank Account that serves as a collection account for earnings on sales as well as for servicing the operational business. The functions of the MSD includes the selection of a list of medicines from the National Essential Medicines list, procurement, storage and distribution to its customers. The zonal stores conduct the same activities as at MSD with the exception of procurement of medicines and medical supplies. The MSD and its zones therefore supply catalog products to health facilities at the central level i.e. national referral hospitals, regional health facilities, district health facilities, health centers and dispensaries, faith based health facilities, approved non-governmental organizations, armed forces, schools and other training institutions that have medical services within their establishment. However, district health facilities can procure medicines from the private sector in case the medicines they need are unavailable at the MSD.
**Human Resources for Health**

The main categories providing services at district levels are clinicians who are doctors, clinical officers and clinical assistants. There are also nurses, health officers, laboratory technicians and pharmacist health workers. This latter categories have assistant categories. There is also less qualified health assistants who are the majority in the districts. The President’s Office Public Service Management (POPSM) is responsible for keeping oversight on staff establishment, schemes of service and promotions, and issuing approval of vacancies against which postings are based. Local government Authorities (LGAs) are responsible for lodging requests to POPS for staff to fill their local needs. LGAs are also responsible for recruiting posted staff that report for duty. The Ministry of Health and Social Welfare (MOHSW) has been assigned the role of posting staff in accordance with POPSM-approved vacancies. The Ministry of Finance and Economic Affairs (MOFEA) allocates funds for salaries as per approved vacancies and activates the salaries through the employees’ data captured using the Lawson computerized system. This complex system requires collaboration that is efficient and effective.

**Health Management information System (HMIS)**

This is a reporting system requiring health facilities to report on a monthly basis to their respective the districts on the situation of various areas in the health services and systems including vaccinations, treatments provided, attendances in MNCH, human resources and drug use. A national health management information system (HMIS) within Tanzania was designed and piloted between 1990 and 1994 and fully rolled out to all regions in 1997. The first version was entirely in English and it was soon realized upon testing that the users had limited commands in this language and was therefore technically changed to Kiswahili, the national language. Thus, the Health Management Information System is called in Kiswahili as *Mfumo wa Taarifa za Huduma za Afya* (MTUHA).

The HMIS system in Tanzania is implemented in approximately 6,000 service delivery points which include government, private, faith-based non-government health facilities. However, the HMIS is not as effective as it should be in terms of delivery of quality health information in the country. The districts and regions have an operational software system to support data aggregation and report submission. Health facilities need to be equipped with sufficient registers, trained HMIS staff, and regular supportive supervision from the higher level. This will help to improve the data collection system leading to quality and reliable health information.

**Financing of health services**

The major part of the financing of health care facilities runs through the national budget financed partly by taxes and partly by money from development partners. Also a significant portion of total health care financing comes from other sources. Other sources include National Health Insuranc
Fund (NHIF) mechanism and Community Health Fund (CHF) which are prepayment mechanisms at the district level, at the community levels. Also there is user fees generally conceived as a means to increase the financial resources available for the health care system, but also intended to (a) reinforce the notion that there is no free health care, (b) reduce informal payments, and (c) help to avoid unnecessary visits to health care facilities. However the user fees makes access to health care services relatively more expensive for poorer people than for richer people.

Exemptions and waivers were put in place to ensure access to essential health services, especially by the poor and vulnerable. In addition to exemptions and waivers, other systems were developed to address the highly regressive aspects of user fees, thus enabling people to access medical treatment when needed through prepayment and risk pooling. In summary, the health financing landscape in Tanzania is quite fragmented, with a large number of funding sources covering different aspects of the costs of health services.

Decentralization

In 1972 Tanzania adopted the decentralization policy which focused on decentralizing key authorities and functions of government from the centre to the grassroots level so as to enable community to participate in decision making. The policy reflected a strong conviction that people must be directly involved in shaping the decisions that affect their lives. The policy manifested itself in two major forms: deconcentration and devolution. During the deconcentration period, rural development was centrally coordinated and managed at the district and regional levels (Max, 1991).

While central government administrative structures improved through these decentralization initiatives, actual participation by the rural and urban populace in the development process was not realized. This type of decentralization was more of deconcentration of administration than devolution of power through local level democratic organs. The policy shifted from the former centralized system to the decentralized local governance system (Max, 1991). For that matter, the local government Reform was used as a driving vehicle of Decentralization by Devolution (D-by-D) policy to strengthen the local government authorities with the overall objective of improving service delivery to the public (Ngware et al., 2005). Thus, the transfer of power is made through transferring power of the decision making, functional responsibilities and resource from central government to local government authority (URT, 2006).

At the district level there is the Local Government which is autonomous in most decision making. The health sector at this level is overseen by the Health Board. Under the Health board is the CHMT which has seven core members who manage the health services in the district. Administratively the CHMT reports to the District Executive Director incharge of all sectors in the districts. The District
Exe. Director is answerable to the District Council in the district and to the Reginal Administration which in turn is answerable to the Prime Ministers Office Regional Administration and Local Government (PMORALG). Technically the CHMT is answerable and accountable to the Regional Management Team and the Ministry of Health and Social Welfare.

1.5. Other on-going projects on HRH in the country

There are a number of other Human Resources for Health (HRH) projects implemented nationally. Some of these also support project districts (See Table 2). Some projects do not directly support activities in the PERFORM districts but may influence the HRH situation through curriculum development and teaching in HRH training centres and through their involvement in Human Resource Information System (HRIS) and HR policy development.

Table 2: Other National HRH projects and their area of focus

<table>
<thead>
<tr>
<th>HRH PROJECT</th>
<th>AREA OF FOCUS</th>
<th>PRESENCE IN THE PROJECT DISTRICTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JICA Cooperation on HRH</td>
<td>HRH Information system</td>
<td>No</td>
</tr>
<tr>
<td>Benjamin William Mkapa HIV/AIDS Foundation (BMAF);</td>
<td>HRH recruitment, retention and Training</td>
<td>Yes</td>
</tr>
<tr>
<td>Tanzania Human Resource capacity Development Project</td>
<td>Strengthen National and Government Authorities to predict, plan for and recruit health and social welfare workforce Improve deployment, utilization, management and retention of health and social welfare workforce Increase productivity of health and social welfare</td>
<td>Yes</td>
</tr>
</tbody>
</table>
1.6. Purpose and structure of the report

As a country report, this document aims to provide the reader with an in-depth analysis of the outcomes of the PERFORM research project in Tanzania. In order to do this, the reader will first be provided with an overview of the research design and methodology followed by a description of the process of identifying problems in the district and selecting interventions to address these problems. The report will also present the findings in terms of district management strengthening, human resource management and health systems improvements while analysing these in view of the contextual factors at play in the country. A comparison of outcomes linked to the problems addressed by each district before and after the interventions were implemented should shed light on any areas of improvement in health workforce performance. Inter-district comparison will be undertaken in order to highlight similarities and differences in outcomes based on the interventions implemented. Based on the findings, the reader will be provided with conclusions and recommendations on how to improve district management and workforce performance in Tanzania.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Workforce</th>
<th>Canada Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch Foundation (TF)</td>
<td>Bringing healthcare workers and clinical teaching faculty into the remote regions of Tanzania to save lives.</td>
<td>No</td>
</tr>
<tr>
<td>Aga Khan Foundation (AKF)</td>
<td>Continuing Education, professional development and distance learning to nurses</td>
<td>Yes</td>
</tr>
<tr>
<td>Christian Social Service Commission (CSSC);</td>
<td>Private sector development, Advocacy and capacity building on HR management</td>
<td>Yes</td>
</tr>
<tr>
<td>Management Sciences for Health (MSH),</td>
<td>Leadership development, training and organizational capacity building</td>
<td>No</td>
</tr>
<tr>
<td>Technical Resource Group (TRG),</td>
<td>HRH capacity building</td>
<td>No</td>
</tr>
<tr>
<td>IMA .HEALTH WORLD</td>
<td>Technical support to HRIS in private sector</td>
<td>No</td>
</tr>
<tr>
<td>International Training and Education Centre (ITEC)</td>
<td>Scaling up human resource for health</td>
<td>No</td>
</tr>
</tbody>
</table>
The report is made up of the following chapters:
Chapter 1 - Introduction and background
Chapter 2 - Methods
Chapter 3 - Findings
Chapter 4 - Discussion
Chapter 5 - Study conclusions and recommendations
2. **Methods**

2.1. **Overview of action research approach**

The PERFORM project used an action research approach. The definition of AR that we applied during PERFORM is given below.

Action Research (AR) is an enquiry which is conducted by a group on a problem which is of importance to them. Its aim is two-fold; to improve practice and to generate knowledge about the processes and strategies that work best to create that improvement.

The group worked through systematic cycles of planning, acting, observing and reflecting to:

- Describe and analyze the problem they face
- Identify and plan strategies to improve situation or solve problem
- Implement the changes needed
- Observe, explain and reflect on the process and the effects of changes made.

They then continued with subsequent cycles to continue to create improvements. External facilitators worked with the group to build participation, provide research methods support during observation phases of the cycles, and to record and analyze the process and strategies of change.

At the core of AR studies is the cycle presented below. This cycle was first described by Kurt Lewin who many see as the founder of AR:

**Figure 2: The classic Action Research Cycle**
Successive cycles are beneficial as they can deepen the learning about a problem and its solutions. In practice these may be more like a spiral, or a cycle with smaller cycles spinning off and feeding back into the main study.

The project started with a situation analysis. The aim of this phase was to collect evidence about the nature of the problem to be addressed in the AR cycles. It also provided a base line against which to compare any subsequent changes.

Aspects of AR in PERFORM to build *research* evidence:

- An initial situation analysis to collect research data on the problem, this feeds into the first cycle of AR.
- Robust use of research and analysis methods during the observation phases of the AR cycle(s) guided by the CRTs.
- Record and reflect on the change process throughout AR cycles using diaries.
- Recollect core data for final situation analysis including context, to identify within-district changes.

### 2.2 Overview of research process

#### 2.2.1. Phase one

**District selection**

The study will take place in three districts each in Ghana, Tanzania and Uganda. Each district was selected using pre-defined criteria. Because of the collaborative nature of the management strengthening intervention, one important criterion for the selection of study sites was a motivated and reasonably staffed district management team with which to work. A second criterion was the inclusion of a mix of types of districts reflecting different contexts including a mix of rural and urban. The Table 3 below lists the study sites in each country.

**Table 3: Participating districts in each country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Selected districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>Kwahu West District</td>
</tr>
<tr>
<td></td>
<td>Akwapim North District</td>
</tr>
<tr>
<td></td>
<td>Upper Manya Krobo District</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Kilolo District</td>
</tr>
<tr>
<td></td>
<td>Mufindi District</td>
</tr>
</tbody>
</table>
No ‘control’ districts were selected. However, information about wider contextual changes that needed to be considered in assessing the impact of the interventions was captured using appropriate methods and tools. Districts which were to serve as study sites were identified based on the agreed criteria and in collaboration with higher authorities and the districts themselves.

Each district selected is managed by a Council Health Management team (CHMT). The CHMT is the main collaborator in each district with the Country Research Teams (CRTs). The composition of the CHMT may vary from one country to another but their function is essentially similar across all three participating countries.

The CHMTs have responsibility for planning and coordinating health activities in the district. They do this by ensuring that health policies are implemented, resources are well utilized, quality standards are upheld, and performance is monitored and evaluated for better results. Because of the action research approach employed in this project, CHMTs are not considered to be ‘study participants’ in the traditional sense of the word. Rather, the CHMTs are considered to be ‘co-researchers’ and partners in achieving the objectives of the study.

At the beginning of the project, orientation meetings were held with the relevant management teams to explain the project, clarify the level of involvement required and to agree roles of the management team and researchers. To ensure clarity and to increase the level of ownership of the project, the national research partners signed a memorandum of understanding with the CHMTs.

**Finalisation of research methods**

During this phase, the methodology was further developed with input from all partners resulting in the production of a methodology manual. The overall management strengthening intervention using concepts from health systems thinking and action research applied within the district context was agreed in this phase. The methodology and agreement is based on a common understanding amongst all members of the research teams of the proposed research approach. Ethics approval in each of the three study countries and for the European partners was sought and obtained during this phase of the project.
2.2.2. Phase two

Initial situation analysis
The purpose of the initial situation analysis was to:

1. Serve as the baseline for the project as well as
2. Inform the subsequent action research cycles in each district through identification of priority challenges to be addressed.

The initial situation analysis included some common core HR and health systems indicators across districts and countries to allow for the comparative analysis. As much as possible, these indicators used routinely collected data and performance indicators (gender disaggregated) to simplify the collection process, minimize disruption and to increase the chance of expanding and sustaining such an approach beyond the project period.

The objectives of the (initial) situation analysis were:

a) To identify major areas of exceptional performance (good or poor) in service delivery.
b) To identify the major areas (geographical and/or service delivery) of staffing shortage.
c) To identify key problems of health workforce performance (retention, distribution and effectiveness)
d) To identify key health systems factors (e.g. resources, processes, gender or other forms of discrimination) affecting (positively or negatively) health workforce.
e) To identify key contextual factors at the district (e.g. political situation, leadership, conflicts), regional and national levels affecting workforce performance.
f) To identify current management and communication processes used by the health management team, dynamics of the DHMT (e.g. roles, power and gender relations among the team) and how these may affect levels of management performance

Overall output from the Initial Situation Analysis
The information collected during the initial situation analysis formed the basis of a draft report. Each country produced one report. This allowed the information in the three districts in each country to be viewed and interpreted alongside each other. The report was written by the CRTs with input from the CHMTs. This draft report was presented at National Workshop 1 in each country.

The objectives of the National workshop were:

- To review the data for each study site
- To review the problem analysis based on findings from initial situation analyses in each district and subsequent problem identification and prioritization
- To identify possible HR/HS bundles for addressing the workforce performance problems appropriate for each study site
To review lessons learnt from the situation analysis process
- Capacity building in action research.

The workshop was attended by members of each of the CHMTs involved in the study, the CRT, the EU paired partner, the local research communications experts and a small number of stakeholders participating as observers.

2.2.2.3. Data collection sources and methods for the Situation analysis

Methods
Data collection involved two steps. In step 1 we reviewed documents (national and regional) and analysed the district health plans known as Comprehensive Council Health Plans (CCHPs) for 2011/12, administered the district questionnaire for each district, interviewed 1 key Council Health Management Team (CHMT member in each district), and conducted one Focus Group Discussion (FGD) with CHMT members in each district. Interviews and FGDs were recorded and transcribed. In step 2 we conducted meetings with the CHMTs to verify data collected for the situation analysis and identified gaps in the data and filled them.

Sampling
A District Medical Officer (DMO) in each district was purposively selected for interview as we needed only one respondent for interview from each district. All CHMT members in each district were involved in the FGD and interview.

Data collection tools
We used a checklist to review documents (national and regional), including the district health plans known as Comprehensive Council Health Plans (CCHPs) for 2011/12, an interview guide to conduct interview, FGD guide to conduct a FGD, and administered the district questionnaire for each district. (see Annex 1).

Data Analysis
Quantitative data that were recorded in numerical form were entered into an Excel worksheet for secondary analysis of totals, percentages and other such simple statistics as necessary. Tables and graphs were used to summarize the information. Thematic approach was adopted to analyse qualitative data. Data were classified and organised according to key themes derived from the PERFORM conceptual framework (and matrix of the information needs) of the PERFORM manual.
Information from district questionnaire were triangulated against evidence generated from the Focus Group Discussions and documentray review sources for accuracy and consistency.

**AR process recording**

Diaries were used to record and reflect on the change process throughout the AR cycles. The diaries also served as a record of the activities implemented in each district by the CHMT. Diaries were reviewed periodically by the CHMTs by themselves and with the CRTs during their visits to the district.

**Problem identification and prioritisation**

The problem analysis process started when the CHMTs participated in data collection and analysis in the districts for the initial situation analysis. The CRT facilitated this process. The CHMTs participated in a two day workshop facilitated by the CRT in the districts where the CRT introduced how to conduct problem analysis and problem tree development. After receiving problem analysis skills the CHMTs analysed the factors causing workforce performance problems in the district, identified the problem areas and prioritized three key areas around which problems were formulated and developed problem trees.

The next step in the problem analysis process was the National Workshop 1 (NW1) where the CHMTs presented the problem trees developed during the workshops in their districts. After the presentations the districts were advised to re-prioritize the problems and retain one problem tree. Each district then worked in a group to re-prioritize the problems and develop a problem tree based on the problem ranked as number one. Each district then presented the problem identified and the problem tree developed followed by peer review by the other districts and researchers present. The CHMTs were asked to refine their problem tree based on the feedback received from the NW1 participants.

Further problem analysis took place in the National Workshop 2 (NW2). During NW2, each CHMT presented its problem trees and received feedback from the other two CHMTs and the researchers. Using the feedback they had received, each group revised their problem trees a second time.

**2.2.2.6. Description of the process of selecting HR/HS bundles**

Another aim of the second National Workshop (NW2) was to develop detailed plans for the unique sets of HR/HS bundles for each study site.

Given the variety of human resource management (HRM) strategies to improve performance linked to ‘direction’ (e.g. job descriptions, work plans, processes) and ‘competencies’ (e.g. in-service training, supportive supervision) and the provision of rewards and sanctions (e.g. praise or disciplinary action) it is essential to have some coordination as it is usually necessary to have more than one HRM
strategy (for example in-service training followed by supportive supervision to help staff put new skills into practice). Where there are several strategies they are often referred to as "bundles" of HRM strategies.

In addition, there may also be problems of resources that affect performance. The problems relate to the wider health systems (HS) - for example, supplies or information systems. So there is a need to combine human resource and health systems strategies to address problems of performance. These also need to be coordinated bundles of strategies. So they are referred to as bundles of HR/HS strategies.

Selecting strategies and making plans

There is a wide range of strategies that can be used to improve workforce performance, depending on the particular problem(s) you are trying to address. The challenge is to identify those strategies that are possible to implement (i.e. within the CHMT’s boundaries of budget and authority and should whenever possible be aligned to annual priority/activity planning of districts) and are likely to be effective in your situation. An additional challenge is to ensure that strategies selected complement each other and are not contradictory.

The problem trees and statements developed during the situation analysis phase served as starting point for the selection of the HR/HS bundles to improve workforce performance.

Based on the key areas for managing performance, the CHMTs decided which of the following areas they needed to address in their district:

1. Availability (of staff)
2. Direction (on what work to do, when and how)
3. Competencies (to carry out required tasks)
4. Rewards and sanctions (to influence staff behaviour)
5. Other health systems components (to support the implementation of the work).
Table 4 shows the bundles that each district implemented. The districts formulated between 6 and 8 bundles. The bundles formulated in all three districts focus on addressing problems in service provision. In all districts the CHMTs designed bundles to improve workforce performance through increasing availability of workers in the health facilities. The districts also formulated bundles aiming at building the competencies of health workers through training. This is more articulated in Iringa Urban and Mufindi districts although training featured in the bundle activities implemented in Kilolo district. In addition, all districts implemented the bundles that sought to procure and distribute medicines and medical equipment and supplies to enhance service delivery. The other element embedded in the district bundles is improvement of the health infrastructure. Iringa Urban and Kilolo districts the CHMTs planned to extend services to the target population through creation of new infrastructure (e.g. establish new CTC in Iringa Urban, increasing health facilities providing RCH services in Kilolo) and renovation of existing health facility building (Iringa Urban).
Table 4: The bundles implemented by each district

<table>
<thead>
<tr>
<th>District name</th>
<th>Problem identified</th>
<th>Underlying cause(s) of problem</th>
<th>HR/HS Bundle to address the problem</th>
<th>Activities in the bundle</th>
</tr>
</thead>
</table>
| Iringa Urban  | Low coverage and quality of CTC services | Inadequate Medicines, Medical Supplies and Equipment  
Increased Workload  
Inadequate number of skilled and knowledgeable Service Providers  
Inefficient Supportive Supervision  
Lack of commitment among Service Providers  
Inadequate Infrastructure | Additional recruitment  
Regular supportive supervision  
Training and development  
Improving skills mix  
Introduce individual incentive  
Ensure Medicines, Medical equipment and Diagnostic supplies available  
Establish new CTC  
Existing CTCs renovated | To identify the HR gaps by cadre  
To update supervision checklist  
To prepare supervision matrix/schedule  
To conduct training on supervisory skills on CTC services to CTC supervisors  
To conduct quarterly comprehensive supportive supervision  
To conduct Training need assessment  
To prepare training program  
To conduct training on CTC services to Health service providers  
To conduct quarterly trainee follow up  
To evaluate training program  
To conduct mentoring and coaching on CTC services  
To facilitate staff rotation from different sections |
<table>
<thead>
<tr>
<th>District name</th>
<th>Problem identified</th>
<th>Underlying cause(s) of problem</th>
<th>HR/HS Bundle to address the problem</th>
<th>Activities in the bundle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mufindi</strong></td>
<td>High prevalence of HIV/AIDS in Mufindi district</td>
<td>Low Community Awareness Increasing Hot Spot In the District</td>
<td>Availability of skilled staff Competence building Health Commodities and materials</td>
<td>Lobbying for recruitment of Recruitment of skilled staffs Posting of staff to Health facilities with poor staffing</td>
</tr>
<tr>
<td>District name</td>
<td>Problem identified</td>
<td>Underlying cause(s) of problem</td>
<td>HR/HS Bundle to address the problem</td>
<td>Activities in the bundle</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td></td>
<td>Inadequate HIV Health Services in the District</td>
<td>Provide Health services Make HIV/AIDS materials available Provide Direction</td>
<td>Conduct TOT to peer educators on prevention of HIV/AIDS To design local EIC/ BCC materials on HIV/AIDS To distribute EIC/BCC materials to adult males and youth To conduct public meeting with adult males and out of school youth Conduct school HIV/AIDS education in secondary schools Develop or collect HIV/AIDS materials for sensitization through radio and other media To conduct adult males and youth sensitization through media e.g. local radio, artists and magazine, video shows, roads Secure enough condoms Increase condoms outlet in hotspots areas To conduct public sensitization on condom use Lobbying skills staffs recruited Post/distribute staff to PMTCT, CTC and MC Increase attraction of working environment</td>
<td></td>
</tr>
<tr>
<td>District name</td>
<td>Problem identified</td>
<td>Underlying cause(s) of problem</td>
<td>HR/HS Bundle to address the problem</td>
<td>Activities in the bundle</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Kilolo        | Delayed early booking for Aante-Natal Care services in the district by 45.3%     | Low community awareness  
Lack of partner support  
Long walking distance to the Health Facility  
Late recognition of pregnancy  
Perception of pregnant mothers on quality of RCH services. | Recruitment of RCH staff  
Provision of quality RCH services  
Create community awareness  
Use of other sources of fund (CHF & NHIF) to improve availability of medicines, equipment and medical supplies  
To increase number of HFs providing RCH services  
To expand outreach services | To advertise for specific vacant post to health training institution  
To conduct one day meeting with 36 RCH nurses on nursing ethics.  
To conduct community sensitization to 106 villages on the importance of early booking to pregnant women  
To procure medicines, equipment and medical supplies for 49 HFs providing RCH services  
To construct new Health facilities |
<table>
<thead>
<tr>
<th>District name</th>
<th>Problem identified</th>
<th>Underlying cause(s) of problem</th>
<th>HR/HS Bundle to address the problem</th>
<th>Activities in the bundle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(dispensaries and H/C).</td>
<td>To establish 10 new outreach/mobile sites</td>
</tr>
</tbody>
</table>
2.2.3. Phase three

Evaluation of management strengthening and HR/HS bundles

In order to build the knowledge base of the overall effectiveness of the approach used in PERFORM, ongoing data collection and analysis is needed. Two stages of analysis are being undertaken.

1. Preliminary analysis of data undertaken by the CRTs in collaboration with the DHMTs was embedded throughout the project as part of the action research cycle.
2. Overall evaluation which will include comparative analysis following the period of implementation of the HR/HS bundles (end of phase 2). This overall evaluation differs from the ongoing evaluation of the HR/HS bundles in that this will take place in the last year of the study and will include an inter-district and inter-country comparative analysis.

The final situation analysis took place after the implementation of the HR/HS bundles in each country. This situation analysis was a one stage process, with data on the health workforce, DHMT, HS, local and national context being collected.

The initial and final situation analysis included some common core HR and health systems indicators across districts and countries to allow for the comparative analysis. Where possible, these indicators have relied on routinely collected data and performance indicators to minimise disruption and to increase the chance of expanding and sustaining such an approach beyond the project period.

Methods

The data were collected between 15th September and mid-October 2014. We collected documents and analysed them, conducted in-depth interviews with the CHMT members, Health facility managers and health facility staff. We also conducted FGDs with the CHMT members and the users of the district services in each district.

Sampling

The criterion that we used to sample the health facilities for the study was involvement in the implementation of the bundles. In Iringa Urban district we sampled 5 health facilities involved in the provision of CTC services. In Mufindi we sampled 10 facilities involved in male circumcision, PMTCT and CTC services. In Kilolo we sampled 10 facilities that provided RCH services. All CHMT members were purposively selected for interviews and FGD and health facility managers of the sampled facilities were purposively selected for in-depth interviews. One health facility staff was randomly selected for in-depth interview at each of the sampled facility in each district. Users of the services were randomly selected for FGDs as they sought services at the facilities.
**Data collection tools**
We used interview guides to conduct in-depth interviews with CHMT members and health facility staff and FGD guides to conduct FGDs with CHMTs and users of the services provided by the health facilities. (see Annex 2).

**Data Analysis**
Interview and FGD data were transcribed and translated before they were entered into the NVivo Version 10 software for coding. Thematic approach was adopted to analyse qualitative data. Data were classified and organised according to key themes derived from the PERFORM conceptual framework (and matrix of the information needs). Data were triangulated against evidence generated from the FGDs and documentary review sources for accuracy and consistency.

**Output from the final situation analysis**
The data has been analysed by the CRTs and EPs with input from the DHMTs. A draft report based on the findings of the situation analysis and the ongoing analysis was prepared by the CRTs and presented at National Workshop 3 in on the 18th of February, 2015. The purpose of National Workshop 3 was to validate the findings of the final situation analysis as well as serve as part of the research communication process. The report, apart from being a deliverable to the European Commission, will also be used for the inter-country comparative analysis process.

**2.2.4. Ethics approval**
The project received ethical approval from international and national ethics review boards. In addition to the approval received from the National Ethical Review Committee, the project was approved by the Faculty of Medicine and Health Research Ethics Committee at the University of Leeds (HSLTLM/11/053) and the LSTM Research Ethics Committee – both in the United Kingdom.
3. Findings

3.1. Iringa Urban District

This section presents findings of the Iringa Urban. Findings are organized in four main themes namely: process and effects of management strengthening; process and effects of health workforce performance; lessons learned by the CHMT members in the implementation of the bundles; and influence of health systems and wider context in the implementation of the bundles.

3.1.1. Management strengthening

EU partners facilitation and technical support to CRTs

Analysis of interviews with CRT and European Union (EU) partners revealed that communication between CRT and EU partners took place through different ways including email, telephone, Skype calls and face to face contact through meetings in workshops. But most of the communication was taking place by either email and then sometimes by phone. The main purposes of the communication were to find out how PERFORM project was being implemented in the districts and to discuss how the European partner could support the CRT in the implementation of the PERFORM project. The EU partners were also involved in reading drafts of documents and sending feedback, comments on how it can be improved, as well as helping to write sections of reports. During the inter-district workshop the EU partners were invited to participate and provided inputs.

While face to face meetings happened rarely, they were considered by both partners to be the most useful, especially when the EU partners visited Tanzania to attend inter-districts meetings. This gave EU partners ample opportunity to provide input to the workshops and discussing with the CRT. However, while the EU partners appreciated involvement in the inter district meetings, there were some reservations. They felt that very little time was given for them to prepare for the meetings including reviewing documents related to the meetings. One respondent put it this way:

“We were coming there and then basically found out what was happening in the district but there was little preparation in terms of advance what is the situation in each district and what are likely to expect from the workshop... If we had more information in advance we could have been better prepared and probably have been able to give more useful comments” (IDI with EU partner).

Related to this, the EU partners felt that it was difficult to follow discussion during the inter-district workshops because most of it took place in Kiswahili and that the EU partners were not able to tell what was said. Other factors which constrained communications between CRT and EU partners include lack of time especially for the CRT members and limited internet access which made Skype call difficult. In addition, it was evident that the EU partners mainly communicated with the team leader in Tanzania. Consequently, the EU partners felt that they had very little knowledge about what
was going on in the team and how other people in the team felt about what we discussed, whether they agreed or disagreed and also how it was passed on. One respondent expressed it this way:

“I felt that the communication was basically through the team leader and we didn’t know what the other thought about our ideas and suggestions and I feel that has influenced the sort of communication and also decision making and action about it” (IDI with EU partner).

**CRT support to CHMTs**

A number of strategies were used by the Country Research Team (CRT) to strengthen the management capacity of the CHMT members to improve health workforce performance. First, CRT members supported CHMT in the identification of bundles and development of strategies to improve health workforce performance. In addition, the CRT members supported CHMT in the use of diary to record implementation of the bundles. Further during the implementation of the bundles, supportive visits to the district took place every 2 months in the first year and every one month in year 4. The main aims of the visits were to get an update on the implementation of the bundles and supervise recording of activities related to the project in the CHMT diary. Additional support in relation to the implementation of bundles and using diary was provided by the CRT to the CHMT via phone. The CRT members and CHMTs exchanged emails and phone calls in between visits. Visit reports were prepared following every support visit to the districts. The CRT members shared the district visit reports with the European paired partners. A summary of key issues captured in the visit reports were shared with the CHMT members at the next visit. All the members of the CRT usually visited the districts at the same time. During the visits, the CHMT expressed the need for more support and coaching from the CRTs especially regarding the recording of the implementation process in the diary. Furthermore, review meetings were scheduled for every 4 months during year 1 and every 6 months in year 2. These meetings provided opportunities for the CHMT members to share their experiences in the implementation of bundles and learning from other districts. The CHMT members also shared their experiences too and gained support in relation to the design of bundles from the Regional Health Management Team (RHMT).

**Analysis of CHMTs’ problems**

The process of analysing the problems that the CHMT face started when the CHMTs members participated in data collection and analysis for the initial situation analysis to identify workforce performance problems experienced in their districts. After problem identification the CHMTs participated in a two day workshop facilitated by the CRT in the districts where the CRT introduced problem analysis and problem tree development techniques. After acquiring problem analysis skills the CHMT analysed the factors affecting workforce performance in the districts, identified the problem areas and prioritized key areas around which problems were formulated and subsequently developed problem trees.
The next step in the problem analysis process was the National Workshop 1 (NW1) attended by all three districts and the Regional Health Management Team (RHMT). During the NW1 the CHMT presented the problem trees developed during the problem identification and analysis workshops in the district. After the presentations the NW1 participants advised the district to re-prioritize the problems and retain one problem tree. The CHMT members then worked in a group and re-prioritized the problems and developed a problem tree based on the problem ranked as number one during the re-prioritization process. The CHMT then presented the problem identified and the problem tree developed followed by peer review by the other districts, RHMT and researchers present.

Further problem analysis took place in the National Workshop 2 (NW2). However, before the NW2 the Kilolo CHMT had not refined the problem tree following the NW1 feedback. During NW2, the CHMT presented its problem trees and received feedback from the other two CHMTs and the researchers. Using the feedback they had received, each group revised their problem trees. Kilolo chose to develop a problem tree based on improving focused antenatal care (FANC), Mufindi chose to reduce HIV incidence in the district, Iringa Urban chose to improve quality and coverage of CTC services.

**Selection of bundles**

The CHMTs attended the National Workshop 2 (NW2) where the PERFORM researchers introduced the Human Resources and Health System (HR/HS) bundles concept to the CHMTs from the three study districts. The PERFORM researchers provided guidance to the CHMTs on how to link the problems identified in their districts with suitable strategies and activities under each strategy. They used the DHMT manual as a guide to help them with this selection process. The process of formulation of bundles took time as the CHMT struggled to identify suitable strategies. Formulation of bundles became even a bit complicated for the CHMTs after receiving information from the researchers that there was no additional funding from the project and so they had to select strategies and activities they could implement within their budget. With knowledge that no additional funding was forthcoming the CHMTs decided to drop a number of strategies and retained only five strategies. The CHMTs were asked to integrate their selected bundles into the draft comprehensive Council Health Plan (CCHP) for the period July 2013 – June 2014. In addition, the CHMTs completed a detailed matrix which showed the bundles, strategies, expected outcomes, and links to the CCHP. The HR/HS bundles selected for implementation in Iringa urban district can be found in Error! Reference source not found.

**Table 5: HR/HS bundles selected for implementation in Iringa Urban**

<table>
<thead>
<tr>
<th>A. Objective</th>
<th>B. Strategy</th>
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29
### A. Objective

<table>
<thead>
<tr>
<th>1. Availability</th>
<th>B. Strategy</th>
</tr>
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<tbody>
<tr>
<td>Reduce workload to CTC service providers</td>
<td>Additional recruitment</td>
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</table>

### 2. Direction

<table>
<thead>
<tr>
<th>Strengthen supportive supervision</th>
<th>Regular supportive supervision</th>
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### 3. Competencies

<table>
<thead>
<tr>
<th>Improve knowledge and skills on CTC services to existing Health Service Providers</th>
<th>Training and development</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Improving skills mix through attachment and coaching</td>
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</tbody>
</table>

### 4. Rewards and sanctions

<table>
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<tr>
<th>Enhance commitment among service providers</th>
<th>Introduce individual incentives</th>
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<tr>
<td></td>
<td>Promote monthly staff meetings</td>
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### 5. Health system

<table>
<thead>
<tr>
<th>Availability of Medicine, Medical equipment and Diagnostic supplies improved</th>
<th>Ensure Medicines, Medical equipment and Diagnostic supplies available</th>
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</thead>
<tbody>
<tr>
<td>State of CTC Infrastructure improved</td>
<td>Establish new CTC</td>
</tr>
<tr>
<td></td>
<td>Renovate existing CTCs</td>
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<tr>
<td></td>
<td>Ensure constant supply of Medicines, Medical equipment and Diagnostic supplies</td>
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Following a suggestion by the CRT, the CHMTs started to discuss the implementation of bundles during their monthly management meetings.

### Effects of management strengthening

#### CHMT operation and practices

Analysis of FGD and IDIs with the CHMT members indicated that implementation of the bundles has strengthened CHMT’s capacity in four broad areas, as set out next. Firstly, the CHMT members felt that they had gained knowledge and skills which helped them perform better. According to the CHMT members, the process of identifying and designing of bundles enabled them understand that in order to address health workforce problems, they need to address the root causes of the problem. The CHMT members have been applying problem tree analysis approach in identifying and finding solutions to the health workforce related problems. The vast majority of the CHMT members felt that
while they had been doing this in the past, they hardly used problem tree analysis approach to find root causes of the problems. The implementation of the bundles has enabled the CHMT members to do it well. They no longer do things in the ‘business as usual’ manner.

“In our meetings we have been asking ourselves ‘are health workers performing?’ If not, what problems affect their performance? What can we do to make them perform better? So we do follow strategies we gained from the PERFORM project, problem tree analysis” (IDI with CHMT member).

Another respondent added this way:

“PERFORM has built our capacity so much in identifying the problems that face staff, and how to look for ways of solving them. Currently if we have any problem we start by finding the root cause of the problem and how to address the issue” (IDI with CHMT member)

Secondly, the implementation of the bundles project has helped CHMT members set specific targets to be achieved in a specified timeline. The CHMT members felt that previously they used to implement activities but did not have any specific achievement plan.

“PERFORM project has helped us to have evidence-based results and best outcomes. So there is something that you can show, that this has been done. If anyone come here today and asks us ‘what have you done within this period?’ What did you do in the last month? Which activities have you implemented? ‘By having the bundles you can show what has been done” (IDI with CHMT).

The CHMT members reported that traditionally various methods were used to monitor the implementation of the activities included in the district health plans. The most cited methods were supportive supervision and quarterly and annual technical and financial reports. These are the formal mechanisms used by the Ministry of Health and Social Welfare.

After the start of the bundles implementation, they used a diary to track the implementation of the bundles included in the district annual health plans. According to the CHMT members, the diary has a good format which helped the CHMT members see what activities had been implemented and what their impact were. Diary was used to record implementation of the activities, reflect and learn about factors that facilitate and/or constrained implementation of the bundles. In addition, according to the CHMT members diary was used to track the implementation of various activities included in the CCHPs. The CHMT members reported that traditionally the focus had been on documenting what had been implemented. They rarely had time to systematically reflect on the factors that facilitated or constrained the implementation of the activities. The use of diary made it possible for the CHMT members to record not only the success stories but even the problems.

“PERFORM project has helped us track the implementation of different activities. We can now easily know which activities have been successfully implemented and which ones have not been implemented. In the past, although we were doing planning, we were very poor in tracking which activities have been implemented and which ones have not been implemented.
But nowadays, it is very easy to know why some activities have been implemented and others have not because we now keep records” (IDI with CHMT member).

Thirdly, implementation of the bundles has strengthened team work among the CHMT members. The CHMT members felt that they now work as a team, different from the past. This has been possible because the implementation of many strategies identified in the bundles required team work.

“It has united us so much. PERFORM has made us do so many activities as a team. You may find that a pharmacist works together with a laboratory technician, and you do the same with a doctor. It has helped to bring people together and foster a common understanding of many things” (IDI with CHMT member).

“We used to be organized, but PERFORM has given us something extra, which is much better. This is especially so when we talk about the issue of bundles” (IDI with CHMT).

Fourthly, the quality of supervision has improved significantly – The vast majority of the CHMT members reported that in the past, supervision visits were like inspections and the focus was on discovering and rectifying mistakes/problems found in the health facilities. Nowadays, the CHMT members conduct friendly supervision and they focus on mentoring and coaching rather than inspection. This aspect was also supported by the interviews with health providers. The vast majority of the health providers who were interviewed had the opinion that supervisions are increasingly becoming friendly. In addition, in the past, supportive supervisions were rarely conducted in team work. After starting the implementation of the PERFORM project the CHMT members came to realize many activities are linked to one another. Therefore, in order to implement them effectively they had to work as a team. Furthermore, the district was able to update supervision checklist provided by the Ministry of Health and Social Welfare (MoHSW) in order to better suite with their district needs. This was reportedly to have greatly improved the quality of the supportive supervisions.

“There is a big change. Previously we were scared about supervision. Those people responsible for doing supervisions were very harsh. They didn’t allow you even to give explanations; they didn’t listen to the workers. But today things have changed. Supervisions are done in a very friendly manner. When they come, they share some issues with workers, in case of mistakes; they humbly make corrections and share our opinions” (IDI with health facility staff in Iringa Urban).

Fifthly, the CHMT members also came to realize that health workforce problems can be linked to one another. In order to effectively address these problems, they need multiple strategies. The CHMT members, therefore, came to appreciate that when they analyse health workforce problems they need to look at various possible interventions, and that some interventions may address multiple issues. More importantly, the CHMT members learned that they can better plan and utilize available resources to implement various activities.

“PERFORM project was one of its kind. I cannot remember any other project which had the same approach of PERFORM. You know we had some projects where people come with
money and say they want to do this and our work is to support them to do those activities. But in the PERFORM project we were mentored to identify problems and to prioritize and come up with interventions using our own available resources. This was really a capacity building project” (FGD with CHMT members in Iringa Urban).

3.1.2. Workforce performance

Strengthening Workforce Performance

With knowledge that no funding from the PERFORM project will be provided to support implementation of the bundles, the CHMTs decided to develop a few strategies which would be implemented using their own resources. The CHMT members integrated their selected bundles into the Comprehensive Council Health Plan starting from the period July 2013 – June 2014. A comprehensive list of the strategies have been indicated in Table 5 above which included the following:

1. Strengthening supportive supervision - Specific strategies included conducting quarterly supervision, revising supervision checklist in order to suit the district needs, improve mentorship and coaching during supportive supervision as well as conducting training on supervisory skills on CTC services to CTC providers. In a

2. Improving knowledge and skills on CTC services of existing health service providers- Health providers attended short courses/trainings to enable them improve their skills to better improve quality of CTC services. In addition, the CHMT members provided mentorship and coaching to health service providers, particularly during supportive supervisory visits. Furthermore, health providers were attached to district or regional hospitals in order to improve their skills and knowledge. For example, in 2014, six (6) health providers were attached at Mbeya Regional Hospital for two weeks. The attachment was mainly aimed at increasing their skills on CTC, particularly for pediatric HIV. The attachment was supported by the Non-governmental organization namely Baylor International Pediatric AIDS Initiative (BIPAI) which deals with paediatric HIV.

3. Enhancing commitment of the service providers through rewarding the best performers. Rewards were normally provided during annual workers’ day and included certificate of recognitions, cash and other items as the need arose. In addition, the CHMT members encouraged monthly staff meetings in order to provide staff with opportunities to air their views. Each CHMT member was assigned to supervise specific health facilities. The CHMT members attended monthly staff meetings in their respective health facilities. Minutes of the meetings were submitted to the DMO’s office on a monthly basis.
Implementation and monitoring of bundles

As indicated above bundles were integrated in the Comprehensive Council health plans and were implemented by the CHMT and in collaboration with development partners as normal CHMT activities. The CRTs introduced the diaries to the districts and explained the purpose of the document and its format in July 2013. The CHMTs agreed to record the implementation process in the diary and share the diary with the CRTs during their visits or at any other time it was requested for. The CHMTs decided to appoint a focal person in each district to be responsible for filling in the activities in the diary. The CRT provided continuous guidance, mentoring and encouragement to the CHMT with regards to documentation and filling in the diary.

Intended effects of the bundles

The quality and coverage of CTC services has improved significantly, the CHMT members reported. However, we did not collect quantitative data to validate this finding. For example, they had renovated Ipogolo health centre and constructed a new CTC building at Ngome health centre. In addition, the CHMT had established a new CTC at Frelimo district hospital.

“No we have a new CTC, we have also rehabilitated many CTC and purchased furniture. As for the human resources, many health providers have received training in order to improve CTC services. For example, some health providers received training on CTC and this has made it possible to establish a new CTC at Frelimo District hospital. In short, we have achieved the intended objectives” (IDI with CHMT member).

Interviews with staff working at the health facilities also confirmed that the quality of CTC services has improved in recent years. Likewise, FGD data with service users confirms this finding. According to our respondents, while the waiting time is a bit long, other aspects of services are good. Clients were satisfied with the quality of health providers, attitudes of the providers towards people living with HIV/AIDS, cleanliness of the health facility and availability of drugs. However, the PERFORM project did not collect quantitative or qualitative data on client satisfaction to validate this finding.

However, findings from FGD with service users revealed that service users would like the district to increase the number of days for clinics. According to the service users this would reduce the waiting time. Likewise, the vast majority of patients were not satisfied with cleanliness of toilets and availability of diagnostic equipment.

In addition, the CHMT in Iringa Urban reported that the coaching, attachment and supportive supervision exercise provided to the CTC service providers helped to improve their skills in the provision of health services. Almost all respondents reported that the new skilled gained helped
improve quality of CTC services. It was evident that a number of health providers had received training on CTC in recent years. The training was often provided by the Ministry of Health and Social Welfare in collaboration with the development partners, particularly TUNAJALI. TUNAJALI project which has been focusing on providing Clinical and Community HIV/AIDS Services to People Living with HIV/AIDS (PLHIVs). The project is implemented by Deloitte Consulting Limited (DCL) and its main technical partner, Christian Social Services Commission (CSSC).

Perception of bundles by CHMT, staff and other stakeholders

Analysis of interviews and FGDs across all levels of respondents revealed that there was low involvement of other stakeholders, including health facility managers in the design and implementation of the bundles. Consequently, the PERFORM project was only known to the CHMT members. Other stakeholders in the district had very little knowledge of the project. The vast majority of respondents were of the opinion that the project should have been known to other people including those at the lower levels. According to our respondents, other stakeholders could contribute to the implementation of the bundles and perhaps achieve better results. One respondent put it this way:

“As I said at the beginning, this project did not inject money. It wanted to make us use the available resources to improve performance, so it was a new idea and practice to us. So may be involvement of other stakeholders could have helped improve the implementation” (IDI with CHMT member).

Similar views were expressed by health facility managers and staff as well as regional and district level stakeholders. When asked what else PERFORM would have done, one responded expressed this way:

“It would have been god if the PERFORM project had involved other stakeholders including service providers. These are important stakeholders because they direct have contact with clients/patients” (IDI with health facility staff).

3.1.3. Wider health system

The influence of wider health system on management strengthening and workforce performance

Different influences from the health system were found to have constrained or facilitated the implementation of the bundles, as we set out next. Several factors were reportedly to have constrained the implementation of the planned activities. The most commonly identified factors were the following:

All sources of data revealed that central government funds are the primary source of finances to run social and economic development activities in the local authorities. Information obtained from the majority of the interviews and FGDs revealed that funds from the central government are disbursed to the district late. The health management teams usually develop comprehensive council health plans
(CCHP) approximately between November and March, and the implementation of these plans begun in every new financial year, starting in July. Therefore, the CHMT is supposed to receive funds from the central government to enable it to start the implementation of the planned council health activities. However, our respondents reported that, in most cases, the central government is very late in disbursing money. While the financial year begins on July, most often the district received funds between December and January. Even though lack and delay in the disbursement of funds had not halted the process completely, there had been delays in implementing the bundles. There were some bundles which were implemented but were not completed, and some were still being implemented. Consequently, some of the activities which had been planned could not be implemented. Interviews from the regional level also corroborated the information from the district on this issue.

Another important factor that constrained the implementation of the bundles was ad hoc and competing tasks facing the CHMT members. Almost all CHMT members reported that besides the implementation of bundles, the CHMT had many other activities and some of them were unplanned. Due to this challenge, the CHMT could not implement some of the activities because even though there was funding, the CHMTs were overburdened with other responsibilities and could not provide coaching and mentoring to the CTC service providers as planned in the bundle. The most cited ad hoc activities included unplanned meetings, seminars, and workshops. These often disrupted their schedules which ultimately had impact on the implementation of the bundles. Some activities planned to be implemented had to be postponed.

“Besides implementing the bundles we have so many other duties, so you may find that sometimes what was to be implemented in a certain month is postponed to the following month because of emergent issues” (FGD with CHMT).

On the other hand good and committed leadership of the CHMT particularly the district medical officer facilitated the implementation of the bundles. Equally important was stability within the CHMT members. Iringa urban had not experienced changes of the CHMT members during the life span of the PERFORM project. This implies that there was continuity of the activities.

“Good solidarity among the CHMT members in various matters was a key factor that facilitated the implementation of the bundles. We have been cooperating in supervision, in meetings we are together, when there are problems we discuss them, we have had plans, we have been cooperating, and in general the management is good” (FGD with CHMT).

Furthermore, good infrastructure, particularly easy physical access to the health facilities facilitated implementation of the bundles. Most health facilities in Iringa urban are located within areas which can easily be reached by the CHMT members. This facilitated communication, implementation, and monitoring the implementation of various activities.
The influence of other contextual factors on management strengthening and workforce performance

The process of management strengthening and workforce performance in Iringa urban was also influenced by other projects and stakeholders. The presence of these projects catalyzed the implementation of the bundles. Some of the bundles were implemented in the auspices of these projects. The most cited ongoing projects related to the human resources for health in the district are the following:

1. Benjamin Mkapa Foundation (BEMAF). This project has been supporting the district in the area of human resources for health. Specific activities which were done by the project included: building capacity of the health providers and the CHMT members, providing orientation trainings to newly recruited health providers.

2. TUNAJALI project which has been focusing on providing Clinical and Community HIV/AIDS Services to People Living with HIV/AIDS (PLHIVs). The project is implemented by Deloitte Consulting Limited (DCL) and its main technical partner, Christian Social Services Commission (CSSC). The program is generously supported by the American people through the United States Agency for International Development (USAID) as part of the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR). TUNAJALI programme provided training to health community workers, renovated service delivery facilities, trained volunteers for home-based care and equipped laboratories. Specifically, TUNAJALI has supported rehabilitation of the Ipogolo health centre and construction of a new CTC building at Ngome health centre. A few health providers and CHMT members also pointed out that during the TUNAJALI was paying extra duty allowances to health providers working in the area of CTC.

3. CHAMPION- CHAMPION has been in the forefront to promote male involvement in the maternal and child health programmes. Men had always lagged behind in accompanying their wives/partners to the health facility.

4. JHPIEGO, an international, non-profit health organization affiliated with The Johns Hopkins University- JHPIEGO has been active in promoting voluntary medical male circumcision (MC), one of the provider-initiated counselling and testing models.
5. The Primary Health Care Institute (PHCI) was also cited as an important stakeholder. PHCI focused in building capacity to the CHMT members through training in a number of areas including human resources for health related trainings. It is beyond doubt that these trainings strengthened the capacity of the CHMT members as well as health providers.

3.1.4. Unintended effects of the implementation of the Bundles

The experiences that the CHMT members has gained in the implementation of bundles to improve CTC services has given them another door through which to improve other service areas which go hand in hand with the provision of CTC services. The CHMT members felt that other services have equally improved in recent years. However, we did not correct quantitative data to validate this perception.

“When we were doing our visits we did not only supervise CTC services. We had checklist which was comprehensive. We supervised CTC services and other areas including the availability of medicines and medical supplies and the performance of the health workers” (FGD with CHMT members).

Discussion

The findings generally indicate that the CHMT members received adequate supportive from the CRT through bimonthly visits as well as review meetings conducted in every four months in the first year and every six months in the second year. These meetings provided opportunities for CRT to share experiences with the CHMT members, providing support on the implementation of bundles as well as monitoring the implementation process.

It was evident from the findings that a number of changes took place as a result of the management strengthening process under the PERFORM project. The most important changes were: strengthening team work among the CHMT members, improved frequency and quality of supportive supervision, the CHMT gained skills and knowledge on problem identification and analysis, improved monitoring and recording of the district health workforce performance activities. These changes were largely attributed to frequent support provided by the CRT members, willingness and commitment of the CHMT members as well as guidance and support from the regional health management team.

As far as workforce performance is concerned, there were a number of perceived improvements. The quality and coverage of CTC services was reported to have been improved significantly. It was evident that the CHMT members in collaboration with stakeholders had renovated and constructed CTC buildings, as well as established new CTCs.
TUNAJALI project played a significant role in supporting CHMT members in this aspect. It was not surprising that clients were satisfied with the quality of health providers, attitudes of the providers towards people living with HIV/AIDS, cleanliness of the health facility and availability of drugs. However, reservations were also noted on waiting time, cleanliness of toilets and availability of diagnostic equipment. In addition, it was evident that a significant number of health providers had received training on CTC in recent years. However, despite these achievements, there were indications that significant improvements would have been achieved if the CHMT members had involved stakeholders and health facilities in the design and implementation of the bundles.

A number of factors were reportedly to have constrained the implementation of the planned activities. The most commonly identified factors were late disbursement of funds from the central government and ad hoc activities included unplanned meetings, seminars, and workshops. Consequently, some of the activities which had been planned could not be implemented. The fact that most districts in Tanzania are dependent on the central government funds to implement district based health activities makes it difficult for the districts to effectively implement planned activities on time. Similarly, unplanned ad hoc activities have been widely reported in Tanzania and have been affecting implementation of district health plans.

On the other hand, good and committed leadership of the CHMT particularly the district medical officer facilitated the implementation of the bundles. Equally important was stability within the CHMT members. Furthermore, presence of other projects related to human resources for health and HIV/AIDS facilitated the implementation of the selected bundles. TUNAJALI project for instance, constructed a new CTC building, provided supporting in renovated some CTCs as well as provided training to the health providers in the areas of CTC.

Overall, the findings suggest that the use of HR/HS strategies was a good way to improve CTC services as well as improve management. The findings however suggest that in order to effectively replicate the experience in other districts a number of issues need to be taken into account. The important factor are committed leadership of the CHMT, team work among the CHMT members, involvement of key stakeholders at the early stage of the bundles design and throughout the implementation process as well as strong support from the regional level stakeholders, particularly the Regional Health Management Team.
3.1.5. Conclusion and Recommendations

The facilitation of CHMT by the CRT to influenced management strengthening in the district, allowing the CHMT to acquire problem identification and analysis knowledge and skills. Teamwork and meetings within CHMT improved as a result of the management strengthening efforts.

Implementation of the bundles improved workforce performance with positive effects on coverage and quality of CTC services the CHMT planned to improve. The stability of DMO leadership in the district contributed to the success that the CHMT achieved in workforce performance. The CHMT needs to pay attention to a few areas of service delivery that needs improvement including cleanliness of the health facility toilets, availability of diagnostic equipment, and increase the number of days for the clinics.

3.2. Mufindi District

3.2.1. Management strengthening

Analysis of CHMTs’ problems

The district used the problem tree analysis process similar to what is described under Iringa Urban section. Using this process the Mufindi CHMT identified the problem of ‘High Prevalence of HIV/AIDS’. CHMT interviews indicate that apart from the high HIV&AIDS prevalence, this problem was also identified because people of Mufindi district have often been willing to participate in HIV&AIDS projects.

Selection of bundles

Using the process of problem tree analysis (See Annex 3) as in other study districts described previously, selected objectives were: (1) Creating awareness on prevention of HIV/AIDS to adults and youth; (2) Increasing health facilities providing PMTCT, CTC, and MC and (3) Reducing unsafe sexual practices in the hot sport areas in the district. Eventually the bundles selected were:

- Increase the availability of staff,
- Build competence,
- Acquire materials and commodities for HIV&AIDS,
- Distribute HIV&AIDS materials and supplies, and
- Provide direction in HIV&AIDS activities.
**CHMT operation and practices**

Effects of management strengthening can be discerned from the data in relation to aspects of: meetings and decision making, problem tree analysis, use of a diary in bundle implementation and team building.

During the interviews with CHMT members it was noted that there were changes concerning meetings. Before the project started, CHMT meetings were not as frequent. Interviews indicated that one of the important effect of PERFORM Project in the district was the introduction of routine meetings. Currently they hold weekly CHMT meetings on Tuesdays and Thursdays usually from 7:30 am to 2:30 pm. In addition the DMO noted that he has put in place a regulation which requires them to hold monthly meetings to review district health functions. They also updated each other on challenges encountered during supervision. The attendance in meetings was satisfactory although sometimes some members attended other functions such as seminars or visits to health centres. However sometimes due to absenteeism they were obliged to postpone some of the meetings.

Interviews with CHMT indicated that PERFORM Project has had influence on how decisions are made by CHMT. They held meetings to make major decisions. It was also noted that every member contributes to what is being discussed. In these meetings different issues were raised and discussed together. They also gave each other tasks to make some closer follow up on the issues raised. They normally concluded by looking at the priority needs and ultimately made decisions.

The findings also indicate that to some extent the CHMT members are moving away from the traditional problem identification and analysis to a more participatory approach as could be captured from a response to a question that sought to gauge how CHMT reaches decisions on priority setting and in terms of solving problems related to job performance in Mufindi district:

“…our strategies emanate mainly from the meetings. After identifying various problems and challenges we come up with various strategies for solving the problems” (Focus Group Discussion, CHMT, Mufindi district)

The problem tree analysis was found to be a useful tool by the majority of the CHMT members although the tool is used for different purposes and scope. In fact, the majority of them used some bits of the process without actually knowing what type of processes they are employing in identifying and solving their problems. The above stance was also corroborated by another response from a CHMT member:

“Yes. The method is useful because it helps you know the cause of the problem and it tells you what to do in order to solve it. But if you do not do the problem tree analysis, you will be doing things randomly without any specific objectives in mind. The truth of the matter is that you will be doing it generally and at the end of the day you will not know whether you have achieved the objectives or did not understand you did not find the root cause (key issues) (CHMT interview in Mufindi)
Furthermore, the evaluation study found that the method of problem tree analysis was used to identify some practical problems faced by the CHMT members in executing day to day activities, although not all the steps of the problem tree analysis were followed. For example, one member from the CHMT Focus Group Discussion noted that:

“We have been utilizing it (the problem tree analysis method) in matters related to maternal health. We have been trying to study the trend of women who have been safely giving birth and we have found that the number has risen. We asked ourselves about the secret behind the rise. In this case, we normally work together as a team to help these mothers to see that they give birth while they are healthy and they are economically sound. (Focus Group Discussion with CHMT Mufindi)

PERFOM’s support through diary recording helped the CHMT develop the capacity to record, store, manage and report data. Observations by the CRTs during the field visits and interviews with the CHMT members indicate that before the commencement of the project, capacity in data management was extremely low. Discussions with CHMT members during the field visits generally indicate that those who have been actively involved in the PERFORM project can now provide monthly data reports, whereas before nearly none of them were able to do so in a systematic way. One CHMT member from Mufindi was quoted during the monthly CRT’s visits that:

“I am very proud of having participated in the PERFORM project. Yesterday, I was presenting a report to the RMO’s meeting and I found myself so confident because I had all the necessary data as evidence to support my presentation which I learned to track and record through the diary by PERFORM people”

However, while some CHMT’s members acknowledged the importance of using a diary method, the method seemed to be cumbersome to some others and there were delays in compiling and sending the reports to the CRTs. Moreover, not all activities were being recorded in the diary by CHMTs. For example, the contents in the diary were not always arranged in chronological (date) order. The format in the diary was not always consistent. The reflections of the group as well as contextual factors were not recorded consistently. Irrespective of these problems, CHMT in Mufindi, appointed two focal persons to improve the quality of the diary recoding.

With regard to the Project’s contribution towards improvement of CHMT’s ability to analyze problems, the evaluation exercise revealed that PERFORM has empowered the CHMT on how to articulate and comprehend health related problems. In particular the evaluation unearthed a positive note in regard the participatory approach engraven in the concept of action research as applicable to identification, diagnosis and searching for effective strategies for addressing the existing problem(s). In particular, the support from PERFOM has enabled the CHMT members to rethink on how best to address health problems through a participatory and bottom up approach than the more often used top-down bureaucratic procedures
Planning and funding of bundles
During the interview with the CHMT it was noted that in district health planning and budgeting process, the Health Secretary receives planning needs from all the heads of units. Eventually a list of needs prepared is submitted to the DMO and thereafter to the CHMT to be discussed for incorporation into the CCHP. As such, after the bundles were selected, the CHMT members were advised by the CRT to link the bundles to the existing activities in their CCHP. As such, a plan of action was developed by the CHMT to address the key problem in Mufindi district -“High Prevalence of HIV/AIDS”.

The budget is normally discussed and finalised before the beginning of the financial year. While some efforts were made by the CHMT members to align the existing activities in the CCHP with the selected bundles, the actual implementation of these activities was delayed due to the unavailability of funds on time. However some bundles were implemented through the support and involvement of other stakeholders as elaborated under the section on workforce performance. Other constraining factors were frequent travels of some of the CHMT members as well as high turnover of the DMOs at Mufindi. During the project period there has been three DMOs in the district. In some respects, these frequent leadership changes affected the progress in planning and budgeting for the bundles.

3.2.2. Workforce performance
This section of workforce performance consists of details on the process of implementation and monitoring of bundles. Then this is followed by intended and unintended effects of bundle implementation. Finally the perception of bundles by health workers and other stakeholders is presented.

Implementation and monitoring of bundles
Bundles were implemented at both facility and community level. The implementation of some bundles was conducted at facility level as routine services. Most interview respondents noted that health workers provided health education to pregnant women attending antenatal clinics. Also during family planning sessions clients were sensitized on condoms use. Several CHMT respondents reported that at the district hospital routine activities were established for circumcising both young male children and adults. The interviews from health facilities however revealed that CTC and PMTCT activities were conducted in some health facilities and not in others. Where such services were not available, clients were advised to go to health facilities where such services were available.
Apart from routine services at health facilities, community based methods were used to expedite bundle implementation. Some interview respondents said they conducted sensitization campaigns to the community on the importance of men circumcision with support from JHPIEGO on special male circumcision campaign. Also condoms were distributed to the community especially at hot spot areas such as mining population after sensitization campaigns. Other community sensitization activities included visits to different schools to provide school health education on HIV&AIDS and Male Circumcision (MC).

Various modalities were employed in the district to monitor bundle implementation. Responses from FDGs and health facility interviews indicated that there were frequent planned supervisory visits by CHMTs to health facilities. Some of these supervisory visits were appreciated by health facilities:

“They normally show us the areas where we go wrong and they normally show us how to do it better. Therefore, they generally, help us” (One health centre staff)

However there were some challenges in conducting supervision to health facilities. Main challenges noted by majority respondents were few supervisors, financial problems and inadequacy of vehicles for supervision.

Regular communication through discussions between health workers at the district level was another way used to monitor progress of bundle implementation. In this way, they determined whether or not they had implemented planned activities. CHMT meetings were also used to monitor the implementation of bundles:

“The DMO would call a meeting to verify the implementation of what was planned” (A member of CHMT)

Most CHMT members agreed about the usefulness of diaries for documenting the implementation of bundles. They also noted that a diary contained objectives that were set in their strategies for achievement of goals. A diary was also seen as a document to be regularly examined to determine progress of work. Moreover, it was reported that the Dairy recorders are co-opted members of the CHMT and hence had limited power to influence some decisions during the CHMT meetings. This was changed that one of the recorders (DNA) be a full CHMT member and could be used as a strong person to push the agenda on the implementation of the bundles during CHMT meetings.

The process for monitoring bundle implementations improved over time. Responses from health facilities revealed that the DHMT supervisions had increased in frequency compared to before PERFORM began. Also a new style of supervision was noted:
“Honestly, there are changes, nowadays we have what we call supportive supervisions. They have moved away with the old style of perceiving a worker always knows nothing. That was an embarrassment”. (One health centre staff)

“Theyir supervision is instructive by nature. They look for example the way we do fill in different reports; in case of mistake then they correct us”. (Health centre manager)

However there were challenges faced in monitoring the implementations of bundles. Participants in the CHMT FGD agreed that some follow up activities were not accomplished due to overload of activities. Also the some diaries were not completed because at times responsible persons were doing other assignments. Interviews from health facilities indicated that DHMTs did not have a specific time table for supervision, some supervisors were impolite and that staff shortage at district level hindered effective supervision.

Some stakeholders were involvement in the implementation of bundles in the district. Interview from the CHMT and health centres indicated that stakeholders were involved mainly in HIV&AIDS services. For example brochures were brought by JHPIEGO during circumcision campaigns while JHPIEGO and Farm Access were involved in male circumcision programmes. Similarly Engender Health TUNAJALI, PSI, JHPIEGO, JKT and Marie Stoppes were involved in various HIV&AIDS prevention and treatment activities. In addition facilities near mining camps involved mine leaders to distribute condoms in mining camps while KOPE employed staff in the district.

However stakeholders were minimally involved in planning and monitoring of bundle implementation. In particular TUNAJALI were involved in a budget meeting and UNICEF, TUNAJALI and politicians were involved to make decisions during allocation of resources in the district. In addition TUNAJALI helped the district in establishing a proper way of record keeping.

Various factors influenced the involvement of stakeholders in the project. The CHMT and some facility managers reported that stakeholders were involved because they were doing business similar to those conducted by the CHMT in the district. In particular TUNAJALI distributed condoms and provided HIV&AIDS awareness to the community. In addition the involvement of Marie Stoppers and other USA organizations was because they dealt with issues of family planning, CTC and PMTCT. Similarly ownership of special programs in HIV&AIDS was a reason for involving some stakeholders in the project. For example a special campaign for male circumcision pioneered by JHPIEGO was the reason for working with them in this area. The availability of funds for training was another reason for collaborating with some stakeholders. For example Misitu Company and JHPIEGO provided funds for HRH development. Community leaders such as the Villages Executive officers (VEOs) were involved in order to get easy access to the community when conducting HIV&AIDS sensitization.
The reason for non-involvement was influenced by the level of, or area of project operation. Some facility managers noted that they could not get the involvement of TUNAJALI because the request for support came from the facility and not from the district office which was the contact office. Also they could not get support from Farm Access because their area of operation did not include the health centre.

**Intended effects of bundles**

As a result of bundle implementation, community awareness, willingness and demand for service increased considerably and the service users felt quality of services had also improved. Information from most health facilities showed that the level of community awareness on the importance of condoms was high as demonstrated by increased community demand for condoms. Also many people came forward for HIV test. Responses from FGD indicated that people were willing to come for circumcision, even during weekends. This reduced congestion of clients for MC because services were provided every day. Respondents also said MC was seen as a normal activity in the community who also agreed to test for HIV when they came for MC.

Similarly responses from facility managers indicated that the availability of drugs and good services provided at CTC increased the number of clients. Also the number of men who accompanied their female partners to clinics and male voluntary HIV testing increased. Pregnant women agreed to test for HIV without any resistance which indicated that people were more educated on HIV&AIDS compared to the past. It was also reported that previously, pregnant women delayed to report to antenatal clinics but currently most of the pregnant women report to the clinic early. Also stigmatization about HIV&AIDS was no longer widespread and that the treatment process was taken as a common activity in the community. Interviews from some health facilities indicated that MC services reduced opportunistic diseases and infections from mother to a child decreased considerably.

“There is progress in that most of the children born from mothers who got PMCTC services were HIV negative.” (Health Facility staff)

It was noted that convenient services were attractive to clients. Interviews from health facilities showed that during the past PMCTC and CTC services were provided separately but the project reorganized services to be provided in one common place. Similarly better planning of services had improved patients satisfaction.

“In order to reduce congestion of patients requiring CD4 machine, a special day was set aside for testing. When patient went to the district hospital they accessed diagnostic services without any problem”. (One facility staff)
Perception of bundles by CHMT, staff and other stakeholders

Generally CHMT, staff and other stakeholders appreciated. The availability of health services related to the bundles. The interviews from health workers demonstrated that bundles were perceived as adequate. Most respondents noted that PMTCT was implemented well although at one time the services were unstable due to lack of diagnostic equipment but later this problem was solved. Also there was easy access of PMTCT services noted.

“When pregnant women come for the first time (first attendance) they were educated on HIV AIDS and the importance of conducting an HIV test. HIV test were taken and the results given to clients. Those who were positive were advised to take PMTCT drugs.” (Health facility staff)

It was also realized that at the moment HIV testing is conducted more efficiently using a modern machine.

“The equipment which was provided by their stakeholder can test about 300 people a day. Currently some health workers are on training and when they complete their training they will be able to test more patients.” (FGD)

“The performance of CTC is good and that our centre started in 2011 has the number of clients increased” (Health facility manager).

Responses from health facilities indicated that MC was well implemented and that health education and sensitization on HIV&AIDS to various communities were well organized. Similarly condom distribution was well implemented.

“We have enough condoms [We]. Provide them to clients when they come to the health centre.” (Health facility manager)

“We exposed condoms in areas whereby youths prefer to pass by or where they meet. We also encouraged clients to come to the health centre to collect them.” (Another health facility manager)

In a client FGD it emerged that doctors listened to the clients’ problems and provided clients with explanation relating to treatments given. The health workers kept client secrets and language used was clear. The consultation time, attitudes and behaviour of health care workers was said to be acceptable:

“When a client entered a doctor’s room, the doctor normally asked about the problems or whether drugs they used caused any problem ... we get enough time to explain our problems to the doctor.” (Client FGD)

“Doctors listens to problems and provide explanations relating to the treatments given. The instructions provided are relevant and understood.” (Client FGD)
Clients noted that drugs were readily available at CTC services. It was also noted that services were improving, in that they got services nearby compared to the past where clients had to travel long distances for services. It was also noted that waiting time was normal although:

> Sometimes doctors were occupied with many responsibilities. For example sometimes doctors had meetings which made waiting time longer. As such it varied from day to day. (Clients FGD)

### 3.2.3. Wider health system

This section presents findings on the influence of health systems on management strengthening and workforce performance respectively. This is followed by a presentation of the influence of contextual factors on management strengthening and workforce performance respectively.

Management strengthening was influenced by various health systems. CHMT interviews indicated that keeping the diary influenced the CHMT to become better planners and managers of their activities. Also data prompted health workers to make better decision regarding missing supplies for health facilities. Similarly the sharing of data with the DAC, people working in wards and laboratories enhanced problem solving. It was also noted that some complicated report forms made their reporting quality poor.

Similarly health systems had influence on workforce performance. Availability of adequate supplies, human resources, finance, equipment and supplies especially at the first phase of the project improved workforce performance. For example, TUNAJALI provided a computer and paid a data clerk which improved the health service implementation. Also incentives given to health workers during campaigns made health workers motivated in performing campaign work. Initially some health workers got hard time to work in PMTCT because of limited skills. However after receiving training in option B+; they improved their work performance. It was also reported that when health workers got most of the drugs from MSD and TUNAJALI their work performance was improved in that more clients were reached.

Respondents from interviews indicated that sending health workers for seminars was an incentive that motivated staff to work better. Also additional human resources, supplies and drugs observed during the initial phase of the project improved workforce performance in terms of increased MC, condom distribution and PMTCT and CTC services. From the evaluation it was also noted that both the campaigns and good services increased the demand for such health services. However this increased
demand for services in turn ended up with shortages of equipment, supplies and human resources required.

The relative limited equipment supplies and human resources as a result of higher demand prompted some challenges. In the FGD and staff interviews it was noted that that some activities were not implemented because of inadequate equipment or supplies.

“We had only two pairs of scissors used for deliveries, as such, could not be used for circumcision” (Health facility manager)

“Sometimes we did not receive condoms in time because they were also not available at MSD.” (Health facility manager)

Similarly when the demand for condoms increased and the supply of condoms became limited. When they ran short of condoms they went to the district office; but such supplies were not available; and at other times MSD also ran short of them. It was noted that most of health facilities sent wrong estimates of drugs (underestimates) to the district pharmacist. As a result the district ordered few drugs from MSD. Due to unreliable supply of certain drugs they were obliged to change the drugs for clients which is not an appropriate practice. Sometimes lack of reliable means of transport hindered community sensitization and contributed to poor condoms distribution.

Sometimes information and reporting challenges influenced health workforce performance. From FGD and staff interviews it was noted that to some health workers report forms were complicated and the use of (English) language in the forms confused health workers. As such some forms were wrongly completed. On some occasions poor financing of health services hindered the implementation of bundles. In the FGD and CHMT interviews it was noted that late arrival of funds from the Central government, delayed the implementation of activities or sometimes made implementation of activities impossible. In some cases funds were inadequate for earmarked activities. Poor organization and planning in the district had a negative influence on performance of health workers. Interviews with the CHMT and health facility workers showed that in some cases school sensitization was not conducted because it was not clear who was responsible for such duties in the district. Also there were leadership problems at district level causing hindrance to implementation of bundles.

“Frequent changes of DMOs experienced, prevented smooth running of the project activities. Whenever a new leader came into the system, a new leadership style was started which the rest of the team were compelled to follow” (CHMT member)
“Lack of transparency in the CHMT was an obstacle. It was difficult to access some data or information.” (CHMT member)

The influence of contextual factors on Management strengthening and Workforce performance

There were various contextual factors that influenced Management strengthening. CHMT interviews indicated that multiple responsibilities and ad hoc activities from vertical programmes overstretched CHMT members making them ineffective in management responsibilities. The CHMT noted that the condition in the district make it easier for CHMT to get workers to come and work in the district:

“the climatic condition of Mufindi district is good; and the road networks are good. These conditions do motivate the workers to stay in their different working stations.” (CHMT member)

Since 2012 information concerning the recruitments of new staff was processed using a special software called Lawson which operates fast. As such there was no delay of salaries to reach newly recruited staff. Also all new staff were given subsistence allowances of seven days without fail. This situation made the CHMT conduct their management with ease.

There are also contextual factors that influence work performance. The availability of more staff who are motivated in the district due to the new HRH information system (explained in the previous paragraph) also influences the work performance. Also the presence of stakeholders in the district facilitated the implementation of bundles. During FGD and facility staff interviews it was clear that success in bundle implementation was attributed to stakeholders such as JHPIEGO who trained a number of staff and paid allowances to health workers who participated in health campaigns. Similarly TUNAJALI provided HIV&AIDS services, and Mass media was responsible for sensitization of the community in MC and HIV&AIDS messages. The success was largely due to joint stakeholder efforts.

A relatively high HIV&AIDS awareness of the community was useful in enhancing the implementation of bundles. In the FGD with CHMT members, it was noted that general community awareness of HIV&AIDS provided easy acceptance to project services. It was easy to proceed smoothly with the project implementation. Also the use of community health workers (CHW) enhanced the distribution of condoms to the community because they were easily understood and accepted in their own communities.

Conversely, some personal and community beliefs hindered bundle implementation. Interviews with health facility workers indicated that poor understanding among youth hindered male circumcision...
services. Also some clients stopped taking drugs when they felt better after using drugs for a short period of time. This situation caused complications in treatment of patients. Some patients were reluctant to receive HIV test results although ample time was devoted in educating them on the importance of blood tests. Strong religious beliefs influenced some people to reject or discontinue prescribed treatment. Similarly some health facility owners would not allow some HIV services to be operated in their health facility due to religious reasons.

“It was common to distribute condoms by secret ways as the Bishop would not agree to see the condoms exposed for public use. [At the same time] we did not want to go against religious ethics.” (Health facility staff)

Long distances and unreliable transport to clinics was an obstacle for some clients to receive HIV&AIDS services. Responses from various facilities indicated that they served far off villagers who also faced transport problem. This either made them come late or fail to come for PMTCT or CTC services. Consequently some patients who managed to come were asked to take drugs for those who could not come. Also poverty contributed to poor treatment requirement. Views from some facilities indicated that some patients were too poor to afford basic nutrition requirement in the treatment of people living with HIV.

3.2.4. Unintended effects

However there were some unintended effects of bundle implementation. For example CHMT was made to share many things as a result of getting involved in the project:

“I found myself involved in HIV issues, something I was not doing in the past”. (One member of CHMT)

It was also noted that MC services increased activities in the centres making health workers too busy. Interviews from health facilities indicated while some staff conducted campaigns others went for support services in other centres. This caused deterioration of services in health centres. Sometimes there was a need to give extra-duty allowances to staff doing extra services. Also additional services brought about challenges in PMTCT services including shortage of drugs and lack of working equipment in some facilities. Another unintended effect was a surprise brought about by inconsistency of test results from different centres. Sometimes patients who were diagnosed HIV positive were found to be HIV negative when tested at the district hospital. This caused confusion to both the patient and health workers.
3.2.5. Discussion

Effects of Management strengthening
Facilitation from CRT influenced management strengthening as evidenced by enhanced participatory processes in frequent CHMT meetings, problem tree analysis and in the use of the diary. This concept has been at the core of action learning, as espoused by Revans (1983), who also believed that most of the knowledge needed by managers to solve their problems could be found within a group of them working collectively. The Tanzania Essential Health Interventions Project (TEHIP) documented the processes of change as well as a high health impact that worked simultaneously across all stakeholders to bring about change (Neilson and Smutylo, 2004).

The Process of Workforce performance
The commitment of CHMT members was required in order to include the new agenda of bundle implementation in the district. Also stakeholders were involved but more in the implementation of bundles and less involved in both planning and monitoring of bundles. Their involvement in implementation of bundles was mainly due to doing similar activities their support in resources including provision of allowances as incentives to health workers. With regard to incentives for performance currently it is noted that components of disease-specific programmes – are guided by extrinsic factors and are introducing various forms of ‘pay-for-performance’ to improve (Vujicic, M. and et al, 2009.) productivity. The monitoring of bundle implementation did not depend on a single factor but required various methods including diaries, meetings, communication among CHMT members and supervisory visits. However though common other viewers note that supervision is not always a successful strategy for improving performance and quality of service (Rowe, A.K., et al., 2005).

Effects of workforce performance
The implementation of acceptable services created willingness and demand for services in the community. However the increased demand for services eventually caused the need for more resources which were not always available. Also increased demand resulted in increased staff workload which compromised their motivation for work. This is an unintended effect which in other studies was shown using a different example. De Savigny and Adam (2009) provide an example of how a pay-for-performance initiative to improve a TB DOTS programme led to damage to other parts of the health system, including the distraction of health personnel from other essential duties.

It was also noted that some members of the CHMT were made to participate in activities they were not trained for. While skills mix is often seen as a way of increasing productivity to reduce costs in
industrialised countries, in Low/Middle Income Countries (LMICs) what is now more commonly called ‘task shifting’ is being used to make better use of available staff (Gimbel-Sherr, S.O., et al., 2007).

**HS influences**
The availability and use of diaries influenced the CHMT to become better planners and managers of their activities. Similarly adequate supplies, human resources and finance improved workforce performance. Baumann’s (2007) assertion that workers may not be able to accomplish their jobs when organisations fail to provide them with essential equipment is well recognised and argues for better integration of different components of the health system.

However when these inputs were inadequate at a later stage as the demand of services increased, there was poor workforce performance. This finding is similar to observations that health workers in resource-poor settings often severely under-perform due to staff shortages, low wages, poor working conditions, skills and knowledge deficits, and inadequate management and supervision (Dieleman and Harnmeijer, 2006). Similarly current thinking on health systems strengthening suggests further integration of health workforce strategies with five other ‘building blocks’ (sub-systems) of a health system (WHO, 2007).

**Contextual influences**
Quick recruitment and good working condition for health workers made the CHMT conduct their management functions with ease. However frequent changes of leadership in the CHMT created lack of continuity of what was planned or agreed upon. Studies in this area show that high turnover, or inadequate staff retention, also has an important impact on availability of health personnel (Zurn, Dolea and Stilwell 2005) as well as reducing the return on investing in training. In addition adhoc activities from vertical programmes overstretched CHMT members making them ineffective in management responsibilities.

The presence of supportive stakeholders in the district and high community awareness on HIV&AIDS enhanced the implementation of bundles. Conversely late disbursement of funds, and long distances to health facilities was an obstacle to bundle implementation. Literature in this area elaborates that a system – particularly a complex ‘human activity system’ (Checkland, 1981) might operate effectively in one context but not another as such despite the natural inclination to ask, “What works?” a more appropriate question with complex systems is “what works in what context for whom and why” (Pawson, R., et al. 2005).
3.2.6. Conclusion and recommendations

The facilitation from CRT to CHMT influenced management strengthening as evidenced by enhanced participatory processes in frequent CHMT meetings, problem tree analysis and in the use of the diary. Also the commitment of CHMT members was required in order to include the new agenda of bundle implementation in the district. Stakeholders were also involved but more in the implementation of bundles and less involved in both planning and monitoring of bundles. Their involvement in implementation of bundles was mainly due to doing similar activities, provision of supplies and equipment and funding of training and staff allowances.

The implementation of bundles services created willingness and demand for services in the community. However the increased demand for services eventually caused the need for more resources which were not always available. Also the increased demand overstretched available health workers.

HS influences were noted in terms of the availability and use of diaries which influenced the CHMT to become better planners and managers of their activities. Similarly adequate supplies, human resources and finance improved workforce performance. However when these inputs were inadequate at a later stage the demand of services increased, there was poor workforce performance. Contextual factors influence management strengthening. Quick recruitment and good working condition for health workers made the CHMT conduct their management functions with ease. However frequent changes of leadership in the CHMT created lack of continuity of management decisions. Contextual influences on workforce performance were the presence of supportive stakeholders in the district and high community awareness on HIV&AIDS which enhanced the implementation of bundles. Conversely late disbursement of funds, and long distances to health facilities was an obstacle to bundle implementation.

Key recommendations for policy makers or CHMT

- District Executive Director should have the mandate of recruiting health workers for district councils according to the needs of a district.
- The government should provide more financial and human resources to the district for better service coverage especially in rural villages.
- There should be more opportunities for inter district interactions to facilitate cross district learning which has been shown to be useful.
3.3. Kilolo District

3.3.1. Management strengthening

CRT support to CHMTs

The kind of support provided by the CRT to strengthen management of the CHMT for Kilolo in order to improve health workforce performance is similar to the process the CRT used to strengthen management of the CHMT for Iringa Urban district (see page 38).

Analysis of CHMTs’ problems

The process of analyzing the problems that the CHMT for Kilolo face is same as the process of problem analysis that the CHMT for Iringa Urban district went through. However, during the process of problem analysis the Kilolo CHMT initially prioritized three problem areas for problem tree development: shortage of TB diagnostic centres, low performance in Focused Antenatal Care (FANC), and low CTC coverage. Later, the Kilolo CHMT identified low performance in antenatal care services as priority problem number one and chose to develop a problem tree based on improving Focused Antenatal Care (FANC). The NW1 asked the Kilolo CHMT to refine its problem tree based on the feedback received from the NW1 participants. Kilolo revised their problem trees further during the CRT subsequent visits to the district. (see Annex 3).

Selection of bundles

The process of selection of the bundles for Kilolo district is same as the process of selecting bundles presented under Iringa Urban district. In this process the CHMT for Kilolo formulated the HR/HS strategies appearing in Table 6.

Table 6: Bundles of HR and HS strategies initially identified by Kilolo CHMT

<table>
<thead>
<tr>
<th>No.</th>
<th>Bundles identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruitment of health staff</td>
</tr>
<tr>
<td>2.</td>
<td>provision of incentive package</td>
</tr>
<tr>
<td>3.</td>
<td>Capacity building to service providers on FANC</td>
</tr>
<tr>
<td>4.</td>
<td>Create community awareness</td>
</tr>
<tr>
<td>5.</td>
<td>Use of other sources of funds (Community Health Fund (CHF) &amp; National Health Insurance Fund (NHIF)) to improve availability of medicines, equipment and medical supplies</td>
</tr>
</tbody>
</table>

However, formulation of the bundles was a challenging task. FGD respondents mentioned how difficult it was for the CHMT to determine and design indicators for measuring the impact of the
bundles. Some of the indicators formulated were not easy to measure and this created uncertainty about implementation.

The other factor that affected choice of the bundles that posed as a challenge is budget constraints as one of the respondents from the CHMT remarked:

“There are things which we discussed, but because of insufficiency of the budget we couldn’t. For example we had the idea that the centres that were difficult to reach be given motorbikes to simplify transport for them to come to the centres. This one was not included. Also the construction of doctors’ and nurses’ houses was not included under construction due to instructions which we received. The instruction was that if a house is constructed for the nurse or medical officer, it should be a community initiative.

Due to budget constraints certain planned activities could not be funded from the available district budget and the project did not provide additional funds for implementation.

As implementation of the bundles commenced, it became necessary for the CHMT to modify the original problem and the bundles. Participants of the CHMT FGD indicated the reason for a modification in the problem with a more concise focus as observed by one of the participants: “the initial problem was too broad, even for indicators it was difficult to tell where we were coming from and where we were going. It was not measurable.”

In February 2014 during an inter-district meeting the CHMT formulated a new problem with a different focus advised by the regional health team. The new problem focused on delayed early booking of pregnant women for antenatal care.

Table 7: New Bundles formulated by Kilolo CHMT during implementation

<table>
<thead>
<tr>
<th>No.</th>
<th>Bundles formulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Recruitment of RCH staff</td>
</tr>
<tr>
<td>2.</td>
<td>Provision of quality RCH services</td>
</tr>
<tr>
<td>3.</td>
<td>Create community awareness</td>
</tr>
<tr>
<td>4.</td>
<td>Use of other sources of fund (CHF &amp; NHIF) to improve availability of medicines, equipment and medical supplies</td>
</tr>
<tr>
<td>5.</td>
<td>To increase number of HFs providing RCH services</td>
</tr>
<tr>
<td>6.</td>
<td>To expand outreach services through health facilities</td>
</tr>
</tbody>
</table>
A change in the problem led to repeating the problem analysis activity and formulation of a new problem tree. Formulation of new problem tree necessitated reformulation of bundles. Table 7 contains a list of the new bundles that the CHMT formulated.

**CHMT operation and practices**

It was important to understand whether implementation of the PERFORM project had an effect on the composition and practices of the CHMT. Analysis of CHMT interviews indicates that the CHMT consists of eight members, known as the core members of the team. However, the CHMT co-opts other district health staff. The composition of the CHMT has remained the same as documentary analysis indicates. The CHMT respondents reported that the introduction of the PERFORM project and implementation of the bundles did not have any effects on the composition of the CHMT.

Management meetings are essential and part and parcel of CHMT operations. The majority of the respondents reported that the CHMT held one management meeting every month, indicating that CHMT management meetings were regular. This is different from the past CHMT practices regarding holding meetings. Documentary analysis indicates that in the past CHMT meetings were irregular.[19] One CHMT respondent explained why CHMT management meetings seem to become regular overtime:

“In the remote past that was the case, but we complained a bit. We found ourselves with too many things and gossip was ensuing on the streets. We realized that this was because we did not follow regulations regarding meetings, but these days it is not there so much.”

Analysis of CHMT interviews indicate that all respondents reported that decision making took place in the CHMT management meetings and the decision making process involved all the core members of the CHMT. The respondents also reported that sometimes the CHMT co-opted other district-level health officials to attend CHMT meetings where decisions are jointly taken. Documentary analysis indicates that this has been CHMT practice even before implementation of the bundles. [19]

All the respondents perceived the decision making processes to be participatory, providing opportunity for all members to freely contribute to the meeting agenda, discussions during the meetings and to the decisions taken. The following comment by one of the CHMT respondents reflects this perception:

“For me it is not just my opinions but as a reality, all opinions provided by each CHMT member lead to collective decision making. You will find that, in addition to being in this team, there are core members and co-opted members, but what they all implement is the same thing. We all talk about community service delivery, and so forth, which for both core members and co-opted members the target is the same. If you talk about the MC coordinator it means he is going to look into all the health
interventions, which are DMO’s roles as well. If you talk about the laboratory coordinator, you will be talking about the same thing: whether the mother has or has not tested for HIV etc. Therefore there are roles which are identical, so even when decisions are reached there is no segregation.”

One of the CHMT management functions is to identify and address the problems during implementation and service delivery in the district. Documentary analysis indicates that the CRT introduced problem analysis approach to strengthen the CHMT’s capacity to address the problems experienced in the district health sector effectively. CHMT interviews and FGD analysis shows that this approach was not new to the CHMT but there were limitations in its use. For example, before PERFORM the CHMT members did not effectively use the problem tree technique to analyze the root causes of the problems experienced. Since the CHMT started using the problem analysis approach there have been changes in the way the CHMT identify problems. The CHMT members now identify the problems and their causes together as a team and look at how each problem identified relate to other problems before reaching a conclusion on how to tackle it. The changes realized were the result of the problem identification and analysis skills provided during the workshops and district visits by the PERFORM researchers.

Respondents of CHMT interviews and FGD agreed that the problem analysis process was useful. The participants of the FGD mentioned the advantages of the problem analysis technique. First, it helped the CHMT to know the problems and how to solve them. For example during problem analysis the CHMT discovered that the factors contributing to the problem of delayed booking of pregnant women were many but the main ones were a small number of health staff in the district, location of health facilities far away from the communities. Second, by using a problem tree it was easy to identify the causes of the problems. Third, the problem analysis technique enabled the CHMT to address the problems identified effectively using multiple interventions as one of the FGD participants explained the advantages of problem analysis in the following quote:

“Another advantage which I have seen from using the problem tree analysis is that because the causes of the problems are many so we are addressing problems using various solutions. For example the delayed early booking problem is caused by shortage of staff, medical supplies, minimal community awareness, and marriage customs and traditions. So we were addressing every cause separately, but at the end of the day you address the primary problem in its totality.”

Planning and funding of bundles
CHMT interviews raised two issues as far as planning of the bundles was concerned. First, the CHMT had a clear list of the planned bundles and second, there was attempt to involve various stakeholders in the planning of the bundles as the following remark by one of the respondents reflects:

“.....when it comes to a point when we want to prepare our plans in the council, often we invite stakeholders. We usually look at the interventions jointly there. They tell us what they have planned and what they are implementing.”

Evidence from the interviews indicates that the CHMT engaged two stakeholders; namely, TUNAJALI and BMAF in planning. However, the majority of the respondents mentioned TUNAJALI being the key stakeholder that mostly collaborated with the CHMT in planning district health services, including the planning of the bundles. TUNAJALI was an important stakeholder as it provided substantial funding to support implementation of the district health programmes, including recruitment and training of health facility workers and worked closely with the CHMT to implement HIV/AIDS activities in the district. Emphasizing the importance of TUNAJALI in district health planning one of the CHMT respondent observed that:

“It is these TUNAJALI because we go with them to do planning for the Council.”

The bundle activities were funded from the district health budget like any other health activities implemented in the district. Funding of the district health budget came from the Central government and donors. However, as we shall see below, the CHMT experienced problems in terms of disbursement of funds from the earmarked sources.

Lessons learnt by CHMT

The CHMT learned a number of lessons in the implementation of the PERFORM project. The CHMT FGD indicated that documentation of implementation through the diaries is one of the lessons learned by the CHMT as one of the FGD respondent remarked:

“What I have learnt if that the diary is like daily records, whatever is done is important to be documented. It helps us not to forget things. This is not only for the diary but also for our other activities. It is very important to document our activities soon after coming back from the field. It is important to write down an activity report.”

Second, by using the bundles approach CHMT members have learned that the health problems addressed are multifaceted requiring collaboration of different sections of the district health sector. The following observation by one of the FGD participant reflects this view:

“In the past we used to leave this matter with one person – the RCH to address this problem of delayed early booking, but after preparing the bundles it was seen that each one has something to do
in solving this problem. I think it has helped us. For example on the part of medicines, I did not think that I was directly involved in that problem, but these days we consult among ourselves that when we procure we agree to purchase facilities which would improve mother and child services. When we sit with a laboratory person we agree that expectant women must test for syphilis and so necessarily we buy equipment for those kinds of test. In one way or another, this information reaches our clients, and they now know that if they go at a certain time, they would get service. Initially they were thinking that even if they go to the clinics early enough they would not get service, they would not test for HB or syphilis. But after putting this strategy in place we see that the number of clients has increased.”

3.3.2. Workforce performance

Implementation and monitoring of bundles

Table 7 above gives the bundles that the CHMT implemented. Analysis of CHMT interviews and CHMT FGD indicates that the district recruited a good number of health workers to fill vacant positions in the health facilities during the 2013/2014 period. The majority of respondents also mentioned that the district authorities made training available to more health facility workers aiming at enabling more health facilities in the district to provide quality RCH services to the communities and to conduct outreach services. Interviews also indicate that health facility staff conducted sensitization meetings to raise awareness of the communities on the problem of delayed early booking of pregnant women for antenatal care. As indicated below under the wider health system topic, the respondents indicated that there was improvement in the availability of medicines in the facilities.

The CHMT and health facilities involved different stakeholders in the implementation of these bundles. For example, the district involved BMAF and TUNAJALI in the recruitment of staff for the district health sector and involved BMAF in health workforce training and retention programmes in the district. To achieve effectiveness the health facilities engaged District Council officials working at Ward and Village levels such as the Village Executive Officers (VEOs and) the Village Health Workers (VHWs) and Health Facility Governing Committees (HFGCs) to educate and sensitize the communities regarding the problem of delayed early booking for antenatal care.

Both health facility manager and health staff interviews indicate that the CHMT monitored implementation of the bundles in the district. Both categories of respondents indicated that the CHMT conducted monitoring of implementation of the bundles mainly through supervision of health facilities, the main implementers of the bundles.
Respondents provided their opinions on the number of supervision visits made by the supervisors from the district per year. While one respondent from the health facility respondent category said that supervision visits were rare indicating that supervisors made three visits per year, one respondent from the health staff respondent category indicated that supervisors visited the health facilities two or three times in a quarter. However, the majority of the respondents from both categories of respondents indicated that the frequency of supervision visits to health facilities increased compared to the past years. The majority of them indicated one visit per quarter.

Respondents from the CHMT category mentioned that every activity planned and implemented had a follow-up plan. Achievement of the plan was possible through allocation of the planned activities to responsible persons. These persons did not only oversee the implementation of the planned activities but also were responsible for ensuring activity reporting. These reports were prepared monthly and submitted to the CHMT. It is on the basis of the implementation reports that the CHMT prepared the district quarterly and annual implementation reports.

**Intended effects of bundles**

Both interviews and CHMT FGD respondent categories reported the effects of bundles on workforce performance. The respondents reported changes relating to bundles implementation in three areas of workforce performance. The first area is availability of staff in the health facilities. The majority of respondents from the CHMT respondent category and CHMT FGD mentioned that recruitment of the workers for the district health sector improved the availability of health workers in health facilities. Health facility manager and staff interviews are consistent with the responses from the CHMT interviews and the FGD. While a few health facility respondents indicated that their health facilities experienced a shortage of health workers the majority of them expressed satisfaction regarding the staffing levels in their health facilities. Documentary review [SA 1 report](#) indicates that the district faced an acute shortage of health workforce before the CHMT started implementing the bundles.

The respondents felt that improvement in health workers availability in the health facilities had a number of effects. First, it helped to reduce workloads leading to improved performance in general and boosting staff morale as one of the CHMT member respondent remarked:

“Previously we had a big shortage of workers and therefore most of the workers were overloaded. But nowadays the number of workers has increased, the distribution of work is good and therefore the performance has improved.”
Second, it led to even distribution of the workload among the workers in the health facilities as reflected in the following remark by one of the health facility staff interviewed:

“Previously the cases of home deliveries were very many, but now such cases have significantly decreased. It is so because our workload distribution is good. It is now possible for us to have enough time to educate the women. During the past it was very difficult to provide health education due to high work load.”

Third, the respondents thought that improvement in the availability of health workers led to improved service delivery as one of the health facility managers interviewed observed:

“Yes the services have improved, because at the time this dispensary started to operate we were only two; I and one fellow and the patients were complaining that they wanted a doctor. Now we have a doctor and the patients are no longer complaining.”

Fourth, CHMT FGD respondents mentioned that improved staffing levels created comfort on the part of the patient through reducing the waiting time of the patients when seeking health care at the health facilities. In addition, improvement in the availability of workers permitted health facility workers to begin providing outreach services planned in the bundles.

The other area of workforce performance where changes have been noted is improvement in the skills and competences of the health facility workers. Both CHMT and health facility respondents mentioned that the skills of health workers in health facilities have been improved through training. According to the health facility interviews training enabled more workers to provide RCH services in the health facilities, and to conduct sensitization in order to create awareness on the problem of delayed booking for antenatal care.

In addition, there has been attempt by the district to provide incentives to retain health workers working in health facility located in remote areas of the district. The district provided hardship allowance (money) to workers in health facilities located in remote areas of the district. However, analysis of health facility interviews indicate that despite these retention initiatives there were still difficulties in retaining workers in remote areas.

**Perception of bundles by CHMT, staff and other stakeholders**

In addition, analysis of both CHMT interviews and CHMT FGD indicate that the bundles approach was useful. FGD respondents mentioned that the bundles approach made the CHMT: to work as a team and to address the problems differently. The respondents argued that the need to work as a team stemmed from the fact that the bundles approach requires collaboration of CHMT staff responsible for different sections of the district health sector. In addition, CHMT members now look at how a certain problem relates to other problems being addressed.
The other important issue was whether the bundle had an effect on the problem addressed. Although some of the respondents indicated that the problem of delayed early booking of pregnant women for antenatal care persisted, CHMT interviews and HF Manger interviews indicate that the problem was decreasing as a result of implementation of the bundles as reflected in the following quote:

“The problem is decreasing. Previously it was very common to find a woman coming to the clinic at a delivery time (full term) without attending even a single RCH service. But these types of cases are now few; they decrease as time goes on.”

However, quantitative data to support this observation were not available at district level as the CHMT had not systematically collected data showing health facility antenatal clinic attendance by year when this evaluation was conducted.

3.3.3. Wider health system

Influence of Health System on management strengthening and workforce performance

Analysis of interview data indicates that in general, availability of medicines and medical equipment and supplies improved overtime. Up to date quantitative data from the Health Management Information System (HMIS) was not available to indicate this perceived improvement of medicines and equipment availability because records of medicines stoke-outs did not indicate a clear picture of availability of medicines from time to time. The majority of the respondents mentioned that improved availability of medicines and equipment enhanced service delivery in the district health facilities. However, some respondents from the health facility manager and staff respondent categories expressed concerns that although there were improvements in the availability of equipment, health facilities worked with insufficient numbers of the medical equipment such as sucking machine for the children, delivery kits, drip stands, etc. In addition, although CHMT interviews indicate that medicines, equipment and other medical supplies were made available to the health facilities, respondents of the CHMT FGD refuted this view. The respondents raised concern about the delays in the supply of medicines in particular.

Although some respondents identified a few problems relating to health infrastructure (lack of space for service delivery), health facility interviews indicate that health infrastructure improved through rehabilitation of the existing health facility buildings and construction of new buildings for the facilities, including staff houses. This increased space for service delivery motivated the workers to remain working in those health facilities.
Respondents from the CHMT respondent category commented also on the overdependence on the central government to finance the district health budget. The concern was on the delays created by the Treasury in the disbursement of the requested funds to the districts. Interviews indicated that every year the district experienced delays in the disbursement of funds but the problem was critical during the 2013/14 period when the CHMT was implementing the bundles. This problem emanates from the national level where the policy dictates that the Ministry of Health (MoH) should not release funds to any district until all districts in the country have their district health plans and budgets (CCHPs) approved by the MoH. However, it has been the practice for some of the districts to delay submission of their plans to the MoH for approval. This delay affects negatively other districts that meet the CCHP submission deadlines. The respondents indicated that this constraint had a wider impact on the district health system since it caused postponement of implementation of several planned health activities.

Respondents also mentioned how difficult it was to access funds from a significant stakeholder (TUNAJALI) through the District Council system. In order to enforce accountability of the funds provided for implementing the health activities in the district TUNAJALI changed its system of disbursement of funds. Instead of disbursing funds directly to the CHMT, TUNAJALI started channelling the funds through the bureaucratic system of the District Council creating delays in implementing the activities supported by TUNAJALI.

FGD and interviews also indicated that ad-hoc activities from other programmes in the district and from the national level affected the implementation of the planned bundle activities. Implementers in the district sometimes took time off to implement activities outside the implementation schedule.

The respondents reported that to enhance implementation and achieve effectiveness health facilities engaged the Village Health Workers (VHWs) and Health Facility Governing Comittes (HFGCs) to educate and sensitize the communities regarding the problem of delayed booking for antenatal care in the district. This supplemented the efforts of the health facility staff in carrying out sensitization of the communities on the problem.

All categories of the respondents indicated that the presence of the stakeholders in the district health sector facilitated implementation of the bundles. For example, due to shortage of staff in some health facilities BMAF assisted the district health system to recruit and train workers from the communities in order to enhance implementation.

**Influence of other contextual factors on management strengthening and workforce performance**
The respondents from CHMT and health facility staff categories mentioned other contextual factors that affected implementation of the bundles. They mentioned culture of the communities and social factors. They mentioned that some members of the community cherished a culture of not reporting to the health facilities during the early pregnancy believing that pregnancy issues could be dealt with at home. As for social factors, some of the respondents mentioned lack of commitment from the implementers such as the health facility staff who would be embroiled with other household or community activities.

3.3.4. Unintended effects

There were no negative unintended effects mentioned by the respondents. Analysis of interviews and FGD indicates that the respondents mentioned three positive unintended effects of implementing the bundles. First, the respondents mentioned that implementation of the bundles created a teamwork spirit among health staff both at CHMT and health facility levels as indicated in one of the FGD responses:

“The main advantage of using the bundles approach mentioned by several respondents is that the bundles approach has made the CHMT to work as a team.”

Second, the majority of respondents, both health facility managers and staff respondents, mentioned increased frequency of supervision of health facilities and improvement in the quality of CHMT supervision reporting that supervisory visits became regular and the health facilities received more participatory and supportive supervision from the CHMT. The respondents reported also that the supervisors spent more time at the health facilities than before, identified weaknesses in service delivery, looked at the facility records and reports and provided feedback to the health facility staff at the end of the supervision visit. This feeling is similar to the opinion expressed by one of the health facility staff interviewee who commented that:

“There are many changes especially in service delivery. I have just come back from my studies but I found so many changes especially since January this year. The frequencies of supervision by CHMT have increased. Also the way of doing supervisions has changed; nowadays supervisions are very participatory, they are supportive supervisions. When they come we normally sit together, they look at our registers and other reports, we discuss together, and in case of anything which is not good; they correct us humbly. To me that is an improvement. During the past, supervisions were very few.”

Increased frequency of supervision resulted in improvement in the submission of the reports to the CHMT by the health facilities although the respondents reported that the CHMT also strengthened health facility reporting by providing incentives (providing money) to motivate those who submitted the reports. The respondents reported also that frequent supervision visits to the health facilities reduced absenteeism.
Third, the respondents reported that implementation of the bundles led to enactment of by-laws. The village leaderships enacted by-laws to supplement efforts to sensitize the communities to allow pregnant women to attend antenatal clinics at the early stage of their pregnancies.

3.3.5. Discussion

The findings show that the process of CHMT management strengthening involved the European partners’ support to the CRT and CRT’s support to the CHMT. The PERFORM researchers provided problem analysis techniques that enabled the CHMT to identify and analyse workforce performance problems experienced in the district. However, the CHMT prioritized the problems identified and selected one problem. The problem that the CHMT decided to address is “delayed early booking for antenatal care.”

The findings also show that the PERFORM researchers supported the CHMT to understand the concept of bundles and to select the bundles of HR/HS strategies to address the prioritized problem of delayed early booking for antenatal care.

Although the CHMT found the problem analysis and bundles selection processes challenging, the CHMT was able to develop the problem tree together with the problem statement and to design the bundles. However, the CHMT indicated that the processes were useful.

The respondents provided views about the impact of the management strengthening process the CHMT went through. It appears the impact of the process was more on the problem analysis area where the CHMT respondents indicated that the process enabled the CHMT members to acquire problem analysis skills used by the members to analyse the causes of the problems and to identify the strategies to address the problems. Although the CHMT was able to formulate the bundles, respondents indicated that the CHMT faced difficulties in determining and formulating measurable indicators.

The findings show that the process of implementation of the bundles involved various stakeholders and improved the performance of health facility workers in the district. However, two major stakeholders (BMAF and TUNAJALI) feature prominently in the bundles implementation activities that had significant effects on workforce performance.

Two important activities that these stakeholders supported are clear in the findings presented: training of health facility workers to improve their ability to provide RCH services and to sensitize
communities on the importance of early booking and recruitment of workers to improve availability of health workers in the district. Improvement in the availability of staff improved performance and boosted staff morale through reducing workloads, led to even distribution of workload among staff, led to improved service delivery, reduced waiting time for the patients seeking care at the health facilities, and permitted provision of outreach services.

In addition, sub-district stakeholders (VEO, HFGCs, and VHWs) enhanced health facility worker performance for effective implementation of the bundles. These stakeholders teamed up with health facility workers to sensitize communities on the importance of early booking.

However, implementation of the bundles had unintended effects. The findings show that three effects emerged: team work spirit developed among CHMT and health facility staff boosting work performance, the frequency of CHMT supervision visits to health facilities increased and the quality of supervision improved, and the village leaderships supported efforts to sensitize communities for early booking for antenatal care.

A number of health system and other contextual factors facilitated and constrained implementation of the bundles. The findings show that while two factors facilitated implementation three factors seemed to have affected implementation of bundles negatively. The first factors that facilitated implementation is availability of medicines and medical equipment, although respondents indicated that there were delays in the delivery of medicines and that the number of equipment available in the health facilities was limited. The second factor is the presence of programmes implemented by various stakeholders.

The factors that constrained implementation of the bundles include lack of funds to implement activities caused by delays in the disbursement of funds from the central government and channelling donor funds through bureaucratic systems of the District Council, lack of awareness about the importance and use of quantitative data from the HMIS system in the CHMT management, ad-hoc activities from national and district based stakeholder programmes that interfered with implementation of planned activities, and the dominant belief in the communities that households are better places to deal with pregnancy issues.

3.3.6. Conclusion and recommendations

The management strengthening intervention implemented in the district appeared to have improved the skills of the CHMT, particularly in problem identification and analysis. Workforce performance, to a larger extent, improved as a result of implementation of the bundles. However, some contextual
factors such as late disbursement of funds from the central government and implementation of ad-hoc activities affected implementation negatively. It is recommended that:

- The CHMT continue improving workforce performance using the bundles approach
- The CHMT should continue using the problem analysis skills it has acquired from the PERFORM experience
- The CHMT should continue involving relevant stakeholders in its activities. Support from these stakeholders is valuable.

3.4. Comparison of the three districts

This section presents a comparative analysis of the findings from the three districts namely Iringa Urban, Mufindi and Kilolo by comparing and contrasting the findings and followed by a discussion.

3.4.1. Changes in management strengthening

The Process of Management Strengthening

On the process of management strengthening, the findings generally indicate that all the districts received adequate supportive through CRT visits which were conducted in every two months in the first year followed by monthly visits in the second year. Moreover, there were review meetings which were conducted in every four months in the first year and every six months in the second year. In a way, the CRT visits and review meetings provided ample opportunities for CRT to share experiences with the CHMT members, providing guidance and working together to solve some practical problems.

In addition to the CRT visits and review meetings, the findings show that CHMT continued to conduct their CHMT meetings as usual including issues related to PERFORM project which were later shared with CRT during the CRT visits and review meetings. Thus, much of capacity building for CHMT occurred through these forums as part of the management strengthening interventions including also regular phone calls, text messaging and emails.

However, during the management strengthening process, two districts experienced some problems. For example, there was insufficient involvement of health centres at the beginning of the project in Mufindi, while in Kilolo there was a need to revise original problem tree twice which led to delays in implementation (See Error! Reference source not found.). Similarly, the findings from Iringa indicate that many stakeholders were not even aware of PERFORM, which means they were not involved in problem analysis and planning of bundles. All these had implications on the speed of implementation of the bundles as already presented in the findings section.
Effects on management strengthening

The effects of management strengthening were basically focused on how the selected bundles for each district transform the way CHMT addresses problems. In this regard, the effects of the changes on management strengthening were to be tracked on a number of established evaluation areas such as:

- CHMT routinely operates as a team to address problems with balanced power relations; CHMT routinely conducts proper analyses of health workforce / system problems and/or other areas;
- CHMT routinely carry out comprehensive assessments (as part of planning – options appraisal) of potentially effective health workforce/system ‘bundles’;
- CHMT assesses the implementation requirements of its selection of health workforce / system ‘bundles’;
- timeline to support specific interventions; there is a robust relationship between problems, planned solutions and monitoring and making necessary adjustments at the implementation stage; and
- Finally CHMT routinely identifies lessons from the process of problem solving and use them in future planning.

As such, the findings across the three districts in Iringa show some interesting patterns with regard to the evaluation questions. One of the foremost similarities across the districts are noted to be: improved teamwork (Iringa, Kilolo and Mufindi); improved participatory decisions (Mufindi and Kilolo); improved practices for problem analyses in all districts. However, the findings from Iringa Urban and Mufindi show that CHMTs’ capacity to record, store, manage and report data improved after gaining new skills from the PERFORM project (Error! Reference source not found.). Moreover, monitoring and supervision were noted to be one of the effects of capacity strengthening intervention. The findings indicate that there has been increased frequency and quality of supervision for all the districts. It should be pointed out that regular and supportive supervision is still one of the effective strategies for improving performance and quality of service. This is well documented and emphasized by the MOHSW Supportive Supervision Guidelines (2010:8) which describes supportive supervision as a “process which promotes quality outcomes by strengthening communication, identifying and solving problem, facilitating team work, and providing leadership and support to empower health providers to monitor and improve their own performance”. However, this strategy has been often affected by the lack of adequate funds and complicated transport logistics for some remote areas.

It is also interesting to note from the case of Kilolo that there are now more regular monthly management meetings conducted. It should be noted that PERFORM project aimed at influencing the occurrence of regular CHMT’s meetings with each member of the CHMT given equal access to contribute to the agenda setting, discussion and decision making as a way of strengthening the
capacity of the members of the CHMT to operate as a team to address problems with balanced power relations. In this case, Kilolo provides a classic example of how this aspect was achieved.
Table 8: Effects on management strengthening

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3.4.2. Changes in workforce performance

In the bid to assess changes in the process of workforce performance, PEFORM was interested to assess and document how CHMTs implement ‘bundles’ according to plan (including monitoring and making adjustments); how CHMTs implement ‘bundles’ in an efficient manner; and how bundles are implemented in consultation with beneficiaries and stakeholders. These were some broad areas for tracking changes in workforce performance.

Accordingly, the findings across the two districts generally indicate that staff skills gained from the project has led to better services (Iringa and Kilolo); improved quality of service for all districts. Moreover, the project’s impact has led to the introduction of incentives to retain/motivate staff for the case of Mufindi and Kilolo (Error! Reference source not found.). The findings further indicate that there has been an increase on the awareness, willingness and demand for services and improved drug availability which has eventually led to increased number of patients for the case of Mufindi. In addition, male circumcision service has significantly prevented sexually transmitted infections in Mufindi. For the case of Kilolo, there were a number of new recruitments made which have improved staff availability in facilities and hence reducing workloads, fair workload distribution among staff and improved performance. More interesting, the overall problem of delayed early booking for pregnant mothers in Kilolo has been decreasing since the bundles started, which is positive sign for PERFORM intervention, although other factors cannot be entirely discounted.

Clearly, these findings from the three districts imply that systematic planning and management of health staff can increase workforce performance particularly in reducing staff time wastage, make the best use of available skills and hence good service delivery to the clients. Similarly, the findings have to some extent responded positively on the areas of workforce performance which include retention, distribution and effectiveness as already presented in the findings sections of each district, although the magnitude of the impact has been differing across the three districts.
### Table 9: Effects on improving HW Performance

<table>
<thead>
<tr>
<th>Evaluation area</th>
<th>Iringa Urban</th>
<th>Mufindi</th>
<th>Kilolo</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effects on improving HW Performance</strong></td>
<td>1. Quality and coverage of CTC improved significantly</td>
<td>1. Awareness, willingness and demand for service increased considerably</td>
<td>1. Recruitments improved staff availability in facilities and led to:</td>
<td>1) Staff skills led to better services (Iringa, Kilolo)</td>
</tr>
<tr>
<td>2. Improved skills of health staff have led to better quality health services</td>
<td>2. Improved drug availability and improved services increased number of patients</td>
<td>a. reduced workloads leading to improved performance</td>
<td>2) improved service quality (all)</td>
<td></td>
</tr>
<tr>
<td>3. MC services prevented sexually transmitted infections</td>
<td>b. even workload distribution among staff</td>
<td>3) introduction of incentives to retain/motivate staff (Mufindi, Kilolo)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. MC services increased activities in the centres, making staff too busy (and slight decrease in quality) which was then alleviated by extra-duty allowances</td>
<td>c. improved service quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. reduced waiting time for clients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Improved staff skills and competences through training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Introduction of incentives to retain staff working in remote areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. The overall problem of</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
delayed booking has been decreasing since bundles started
3.4.3. Unintended effects

From the point of view, any given intervention program may have both intended and unintended effects. According to Mertons (1936) cited in Wiig and Holm-Hansen (2014:5), “…every planned action that manipulates human behaviour will have unanticipated effects, although not necessarily undesirable ones”. He differentiates three main types of unanticipated effects: (a) positive unexpected effects; (b) negative and detrimental effects which occur in addition to anticipated ones; and (c) perverse effects - effects counter to what was planned or anticipated. This is because not all of which can be foreseen by the programme or project designers. Moreover, many different development programs coexist within the same intervention areas, making it difficult to assess the paths and interactions of many stakeholders and their intervention programmes which could result into different outcomes of the intended project.

Indeed, bundle implementation created community awareness (i.e. the importance of condom use), willingness and demand for service. This was reflected from the users of the health services Mufindi who felt that the quality of services had improved. In addition, the bundles have created awareness on the importance of HIV testing as reflected from FGDs with health service users. For example, a significant number of people were willing to come for circumcision, even during weekends. Similarly responses from facility managers indicated that the availability of drugs and good services provided at CTC increased the number of clients. Also the number of men who accompanied their female partners to clinics and male voluntary HIV testing increased. Pregnant women agreed to test for HIV without any resistance which indicated that people were more educated on HIV&AIDS compared to the past. It was also reported that previously, pregnant women delayed to report to antenatal clinics but currently most of the pregnant women report to the clinic early. Also stigmatization about HIV&AIDS was no longer widespread and that the treatment process was taken as a common activity in the community. Interviews from some health facilities indicated that MC services reduced opportunistic diseases and infections from mother to a child decreased considerably.

On the other hand, the findings from the three districts show that PERFORM project had some unintended effects which emanated from the experience gained by the of health staff to impact other services in the districts in terms of using the problem analysis and documentation as tools for planning and monitoring especially for the case of Mufindi and Iringa Urban. More unintended were noted from Mufindi district which included, for example, some PMCTC and CTC services have been reorganized and provided in one common place, the Male Circumcision services rapidly expanded by making the staff too busy attend other activities at the health facilities; there was shortage of drugs
and lack of working equipment in some facilities due to increased demand for services; and CHMT recognized the importance of strategy development as part of its annual work plan. As for the case of Kilolo, the project has created a teamwork spirit among staff at both CHMT and HF levels which was not there before. In addition, the PERFORM project raised some awareness on the part of village officials to the extent of enacting some by-laws to make communities observe early booking rules (Error! Reference source not found.).
### Table 10: Unintended Effects

<table>
<thead>
<tr>
<th>Evaluation Area</th>
<th>Iringa Urban</th>
<th>Mufindi</th>
<th>Kilolo</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unintended Effects</strong></td>
<td>- Experience gained from the project through implementation of bundles to improve CTC services has opened a new door for CHMT members to improve other service health areas in the district</td>
<td>- Some PMCTC and CTC services have been reorganized and provided in one common place</td>
<td>- Created a teamwork spirit among staff at both CHMT and HF levels</td>
<td>- Experience gained from PERFORM has trickled down to other services in the councils (Iringa and Mufindi)</td>
</tr>
<tr>
<td></td>
<td>- Increased MC services made Health workers too busy attend other activities at HF's</td>
<td>- Shortage of drugs and lack of working equipments in some facilities due to increased demand for service.</td>
<td>- The project raised awareness on the village officials to enact some-laws to make communities observe early booking rules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- CHMT has recognized the importance of strategy development as part of its annual work plan.</td>
<td>- Problem tree analysis and documentation approaches have been extended beyond the horizons of the PERFORM project towards overall council planning process</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tbody>
</table>

4. Discussion

This section looks at the findings from the three districts comparatively at the way PERFORM project has improved CHMT management and workforce performance. The idea is to pull down some of the key similarities and differences of the findings across the three districts, namely Iringa Urban, Mufindi and Kilolo and to discuss them comparatively.

First and foremost, it should be noted that the three districts have different contextual factors and have thus followed diverse paths towards responding to the management strengthening and workforce performance interventions. For example, the findings for the case of Iringa Urban suggest that the council received adequate support from the CRT through bi-monthly visits as well as review meetings conducted in every four months in the first year and every six months in the second year. In a way, the meetings provided opportunities for CRT to share experiences with the CHMT members, providing support on the implementation of bundles as well as monitoring the implementation process. One of the key outcome of this process was changes observed on strengthening team work among the CHMT members, improved frequency and quality of supportive supervision, and the CHMT gaining skills and knowledge for management functions. In Mufindi district, there were a number of changes on strengthening the CHMT, which included, for example, enhanced participatory processes in CHMT planning process; frequent CHMT meetings; further use of problem tree analysis and the use of the diary method to document the conduct of different activities related to health in the district. In addition, team-work spirit was highly acknowledged from Mufindi as in other districts under the intervention. Research so far conducted on this area indicate that team-work spirit has been at the core of action learning, as espoused by Revans (1983), who also believes that most of the knowledge needed by managers to solve their problems could be found within a group of them working collectively. In the same vein, findings from Kilolo show that the process of CHMT management strengthening involved three important actors namely; a) the European partners’ support to the CRT; b) CRT’s support to the CHMT; and c) CHMT support to sub-managers and sub-district staff. Generally, this pattern was also observed from the other two case districts. For instance, the PERFORM researchers across all the three districts provided support on the use of problem analysis techniques that enabled the CHMT to identify and analyse problems related to workforce performance. The findings further indicate that the PERFORM researchers supported the CHMT to clearly understand the concept of bundles and the selection strategies (HR/HS) to address the prioritized problem. Indeed, capacity building of this nature highly contributed to strengthen management of the CHMT members in the same way as improving workforce performance.

With regard to workforce performance, the cases under the intervention lend support to the argument that action research methodology can under the right conditions, contribute to workforce performance. The findings provide ample evidence on the workforce performance as evidenced from the three
districts in Iringa. For example, there were a number of perceived workforce improvements for the
case of Iringa Urban which related to improve of quality and coverage of CTC services. Specifically,
the findings from this case council show that members of the CHMT in collaboration with
stakeholders renovated and constructed some CTC buildings, as well as establishing new CTCs.
However, TUNAJALI project played a significant role in supporting CHMT members to accomplish
this task. In this case, we cannot draw a firm conclusion that the construction of new CTC service
centres was directly linked to the PERFORM project. What we could claim, however, is the fact that
the construction speed and effective management of the project had some seeds of the intervention
process as could be testified by the interviews made with some CHMT members. Moreover, a
significant number of health providers received training on CTC in recent years, which again cannot
be directly linked with the impact of PERFORM. However, despite these challenges of attribution,
there were some clear indications that a significant number of CHMT members had played a key role
in attracting and involving other key stakeholders and health facilities in the design and
implementation of the bundles. Similarly, stakeholders were less involved in Mufindi during the
design of the bundles but more in the implementation of bundles. Logically, their close involvement
in implementation of bundles was mainly due to the fact that the stakeholders were also doing similar
activities and their support in resources including provision of allowances as incentives to health
workers, was essential. More interesting for the case of Mufindi is the fact that the monitoring of
bundles implementation did not depend on a single factor, but required various methods including
diaries, meetings, communication among CHMT members and supervisory visits. Nonetheless, the
literature warns us that though common supervision is not always a successful strategy for improving
performance and quality of service (Rowe, et al., 2005). What is needed is supportive supervision
which enables the implementers such as health workers at the health facilities to familiarise with some
new skills and methods for performing their duties.

A number of health system and other contextual factors both facilitated and constrained the
implementation of the bundles in Kilolo. The findings show two factors facilitated the process. The
first factor that facilitated implementation is availability of medicines and medical equipment,
although respondents indicated that there were delays in the delivery of medicines and that the
number of equipment available in the health facilities was limited. The second factor is the presence
of programmes implemented by various stakeholders. On the other hand, the factors that appeared to
have constrained implementation of the bundles in Kilolo included lack of funds to implement
activities due to delays in the disbursement of funds from the central government and channelling
donor funds through bureaucratic systems of the District Council. The second constraining facto was
ad-hoc activities from national and district based stakeholder programmes that interfered with
implementation of planned activities. It should be pointed out that increased demand services resulted
in increased staff workload which compromised their motivation for work. For example, De Savigny
and Adam (2009) provide an example of how a pay-for-performance initiative to improve a TB DOTS programme led to damage to other parts of the health system, including the distraction of health personnel from other essential duties. The third factor was the dominant belief in some communities that household care for pregnant mothers is better than hospital care. These cases from Kilolo were also observed from Mufindi and partly in Iringa Urban.

Accordingly, the findings from the three districts point to one of the key challenges faced in any intervention initiatives such as PERFORM project. While the key objective of the project was to strengthen management of the CHMT and increased workforce performance in the three districts, the key lesson which can be drawn here is that the intervention of this nature cannot avoid the risk of contextual factors as well as getting a full commitment and willingness of the key actors such as CHMT members and sub-staff to participate in the project’s implementation. For example, it was observed in the findings sections that some members of the CHMT were made to participate in activities they were not trained for. Fritzen (2007:2) reminds us that that Human Resource Management (HRM) is strategic in any kind of reform developed in a health care system. This means that once the desired results are strongly dependent on the behaviour of the workforce, “understanding how health professionals will respond to new values, roles, responsibilities and resources is essential to ensure the viability of reform interventions”.

Moreover, the fact that most of the key actors have been used to participate in programmes/projects which come with some financial incentives, PERFORM project seemed to be a new approach to them; hence some passive resistance in implementation of the bundles could not be discounted. Finally, the findings from the three cases cannot enable us to make some firm conclusion on the impact of PERFORM on management strengthening and workforce performance due to the methodological limitation. However, what can be possible is only to make some generalization of the impact of the project within the three district councils in Iringa region, rather than trying to generalize the findings to other districts in Tanzania. In sum, the potential of the PERFORM project to contribute to management strengthening and workforce performance depended on how other important factors such as the contextual factors; the role of other key stakeholders preforming similar functions in the districts. This would have also required a robust and rigorous analysis of both qualitative and quantitative baseline information against the end line information.

**Limitations**

The main limitation of this research is lack of reliable data to support some of the judgements made in the report. Analysis of the quantitative data was undertaken but the researchers decided not to use the data because the Health Management Information System that produces quantitative data in Tanzania
is unreliable. Hence, the researchers relied more on data reflecting perception of the interview and FGD respondents.

5. Study conclusion and recommendations

It is clear from the findings of the research that the PERFORM management strengthening intervention improved the practices of the CHMTs and workforce performance in general. It is recommended that:

- The CHMT should not be left alone. The Prime Minister’s Office Regional Administration and Local Government (PMO-RALG), the Ministry of Health (MoH) and the District Council authorities in the districts should support the CHMTs to use the problem analysis skills and knowledge gained in management and planning of district health services
- the District Council authorities should learn lessons from the PERFORM experience and support the CHMTs to continue improving workforce performance in their districts
- The contribution of other stakeholders in improving district systems must not be played down. The CHMTs should continue involving relevant stakeholders to improve the district health systems and health workforce performance in general.
- District interactions through Inter-district meetings should continue. This will enable the districts to continue networking and learning from each other.
6. References


Revans, R., ABC of action learning. 1983, Bromley, UK: Chartwell-Bratt Ltd.


7. Annexes

Annex 1: Data collection tools for the Situation analysis one

One-to-one interview guide- Stakeholder at district level

Date of interview:……………………………………………………… Code:

Interview conducted by:……………………………………………………………………………

<table>
<thead>
<tr>
<th>Introduction: key components</th>
<th>I want to thank you for taking the time to meet with me today. My name is ………………………………… and I would like to talk with you about the health workforce in ………………… district. Specifically, as part of the PERFORM project, we are trying to understand the factors affecting workforce performance in order to find ways to improve the performance of the health workforce in ………………… district. The interview should take about one hour. I will be taping the session because I don’t want to miss any of your comments. I explained these procedures to you when we set up this meeting. Although I will be taking some notes during the session, I can’t possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don’t miss your comments. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish. Do you have any questions about the PERFORM project or about what I have just explained? Are you willing to participate in this interview? Are you happy for me to record our conversation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Thank you</td>
<td></td>
</tr>
<tr>
<td>- Introduce yourself</td>
<td></td>
</tr>
<tr>
<td>- Explain purpose of interview</td>
<td></td>
</tr>
<tr>
<td>- Confidentiality</td>
<td></td>
</tr>
<tr>
<td>- Duration</td>
<td></td>
</tr>
<tr>
<td>- Explain how the interview will be conducted</td>
<td></td>
</tr>
<tr>
<td>- Opportunity for questions</td>
<td></td>
</tr>
<tr>
<td>- Ask them to sign consent form if not already done.</td>
<td></td>
</tr>
</tbody>
</table>
Please sign the consent form I gave you earlier. Can you please give the consent form to me.

<table>
<thead>
<tr>
<th>Questions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Chose quiet place where</td>
<td>• Please introduce yourself. What is your job?</td>
</tr>
<tr>
<td>can talk freely</td>
<td>Please describe what you do.</td>
</tr>
<tr>
<td>• Ask factual questions</td>
<td>• Does the district have a HRH plan or strategy? Can you</td>
</tr>
<tr>
<td>before opinion.</td>
<td>briefly describe its content?</td>
</tr>
<tr>
<td>• Use probes as needed.</td>
<td>• Are there any local/district policies regarding (the</td>
</tr>
<tr>
<td></td>
<td>performance of) HRH?</td>
</tr>
<tr>
<td></td>
<td>• What groups (DHMT, regional office, MoH, CSOs e.t.c.)</td>
</tr>
<tr>
<td></td>
<td>are involved in formulating and implementing local/district</td>
</tr>
<tr>
<td></td>
<td>policies for HRH development?</td>
</tr>
<tr>
<td></td>
<td>• Who are the main actors involved in funding local/district</td>
</tr>
<tr>
<td></td>
<td>HRH policies and plans?</td>
</tr>
<tr>
<td></td>
<td>• Who are the key district and external players in HRH?</td>
</tr>
<tr>
<td></td>
<td>• Are there any on-going or completed district-wide projects</td>
</tr>
<tr>
<td></td>
<td>on issues relating to HRH (performance)?</td>
</tr>
<tr>
<td></td>
<td>• What local factors influence (the performance of) HRH in</td>
</tr>
<tr>
<td></td>
<td>the district?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closing: key components</th>
<th>Is there anything more you would like to add?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Additional comments</td>
<td>I will be analyzing the information you and others have</td>
</tr>
<tr>
<td>• Describe next steps</td>
<td>given me and preparing a report based on your responses.</td>
</tr>
<tr>
<td>• Thank you</td>
<td>The DHMT and the research team will use the report to</td>
</tr>
<tr>
<td></td>
<td>identify ways of strengthening the DHMT in order to</td>
</tr>
<tr>
<td></td>
<td>improve workforce performance.</td>
</tr>
</tbody>
</table>

Thank you for your time.
Focus group discussions - DHMT

Introduction: key components

- Thank you
- Introduce yourself
- Explain purpose of interview
- Confidentiality
- Duration
- Explain how the interview will be conducted
- Opportunity for questions
- Ask them to sign consent form if not already done.

I want to thank you for taking the time to meet with me today. My name is …………. and this is my colleague ………. We would like to talk with you about the health workforce in ……… district. Specifically, as part of the PERFORM project, we are trying to strengthen the management by the DHMT and understand the factors affecting workforce performance in order to find ways to improve the performance of the health workforce in ……… district.

We are not here to share information, or to give you our opinions. Your perceptions are what matter. There are no right or wrong answers. You can disagree with each other, and you can change your mind. We would like you to feel comfortable saying what you really think and how you really feel.

The interview should take about 2 hours. We will be taping the session because I don’t want to miss any of your comments. These procedures were explained to you when we set up this meeting. Although my colleague will be taking some notes during the session, they can’t possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don’t miss your comments.

All responses will be kept confidential. No one will know who said what. This means that we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish.
We want this to be a group discussion, so feel free to respond to me and to other members in the group without waiting to be called on. However, we would appreciate it if only one person did talk at a time.

Do you have any questions about the PERFORM project or about what I have just explained?

Are you willing to participate in this discussion?

Are you happy for us to record our conversation?

Please sign the consent form I gave you earlier. Can you please give the consent form to me.

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Chose quiet place where can talk freely</td>
</tr>
<tr>
<td>• Ask factual questions before opinion.</td>
</tr>
<tr>
<td>• Use probes as needed.</td>
</tr>
</tbody>
</table>

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Now, let's start by everyone sharing their profession, what their job is, and how long they've been working in this district.</td>
</tr>
<tr>
<td>• Is there a district health plan? Please, briefly describe it, including the development process, content, last update and any other relevant issues.</td>
</tr>
<tr>
<td>• Does the district have a health workforce plan/policy? Please describe its content, last update and any other relevant issues. Does the policy cover health workforce performance?</td>
</tr>
<tr>
<td>• What are the health workforce priorities in the district?</td>
</tr>
<tr>
<td>• What local factors affect the performance of the health workforce?</td>
</tr>
<tr>
<td>• What level (national, regional, district, sub-district) is in charge of recruitment, hiring, transfer and promotion of health workforce?</td>
</tr>
<tr>
<td>• Where does the overall budget for the district come from? Who plans the budget? Who approves it? What monitoring arrangements exist for the spending of the district budget?</td>
</tr>
<tr>
<td>• Is there budget allocation for salaries,</td>
</tr>
</tbody>
</table>
allowances and financial incentives for staff? Who pays the district staff? Are salaries usually paid on time? Does the DHMT have the authority to use the district budget to hire additional staff on contract?

- What management and supervision mechanisms exist to supervise staff and monitor performance of health facilities? Are these mechanisms adhered to?

- What is known about staff motivation levels? Have there been surveys?

- What disciplinary actions can the DHMT take? How frequently are these actions taken?

- How often does the DHMT meet with facility health committees, community representatives? Do you have any records of these meetings? Can I see them?

- Are there any ongoing or completed local projects on issues related to HW in the district?

- What are the most important problems you have encountered in your work that are preventing you from developing and or implementing plans to improve health workforce performance in the district?

- What opportunities exist for improving your work and its results, which do not necessarily require any new or additional resources?

Is there any other information regarding workforce performance in the district that you think would be useful for us to know?

Thank you very much for coming today. Your time is very much appreciated and your comments have been very helpful.
District Questionnaire:

- **DISTRICT HEALTH MANAGEMENT AND SUPPORT SYSTEMS**

**Interviewer:**

**Respondents:**

- **Country:**
  
  Region/Province:

- **District (name):**

**Physical and institutional infrastructure and resources: Reference Year:**

- **Catchment area**
  
  - What is the population of this district?
  
  DNK or ………………………

  - What is the area of this district?
  
  DNK or …………………square km

  - Which are the areas of greatest population concentration?
  
  DNK or …………………………………………………………..

  - What is the nature of the terrain
  
  Mountainous/flat/other(specify)………………………………………………………………

  - How much of the district can be cut off during the rainy season?
  
  ……………………………………………………………………………………………..

  For how long?
  
  DNK or less than 1 week/ 1-3 weeks/ more than 1 month

- **Disease priorities and service provision**
  
  - In your opinion, which are the five most important disease problems in this district?
How many primary care facilities exist per 10,000 population?

**Health facilities**

- Number and type of facilities in the district by provider

Is there a list/records available for copying?

Available/not available

If available, note down the following information:

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>Government</th>
<th>Other/NGO</th>
<th>Number of beds</th>
<th>Services provided*</th>
</tr>
</thead>
<tbody>
<tr>
<td>District hospital</td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>Other hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health centre</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dispensary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health post</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*= G- General consultations; MCH – Mother & child health; VAC – Vaccinations; DEL – Deliveries; FP – Family Planning; IEC – Information & Education for health; LAB – Laboratory services; Other-Other services
### Transport

<table>
<thead>
<tr>
<th>Means of transport</th>
<th>DHMT Functioning</th>
<th>Hospital Functioning</th>
<th>PHCU* Functioning</th>
<th>DHMT Not functioning</th>
<th>Hospital Not functioning</th>
<th>PHCU* Not functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Primary health care unit

- Are any of the above vehicles attached to special programmes?
  - Yes/No
  - If yes, how many? .........................
  - If yes, are they shared with other programmes?
    - Yes/No
- Do all core members of the DHMT have access to a vehicle for their work?
  - Yes/No
- The existing public transport system is connecting:
  - All or most health facilities
  - Few or no health facilities
- Health workers usually use the public transport system for their supervision/outreach work
  - Yes/No/DNK

### Other health care providers

- Are traditional practitioners common?
  - Yes/No/DNK
  - If yes, are there more traditional practitioners than government and private doctors?
    - Yes/No/DNK
• Do district health management teams and traditional health practitioners in the district undertake collaborative activities?

Yes/No/DNK

If yes, please list some of these activities

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………

• What NGO facilities and programmes operate in this area?

List by type/number/programme focus.

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………

• Does the DHMT undertake collaborative activities with the non-public health services (e.g. private, mission, or NGO owned) in the district?

Yes/No

If yes, list some of these activities

…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………
…………………………………………………………………………………………………

Management Systems

Management structures

• Please fill in the table below with respect to District Health Management Structures

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>District Development Committee</th>
<th>District Health Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the structure in place?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Does it have guidelines on its function and</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
responsibilities

- Have meetings been held in the past 12 months?

If yes,

- How many?

- How often?

- Are there records of these meetings? (i.e. minutes)

- Does the structure have authority to make decisions on:
  - District health plans?
  - District health budget?
  - Personnel e.g. posting or transfers?
  - Purchase of drugs & other medical supplies?

- What are the functions of the district health Management team?

- List the members of the District health Management Team, their roles and gender.

<table>
<thead>
<tr>
<th>DHMT Post</th>
<th>Role(s)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Female</td>
</tr>
</tbody>
</table>
• Do the members of the DHMT have job descriptions?
  Yes (all members)  Yes (some members)  No

• How many DHMT members have been changed over the previous 12 months?
  ………………………………………………………………………………………………………………..

• How many vacancies have been unfilled on the DHMT over the past 12 months?
  ………………………………………………………………………………………………………………..
  ………………………………………………………………………………………………………………..

• **Financial management**
  
  • Is there a district health budget?
    Yes/No

  • Did the DHMT have a role in the allocation of funds to activities for the current financial year?
    Yes/No

  • Indicate (in the table below) which level of authority the district has to use its budget for each specified area.

<table>
<thead>
<tr>
<th>Area</th>
<th>Level of authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paying staff salaries</td>
<td>Full   Partial  None   NA</td>
</tr>
</tbody>
</table>

95
Purchasing drugs

Purchasing other supplies such as linen, stationery, cleaning materials

Purchasing equipment

Repairing equipment

Maintaining buildings

Maintenance vehicles and motorcycles

- Indicate (on the table below) whether the following financial monitoring systems are in use. If in use, verify existence and actual use.

<table>
<thead>
<tr>
<th>Structures</th>
<th>Existence</th>
<th>Actual Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Financial records</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Accounting procedures</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Financial reports</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Periodic auditing visits</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Others (please specify):</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Supervision**

- How many supervisory visits have been made by the district health management team to district hospitals and district health centres during the last six months? List the number of planned supervisory visits that were actually undertaken in the six months prior to the situation analysis in the table below.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Number of visits planned</th>
<th>Number of visits actually carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Are records on these visits available?
Available/not available

- Do you have a schedule for supervisory visits by the DHMT?
Yes/No/DNK

If yes, can I see it?
Available/not available

- Do you have a supervisory protocol/checklist?
Yes/No

If yes, does this cover all district programmes/activities?
Yes/No/DNK

If no, which programmes/activities are covered?

Can I see it?
Available/not available

- When did the last visit from someone from the regional level take place?
DNK or

Within the last 4 months/more than 4 months ago

What was the purpose of the visit?
DNK or

- What is the most useful support and guidance you get from the regional level?
When did the last visit from someone from ministry headquarters take place?
DNK or
Within the last 6 months/more than 6 months ago
What was the purpose of the visit?
DNK or

What is the most useful support and guidance you get from Ministry headquarters?

Human resources and training

- **Staff**
  - Total number and type of government health staff employed in the district:
    
    Is there a list/records?
    
    Available/not available
    
    - If available, note down the following information, specifying staff actually in post, with established posts in brackets

<table>
<thead>
<tr>
<th></th>
<th>In district health management</th>
<th>In district hospital</th>
<th>In other hospital</th>
<th>In PHC facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical doctors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of these:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Staff Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgeons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetricians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatricians</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical assistants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained midwives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health nurses/health visitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses aids/student nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health education officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health inspectors/assistants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentists/dental assistants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory assistants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiographers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anaesthetists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistician/ Stat. clerks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital/health administrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained accountants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planners/economists</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ungraded support staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Who is in charge of postings and transfers?
National/regional/district level or
Other (specify).................................................................

• Who pays district staff?
DNK or Ministry of Health.................................%
Region ......................................................% 
District..............................................................%
Other (specify).....................................................%

• Are you consulted concerning postings and transfers for the district?
Yes/No
If yes, how often?
Sometimes/often/always

• **Working conditions**
Indicate whether the following exist in the district and the degree of satisfaction with the current situation according to the DHMT

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Exists for:</th>
<th>Degree of satisfaction*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Some</td>
</tr>
<tr>
<td>Job descriptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff rotation systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing for personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Scale: Very Dissatisfied = 1; Dissatisfied = 2; Satisfied = 3; Very Satisfied = 4; Undecided = X*
**Continuing education**

- Number and type of staff that attended CE courses/workshops within the last 12 months

  - District Health Management Team

<table>
<thead>
<tr>
<th>Staff type</th>
<th>Number of Courses</th>
<th>Type of training received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health inspector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  - District health workers

<table>
<thead>
<tr>
<th>Staff type</th>
<th>Number of courses</th>
<th>Type of training received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical doctors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical assistant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community health officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurses/midwives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health officers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- For members of the district health management team:

Which aspect of your last training course/workshop have you found most useful in your work?

…………………………………………………………………………………………
…………………………………………………………………………………………
…………………………………………………………………………………………

Which aspect of your last training course/workshop has been most interesting to you personally?

- Who decides what courses/workshops are held in your district?
DNK or District team/Region/Province/MoH HQ/Donors
Other (specify)………………………………………………………………………………

**Health training facilities**

- Number and type of health training facilities in the district

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>No. serving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>District</td>
</tr>
<tr>
<td>Nurse training schools</td>
<td></td>
</tr>
<tr>
<td>Midwifery training schools</td>
<td></td>
</tr>
<tr>
<td>MA/CO/CHO training schools</td>
<td></td>
</tr>
<tr>
<td>Environmental health schools</td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
<td></td>
</tr>
</tbody>
</table>

- Are these schools involved in the provision of Continuing Education in the district?
  Yes/No/DNK
  If yes, how?

  …………………………………………………………………………………………………
  …………………………………………………………………………………………………
  …………………………………………………………………………………………………

- Do staff from these institutions serve as resource persons to supporting district activities?
  Yes/No/DNK
  If yes, in what area do they provide support?

  Training/operational research/other (specify)
  …………………………………………………………………………………………………
  …………………………………………………………………………………………………
  …………………………………………………………………………………………………
  …………………………………………………………………………………………………
Annex 2: Data collection tools for Situation Analysis two

IDI 1: Interview Guide for interviewing DHMT members

| Introduction: key components | I want to thank you for taking the time to meet with me today. My name is ………………………………… and I would like to talk with you about the health workforce in ………………. district. Specifically, as part of the PERFORM project, we are trying to understand the factors affecting workforce performance in order to find ways to improve the performance of the health workforce in …………….. district. The interview should take about one hour. I will be taping the session because I don’t want to miss any of your comments. I explained these procedures to you when we set up this meeting. Although I will be taking some notes during the session, I can’t possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don’t miss your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish.

Do you have any questions about the PERFORM project or about what I have just explained?

Are you willing to participate in this interview?

Are you happy for me to record our conversation? |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thank you</td>
<td></td>
</tr>
<tr>
<td>Introduce yourself</td>
<td></td>
</tr>
<tr>
<td>Explain purpose of interview</td>
<td></td>
</tr>
<tr>
<td>Confidentiality &amp; anonymity</td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td></td>
</tr>
<tr>
<td>Explain how the interview will be conducted</td>
<td></td>
</tr>
<tr>
<td>Opportunity for questions</td>
<td></td>
</tr>
<tr>
<td>Questions</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Chose quiet place where can talk freely</td>
<td></td>
</tr>
<tr>
<td>• Ask factual questions before opinion.</td>
<td></td>
</tr>
<tr>
<td>• Use probes as needed.</td>
<td></td>
</tr>
<tr>
<td>• Include note taker</td>
<td></td>
</tr>
<tr>
<td>Q1. Please introduce yourself. What is your role within the DHMT? Please describe what you do.</td>
<td></td>
</tr>
<tr>
<td>Q2. How does the DHMT discuss and/or agree before decisions are taken (for example, key decisions to with budget, or planning new programmes)?</td>
<td></td>
</tr>
<tr>
<td>Q3. Can you describe a typical DHMT meeting (who comes, is there an agenda, who sets the agenda, what happens)?</td>
<td></td>
</tr>
<tr>
<td>Q4. How do you perceive the participation of each member of the DHMT during a meeting?</td>
<td></td>
</tr>
<tr>
<td>Q5. In your opinion how are the views of each member of the DHMT taken into consideration when decisions are made? Can you give specific examples?</td>
<td></td>
</tr>
<tr>
<td>Q6. How often does the DHMT meet as a group? Do all members attend these meetings? If not, why? Are there minutes of these meetings? What happens with these minutes?</td>
<td></td>
</tr>
<tr>
<td>Q7. How do you identify problems? [NB not how DHMTs did this initially, but focus on how they do it now]. Can you give us some examples of recent problems identified by DHMT? How did you identify them?</td>
<td></td>
</tr>
<tr>
<td>Q8. Since the beginning of the project, does your team undertake analysis of problems that arise in the district? If yes, please give a specific example. How often do you do this? When?</td>
<td></td>
</tr>
<tr>
<td>Q9. How does the process of problem analysis inform prioritization and planning? (Which causes do you focus on?)</td>
<td></td>
</tr>
<tr>
<td>Q10. In your opinion, is the problem analysis process useful? What factors have helped and/or hindered this process?</td>
<td></td>
</tr>
<tr>
<td>Q11. How do you, as a team, usually decide which strategies to use to address workforce problems? How often? When?</td>
<td></td>
</tr>
<tr>
<td>Q12.</td>
<td>How do you include these strategies in the overall district work plan?</td>
</tr>
<tr>
<td>Q13.</td>
<td>In your opinion, is the strategy development useful as part of developing your annual work plan?</td>
</tr>
<tr>
<td>Q14.</td>
<td>What workforce strategies are included in your district work plan for this year? Why did you include them?</td>
</tr>
<tr>
<td>Q15.</td>
<td>Are there some workforce strategies that you did not include in the district work plan? Why did you leave them out?</td>
</tr>
<tr>
<td>Q16.</td>
<td>Has sufficient money been set aside in your budget for the implementation of each workforce strategy included in your work plan?</td>
</tr>
<tr>
<td>Q17.</td>
<td>In your view, has the PERFORM project had any impact on the composition of DHMT (attraction and attrition)? If yes, please explain. Why has this happened? How was it managed?</td>
</tr>
<tr>
<td>Q18.</td>
<td>In your opinion, has the PERFORM project had an impact on the practices of DHMT? For example, do you now spend more time on the management strengthening intervention (explain problem solving and strategy development approach) and so have less time for other tasks? Do you now receive more resources or attract projects? Do you receive requests to share expertise outside the district?</td>
</tr>
<tr>
<td>Q19.</td>
<td>How do you track (monitor) the activities in the district work plan? How do you keep a record of this (e.g. quarterly/annual report)? Have you made any changes to the way you track these? Do you have a record of these monitoring activities? (E.g. quarterly or annual report). If yes, can I have a copy of this document please? Have you made any changes to these monitoring activities recorded here? If yes, please explain</td>
</tr>
</tbody>
</table>
why these changes were needed.

Q20. In your view, who are the relevant stakeholders in the district? Why are they important? Have you identified and involved relevant stakeholders in the planning of the bundles? How and why?

Q21. Have these stakeholders been involved in monitoring the implementation of the bundles? How? If you haven’t involved stakeholders in monitoring, why not?

Q22. In your opinion, have the bundles achieved the desired outcomes which you set out at the beginning of the project? Please explain why or why not.

Q23. In your opinion, has the PERFORM project helped your work in the district? If so, how? If not why not? What about staff performance? Please explain why or why not. What do you believe are the reasons for this?

Q24. Is there anything more you would like to add or do you have any comments about the PERFORM project which we have not already discussed?

Closing: key components

- Describe next steps
- Thank you

I will be analyzing the information you and others have given me and preparing the next version of this tool. Thank you for your time.

IDI 5: Guide for interviewing sub-district managers

Introduction: key components

- Thank you
- Introduce yourself
- Explain purpose of

I want to thank you for taking the time to meet with me today. My name is ………………………………… and I would like to talk with you about the PERFORM project. Specifically, we are trying to find out your views on the activities implemented as part of the
**Interview**

- Confidentiality & anonymity
- Duration
- Explain how the interview will be conducted
- Opportunity for questions

PERFORM project in .............. district.

The interview should take about ........... hour. I will be taping the session because I don’t want to miss any of your comments. I explained these procedures to you when we set up this meeting. Although I will be taking some notes during the session, I can’t possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don’t miss your comments.

All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish.

Do you have any questions about the PERFORM project or about what I have just explained?

Are you willing to participate in this interview?

Are you happy for me to record our conversation?

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Choose quiet place where you can talk freely</td>
</tr>
<tr>
<td>- Ask factual questions before opinion.</td>
</tr>
<tr>
<td>- Use probes as needed.</td>
</tr>
</tbody>
</table>

| Q25. Please introduce yourself. What is your job/title? |
| Please describe what you do. How long have you been in this job? |

| Q26. Have you heard of the PERFORM project before? If yes, what do you think is the aim of the PERFORM project? |
| If no, please refer the respondent an information sheet and/or briefing note so they can read about the project later. |

| Q27. Are you aware of any changes to work or activities related to workforce improvement that are currently being implemented or planned in the district? |

| Q28. If yes, can you please describe them? How is this activity/activities being implemented in your facility? |
| If no, prompt with some examples from the bundle work plan. |
| If still no, skip to question 8. |

| Q29. How do you monitor progress in the |
implementation? Do you have a record of these monitoring activities? (E.g. quarterly or annual report). If yes, can I have a copy of this document please? Have you made any changes to these monitoring activities recorded here? If yes, please explain why these changes were needed.

Q30. In your opinion, have the activities achieved the desired outcomes which were set out at the beginning of the implementation? Please explain why or why not.

Q31. In your opinion, have these activities or changes helped you and your colleagues perform better and to achieve your targets? If so, how? What do you believe are the reasons for this? If not, why is this?

Q32. Have you heard of the PERFORM project? If yes, do you have any comments? If no, please refer the respondent to the information sheet and/or project briefing note so they can read about the project later.

<table>
<thead>
<tr>
<th>Closing: key components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Describe next steps</td>
<td>I will be analyzing the information you and others have given me and preparing the next version of this tool.</td>
</tr>
<tr>
<td>• Thank you</td>
<td>Thank you for your time.</td>
</tr>
</tbody>
</table>

**IDI 6: Guide for interviewing Sub-district staff**

<table>
<thead>
<tr>
<th>Introduction: key components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Thank you</td>
<td>I want to thank you for taking the time to meet with me today. My name is ………………………………… and I would like to talk with you about the PERFORM project. Specifically, we are trying to find out your views on the activities implemented as part of the PERFORM project in …………… district.</td>
</tr>
<tr>
<td>• Introduce yourself</td>
<td>The interview should take about …….hour. I will be taping the session because I don’t want to miss any of your comments. I explained these procedures to you when we set up this meeting. Although I will be taking some notes during the session, I can’t possibly write fast enough to get it all down. Because we are on tape, please be sure to speak up so that we don’t miss your comments.</td>
</tr>
<tr>
<td>• Explain purpose of interview</td>
<td>All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to</td>
</tr>
<tr>
<td>• Confidentiality &amp; anonymity</td>
<td></td>
</tr>
<tr>
<td>• Duration</td>
<td></td>
</tr>
<tr>
<td>• Explain how the interview will be conducted</td>
<td></td>
</tr>
<tr>
<td>• Opportunity for questions</td>
<td></td>
</tr>
</tbody>
</table>
talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish.

Do you have any questions about the PERFORM project or about what I have just explained?
Are you willing to participate in this interview?
Are you happy for me to record our conversation?

Questions

- Chose quiet place where can talk freely
- Ask factual questions before opinion.
- Use probes as needed.

Q33. Please introduce yourself. What is your job/title?
Please describe what you do. How long have you been in this job in this facility?

Q34. In your view, who are the relevant stakeholders with regard to human resources in the district? Why are they important? Would you say you are an important stakeholder in the district?
The interviewer may have to explain the concept of stakeholder to respondent(s)

Q35. Are you aware of any changes to work or activities related to workforce improvement that are currently being implemented or planned in the district?

Q36. If yes, can you please describe them? How is this activity/activities being implemented in your facility?
If no, prompt with some examples from the bundle work plan.
If still no, skip to question 8.

Q37. Were you involved in the planning of these activities? If yes, How and why? If no, why not?

Q38. Were you involved in monitoring the implementation of the activities? How? If you haven’t been involved in monitoring, why not?

Q39. In your opinion, have these activities achieved the desired outcomes which were set out at the beginning of the implementation? Please explain why or why not.

Q40. In your opinion, have these activities or changes helped you and your colleagues perform better and to achieve your targets? If so, how? What do you believe are
the reasons for this? If not, why is this?

Q41. Would you like to see this activity continue? Why/Why not?

Q42. Have you heard of the PERFORM project? If yes, do you have any comments? If no, please refer the respondent to the information sheet and/or project briefing note so they can read about the project later.

**Closing: key components**
- Describe next steps
- Thank you

I will be analyzing the information you and others have given me and preparing the next version of this tool. Thank you for your time.

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**IDI 4: Interview Guide for interviewing Stakeholders**

**Introduction: key components**
- Thank you
- Introduce yourself
- Explain purpose of interview
- Confidentiality & anonymity
- Duration
- Explain how the interview will be conducted
- Ask them to sign consent form if not already done.

I want to thank you for taking the time to meet with me today. My name is ………………………………… and I would like to talk with you about ………………. The interview should take about……………. I will be recording the session because I don’t want to miss any of your comments. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Remember, we don’t have to talk about anything you don’t want to and you may ask for the recorder to be switched off at any time or end the interview if you wish.

Are you willing to participate in this interview?
Are you happy for me to record our conversation?
Please sign the consent form I gave you earlier. Can you please give the consent form to me.

**Questions**
- Chose quiet place where can talk freely
- Ask factual questions before opinion.
- Use probes as needed.

Q1. Please introduce yourself. What is your job/title? Please describe what you do. How long have you been in this job?

I will like to ask you a few questions about the activities which the DHMTs have been implementing in the district as part of the PERFORM project.

Q2. Are you aware of the PERFOMR project? If yes,
proceed to Q2. If no, please refer the respondent to the information sheet and/or project briefing note so they can read about the project later.

Q3. Are you aware of any changes to work or activities related to workforce improvement that are currently being implemented or planned in the district?

If yes, please describe these activities to me.

Q4. Have you (or your organization) been involved in the implementation and/or monitoring of these activities? If yes, please explain which activities you are involved in and how you are involved.

Q5. In your opinion, have these activities solved the problems or addressed the issues which they were intended to solve? Please explain why or why not citing outcomes from the activities.

Q6. Do you think that these activities are enough to address the issues/problems they are focused on? If not, how can they be improved?

Q7. Do you think the outcomes of these activities are sustainable? Do you think the problems are likely to reoccur? Why or why not?

Q8. Have you heard of the PERFORM project? If yes, do you have any comments? If no, please refer the respondent to the information sheet and/or briefing note so they can read about the project later.

**Closing: key components**

- Describe next steps
- Thank you

I will be analyzing the information you and others have given me and preparing a report based on your responses. Thank you for your time.
PERFORM Focus Group Discussion with District Health Management Team
Topic Guide

Introduction

We would be grateful if you could share with us your experiences and views on four topics related to the PERFORM process:

- Topic 1: Reflections on the PERFORM process and journey
- Topic 2: Reflections on changes made along the way
- Topic 3: Reflections on working with the PERFORM research team
- Topic 4: Reflections on the usefulness of PERFORM

Topic 1: Reflections on the PERFORM process and journey

As you know, PERFORM is about working together to improve workforce performance by addressing human resource problems.

- Please start by telling me about the time in the PERFORM process when you first identified workforce problems to address.
  - What was the process used to identify the problems?
  - Who was involved?
  - What problems did you choose to focus on?
  - Why did you choose these problems and not different ones?
- How did you feel about this process of problem identification?
  - What worked well?
  - What worked less well and could have been improved?
  - [Can probe specifically about problem analysis approach, problem trees, workshop facilitation by research team, learning from this process]
- What did you do after you selected the problem?
  - You came up with quite a few strategies: so, how did you select strategies to address these problems? What were your thought processes or criteria? What guidance did you have on selecting the strategies? [Did the DHMT use the DHMT manual and the big table within it?]
  - Was there a plan? [If yes, then ask:]
  - Who was involved?
  - What specifically did the plan consist of? Can you tell me a bit more about this?
  - What were the challenges in developing the plan? Did everyone agree to the plan?
  - Was the plan linked to the problem you chose? How is this so? Could you give me some examples of how the problem and plan were linked? OR If not, why do you think there wasn’t a link?
- Thinking back about the workshop as a whole: what do you think were the advantages and disadvantages of using the workshop for the process of problem identification and developing the plan?
- What were the next steps after you developed the plan?
  - How did you start to put the plan into action? What did you do? Can you give me some examples?
  - Who was involved? Why? What were their roles?
  - What were the challenges in the process of implementing the plan? What do you think caused these challenges?
o Did the implementation clearly follow the plan? If not, why not?
o What factors do you think were important in ensuring that implementation was linked to the plan? (E.g. Good communication between DHMT? Team work? Support from CRT? Understanding of the PERFORM action cycle? Knowledge of problem analysis techniques?)
o What were the challenges for linking implementation tightly to the plan? (E.g. disagreements about causes of problems? Gaining support and enthusiasm for implementation? Funding?)

- **What were the first things you noticed when you started to implement the plan?**
  o What specifically did you notice? [You could talk about effects on the DHMT or on health workers]
o Did you notice anything else as time went on?
o What tools or processes did you use to monitor your plans? How useful have these been?
o Did you discuss what you noticed with other DHMT members – either informally or during meetings? Can you give me examples of some of these discussions? What worked well and what didn’t work so well [can be about bundles themselves or implementation]?
o What actions did you take as a result of these discussions? Did you make changes to the plan or implementation?

Thank you for sharing your experiences so far. Now that we’ve started to talk about what hasn’t worked so well, let’s move on to topic 2 and reflect more about any changes you may have made.

**Topic 2: Reflections on changes made along the way**

- **Please tell me: did you make any changes to your initial plan as result of what you saw happening?**
  o What did you change? Why?
o What process did you use to make this change? Why did you do it like this?
o Who was involved and who made the decision to change?
o How easy or difficult was it to make this change? Why?
- **Did the change you made now address the problem more effectively?**
  o How did it improve it? [refer back to problem discussed]
o How do you know it improved it – can you give me some examples?

Thank you again for sharing your experiences. I would like to move onto topic 3 and reflect on your experiences of working with the PERFORM research team.

**Topic 3: Reflections on working with the PERFORM research team**

- **Can you describe how the CRT works with you?**
  - In what areas? (E.g. Problem solving? Technical (and at the workshops)? Facilitating planning and implementation?)
- **How is the support organised?**
  - Is this planned? Is it a written plan or verbal agreement or is support provided on ad hoc basis?
  - [If a written or verbal plan exists, ask the following questions:]
- **How was this plan developed?**
  - Who was involved?
- What was discussed?
- **What does the plan include?**
  - What areas does it cover?
  - Does the plan also include X, Y and Z (e.g. phone calls, emails, visits, review meetings)?
- **Did you and the research team both agree on and understand the plan’s content?**
  - If not, where were the disagreements or misunderstandings?
  - Did you change the plan?
- **Was the support provided as planned?**
  - If not, why not?
- **What has gone well in terms of communication and support?**
  - Why?
- **What has not gone so well in terms of communication and support?**
  - Why?

Thank you again for sharing your opinions. Finally, I would like to move onto topic 4 and reflect in more detail on how useful you feel the PERFORM approach has been, and how useful it might be in the future.

**Topic 4: Reflections on the usefulness of PERFORM**

- **After you started to implement the plan, have you had much chance to reflect on the journey – from identifying the problem to implementing and monitoring the plan?**
  - Can you share some of your thoughts and reflections – either personally or thoughts generally among the team – about the journey?
  - What lessons have you learned from your experience with PERFORM?
  - Are these views shared across the DHTM?
- **In the future, will you continue to use the PERFORM approach to address problems (planning, implementing, monitoring, reflecting, replanning)?**
  - Will you use it to address more HR problems? Have you already started to do this? If yes, what was your experience?
  - Will you use it to address non-HR problems? Why?
  - If you plan to use the PERFORM approach, what might the challenges be?

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PERFORM Focus Group Discussion with health service users

**Topic Guide**

**Introduction**

We are conducting a study with users of our health centre to find out what you think about our services\(^1\). This will help us improve quality to future clients. We will not ask you to give details of the reason for going to the health centre\(^2\). Your answers are strictly confidential and we thank you for your participation and honesty.

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\(^1\) Please only select participants who have recently used services at the health facility

\(^2\) We don't want to break confidentiality about people's health condition
**Topic 1: Your recent visit**
- We would like to hear about some of your aspects of your visit. You do not need to tell us why you attended.
  - How long was the wait for the health worker? What do you think about that length of wait?
  - What type/level of health worker did you see?
  - How much time did you have with the health worker/doctor? What do you think about that length of time you had?
  - What happened during your time with the health worker/doctor? Did the health worker/doctor check your history? Did he or she conduct an examination?
  - What do you think about the amount of privacy during the time with the health worker/doctor? Did you feel comfortable, or were you uncomfortable because you thought other people might hear or see things that you didn’t want them to?
  - What do you think about the treatment and advice you were given about your health problems? How easy or difficult was it to understand? Were you able to understand the advice well enough to follow it?
  - If drugs or medicines were prescribed, were these available on the day at the health centre? If tests were recommended, how easy or difficult was it to have these?
  - Were you given instructions for a follow-up or review? What do you think about this advice?
  - What do you think about the attitude of the staff towards you? (the way they talk to you, listen to you, language used, respect shown)
  - How is the cleanliness of the health centre and surroundings?
  - How satisfied do you feel about the way you were treated and the service provided? How well did it meet your needs and expectations?”

**Topic 2: The service provided by the health centre on previous visits**
- How does the service provided now compare with the service about a year ago³?
- Have you noticed a change in relation to:
  - waiting times?
  - length of consultation?
  - the attitude of the staff?
  - availability of drugs and medicines?
  - accessing tests?
  - the quality of service provided by the health centre?

**Closing**

Is there anything anyone would like to add?

Thank you for your time.

**Note to facilitator(s):** you may want to raise other issues during the FGD, for example, if these are related specifically to the bundles.

³ This period will depend on when the PERFORM intervention started
Annex 3: Problem trees developed by the districts.

Problem tree for Iringa Urban District:

LOW QUALITY AND COVERAGE OF CTC SERVICES

- Inadequate number of skilled and knowledgeable Service Providers
- Inefficient Supportive Supervision
- Lack of commitment among
- Inadequate Infrastructure

- Increased Workload
- Low Quality and Coverage of CTC Services

- Inadequate Medicines, Medical Supplies and Equipment
- Limited number of approved suppliers
- Unreliable sources of
- Limited Knowledge on Ordering of

- Irregular supply from MSD
- Delayed disbursement of Funds
- Bureaucratic procurement
- Ineffective implementation of PPM

- Frequent introduction of new
- Ineffective In-service training
- Too many reporting

- Limited working space
- Few Health Facilities

- Inadequate Knowledge among Supervisors
- Outdated Supervision Checklist
- Numerous ad-hoc activities

- Limited working Environment
- Low Motivation

- Few Health Facilities

Problem tree for Kilolo District

DELAYED EARLY BOOKING IN ANC SERVICES IN THE DISTRICT BY 45.3%

- Low community awareness
- Limited budget allocated to CCHP
- Low community sensitization

- Long walking distance to the Health Facility
- Inadequate outreach services
- Limited budget allocated to CCHP

- Shortage of staff
- Inadequate recruitment of staff
- Inadequate retention

- Unavailability of basic services
- Shortage of medicine & laboratory
- Inadequate HPs trained
Problem tree for Mufindi District

High Prevalence of HIV/AIDS in the Mufindi by 15%

- Low Community awareness
- Inadequate HIV Health Services in the District

Increasing Hot Spot In the District

- Local believes and Traditional practice
- Increased number of new In trace in the District

Inadequate Community senalization On HIV

- Illiteracy
- Poverty

- Shortage of skilled staff

- Low behavior Change of Community

- Inadequate Retention mechanism

- Inadequate Retention of skilled staff

- Increased number of new In trace in the District

- Few Health facility Providing comprehensive HIV services

Low recruitment of Skilled staff

- Low recruitment of Skilled staff

- Shortage of Skilled staff

Inadequate Retention of skilled staff

- Inadequate Motivation

- Being along the Highway

- Low retention Mechanism

Inadequate of IEC Material

- Limited Fund

Inadequate HIV Health Services in the District

- Insufficient of Medical Equipment & Supplies test Kit

- Government system problem MSD System

- Low recruitment

- Frequently out of stock from MSD

Inadequate HIV Health Services in the District

- Inadequate Motivation

- Inadequate Incentive package

- Government system problem MSD System