

https://dspace.org/

Roles, norms and incentives influencing the performance of clinical officers in Kenyan rural hospitals

Mbindyo, Patrick Mutinda

2013-01-24
http://hdl.handle.net/10539/12288

Downloaded from a DSpace repository. https://dspace.org/

ROLES, NORMS AND INCENTIVES INFLUENCING THE PERFORMANCE OF CLINICAL OFFICERS IN KENYAN RURAL HOSPITALS

Patrick Mutinda Mbindyo

A Thesis submitted to the Faculty of Health Sciences, University of the Witwatersrand, in fulfilment of the requirements for the degree of Doctor of Philosophy

Johannesburg, 2012

Declaration

I, Patrick Mutinda Mbindyo, declare that this thesis is my own work. It is being submitted for the degree of Doctor of Philosophy in Public Health at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

…….(Signature of Candidate)

……..day of……..(month), 2012

To Sarah Nthenya and Sandra Mwikali

Abstract

This work explored perceptions regarding the roles, norms and incentives influencing the performance of Clinical Officers (COs) in rural district hospitals in Kenya. In order to improve access to health care mainly in rural areas, COs are increasingly being used to perform tasks that were previously the preserve of physicians. The assumption underlying their use is that they are a viable option to doctors. Studies have shown with reference to HIV care and obstetric and gynaecological surgical tasks that COs' performance is comparable to that of physicians. Other studies also show that the care offered by COs is cost effective when compared with the costs associated with physicians and obstetricians care. However, there is emerging work which shows that COs are not happy in their assigned role in the health system. These studies report CO's dissatisfaction with the low remuneration, poor career progress and limited career options inherent their jobs as compared with those accorded to physicians. As revealed by a systematic review of mid-level worker literature, addressing these issues is at present difficult due to gaps in our understanding of CO functioning. The existence of these gaps is explained by the limited empirical work on COs in general. The aim of this thesis was to address this issue by exploring issues that affect their routine functioning in a typical rural hospital setting going beyond the fact that they are technically competent.

To investigate these issues, a conceptual framework was adopted that explores the tension between what institutions demand and what individuals within them feel able to do. Qualitative methods comprising of interviews, participant observation, review of official policy and hospital level documents on COs, and review of hospital statistics were used. A comparative approach was adopted that sought to; (1) examine perceptions regarding influences on the performance of COs from a variety of sources (COs, doctors, nurses, supervisors, hospital managers, policy makers and policy documents); (2) compare perceptions of respondents based in three faith-based hospitals with those in three government facilities; and, (3), explore features of different work settings (outpatient department, specialist clinics and vertically supported clinics) within these hospitals that encouraged good CO performance. Preliminary findings were reported back to respondents in the six study hospitals.

Analysis of the data showed three major issues. First, perceptions of CO roles are problematic despite an acknowledgement of the important function performed by COs in the health system. This is revealed by the variety of images regarding their roles that highlights the need for a redefinition of CO roles. An example of this is shown by the inconsistency between their

importance as the 'backbone of the health system' versus the poor remuneration and career prospects that their position attracts. Second, there were differences in the norms of CO performance that have resulted in variations regarding what is expected of them. While there was much attention paid to norms of performance about technical aspects of work, less attention focussed on non-technical aspects of work. The adoption of a holistic approach to the notion of CO performance is needed that will enable facilities and the system to meet the needs of the CO which should prompt COs to reciprocate by working better. Third was the issue that there were minimal incentives were attached to COs work. In the public sector, there were some incentives but their availability depended on the work settings. For example, while COs in vertical clinics got training their colleagues in the outpatient department had few chances to get training opportunities. Faith-based hospitals did provide performance related bonuses that encouraged health workers to perform better although notably basic salaries in faith-based hospitals were no better than those given in the government sector. However, major incentives such as salary and promotions in the public sector are handled by the central government giving public sector hospital managers little opportunity to utilise such incentive mechanisms. Where hospital managers may have some leeway in implementing actions at the local level to improve performance, for example through improving CO recognition and working conditions, it was observed that public sector managers were generally less engaged in utilising such incentives. Therefore while it is important to consider and address system level factors that influence CO performance such as salaries and promotions, among others, facility managers would also appear to have some scope to improve performance.

In discussing these issues, it is becoming clear that the assumption that COs are altruistic and will continue to work flawlessly in their assigned niche presents a naïve view of COs. This thesis shows that COs are also influenced by self–interest and find ways to overcome or work around any perceived barriers to their growth, some of which may work against the institution. This calls for a re-examination of who COs are, what they do and how they should be managed. Ways of resolving the tension that exists between COs and the health institution exist and can be derived from examining the coping mechanisms that COs have adopted to make their lives better. These coping mechanisms show areas that need attention. Further, there should be greater consideration of the important role that facility managers play in mediating and/or modifying system level influences by creating local environments suitable for better staff performance.

Underlying all this is the fact that a long term view of COs is needed. The long term view must go beyond the notion of 'substitute physician' as Kenya has made huge investments in this cadre over the last 40 years or more and, with other countries, is likely to continue to rely on such a cadre for much clinical care. This thesis therefore concludes with recommendations that seek to address issues identified with the performance of COs in the Kenyan health system focusing on potential hospital level and system level solutions. Also included is a reflection of the relevance of findings for countries similar to Kenya that are currently using or seek to use COs as a physician substitute.

Acknowledgements

It is said that it takes a whole village to raise (in my case, educate) a single child. The following are my village. I am grateful to Prof. Mike English for offering me opportunity to work with him and particularly for his support during a period I underwent a difficult personal problem. To my supervisors Dr. Duane Blaauw and Prof. Mike English, thanks for your superb supervisory support that extended to other areas beyond the thesis. I also wish to acknowledge Prof. Sharon Fonn and Dr. Charles Hongoro who provided invaluable comments when I presented the work in an interim PhD seminar as part of the School of Public Health's PhD completion requirements. Thanks also to Prof. Kathy Kahn for support in various ways.

Several institutions contributed to the completion of this thesis. I would like to thank the Kemri-Wellcome Trust Research Programme for funding my studies. Thanks are due to Kemri-Wellcome Trust and Centre for Health Policy administrative staff for ensuring that i was comfortable, whether in Nairobi or Johannesburg. The involvement of the Ministry of Medical services, Kenya was vital to conducting this research. I thank the Deputy Director for Medical Services - Dr. Wilfred Mogoa for giving permission to undertake this work in government hospitals and to Mr. Micah Kisoo, Chief Clinical Officer, for taking great interest in the study and encouraging me to go ahead with it. I also thank the participating government and faith-based hospitals visited in this study for allowing me to conduct this study in their facilities and encouraging their staff to give information freely. To Mr. Johnson Amalumba, Secretary General of Kenya Association of Clinical Officers, thanks for sharing with me the issues facing COs from the Associations' perspective. In particular, I am grateful to the clinical officers, doctors, nurses, their supervisors and managers who gave up their time to share their experiences with me. Evelyn Waweru, thanks for being an excellent fieldwork assistant.

To colleagues, Dr. Lairumbi Mbaabu, Dr. Grace Irimu and Dr. Timothy Abuya, thanks for many conversations we held (and still will) on how to improve the Kenyan health system. Prudence Ditlopo, Bronwyn Harris and Nothemba Kula, thanks for companionship on the PhD journey during the periods I visited Johannesburg. To Moremi Nkosi, Sheila Kimaro, Anthony Karani and Sandra Mudhune, thank you for suggesting many ways of getting much needed distraction – blame the thesis for those that did not work out! Duduzile Mlambo and Bulelwa Ngoma, thank you for being excellent hosts during the periods I visited Jozi.

Finally, huge thanks to my parents and sisters for their unwavering support.

Table of Contents

Abstract iii
Acknowledgements vi
Nomenclature xii

Chapter 1. Introduction 1
1.1. Overview 1
1.2. Human Resources for Health 2
1.3. Health Worker Performance 3
1.4. Main Research Question 6
1.5. Study Objectives 6
1.6. Contribution of the Work 7
1.7. Clarification of Terms 8
1.8. Conclusion 9

Chapter 2. Factual Background to the Thesis 10
2.1. Introduction 10
2.2. Kenya Country Context 10
2.2.1. Population, Economy and Health 10
2.2.2. Organisation of the Kenyan Health System 11
2.3. Overview of Clinical Officers in Kenya 13
2.3.1. CO's Professional and Regulatory Environment 15
2.4. Policy Perspectives on CO Roles 18
2.4.1. Review of CO Schemes of Service 18
2.5. Review of Norms of Performance 20
2.6. Conclusion 23

Chapter 3. Literature Review 24
3.1. Introduction 24
3.2. The Challenge of Human Resources for Health in Low Income Countries 24
3.2.1. Solutions to the HRH Challenge 26
3.3. Exploring Performance 37
3.3.1. Task and Non-Task Performance 37
3.3.2. Ability and Disposition to Achieve Organisational Goals 39
3.3.3. Perspectives on Individual Performance 40
3.3.4. Influences on Individual CO Performance 42
3.5. Conclusion 52

Chapter 4. Methodology 54
4.1. Introduction 54
4.2. Exploratory Multiple Case Study Design 54
4.3. Study Sites 56
4.4. Study Settings 59
4.5. Study Strategy 60
4.5.1. Phase 1 61
4.5.2. Phase 2 62
4.5.3. Phase 3 62
4.6. Sampling Procedures 63
4.7. Data Collection Methods 64
4.7.1. Document Review 64

4.7.2. Interviews 65
4.7.3. Participant Observation 68
4.7.4. Feedback of Results to Study Respondents 69
4.8. Data Management 73
4.9. Analysis 73
4.10. Data Representation 74
4.11. Ensuring Rigour of the Study Methods 75
4.12. Ethical Considerations 76
4.13. Conclusion 78

Chapter 5. Results 79
5.1. Overview of the Chapter 79
5.2. Description of Study Sites – Hospitals 79
5.3. Description of Study Sites - Clinical Settings 81
5.4. Description of Study Informants 82
5.5. Reporting of the Results 83
5.6. Conclusion 84

Chapter 6. The Role of COs in the Health System 85
6.1. Introduction 85
6.2. Opinions Regarding Roles of COs 85
6.2.1. Roles of General COs 85
6.2.2. Roles of Specialist COs 86
6.2.3. Additional Roles Undertaken By COs 88
6.2.4. Summary of Perspectives on Roles of COs 88
6.3. Images of COs 89
6.3.1. 'Filter' 89
6.3.2. Backbone of the Health Service 90
6.3.3. Face of the Hospital 91
6.3.4. Sandwich 92
6.3.5. Primary Health Care Clinician 93
6.3.6. Summary of Images of COs 93
6.4. Task and Non-Task Aspects of CO Roles 94
6.5. Differences between Settings 95
6.5.1. GOK and FBH Requirements of COs 96
6.6. What Is It Like To Be A CO? 97
6.6.1. Institutional Conflict (Role Conflict) 97
6.6.2. Institutional – Individual (Role-Personality) Conflicts 98
6.6.3. Individual (Personality) Conflicts 102
6.7. Conclusion 103

Chapter 7. Norms of CO Performance 104
7.1. Introduction 104
7.2. Understanding of Performance 104
7.2.1. Workload 104
7.2.2. Good Performance 107
7.2.3. Poor Performance 112
7.3. How Have Norms of Performance been Operationalised? 116
7.3.1. Performance as What One Is Expected To Be (Inputs) 116
7.3.2. Performance as How One Carries Out Their Tasks (Process) 117
7.3.3. Performance as Outputs and Outcomes 119

7.4. Difference between Settings....121
7.5. Tension between the Institution and Individual....121
7.5.1. Do COs Work Well or Not?....122
7.5.2. What Explains This?....123
7.6. Summary....126

Chapter 8. Incentives and Performance....127
8.1. Introduction....127
8.2. Financial Incentives....127
8.3. Non-Financial Incentives....133
8.3.1. Performance Thinking....133
8.3.2. Co-producing the Workplace Culture....136
8.3.3. Influence of Hospital Management....142
8.3.4. Summary of Non-Financial Incentives....142
8.4. Incentives at the Clinical Settings....142
8.4.1. Specialist Clinics....143
8.4.2. Vertical Programme Clinics....144
8.5. Contextual Influences on CO Performance....145
8.5.1. Hospital Financing....145
8.5.2. Paperwork....146
8.5.3. Physical Space....146
8.5.4. Resources....147
8.6. Tension between Institutions and Individuals....148
8.6.1. Institutions have limited capability to provide incentives....148
8.6.2. Individuals have their own needs and dispositions....149
8.7. Conclusion....150

Chapter 9. Discussion....152
9.1. Introduction....152
9.2. Limitations and Strengths of the Study Design and Methods....152
9.3. Discussion of Main Findings....160
9.3.1. Roles....160
9.3.2. There is Poor Communication about Formal Norms....163
9.3.3. Underestimation of the Influence of Incentives....165
9.3.4. Issues related to Task and Non-Task Performance....166
9.4. Are COs A Solution to the Human Resources Crisis?....168
9.4.1. There are CO Specific Issues that Need to be Addressed....168
9.4.2. Coping Mechanisms Adopted by COs....170
9.5. How Should The System Respond?....173
9.6. Conclusion....175

Chapter 10. Conclusions and Recommendations....177
10.1. Conclusions....177
10.2. Contribution of This Thesis....178
10.2.1. Knowledge and Practice....179
10.2.2. Theory....179
10.3. Recommendations....180
10.3.1. Improving CO Performance in Kenya....180
10.3.2. Additional Research....183
10.3.3. Mid-Level Workers and the Human Resources for Health Crisis....184

References 187

Tables

Table 2-1: Distribution of Doctors, Clinical Officers and Nurses (per 100,000 population) by Province (public sector) 14
Table 2-2: Structure of the Clinical Officer's Council 17
Table 2-3: Comparison of CO Duties and Responsibilities in the CO Schemes of Service 19
Table 2-4: Duties, Key Result Areas and Performance Standards for Junior COs 21
Table 2-5: Additional Duties, Key Result Areas and Performance Standards for Senior Level COs 22
Table 3-1: Ability and Disposition to Work 40
Table 3-2: Overview of Perspectives on Performance 41
Table 4-1: Summary Hospital Characteristics 58
Table 4-2: Data Collection Methods and Study Phases 60
Table 4-3: Linking Methods to the Study Objectives 64
Table 5-1: Comparison of Hospital Facilities 80
Table 5-2: Summary Comparison of CO Work Settings 81
Table 5-3: Population of Interest 82
Table 6-1: CO Roles from a Task and Non-Task Perspective 94
Table 7-1: Comparison of Workload Statistics 105
Table 8-1: Comparison of Grading Structures 131

Table of Figures

Figure 2-1: Levels of Care under KEPH 13
Figure 3-1: Influences on Individual Performance 42

Nomenclature

A.I.C.	African Inland Church
BSc	Bachelor of Science
CAP	Chapter
CBS	Central Bureau of Statistics
CCC	Comprehensive Care Clinics
CEO	Chief Executive Officer
CHAK	Christian Health Association of Kenya
COs	Clinical Officers
DCO	District Clinical Officer
DPM	Directorate of Personnel Management
ENT	Ear, nose and throat
ERSWEC	Economic Recovery Strategy for Wealth and Employment Creation
FBH	Faith Based Hospitals
FGD	Focus Group Discussions
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GOK	Government of Kenya
HIV/AIDS	Human Immunodeficiency Virus
HRH	Human Resources for Health
JG	Job Group
JLI	Joint Learning Initiative
KCSE	Kenya Certificate of Secondary Education
KDHS	The Kenya Demographic Health Survey
KEPH	Kenya Essential Packages of Health
KMTC	Kenya Medical Training College
KNBS	Kenya National Bureau of Statistics
KES	Kenya Shillings
LICS	Low income countries
LMICS	Low and middle income countries
MDGs	Millennium Development Goals
MLWs	Mid-level workers
MOH	Ministry of Health
MOMS	Ministry of Medical Services
MOPHS	Ministry of Public Health and Sanitation
NASCOP	National HIV/AIDS control programme
NEPAD	New Partnership for African Development
NHIF	National Hospital Insurance Fund
NHSSP	National Health Sector Strategic Plan
NPC	Non-Physician Clinicians
OPD	Outpatient department
RCOs	Registered Clinical Officers
RRI	Rapid Results Initiative
SCOs	Specialist Clinical Officers
TB	Tuberculosis
TFR	Total Fertility Rate
PEPFAR	(United States of America) President's Emergency Plan for AIDS Relief
WHO	World Health Organisation

Chapter 1. Introduction

1.1. Overview

The work presented here explores influences (roles, norms and incentives) over the performance of Clinical Officers (COs), a form of Non-Physician Clinicians (NPC), in district hospital settings in Kenya. This is critical in light of the continuing human resource crisis that is prevalent in many developing countries as well as the recent debate around the utility of using mid-level workers (MLWs), an approach aimed at alleviating the situation. Kenya forms a good backdrop to study these issues since it has a long experience of employing Clinical Officers who provide physician type services all over the country.

The major concern for this study was that considerable emphasis is being placed on NPCs as a means to deliver a range of services in an increasing number of countries with little understanding of what influences their performance. The available literature on NPCs attributes this attractiveness to their competence to accomplish tasks and their numerical adequacy (including distribution) as part of a health systems workforce (1-3). However, achieving an acceptable, available, accessible and quality health service delivery system and developing effective organisations (such as hospitals), wherein these services are to be provided, would require much more than ensuring a continuous production of technically competent NPCs. There is thus need to go beyond current efforts of producing technically competent NPCs to one that additionally ensures that appropriate support systems are put in place to support NPCs to do their best (4-7).

Many developing countries will not - for the near future - have enough financial resources to hire and adequately incentivise the required human resources complement needed to meet WHO standards. This is also affected by the time lag in training new health workers (8). IN light of this, this work sought to explore strategies that could be used to improve the performance of the existing health workforce with a focus on NPCs. The question this thesis sought to tackle is how roles (what NPCs do), norms of performance (how they do it) and organisational environment[1] influenced the performance of COs working in rural Kenyan district hospitals. While some empirical work has been done on NPCs (9-12), it has mainly used quantitative methodologies to compare the technical competence of NPCs with that of

[1] Dussault and Francheschini (2006) see management style, incentives and career structures, salary scales, recruitment, posting and retention practices as some of the organisational factors that influence personnel distribution in a country.

Medical Officers (MOs). Further, even though a number of studies explore NPC issues in different work settings, little work has compared the influence of these work settings over the performance of NPCs. Thus, the work reported here seeks to acquire answers to these issues that would perhaps form a basis on which to develop interventions that may eventually improve NPC performance.

The structure of the rest of the thesis is as follows. The present chapter outlines the human resource challenges facing low income countries that have led to a focus on MLWs as a solution and performance optimization of health workers already working in their health systems. The chapter therefore provides an overview to the problem addressed, the approach and an outline of how the problem is addressed in the rest of the thesis. **Chapter 2** describes the country context of the study (Kenya) and provides a factual background to the thesis by examining the legal and policy framework for Clinical Officers. **Chapter 3** then reviews literature covering broader human resources issues related to the study. Literature on MLWs is reviewed to draw out the research questions to be answered and outlines the study's conceptual framework. **Chapter 4** describes and justifies the methods used to acquire data following the conceptual and analytical framework for the study. **Chapter 5** begins the results section of the thesis, forming the link between the introductory part (chapters 1 to 4) and the results (chapters 6 to 8). It outlines the results of the work undertaken describing the hospital and clinical settings where COs work and briefly describes the COs as part of the study informants. **Chapter 6**, the first core results chapter, pays attention to perceptions regarding the role that COs play in Kenya's health system while **Chapter 7** presents notions of COs' norms of performance at work. **Chapter 8** examines the influence of incentives on CO performance in the organisational settings where COs work while **Chapter 9** discusses and interprets the findings in light of the study's research objectives and literature reviewed. Finally, **Chapter 10** provides a summary of the entire thesis, highlights the key findings and conclusions, and makes modest recommendations based on the issues discussed in the thesis.

1.2. Human Resources for Health

Achieving and maintaining high-quality performance of health workers in low-resource settings is now an important feature of any discussion regarding health workers in developing countries (13, 14). Indeed, getting employees to work has been, and continues to be, an enduring challenge (15). Attempts to improve worker performance in Kenya are encapsulated by the Public Service Reform Strategy (PSRS) that aims to ensure that Kenya has an efficient

and effective public service that functions ethically, is citizen focused and results oriented (16). In support of these aims, a Human Resource Management (HRM) strategy has been put in place to introduce value-driven competency based HRM practices as well as resolve the persistent wage bill issues. Particularly for the health sector, a Human Resources for Health Strategic Plan (HRHSP) 2007/8 - 2009/10 was developed and aligned with the national policy framework (e.g., The Economic Recovery Strategy for Wealth and Employment Creation (2003-2007), Kenya Vision 2030, Second National Health Sector Strategic Plan 2005-2010) and international health goals and commitments (e.g., the United Nation's Millennium Development Goals), all of which aim to consistently move Kenya towards more accessible, equitable and affordable health care (16, 17). Other initiatives include the Rapid Results Initiative (RRI) that seeks to improve performance within 100 days in critical areas such as immunization; revitalizing the performance appraisal process and linking it to promotions; and introducing performance contracts to accounting officers (Permanent Secretaries, Provincial Medical Officers, District Medical Officers), methods that are thought to increase effort to improve outputs and outcomes in the health sector.

While Kenya is reported to be one of the 57 'crisis countries' with an absolute shortage of health workers (14), a paradoxical situation exists where the number of unemployed health professionals is higher compared with that of those employed (16, 18). The number of registered and enrolled nurses, for example, rose from 40,081 in 2004 to 55,169 in 2007 whilst employment in the public sector has apparently fallen from 16,146 in 2004 to 15,036 in 2007 (16). Sentiments expressed regarding the situation as highlighted by a survey of the migration of human resources in Kenya, suggests that 57% of survey respondents were unhappy with their jobs and of these, 38% would wish to be posted elsewhere in the country (19). The main reasons for dissatisfaction were poor income, shortage of staff, long work hours and inadequate resources in addition to poor housing, and lack of opportunities for career improvement (19).

1.3. Health Worker Performance

While considerable attention has been paid to increasing the number, quality, efficiency and distribution of health workers in health systems (20-23), much less attention has been paid to their performance (13, 24, 25). A common approach used to improve health worker performance in Kenya (and elsewhere) is increasing the stock of HR in the public health sector. While to a large extent focusing on doctors and nurses, the recruitment of health

workers has also focussed on increasing the number of other cadres (COs nutritionists, laboratory technologists, counsellors) into the Kenyan public service (18, 26). Research however suggests that increasing numbers of health workers does not necessarily lead to better health system or individual performance (13), (25) even when skills and resources are adequate (24). Further, coverage of essential services cannot be attributed to MOs and nurses alone (14), suggesting the important input of other cadres, among which recent literature has focused on NPCs under the mid-level worker approach. Considering that health workers create the product that health services deliver and constitute its largest recurrent cost component, it is vital that they be utilised as efficiently and effectively as possible (7, 14, 27-29). Understanding these issues in a country that has a huge number of COs who mainly work in the public sector and increasingly in the not-for-profit and private sectors is critical. As the country has had a long, continuous history of employing COs it offers a good example for study with lessons potentially important for other nations seeking to utilise this resource effectively.

Underlying this work is therefore the paradox of a country likely to be facing HRH challenges that include both high levels of unemployment among clinical officers (and nurses) and poor performance of those in employment. It is certainly the case that there is an urgent need to recruit more health workers into Kenya's public health system (18). For example, of the 4,466 suitably qualified applicants for the Emergency Hiring Programme (EHP) funded by some of Kenya's development partners, 2,064 (46 percent) were unemployed; 71 percent of these applicants were under the age of 30, which suggests that such applicants may never have been formally employed since graduation (18). Thus a major constraining factor within Kenya's health system is lack of finances to hire more staff.

Even as Kenya seeks to increase its stock of health workers, there are concerns with the performance of staff already working in the public sector that is perceived to be poor (10, 30). These concerns form the basis of the questions that this thesis seeks to answer and are based on issues emerging from data collected, observations and reflections as part of previous work carried out by this author between July and September 2006 in eight (8) public hospitals in Kenya (10, 31). This work was part of a study to explore influences of motivation on uptake of an intervention to improve staff performance (32-34). The study suggested that CO performance was at times poor and that often they were poorly motivated (10, 31). For example, areas of concern included timeliness where in some sites, COs (as well as other staff)

came late to work or did not turn up to work at all, resulting in the introduction of attendance registers. In other areas such as conscientiousness, some COs found it difficult to see patients politely or provide technically competent care. In explaining the often observed lack of desire by COs to do the right thing or apparent 'don't care' attitude, a hospital matron in one of the sites thought the problem to be related to an inability to sanction them where… "*COs really protect one another – so bad officers go unpunished. If a nurse reports that there is no CO and calls a doctor to see patients, the nurse will be harassed – she is caught in between the two*." (*Hospital Matron, H7*). A doctor felt strongly about the work that COs do stating that... *"I don't want to discuss the CO's…..simply because I do not even want to think about them… because they are the ones who make me do more work than I am supposed to be doing……as simple as that"* (30). The result was a feeling that…*"Staff just work to clear the queue but not to provide quality work. They do not see the problem of the person*" *(Clinical Officer, H7)*. It is thus not surprising that a hospital CEO in one of the sites where the tools for this thesis were piloted stated that: '*Their performance? On a scale of 1 to 5, I would give them a 0!*'

Explanations for their poor performance revolved around the feeling that …*"There is nothing to make us feel that we should work" (Clinical Officer, H8)*, attributed to poor motivation resulting from a lack of promotions, lack of upward mobility, a poorly functioning scheme of service and lack of recognition, among other factors, as shown by the quotes below (10), (31):

> "…*this business of staying for too long in one job group it really de-motivates not just Clinical Officers in fact all health workers…it's really de-motivating. It's really, really de-motivating because it's as if you are working, nobody is seeing and nobody is appreciating so you have time and time until you say let me try a greener pasture somewhere*." *(Senior Orthopaedic Clinical Officer, H1).*
>
> "*Nurses can start from certificate to PhD. Why not COs*?" *(Clinical Officer Intern*, *H8)*

What is interesting is that in the same public hospitals, COs were perceived to work hard and effectively when rotated to settings different from the routine hospital departments for example in clinics (e.g., HIV/AIDS or chest and lung clinics that deal with tuberculosis) that are supported by vertical programmes. Exploring the reasons why some settings are perceived to elicit 'better' performance than other settings in public hospitals is critical to understanding what can be done to improve CO performance.

1.4. Main Research Question

While NPCs are attractive in theory, their effectiveness as a solution is dependent on their long-term job performance of which little is known. Our ignorance might be attributed to two factors, the first of which is health systems' preoccupation with doctors and nurses which over time has resulted in the neglect of NPCs (6, 35-37). Second is the assumption implicit in much policy that NPCs will continue to fill a technical niche indefinitely being content to remain 'substitutes' (4, 38-40). This assumption appears to be strongly reinforced by the available mid-level worker literature that expends a significant amount of effort encouraging the increased utilization of NPCs in many developing country health systems. The evidence used to promote such interventions heavily focuses on NPC technical competence while issues from a non-technical perspective that might affect NPC performance though mentioned (e.g., career progress), have been less investigated. Also in the Kenyan context, anecdotal evidence has been offered suggesting that CO performance differs depending on the organisation that the individual is working for, for which reason both public and faith-based hospitals were chosen for study to enable a comparison of the influence of different organisational settings on CO performance. My argument is therefore that efforts to produce technically proficient NPCs should be complimented with similar efforts to explore how to ensure their performance is optimised and considerable insight might be gained by examining why those already employed work well or not in addition to determining what affects their performance in the long term (4, 41). The question thus addressed in this thesis is, '**How do roles, norms, and organisational settings influence the performance of Clinical Officers in District Hospitals in Kenya**?'

1.5. Study Objectives

The aim of this study was to gain better understanding of the gaps between institutional and individual notions of CO performance by examining the influence of CO's roles, norms and incentives. The specific objectives of the study were:

a) To explore and compare the perspectives of Clinical Officers, their colleagues, supervisors, hospital management with the formal legal and policy frameworks regarding Clinical Officers' roles.
b) To investigate notions and understandings of performance and performance norms from the perspectives of Clinical Officers, their colleagues, supervisors, hospital management with the formal legal and policy frameworks informing Clinical Officers performance.

c) To determine the influence of incentives in different organisational settings (FBH and GOK hospitals; and, outpatient department, clinics run by specialist Clinical Officers and HIV/AIDS and TB clinics that are vertically supported) on Clinical officer performance.

These objectives were explored by examining clinical officers' roles and norms, the challenges facing this cadre of NPCs, characterising their performance and how it is influenced by their situation and the ways in which they are managed. Using qualitative methods, three primary areas of investigation were undertaken; the interaction between the individual and the institution, the interaction between roles, norms and incentives, and the difference between settings. This involved comparing the formal legal and policy framework defining the roles, norms, performance expectations and incentives related to COs in the Kenyan health system with what actually happens in routine practice. Also the examination of the perspectives of individual clinical officers about these issues and comparing these with perspectives from their colleagues, supervisors and hospital managers was done. Informing this was an exploration of the influence of various work settings (FBH versus GOK; and outpatient department, vertical clinics and specialist clinics) on CO performance as well as an exploration of the views of general COs contrasted with those of their specialised colleagues (SCOs).

1.6. Contribution of the Work

Since considerable reliance is placed on COs for service delivery in Kenya, understanding and improving CO performance is a priority for health system policy makers and managers. This is particularly important for the public sector as they provide a significant amount of the health services all over Kenya and the public sector is their major employer. These issues are of concern to many countries in Africa which rely on NPCs to provide medical services because they are seen as a cheap and less mobile element of the clinical workforce. In addition, their use is being proposed in many new settings even in middle (South Africa) and high (United Kingdom) income settings. However despite over 40 years of experience in employing Clinical Officers, little is known in Kenya about their performance and how to manage it. Further, Clinical Officers are, and will be, a major part of the clinical workforce particularly in rural settings in Kenya for many years to come. Their performance is therefore critical to health system functioning. This study addresses these questions at a time when performance improvement initiatives are being instituted in Kenya's public sector and when NPCs are being promoted internationally as one part of a solution to the human resource crisis affecting

many low-income settings.

1.7. Clarification of Terms

Several terms are used in this thesis and need to be clarified to understand the relationships between them.

Mid-level worker (MLW): Mid-level workers (MLWs) are health care providers who have received less training, have more restricted scope of practice than professionals, and are accredited by their countries' licensing bodies (42). The term is generic and is used to represent health workers of various cadres who have substituted those with higher qualifications for many years especially in rural and deprived areas in many African countries (11, 12, 42).

Non-physician clinician (NPC): These are a form of MLWs with training beyond the secondary school level, who have fewer clinical skills than physicians but more than basic nurses who specifically substitute for medical officers (11). These health workers specifically take on diagnostic and treatment functions that were traditionally the domain of physicians. As defined by Mullan and Frehywot, the term can be used to describe health workers drawn from the nursing profession who train and become nurse practitioners as well as those who train to become medical officer substitutes after high school (11). The term as used in this thesis specifically refers to health workers who join clinical officer training programmes directly after high school.

Clinical Officer (CO): COs are a form of NPC commonly found in Kenya. They commonly perform diagnostic and treatment functions that normally should be undertaken by medical officers. The formal term for them in Kenya is Registered Clinical Officer (RCO).

Specialist Clinical Officer (SCO): These are COs who have undergone further specialist training in one clinical activity (e.g., eye care, orthopaedic skills, or anaesthetics). They provide these services mainly at district level or higher hospitals in Kenya. In the Kenyan context, SCOs are usually older and senior to COs.

1.8. Conclusion

This chapter began by outlining the human resource challenges facing low income countries that led to the introduction of NPCs and the need to optimise the performance of health workers already employed in their health systems. The study's research problem and a justification of why investigating issues related to COs are important followed. Finally, the chapter ended by providing a roadmap into the entire thesis, giving a brief overview of the issues explored under each chapter. The next chapter presents describes who COs are from a legal and policy perspective in Kenya.

Chapter 2. Factual Background to the Thesis

2.1. Introduction

Chapter 1 set the scene for the thesis. This chapter outlines the country context for the study, examining features of Kenya and the Clinical Officer cadre that are relevant to the study. In doing this, factual information on the cadre is provided which addresses the first half of sub-objective 1 of the thesis which is to examine the formal legal and policy framework defining the roles, norms and incentives of Clinical Officers in the Kenyan health system. COs' perspectives as well as those of other health workers are presented in the results chapters.

2.2. Kenya Country Context

2.2.1. Population, Economy and Health

Kenya's population, estimated at 36.1 million in 2006, is generally young with 44% of Kenyans aged below 15 years, 52% aged between 15 and 64 years and 4% aged 65 years and above (43). This means that the age dependency ratio is high, standing at 81.4 (i.e., 81 persons aged 0-14 and over 65 are dependent on every 100 working age persons aged between 15- 64 years) (44). While, adult literacy rates improved from 54% in 1988 to 79% in 2006, gender disparities remain, there were more literate male (85%) than female (74%) persons. Poverty indices for the country have improved with those living in absolute poverty declining from 52.3% in 1997 to 45.9% in 2006. This however masks an urban – rural divide with urban areas in 2006 experiencing a 33.7% poverty rate compared with a rate in rural areas at 49.1% (44). Major policies to alleviate poverty include the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) tied to the MDGs (45) which has been incorporated into a long term policy framework entitled Vision 2030 (46).

Despite poor economic performance in the 1990s, significant gains have been seen in Kenya's gross domestic product (GDP) with growth rates increasing from 2.9% in 2003 to 7.0% in 2007. This was attributed to improvements at the political level, improved business confidence, a stable macro-economic environment and a rebound of the global economy allied to improving performance of Kenya's private sector (44, 47). The effect of this growth can be seen in areas such as investments in infrastructural improvement (roads, hospital buildings and equipment supply); education (introduction of free primary and secondary education); and human resources (recruitment and deployment of various staff including

health workers (26). However, due to the political crisis arising from disputes and violent protests following the announcement of the results from the general elections of December 28, 2007, ground was lost and specific consequences included (i) damage to physical assets, (ii) the displacement of about 300,000 people (about 1 percent of the population); (iii) the loss of confidence among investors and tourists; and (iv) damage to social capital (48).

In the health sector specifically substantial gains made in the 1970s and early 1980s were eroded by a number of factors in the latter half of 1980s. These included the oil crisis of the 1970s and poor economic performance leading to the implementation of structural adjustment programmes. The result was a reduction in spending in the social sector of the economy which for the health sector was seen through factors such as underfunding, inappropriate staffing, poor maintenance of equipment and facilities. These coupled with the emergence of the human immunodeficiency syndrome (HIV) and acquired immunodeficiency disease (AIDs) in the 1990s, led to an increase in overall morbidity and mortality particularly among women and children in the years around the turn of the millennium (49). In the last few years however, there have been signs of some improvement. The under-five mortality has improved, decreasing to 74 deaths per 1,000 live births in 2008-2009 down from 115 deaths per 1,000 births recorded in the 2003 KDHS (50). The improvement in child survival in particular is attributed to increases in child vaccination coverage and in ownership and use of mosquito bed nets. Additionally, workload statistics (derived from activities in outpatient and inpatient services of Kenyan facilities) show that service utilization increased from 50.8% in 2006 to 71.8% in 2007 (44). Also, the Kenya Demographic Health Survey (KDHS) 2008-09 suggests that the total fertility rate (TFR) declined from 8.1 births per woman during 1977/8 to 4.7 in 1998, 4.9 in 2003 and 4.6 in 2008 (50). Some areas still pose challenges however. Life expectancy at birth declined to 48 years for females and 47 for males in 2008 from 59.1 and 54.3 years for females and males respectively in 2006; and may fall further if the HIV/AIDS pandemic and potentially resurgent diseases (malaria, pneumonia, tuberculosis) are not controlled (44). Further much pressure on the ability of Kenya to provide services will be provided by the population growth rate (2.75% at 2006) that will increase the population from 36,138.7 million in 2006 to a projected 40,406.4 million in 2010 (44).

2.2.2. Organisation of the Kenyan Health System

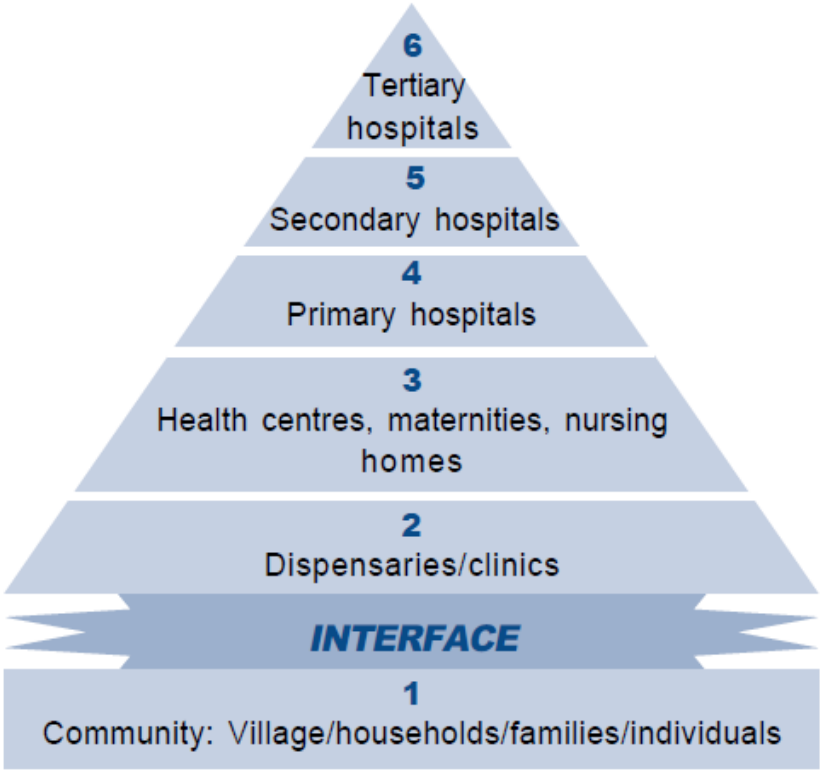
One of the consequences of the post election violence following the December 2007

presidential elections was the split of the Ministry of Health into two, the Ministry of Medical Services (MOMS) and the Ministry of Public Health and Sanitation (MOPHS). MOMS manages the curative services including running public hospitals starting from Level 4 (district) to Level 6 (tertiary) while the MOPHS manages the preventive and promotive health services (including running lower level facilities (Levels 1 to 3)) as well as sanitation. Anecdotal experience suggests that there are many grey, shared areas resulting in some competition over roles and access to resources. Since the focus of this study was district level hospitals managed by MOMS, the split did not, to my knowledge, affect district hospital functions.

Despite this change, the foundational basis of both the curative and preventive aspects of healthcare provision in Kenya remains defined by the Kenya Essential Packages of Health (KEPH) policy. KEPH makes the provision of health care services to be in tune with the aspirations of Human Rights Approach (HRA) to health (39). It utilises a cohort approach to health service delivery that integrates all health programmes into a single integrated approach for each specific age cohort. It is aimed at improving health at different phases of the human development cycle so that synergy and mutual reinforcement between the different programmes can be achieved (39). Six distinct life cycle stages are distinguished and include: Pregnancy, delivery and the newborn child (up to 2 weeks of age); Early childhood (3 weeks to 5 years); Late childhood (6 to 12 years); Adolescence (13 to 24 years); Adulthood (25 to 59 years); and, Elderly (60 years and over).

Services have also been reorganized to meet the needs of the different cohorts and are provided in increasing levels of complexity from the basic preventive services in level 1 to highly complex curative approaches in level 6 as shown in Figure 2-1. For each level of care as per the health sector pyramid (Figure 2-1), norms and standards of care have been established that are intended to guide the efficient, effective and sustainable delivery of this package of services (51). Service delivery standards describe the expectations of each level of care and the human resources needed to meet these expectations. Service delivery norms outline the minimum quantities of these resource inputs needed to efficiently, effectively and sustainably offer the service delivery package (51).

Figure 2-1: Levels of Care under KEPH



Source: MoH (2005:17): Second National Health Sector Strategic Plan of Kenya (NHSSPII: 2005-2010): Reversing the Trends.

Within Kenya's pyramid of care Level 1 mainly focuses on household activities while levels 2-6 are designed to provide preventive and curative care with curative care options of increasing complexity offered as care seekers move up the pyramid. As shown in Figure 2-1 above, district hospitals can be found in level 4 while provincial and national referral hospitals are found in levels 5 and 6 respectively.

2.3. Overview of Clinical Officers in Kenya

This section presents an overview of COs in the Kenyan health system followed by a review of their professional and regulatory environment. In Kenya, Non-Physician Clinicians (NPCs) are known as Clinical Officers (COs). The document analysis revealed that COs have played an important role in the health system for a very long period. The cadre is one of the oldest in the Ministry of Health with roots being traceable to individuals named the 'native dresser' in 1929 at what was then the African Hospital and later rebuilt as the Kenyatta National Hospital (52). The cadre has undergone several name changes to their present official title of 'Registered Clinical Officer' , a term that was formalised in the Clinical Officers Act in 1989 (53). However, in practice, they are known as COs.

In terms of numbers, COs number some 8,300 while medical officers are about 7,055[2]. The distribution of doctors, COs and nurses in the public sector by province and overall in Kenya is provided in Table 2-1 (39). While considerable variation exists in the distribution of health workers in Kenya's public sector, COs consistently appear to outnumber doctors in most provinces in Kenya with the exception of Nairobi.

Table 2-1: Distribution of Doctors, Clinical Officers and Nurses (per 100,000 population) by Province (public sector)

	Kenya	Central	Coast	Eastern	N.E	Nyanza	Rift Valley	Western	Nairobi
Doctors	**4.0**	**4.0**	**4.0**	**3.0**	**1.0**	**2.0**	**3.0**	**2.0**	**6.0**
Clinical Officers	**7.0**	**7.0**	**7.0**	**6.0**	**6.0**	**6.0**	**8.0**	**5.0**	**5.0**
Nurses	**49.0**	**73.0**	**50.0**	**55.0**	**28.0**	**40.0**	**49.0**	**45.0**	**34.0**

MOH (2005:6) (HR mapping and verification study)

The data reported above is about five years old and focussed only on public sector employees (54). Even though there has been a major recruitment of nurses and COs into the health system (26), the table above would likely remain much the same as the number of staff annually leaving the health service for various reasons is usually only just matched by recruitment done periodically roughly maintaining a status quo.

COs are primarily intended to provide clinical, often walk-in or outpatient services in rural areas in Kenya. They mainly work at health centres (Levels 3) through to provincial hospitals (Level 5) in the system, though there are COs working in the national referral hospitals as well (39). A considerable number of COs work at the district level and in particular at the more than 200 district (Level 4) hospitals (39). Due to increasing demand for health services, and with limited employment opportunities in the public sector some have also begun working in non-governmental facilities/programs and faith-based facilities. This is partly attributed to the increasing cost of hiring MOs, considering the salary for one could pay that of two or more CO's. Further, drawing on the experience of the public sector that had been using COs for a long period of time, it was also feasible for them to do the same work in the non-government sector. Also, MOs generally do not stay for long especially in organisations based in rural areas so finding an alternative cadre that could stay long in these areas is important (18).

[2] Personal Communication. Agnes Waudo, In Country Director, Kenya Workforce Project.

2.3.1. CO's Professional and Regulatory Environment

The data presented below is based on a review of government policy and legal documents on COs, review of CO training brochures from the Kenya Medical Training College and also from interviews with policymakers at the Ministry of Health.

Professional Environment

To become a Registered Clinical Officer (RCO), an individual has to undergo a three year diploma programme in clinical medicine and surgery in an accredited training institution of which twenty five (25) exist[3]. After completion of the course, the individual sits for a final qualifying examination. On passing, s/he applies for provisional registration by the Clinical Officers Council. Due to fears over the quality of graduates from these colleges, the Council has introduced a registration exam for any person who intends to be registered under the Act. Following this, the students have to undertake a further one year internship in an accredited hospital that involves three-month supervised rotations in each of the major medical specialties: obstetrics and gynaecology, internal medicine, surgery and paediatrics. While doctor and degree level nurse interns are paid by the central government during their internship, CO interns do not get paid. A few hospitals, in appreciation of their labour, do provide a small token ranging from KES 3,000 - 6,000 per month ($40 to $75 per month).

Applicants to the RCO programme are usually secondary school graduates with the Kenya Certificate of Secondary Education (KCSE) qualification having minimum mean grade C, with at least a C in Biology, English or Kiswahili and a C- in any other two science subjects; (Physics, Physical Science, Chemistry & Mathematics) can apply to join any of the CO training institutions in the country. Anecdotal evidence suggests that over the years, the quality of applicants has greatly improved with the expansion in numbers of secondary school graduates to the extent that it is difficult for an applicant with a B minus grade to join the diploma course.

After three years of practice, a CO can apply to undertake post-basic training by completing a Higher Diploma in Clinical Medicine in areas such as Anaesthesia, ENT, Paediatrics, Lung/Skin disorders (arising from a conflation of TB and leprosy), Orthopaedics, Reproductive Health, Epidemiology, Health Education, Dermato-venerology, Ophthalmology

[3] List of 25 accredited CO training Institutions can be found at: http://clinicalofficerscouncil.com/colleges-medical.php

and Cataract Surgery. Opportunities for re-training to move from CO to medical officer (MBChB) degree programmes in local universities exist but are very rare and are expensive. Those who do manage to join such programmes start as first year students as no recognition of their prior training or work experience is given.

Further training of public sector employees is subject to Public Service Recruitment and Training Policy (55). The policy requires the Permanent Secretary of the relevant Ministry to ensure appropriate training opportunities and facilities are provided so that CO performance of duties and advancement within a defined scheme of service (S.O.S) can be achieved. The usual practice (also reiterated in the policy) is to encourage COs to pay for their own training unlike previously when the Government used to offer scholarships to COs. This, as will be seen later in the chapter, has resulted in much dissatisfaction. This is where the specialised COs do not get any additional salary increments or promotions in recognition of their advanced studies. This is not the case with MOs who specialise.

The Clinical Officers Act prescribes the illnesses that a CO can treat as well as the prescriptions that they can write. Conditions COs can manage are outlined in the first schedule of the CO Act and include paediatrics, adult medicine, obstetrics and gynaecology and surgery (53). While specific conditions are outlined in the appendix, some of the diseases that a CO can treat include gastrointestinal conditions, skin diseases, eye diseases, respiratory diseases, advice on general care for newborn, and family planning, among others (53). The Act also described an approved list of drugs and equipment that can be used by the CO and makes provision for the revision of these by the CO council (53).

Regulatory Environment

The COs regulatory environment is overseen by the Clinical Officers Council, which was established by an Act of parliament in 1989 (53). Its functions are to coordinate and regulate the training, registration and licensing of all Clinical Officers under Clinical Officers (Training Registration & Licensing) Act Cap 260 of 1989 (53). In addition, the Council accredits any institution intending to offer CO training courses following a checklist outlined in its rules and regulations. It also reviews and approves curricula and competency manuals for COs and undertakes regular inspection of CO training institutions to ensure maintenance of quality. For example, due to the emerging concern over the quality of graduates from the training institutions, the Council has put in place a system to ensure that only the required number of

students join any CO course in the accredited training institutions to curb over recruitment of students. This has been achieved by requesting the institutions to submit to the Clinical Officers Council the names of enrolled students so that they can be allocated a registration number (index number) that the students will use to register for exams towards the end of their 3 year course (56).

Table 2-2 outlines the composition of the Clinical Officers Council that is mandated to oversee issues related to COs in Kenya(53).

Table 2-2: Structure of the Clinical Officer's Council

Member	Number
Ministry of Health	(*a*) the Director of Medical Services or his representatives (usually a doctor); (*b*) the Registrar (Chief Clinical Officer);
Doctors	(*c*) two medical officers of health appointed by the Minister;
Clinical Officers	(*d*) at least two and not more than four clinical officers appointed by the Minister;
Training institutions	(*e*) one clinical officer nominated by the Faculty of Clinical Medicine at the College of Health Professions;
Others	(*f*) seven clinical officers, three of whom shall be licensed to engage in private practice who shall be elected to the Council by the Kenya Clinical Officers Association from among the members of the Association

The chairman of the Council is appointed by the Minister of Health from among the members of the Council. All officers are appointed to serve in the council for three years and subsequent membership in the structure can be renewed or revoked.

For COs already working, the Council has introduced a Continuous Professional Development (CPD) programme for both public and private sector employed COs (56). Maintenance of a CO's license to practice has also been linked to attendance at CPD courses. This will ensure that COs update their knowledge regularly in order to maintain their licenses. Licenses for COs practicing in the private sector are renewed once a year, a practice that is now being introduced to the public sector. However, due to the shortage of COs in the public sector and the volume of work, the CPD hours for public sector COs are fewer. License renewal considers both CPD points and observation of professional standards and ethics. In

terms of the CPD points, a scoring criterion has been developed whereby participation in any professional development session recognised by the council attracts a number of points (56). For example, a training course lasting longer than a year is worth 30 points, participation in a scientific conference is with 5 points, while attending a CME is worth 1 point with a maximum of 12 points per year, among others. A CO is required to have thirty (30) points each year to have their license renewed so as to continue practising.

2.4. Policy Perspectives on CO Roles

The preceding section has outlined the overarching professional and regulatory environment for COs. This section describes institutional perspectives on CO roles as outlined in policy documents. As stated in Chapter two, the Kenyan CO cadre has two subgroups; general COs (RCOs) and Specialist COs (SCOs - i.e., COs who have undertaken further specialist training in a medical discipline). The CO's Scheme of Service describes the functions to be carried out by COs of which two exist; the first scheme of service developed in 1994 (57) that draws on the COs scope of service first described in the 1989 Clinical Officer's Act and, the recent revised CO scheme of service published in 2009 (58).

2.4.1. Review of CO Schemes of Service

This section examines the two CO scheme of service (S.O.S.) as the foundational basis for the roles that all COs carry out in the Kenyan health system. Information from these schemes of service acquired through document review of policy documents has been supplemented with data drawn from other government and hospital documents. The duties and responsibilities that are expected to be carried out by COs are outlined in Table 2-3. While the two schemes of service are similar in terms of the duties expected of COs, the 2009 version goes further to outline key result areas for each activity that is assigned to COs. In addition, performance expectations have also been outlined in the revised CO S.O.S, an issue that is dealt with in Chapter Six.

The CO scope of service outlined in the 2009 S.O.S describes the type and complexity of services to be undertaken by both COs and SCOs. Three general areas of service provision are thought to be key and include:

- History taking, examining, diagnosing, treating and follow up of patients and clients in medical health institutions and community
- Offering specialized services such as – ENT, ophthalmology/cataract surgery,

paediatrics and child health, anaesthesia, orthopaedics, epidemiology, lung/skin, reproductive health[4], dermatology and venerology at all levels of health delivery and programmes

- Providing community health services including – health education and promotion, disease control, prevention and management; follow up, data collection, disease surveillance, monitoring and evaluation, standards and quality assurance, home based care and research.

Table 2-3: Comparison of CO Duties and Responsibilities in the CO Schemes of Service

	First Version (1994)	Revised Version (2009)
Duties & Responsibilities	• See, examine, diagnose & treat patients mainly at OPD • Assist in planning conducting outreach and mobile health services • Teach students attached to hospitals & health centres • Plan, supervise and evaluate clinical services in hospital or health centre • At training institution – train counsel and guide students; participate in curriculum development, implementation and evaluation; recruitment, admission and orientation of new students and maintenance of their records. • Supervise and counsel a small number of staff engaged in routine patients care (not common due to poor relationship with nurses) • Giving support and health education to patients and community (now mostly done by nurses) • Organise health committees as well as liaise with divisional heads on health services	Similar duties and responsibilities with the 1994 version. Difference is that for each activity, there are defined result areas. These include: Key Result Areas – Junior level: • Supervising and counselling a small number of staff engaged on routine patients' care and giving support and health education to patients. • Encouraged to go for further training to update skills Key Result Areas – Senior level (in addition to the preceding):- • Secretary to Health Committees: • Partnership for development; e.g., liaising with division heads on health services. • Supervising and guiding junior staff. • Participating in curriculum development of training, implementation and evaluation; recruitment • Management: In-charge of a large health centre or to be the Clinical Officer in-charge of special Clinics/Departments in a hospital

The scope of service deals with all issues related to COs work though there is an emphasis on task related issues except perhaps for the monitoring and evaluation and quality of care issues. While not mentioning any non-task performance behaviours, the S.O.S does imply a need for communication and team work. There is however a revised Code of Conduct for public officers (59) which describes the required and prohibited behaviours of all public officers that is also support by the Public Officer Ethics Act of 2003 (60). In terms of the tasks expected of COs, both Government and Faith-Based Hospital (FBH) sites had very similar duties for

[4] Reproductive health is a new area of specialization among COs. It is still facing resistance from MOs specialized in Obstetrics and Gynecology.

COs, mainly related to patient care and management. In exploring issues facing COs, I found many health workers to be familiar with the 1994 S.O.S. On probing this further, few COs reported having seen their scheme of service with some referring me to their legislative document (CO Act). This suggests that much of the information on their roles is acquired from their peers, their supervisors, or hospital management. Almost all respondents were not aware of the updated 2009 S.O.S. Thus in this thesis, reference is primarily made to the first version except where explicit comparisons with the revised version are mentioned.

Both S.O.S.'s state that a CO can work in any medical setting offering health services, head a department, and/or teach in a training institution. Their duties and responsibilities increase in complexity from purely medical (junior level COs) to a mix of medical, training and management (mid level COs), then thereafter, medical, training, management, policy formulation and implementation (senior COs). Roles for senior officers appear to focus less on actual patient care and more on creating and implementing policy, management, and training. I note that there is little consideration of non-task aspects of COs job, considering that most of their work involves collaboration/cooperation with other cadres, which should be emphasised.

Though the two S.O.S.'s are similar in many aspects, there are two major differences between them. The first is that in the original version, duty and responsibility areas were not clearly defined for each activity that COs were expected to do. This left it open for interpretation depending on what a hospital manager wants from the COs. The revised version sets out the performance standards for each duty that a CO is responsible for. Duties and responsibility in the second version increase with the seniority of the post. Supporting this is clarification of the scope of service that can be provided by COs, which clearly links the 2009 S.O.S. to the CO Act (53). An additional difference between the two is that management and policymaking functions are not mentioned in the CO Act. The second difference, discussed in Chapter Seven relates to the grading structure which in the revised SOS appears to operationalise the structure proposed in the Revised Code of Regulations (59).

2.5. Review of Norms of Performance

This section deals with the institutional perspectives of norms of CO performance as described in their scheme of service (58). The 2009 CO scheme of service describes duties for COs that were discussed in Chapter 5. The document also outlines key result areas for CO's

duties as well as the expected standards of performance that are the focus of this chapter (58). The purpose is… 'To provide for well defined job descriptions and specifications with clear definition of duties and responsibilities at all levels…to enable Clinical Officers understand the requirements and demands of their jobs' (58). By specifying the performance standards expected for each key result area, the 2009 scheme of service thus outlined the norms of performance for COs.

The key result areas and performance standards for the duties undertaken by COs outline the formal norms for COs. Mainly for junior level COs, much of their work focussed on patient care and management, an issue confirmed by participant observation in the district hospitals visited. In hospitals that had an attached medical training centre (H2 and H5) COs did mentor clinical students attached to their specific work area in addition to overseeing the work of CO interns. The shortage of COs perhaps makes it difficult to carry out community activities. It is possible that COs working in lower level facilities (health centres or dispensaries) do carry out the duties such as community health care activities and supervising and counselling staff. There is however no information on this due to the focus of this study on district hospitals. For junior COs, Table 2-4 outlines their duties, key result areas for these duties and the relevant performance standards for each area. Junior COs are those in the common establishment which is formed of COs who have recently joined the health service (0 – 5 years) and mainly work in outpatient departments of hospitals.

Table 2-4: Duties, Key Result Areas and Performance Standards for Junior COs

Duties	Key Result Areas	Standard of Performance
Patient Care and Management:	a. Attending and treating patients' ailments at an Outpatient/Inpatient department in a hospital, health centre or Dispensary. b. Counsel clients on treatment and compliance to treatment	• Documentation of history taking, physical examination, investigation and diagnosis of patients ailments and management • Clarity of investigation form(s) and correct interpretation of results • Clear documentation of prescriptions and follow-up of clients • Record all cases seen daily
Planning and conducting Community Health Care activities;	a. Identify community health needs b. Plan and conduct community health activities c. Develop report of the community health activities	• Documentation of community health needs • Documentation of interventions undertaken to address community health needs

	d. Establishment of community networks through community health care workers and community own resource persons (CORPs) for COII & above	
Training, counselling and guiding clinical students attached to the hospital/health centre;	a. Identify training needs of students and staff b. Develop and conduct trainings and counselling for students in the facility	• Documentation of training plan for students and staff in the facility • Report of counselling and training programme for students and staff in the facility • Orientation of students on clinical practice/areas and maintenance of their records
Supervising and counselling a small number of staff engaged on routine patients' care and giving support and health education to patients.	a. Develop support supervisory plan b. Identify training and counselling needs of staff	• Documentation of support supervision and on the job training of staff • Provide on the job training and counselling of staff

As COs increase in seniority, they take on additional duties as shown in Table 2-5. Seniority here is taken to mean COs who have worked in hospitals for more than 5 years and/ or have specialised in an area of medicine to become specialist COs. Some COs do work as heads of health centres or dispensaries thus, will in addition to the duties and key result areas outlined in Table 2-5, also be expected to perform the tasks outlined in duties and key result areas as shown in Table 2-5 below.

Table 2-5: Additional Duties, Key Result Areas and Performance Standards for Senior Level COs

Duties	Key Result Areas	Standard of Performance
Patient Care and Management:	a. Attending and treating patients' ailments at an Outpatient/Inpatient department in a hospital, health centre or Dispensary. b. Counsel clients on treatment and compliance to treatment	• Documentation of history taking, physical examination, investigation and diagnosis of patients ailments and management • Clarity of investigation form(s) and correct interpretation of results • Clear documentation of prescriptions and follow-up of clients • Record all cases seen daily
Planning and conducting Community Health Care activities;	a. Identify community health needs b. Plan and conduct community health activities c. Develop report of the community health activities	• Documentation of community health needs • Documentation of interventions undertaken to address community health needs

	d. Establishment of community networks through community health care workers and community own resource persons (CORPs) for COII & above	
Training, counselling and guiding clinical students attached to the hospital/health centre;	a. Identify training needs of students and staff b. Develop and conduct trainings and counselling for students in the facility	• Documentation of training plan for students and staff in the facility • Report of counselling and training programme for students and staff in the facility • Orientation of students on clinical practice/areas and maintenance of their records
Supervising and counselling a small number of staff engaged on routine patients' care and giving support and health education to patients.	a. Develop support supervisory plan b. Identify training and counselling needs of staff	• Documentation of support supervision and on the job training of staff • Provide on the job training and counselling of staff

As shown in Table 2-5, senior level COs, in addition to working in district hospitals, could also be deployed to work in Specialized Clinics in Provincial General Hospitals as the Clinical Officer In charge; in a district as a District Clinical Officer or Coordinator of Special Clinical Services /programmes at Provincial level e.g. TB, Child Health, HIV/AIDS. Senior COs may also be deployed to head a Provincial Health Training Centre as a trainer. The scheme of service also adds more policy related responsibilities to senior level COs such as management of Clinical Services in the Department/Division; formulation of clinical services policies; and maintenance of clinical standards and ethics. Their duties also include HR-related functions such as deployment of clinical officers in the Ministry; training and development of clinical officers; staff performance appraisal; planning, implementation and supervision of curriculum development; evaluation of training programmes; and, Public and Community health Services and Research.

2.6. Conclusion

This chapter outlined the country context for the study, describing features of Kenya and the Clinical Officer cadre that are relevant to the study. A description of the legal and policy framework is done as well as the roles and norms of performance for COs. The next chapter reviews the relevant literature for this study.

Chapter 3. Literature Review

3.1. Introduction

Chapter 1 set the scene for the thesis while Chapter 2 presented the factual background to this thesis. This chapter reviews the literature describing the issues that are likely to influence the performance of Clinical Officers in district hospital settings in Kenya. This chapter is divided into two sections. The first section pays attention to the human resources for health situation at global level and in Kenya that has led to a renewed focus on mid-level workers (MLWs) and the use of non-physician clinicians (NPCs). Then a review of empirical studies exploring the performance of NPCs to draw out gaps to be explored in this study is done. The second section focuses on the theoretical underpinnings of the concept of performance and provides a description of the study's conceptual and analytical framework that shows how CO performance was approached in this study.

3.2. The Challenge of Human Resources for Health in Low Income Countries

There is a global shortage of health workers. The World Health Organisation (WHO) estimates that at least 2,360,000 health service providers and 1,890,000 management support workers are needed to fill the gap (14). Specifically focussing on Africa, an eminent group of more than 100 global health experts estimated Africa's shortage of health workers to be 1 million with other estimates positing that the shortage could even be greater (61). As such, instituting workable solutions to accomplish the workforce goal of getting the right workers with the right skills in the right place doing the right things will not be easy (14), (62). While particular causes of human resource challenges vary by country, common factors include chronic underfunding of the health sector, inadequate numbers of trainees, mal-distribution, inappropriate skill mix, loss to migration, poor outdated skills and knowledge, and poor motivation and performance (13, 21, 63, 64). Interventions to improve service delivery and health outcomes need therefore not only to focus on increasing numbers but combining this with efforts to reduce burnout, improve morale, job satisfaction and performance and make the best use of resources and investments in the health sector (14, 61, 65, 66).

The Kenyan Government accepts human resources for health (HRH) as an essential resource of the health system (67, 68) although in common with many countries there was limited or no expansion of the workforce throughout the 1990's and until 2005, largely blamed on a

public sector hiring freeze driven by macro-economic structural adjustment programmes. A Human Resource Mapping and Verification Study conducted in 2004 indicated that there were 35,643 health workers in the public sector with more female (52.7%) than male (47.3%) workers (54). Of these, enrolled nurses as a group are the largest in number contributing 48.3% of the entire health workforce. Recent data from the Centers for Disease Control and Prevention (CDC)/Emory health workforce project in Kenya generally supports this finding. According to the Kenya project director[5], the number of nurses is 20,866; COs is 8,300; and that of MOs is 7,055.

District hospitals have the biggest proportion of the health workers (50.8%), health centres have 13.7%, dispensaries 12.9% and provincial hospitals 11.4% (54). Kenya however faces a number of HRH challenges that include shortages of health professionals in public sector hospitals, lack of equipment and supplies that are similar to many low income countries (LICS) (18, 68, 69). To adequately address the health needs of Kenya's growing population; the number of facilities and health workers clearly needs to increase. However, to modernise all health facilities and hire adequate personnel, the Minister for Medical Services requires KES 540 billion[6], money that is unlikely to be available (70). With the help of development partners through the emergency hiring programme[7] (EHP) that sought to speed up hiring, deployment and upgrading training of health workers (26, 71), some attempts to increase the stock of HRH in the public sector have been made recently, notably employing some cadres of health workers on short-term contracts linked to expansion of specific programmes such as HIV (18, 26). Interestingly, and unlike many African countries, Kenya does not have a major shortage of skilled professionals, at least in nursing. Thus there are more unemployed health professionals than those practicing in the country with the primary problem being lack of finance in the public sector or employment opportunity more generally (18, 68). A recent report in the Kenyan press states that Kenya, under pressure from the International Monetary Fund (IMF), has agreed to freeze public service pay from 2011 to 2014 even though a number of collective bargain agreements had been reached to increase pay (72). This serves to lower

[5] Personal Communication, 05/07/2011. The Kenya Health Workforce project seeks to improve Kenya's workforce capacity through development of a comprehensive human resources information system (HRIS). The HRIS will enable better decision making on the management and distribution of human resources in Kenya. Source: http://www.taskforce.org/our-work/projects/kenya-health-work-force-project. Accessed 06/07/11.

[6] Approximately USD 7 Billion (1USD:77KES).

[7] The Emergency Hiring Program was supported by five donor organisations: the Clinton Foundation jointly with the Danish International Development Agency (DANIDA); the United States Agency for International Development (USAID)-funded Capacity Project; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the International Center for AIDS Care and Treatment Programs (ICAP); and the United Nations Children's Fund (UNICEF).

the motivation of employees employed in the public sector who were expecting pay increases to buffer the pressure of inflation rate that at May 2011 stood at 12.95 per cent (72). Another challenge has risen from the post-election violence whose residual effect is that some personnel are unwilling to work in areas with different ethnic affiliations to their own.

3.2.1. Solutions to the HRH Challenge

There is now interest in strengthening health systems in low income countries to improve their ability to deliver needed services of appropriate standards to their populations. A major component in this effort focuses on improving the stock of human resources for health that is probably attributable to the convergence of two factors. The first is the international commitment to meet the Millennium Development Goals (MDGs) several of which are health-related and the second, the specific and urgent need to address the HIV crisis (73). Though separate, these issues are linked by the severe shortage of health workers who are needed to deliver the services outlined under the MDGs and also address the needs of HIV/AIDS patients. It thus hoped that improving human resources linked to HIV and MDG related interventions would have a positive impact on health systems strengthening more generally (14, 74). While there is debate around the appropriate method(s) to address the challenges, the solution currently proposed and implemented to date to alleviate the HRH crisis is the use of mid-level workers. In particular, non-physician clinicians (NPCs) are seen as a possible solution to bringing physician type services closer to people that need them as long term solutions to recruiting and retaining qualified health professionals especially in rural areas are sought.

3.2.1.1. Mid Level Workers

Mid-level workers (MLWs) are health care providers who have received less training, have more restricted scope of practice than professionals, and are accredited by their countries' licensing bodies (42). The term is generic and is used to represent health workers of various cadres who have substituted those with higher qualifications for many years especially in rural and deprived areas in many African countries (11, 12, 42). Several recent reviews including an extensive online discussion[8] on MLWs have all highlighted the history of MLW programmes outlining the numbers trained in various countries, variations in training and the scope of work they undertake (11, 12, 42). Amongst the possible advantages are that MLWs have less portable qualifications thus are less likely to migrate, usually have lower salaries than staff with

[8] http://www.who.int/workforcealliance/knowledge/e_solutions/copmidlevel/en/index.html

internationally recognised qualifications (e.g., doctors) and take a shorter period to complete formal training (11, 12, 42). Additionally, since they have been utilised in many countries for many years, they have become an important strategy to alleviate health worker shortages and, improve access to and quality of health services (11, 12, 42).

Non-Physician Clinicians are of particular interest as they offer clinical (curative) services as a means of improving access to services traditionally the preserve of the relatively few physicians (11, 12, 42, 75). NPCs are generally largely responsible for the provision of clinical care at several levels that include clinics, dispensaries and district hospitals. The care will range from treating walk-in patients, to admitting and treating patients in hospital wards, undertaking surgery, and also providing community extension services (such as tuberculosis prevention activities and treatment) more broadly (11, 42). The scope of practice in some countries is professionally regulated by a national professional body, usually a medical council. Kenya, unlike many other African countries, has a specific professional body (Clinical Officers Council) for COs that is mandated by the Clinical Officers Act (CAP 257) of the laws of Kenya (53). The CO council regulates all aspects of COs working life including training, registration, continuous professional development and sanctions for malpractice.

Despite the increased interest in MLWs, some concerns regarding the apparently simple, expedient approach including lack of attention to the organisation, structure and resourcing of health services required to support them have emerged (42). Largely driven by the HIV pandemic, these system level challenges are of considerable interest especially when one considers the opportunities and challenges associated with adopting or expanding the use of MLWs. Since Kenya has utilised COs, an example of a NPC, for more than 40 years the setting offers a potentially rich source of experience worthy of evaluation. In particular, the degree to which this primarily technical human resource 'fix' actually works is likely to be affected by the actual performance behaviour of these health workers. This is likely to be influenced by many health systems, organisational, inter-professional and personal characteristics. With regards to NPCs, these issues have received some attention in recent years with a focus on two areas; technical competence and influences on performance which are discussed next.

3.2.1.2. Improving Mid-Level Worker Performance

Even as the stock of HRH is being increased, there is concern about the performance of health workers already within health systems(13, 14). It is argued therefore that we must address gaps between desired and actual provider performance that limit the quality of patient care in developing countries (76). Identifying such gaps requires knowledge of expectations for performance and information about system and provider performance. Recently considerable attention has been given to health system performance measured at the highest, national, level by the WHO (14). However, within a system health worker or provider performance is clearly critical. Competence (potential for correct performance) is one central concern – and for decades considerable efforts have focused on training - but the degree to which a provider can demonstrate their competence may be influenced by their motivation and many organisational factors (including resource availability and other supports) which may be classified for simplicity as operating at 3 levels – the entire health system; the health facility and individual levels (77-79). While increasing health worker numbers may clearly therefore have an impact on the performance of the entire health system, it may also be critical that this is accompanied by improving workers' competence or extending competencies to a wider set of health workers and providing workplaces that foster good performance.

3.2.1.3. Mid-Level Worker Performance

Improving access to health care through MLWs and improving their competence to undertake tasks previously performed by their more qualified colleagues is a core concern regarding the use of MLWs. The search strategy adopted for getting relevant literature on MLWs in general and Clinical Officers in particular was as follows. The main words used were 'clinical officers', 'assistant medical officer', 'assistant clinical officer', 'non-physician clinicians', 'Africa', 'sub-Saharan Africa', 'low income countries', 'middle income countries', and 'task-shifting' in databases such as pubmed and the social sciences citation index. It was however realised that there were few studies done on clinical officers and much of the literature focussed on task-shifting which gave a partial picture of clinical officers as described later in this section. In light of this, literature search expanded to also include the term 'mid-level workers' that was described as having a broader remit compared with that in the task-shifting term. It was realised that not much work had been done in examining clinical officers with official databases not having many reports. The search was expanded to other health workforce related databases such as the HRH global resource center (http://www.hrhresourcecenter.org/), the Regional Network on Equity in Health in Southern

Africa (EQUINET, http://www.equinetafrica.org/) and the Africa Health Workforce Observatory (http://www.hrh-observatory.afro.who.int/en/home.html) as well as Google scholar. A time limit was not imposed on the search because of the need to get all literature on the subject as there were not many studies done in Low Income countries. A snowballing approach was then used to find out other relevant literature from the references cited in the acquired reports. Based on this literature, a general overview of studies on the performance of health workers in Kenya is outlined followed by studies providing evidence on which the use of MLWs is based is reviewed.

It will be noted that the literature reviewed in this thesis is mainly drawn from low income countries. The study focussed on understanding influences on the performance of Clinical Officers in a low income country as an example to other countries seeking to implement the approach. This enables reasonable understanding of the results as many low income countries face similar disease burden and financial constraints that Kenya has, an understanding that studies from middle income and high income countries might not have provided. Further, MLWs in low income countries seem to work under less supervision compared with those in high income countries due to the shortage of the internationally qualified cadres especially in rural areas. This essentially means that they work alone and depend on their own skills and knowledge to work, a critical difference between MLWs in low income countries and those in high income countries. Understanding their situation is critical to their introduction and /or expanded use in other countries that have not used them before. The literature review presented hereafter highlights these issues further.

3.2.1.4. Studies on Performance of Health Workers in Kenya

Studies on the performance of health workers in Kenya are few, despite a general acknowledgement of the need for improvement in their knowledge and skills. As with studies of health workers in other countries as outlined in the next sub-section, many of these have explored technical issues related to the performance of health workers. Some have focused on training in various aspects of care that included emergency obstetric care (80), management of paediatric fevers (81), use of guidelines (33) and critical care (82), among others. Some have had positive results, such as the reported by Olenja and Colleagues, who, on further analysis of data from the 2004 Kenya Service Provision Assessment ((KSPA), found that recent training in relevant subject matter was found to be significantly and positively associated with the ability to provide quality care in the event of unsafe abortion and postpartum haemorrhage

(80). Similar results were reported by MacLeod and colleagues on participants attending a fundamental critical care course (82). However, other studies have reported negative results from training. An example is a study by Wasunna and colleagues explored the performance of health workers in the management of paediatric fevers following in-service training and exposure to job aids (81). The study, conducted in Bondo district in Kenya, carried out a pre-intervention quantitative analysis of 33 government health facilities and 48 health workers at baseline and a post-intervention quantitative analysis of the same health facilities previously surveyed and 36 health workers (81). When the analyses were restricted to health workers who received the enhanced in-service training and/or had received new guidelines and job aids, no significant improvements in reported case management tasks were observed compared to baseline (81). Another study sought to improve the performance of health workers in eight district hospitals in Kenya through the introduction of guidelines on various common illnesses faced by children (30). In qualitatively exploring the barriers to guideline implementation among eighty four hospital staff, a number of issues at institutional and individual levels were found to constrain health worker performance (30). For example, there was an almost complete lack of systems to introduce or reinforce guidelines, poor teamwork across different cadres of health workers, and failure to confront poor practice at an institutional level (30). At an individual level, lack of interest in the evidence supporting guidelines, feelings that use of guidelines eroded professionalism, and expectations that people should be paid to change practice threatened successful implementation (30).

Despite the importance of examining the influence of worker motivation and the context in which they work on their practices, few such studies exist in Kenya. One of these that explored health worker motivation was carried out by Mbindyo and colleagues (10) who qualitatively explored contextual influences on worker motivation of 185 staff in eight district hospitals in Kenya as a factor that could modify the effect of an intervention aimed at changing clinical practices in Kenyan hospitals. They found that motivation was likely to powerfully influence any attempts to change or improve health worker and hospital practices (10). Motivation of health workers in turn is influenced by incentives. A study by Ndetei et al (18) explored strategies adopted by various institutions in Kenya for the retention of health workers. They found that a number of financial (e.g., paid leave and overtime pay, and allowances, such as transport, hardship, responsibility, and uniform allowances) and non-financial (e.g., housing or a housing allowance, post-graduate training and continuing medical education, life insurance, personal loan facilities, shorter working hours, and medical cover to

the employee's nuclear family) were offered (18). However, variation was seen in the application of incentives between public and private facilities and between cadres (18). Focussing on health worker numbers as a motivational determinant, a review by Chankova and colleagues (83) done in 2006 projected that with reference to meeting health MDGs, Kenya needed to substantially increase numbers of health workers in all staff categories over the next five years. In the public and FBH sectors, they stated that the number of doctors should increase by 3 percent annually, whereas the number of clinical officers and nurses needed to increase by 4 percent annually between 2005 and 2010 (83).

3.2.1.5. Reviews of Mid-Level Worker Studies

> "Possibly the most important finding of this review is that at this stage there is a considerable amount of descriptive and experiential information but little rigorous research evidence on this topic available in the English-language literature".
> Lehman, U (2008: V)

Lehman (42) drew this conclusion after reviewing English-language studies on MLWs carried out in low income countries (LICs) that were published before and up to 2008. More recent reviews focussing on the task shifting approach (84, 85) and others seeking to implement interventions to improve the motivation and performance of MLWs (86) still suffer the same criticism. An example is Callaghan and colleagues' (85) systematic review of 84 articles that explored task shifting for HIV treatment and care in 10 sub-Saharan African countries. They found that the paucity and heterogeneity of the results hampered their ability to draw systematic conclusions on any particular task shifting practice (85). Fulton and colleagues (84)supported this view, after a review of 32 studies done in LICs published between 2006 and September 2010 they called for future studies on MLWs to adopt more rigorous research designs.

The literature reviewed shows a long history of MLW use at various levels in LIC health systems with MLWs working either as assistants to professionals or independently providing care (11, 12, 42). However, there was evidence of considerable challenges and gaps in knowledge of how mid-level cadres were functioning (12, 42, 84) that was attributed to the marginalization of these cadres even though their centrality in the delivery of health care was well accepted (42). Perhaps due to the predominance of the traditional health professions in determining health systems discourses and structures, there was little information on management issues related to MLWs in areas such as supervision, career paths, regulation or governance (42).

Further, the reviews highlight an assumption that needs to be tested. An attractive feature of MLWs is their retention at lower levels for long periods (12, 87). This is based on the notion that many MLWs are recruited from rural areas and thus would be more likely to work in these places for long (11). Taking the case of Kenya as an example, the Kenya Medical Training College recruits applicants from all over the country and trains them in its 28 constituent campuses that are located in rural and urban settings in Kenya[9]. Those recruited into public service are deployed according to service need and rarely are their preferences considered. Thus in the case of Kenya, it is not clear whether there are other unstated reasons for MLWs staying longer in rural areas compared with their professional colleagues over and above that they may have been recruited from rural areas.

3.2.1.6. Evidence from Empirical Studies

There is now an increasing body of work that explores whether COs are competent to undertake tasks previously carried out by MOs especially with regard to surgical interventions related to obstetrics and gynaecology and providing care to HIV/AIDS patients. A significant amount of the work on CO competence has been done in Mozambique and Malawi.

Studies carried out in Mozambique exhibit a similar pattern to those done in other countries. Much of the work compares CO competence in relation to that of physicians with reference to provision of HIV/AIDS related care (88) and surgical interventions in obstetrics and gynaecology (1, 87, 89). Some differences between the studies exist where Pereira (87) added a longitudinal component to examine retention rates of physicians and COs in 34 government hospitals while Brentlinger and colleagues (88) added an observational element to their evaluation of COs work. At the district hospital level, Pereira and colleagues (87) found the retention rates of COs to be over 80 percent while that of MOs was zero percent. Brentlinger et al (88) found many COs did not adhere to the Mozambican national clinical standards that led to the revision of their training programme. Cumbi and colleagues explored opinions of 71 health workers using semi-structured interviews and 8 group discussions (of 2 hours each with mixed participants) regarding the capacity and performance of COs (1). Kruk and colleagues' study economically evaluated costs and productivity of surgically trained assistant medical officers and specialist physician in hospitals and health science training institutions (89). The studies reviewed here adopted a cross-sectional design and used mixed-methods to collect data (87-89). The exception was Cumbi et al's study (1) that used qualitative methods only.

[9] http://www.kmtc.ac.ke/KMTC-Campuses. Accessed 4th May 2011.

The population sampled and interviewed in all studies was mixed and included COs, clinical supervisors, nurses, physicians and health unit administrators. Cumbi and colleagues (1) found that COs were an important resource in increasing access to health care and their work was reviewed favourably by other health workers. This finding was echoed by Pereira and colleagues (87) who found that COs stayed longer in rural areas compared with physicians. In terms of their performance, all studies concur with the finding that COs clinical performance was similar to the performance of physicians.

However, some limitations with the Mozambican studies infer the need for more work. First, the numbers of COs interviewed in these studies were generally low and not provided in some cases. One study for example, though focusing on CO performance, gave more weight to the opinions of physicians and nurses over that of COs (1). The studies also raise issues that suggest the need for qualitative approaches to provide more nuanced answers. An example is the need to explore issues from the perspective of COs themselves so as to understand why they stay for longer in rural areas in order to understand what explains this behaviour. Lastly, the studies do not clearly outline how the methods were used to acquire the data reported.

A higher number of studies on COs are reported from Malawi. Unlike those done in Mozambique, the studies reviewed explored a broad range of issues and paid more attention to MLW's even though focussing on surgical interventions in obstetrics and gynaecology. The issues explored ranged from the influence of the work environment (90), the concept of organisational justice (91), management and motivation (23) as well as quantity of work done by COs (92), to the value of delegating tasks to COs (2). The methods used were both qualitative and quantitative and were generally well described with the studies adopting exploratory qualitative, retrospective and quantitative designs as required. Additionally, some of the studies explored perspectives of MLWs working both in government and faith-based hospitals resulting in a more representative view of MLWs in Malawi (92, 93).

Similar to Mozambique and other countries, MLWs were found to play an important role in increasing access to health care in Malawi (2, 23, 90, 91, 93) . However, though making an effort to discuss their findings in relation to COs, several limitations in the studies hinder this. The first is that the numbers of COs included in these studies were few. For example, one study using a self administered questionnaire explored the predictive value of work environment on satisfaction, motivation and performance among 153 mid-level providers of

whom only 13 (8.7%) were COs (90). Another study, using a self administered questionnaire to measure how MLWs in jobs traditionally done by higher-level cadres self-assessed their level of job satisfaction, explored these issues among 124 respondents of whom 13 were COs while 78 were enrolled nurses (91). Qualitative studies done to explore the issues facing MLWs also have the same limitation.

The second issue is that though the Malawian studies raise issues that may affect the motivation and performance of COs, more weight was given to responses by senior non-CO respondents than those of the COs (23). While the views of other respondents are important, it is just as vital to seek the opinion of the COs themselves over issues that affect them. The third issue, which is more of a missed opportunity, is that it would have been useful to explore variations in responses between faith-based hospitals and government facilities as in the case of McAuliffe and colleagues (90) study, data was collected in both institutions. A fourth issue raised by the Malawian studies is the importance of the work environment in motivating MLWs to perform (2, 90, 92, 93).

Studies on MLWs have been carried out in other countries including Uganda (94), (95), Ethiopia (96), Burkina Faso (97) and Tanzania (98) and are described hereafter. A quantitative pilot study assessing agreement between NPCs (nurses and COs) and physicians in their decisions as to whether to start anti-retroviral therapy (ART) was carried out in 12 government ART sites in Uganda (95). The study found moderate to almost perfect agreement between decisions made by NPCs with those of physicians in their final ART recommendation, suggesting NPCs competence to provide ART (95). In a study to assess the contribution of NPCs to comprehensive emergency obstetric care (CEmOC) in Tigray, Ethiopia, Gessessew and colleagues retrospectively examined registries and other official records for deliveries and obstetric interventions at 11 hospitals and 2 health centers with CEmOC status through a self administered questionnaire, interviewed patients and facilities in order to compare NPC with physician outcomes (96). Though NPCs performed the bulk of emergency obstetric procedures with similar outcomes to those of physicians, Gessesew and colleagues found the need to strengthen NPC training programs in emergency obstetric surgery vital in order to further reduce maternal and fetal mortality and morbidity in Ethiopia (96). Similar findings were reported in a study that examined the cost-effectiveness of caesarean-section deliveries by COs, general practitioners and obstetricians in Burkina Faso focussing on effects of training offered on essential surgery in that country (97). Though the

cost of deliveries done by COs were lower than those of general practitioners and obstetricians, their newborn fatality rates were high suggesting the need for refresher training and close supervision (97). Saswata and colleagues through a self administered questionnaire among 20 COs attending a clinical course, found that COs played an important surgical role in Uganda (94). They however asked for objective assessment of the extended role of COs to ensure that quality of patient care is not compromised in addition to a review of restrictive legislation regarding their work (94). Similar concerns over the influence of contextual factors were reported by McCord and colleagues in Tanzania (98). In their study that compared outcomes of emergency obstetrical surgery care by assistant medical officers and physicians in 14 government and faith-based facilities in Tanzania, they found a difference in quality of care between these two institutions though they face similar problems in service delivery (98). While McCord and colleagues (98) attribute the differences to contextual factors that they describe, no attempt to explore these was done.

Overall Limitations of MLW Studies Reviewed

The overall finding is that there is little empirical literature on NPCs. Much of what is available, though reportedly focussing on MLWs, combines MLWs with other non-MLW cadres making it difficult to determine what MLW opinions are on the issues being investigated. Further, there are fewer published studies available that focus on COs exclusively. Many of the studies exploring issues facing COs either are of a comparative nature (COs versus physicians) or have classified COs with other MLW cadres such as enrolled nurses. Additionally, there are contextual differences between the countries being studied that require further work to explore the influences of these differences on the performance of COs. For example, while Malawi and Mozambique face an absolute shortage of health workers, the same cannot be said of Kenya and Tanzania that have adequate numbers of qualified health workers who are not able to find employment. Thus, there are three major issues investigated in this thesis that will add to the existing literature as outlined below.

First, the literature reviewed above on NPCs suggests that much attention has focused on whether NPCs 'perform', referring to their technical proficiency in accomplishing given tasks measured against preset standards of accuracy, completeness, cost, and speed which can be measured in terms of *end-points or outcomes* (99, 100). Constructed this way, performance takes on a more evaluative nature examining how well the worker accomplishes measures such as waiting times; performance of specific technical tasks; and, 'good' use of hospital tools and

equipment (e.g. non frivolous use of laboratory services), among others (99-101). The other aspect of the literature that has received less attention but is no less important is whether the technically proficient NPCs will perform (42), (85). Though efforts to ensure NPCs (or other groups) are technically proficient so that they *can* perform are perhaps vital, placing competent people in posts does not necessarily mean that they *will* perform, particularly at scale in a national health system. Some of the personal, organisational and wider system factors that may explain why there are gaps between what a CO can do and what they will actually do are described in the conceptual framework. These include motivation, availability of resources and other supports (78), (79), use of incentives and sanctions (6), and management style, among others (15), (31). These factors, in contrast to technical or task specifications are sometimes collectively termed as non-technical (or systems 'software') and are deemed critical for ensuring sustained, consistent and good performance (4, 99, 100, 102-104). There are multiple possible approaches to investigating the 'software' aspects of a health system. These extend through approaches based on organisational or social theory (4, 38, 78, 105) to anthropological frameworks of how actors (i.e., health workers) 'perform' their roles, and engage in 'rituals and routines' in ways that sustain or resist the status quo in organisational culture (106). Information on how technical and non-technical aspects combine to influence the everyday functioning of COs in routine hospital settings is required.

Second, the predominant method used to explore issues related to MLWs as shown above is biased towards the use of quantitative approaches to identify a number of issues facing COs (23, 90, 93) with some of the issues raised explored qualitatively (91), (92). While such approaches are useful, their findings are limited by the fact that the methods of acquiring these data is at times not explained. In some qualitative studies, the number of COs interviewed was rather small or not mentioned at all. There is thus a need for studies that have an exclusive focus on COs but also compare and contrast their responses with those of other colleagues working in the same settings.

Third, while several studies did explore issues faced by COs working in both government and faith-based hospitals (92), (98), they did not compare and contrast their findings by institution that could enhance the findings. For example, the study carried out in Tanzania found better care being offered in faith-based hospitals as compared to government facilities but does not offer any explanations for this (98). As such, exploring reasons why faith-based hospitals might provide better care than government funded facilities would be useful in identifying

factors that perhaps can be applied in public hospitals to improve the care offered.

3.3. Exploring Performance

A number of theoretical approaches have been developed to understand worker performance. From a review of these, performance as a concept appears to have no uniform or simple definition, with definitions often depending on the disciplinary approach adopted e.g., psychology, social science or managerial science. Performance can also be considered at different levels with analysis at individual, organisation, system or societal levels (104, 107-110). Also, it is noted that no one theory is dominant and even among theories drawn from a single discipline, there may be little consensus. Since public health does not have a 'performance theory' per se, this study drew on an eclectic body of theory found in management and psychological disciplines that were considered to be useful to explore individual performance and influences on it among COs in Kenya. Most measures utilised to explore health worker performance, for example workload per individual, improvement in mortality or increasing service coverage per population, focus on outcomes or outputs which are relatively easy to count and thus useful when painting a picture of how well a health system is functioning or performing. However, these do not always tell us much about how individuals perform, whether what they do is good or bad, and what influences this. Hence there is also need to adopt approaches that can explore individual and team performance and, if the aim is performance improvement, how these are influenced by different contexts. In order to understand performance, respondents were asked to state what they understood it to be. Their descriptions were then allocated either to task or non-task performance, issues that are the focus of the next section.

3.3.1. Task and Non-Task Performance

The conceptual framework (Figure 3-1) suggests that the outcome of the interaction between institutions and individuals is observed performance, which in this thesis is explored through the use of the task and non-task performance approach. Borman and Motowidlo (111) conceptualize the performance of any job as having two aspects; task performance and non-contextual performance (which in this thesis is labelled as non-task) (99, 100, 112). Both task and non-task performance have been shown to have effects on valued human resource measures including turnover, job satisfaction, rewards, and overall ratings of performance by supervisors (99) and are described in brief below. The job performance construct indicates

how well employees perform their tasks, the initiative they take and the resourcefulness they show in solving problems as well as showing the extent to which employees' complete tasks, the way they utilise available resources and the time and energy they expend on their tasks (113).

Task performance is defined as "the proficiency with which incumbents perform activities that are formally recognized as part of their jobs, activities that contribute to the organisation's technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services" (111). It represents a job's substantive duties and tasks that differentiate one job from another (99, 100, 111, 114). Two major activities in task performance can be derived (99), (100):

- Conversion of raw materials into goods and services that constitute the products of the organisation. For COs, this would be to deliver care of an expected technical standard in line with good clinical practice, also encompassing the therapeutic relationship, and making optimum use of resources, and,
- Activities that maintain and service the technical core of the organisation. For COs this might include appropriate care and other professional services, supervision of junior staff, and timeliness amongst other activities.

Non-task performance describes discretionary behaviours (100). These behaviours may not formally be specified as comprising part of any particular job, yet help to form the social, psychological and organisational context of all jobs (111), (99). As such, they are typically conceptualized as being under the motivational control of individuals and less constrained by work characteristics than task performance (100), (111). Non-task (contextual) performance is considered critical to effective organisational performance as behaviours involving persistence, effort, compliance, and self-discipline might enhance the effectiveness of individual workers and managers (115), co-workers' and supervisors' productivity (116). Non-task performance comprises of several dimensions that include (111), (100):

- Conscientiousness (behaviours towards work) - conscientious individuals are hardworking, achievement oriented, perseverant, they tend to do what needs to be done to accomplish work, are dependable, careful, thorough, responsible, and organized.
- Job dedication (behaviours towards the organisation) – comprising of behaviours such as following rules, taking initiative and acting in ways to enhance the organisation's

reputation.

- Interpersonal facilitation (behaviours towards colleagues) – which include helping, cooperating and volunteering.
- Counter-productive work behaviours (CWB) – which includes negative behaviours such as property damage (including theft and misuse of resources), substance abuse at work, rudeness, lateness, absenteeism, social loafing and turnover.

This conceptual delineation of aspects or attributes of performance that might be expressed within a working role was a useful starting point for exploring individual CO performance. At the hospital level, it is posited that one views jobs as having two aspects; technical (the aspect of occupying a defined substantive position in an organisation), and, social (that any job has social expectations which are also influenced by interactions within and between cadres) (117). While the technical aspects for COs are relatively clear[10], the social aspect is less so. Of interest therefore, would be to explore the prevailing perceptions currently held of COs at different levels of and by different groups within Kenya's health system. In particular, to learn about the effects of interactions between organisations and individuals or groups it may be particularly useful to explore differing situations or work environments in which 'natural experiments' are essentially being conducted in different settings or for different providers (10, 15, 118).

3.3.2. Ability and Disposition to Achieve Organisational Goals

In the work context, motivation can be viewed to be an individual's degree of willingness to exert and maintain an effort towards organisational goals (78). To achieve organisational goals, individuals within an organisation have to be aware of what is deemed as task and non-task aspects of their work as described above. For health workers to carry out both task and non-task activities, organisations need to influence their motivation in two ways: (a) by affecting the extent to which they accept and adopt organisationally prescribed tasks and non-tasks aspects as personal goals ('will do), and (b) by affecting the extent to which health workers effectively mobilize their resources to accomplish joint goals ('can do') (78). Thus there is need to know whether health workers are able (can do) and disposed (will do) to exert effort to achieve organisational goals as shown in Table 3-1 below.

[10] With reference to literature that reviews COs technical competence.

Table 3-1: Ability and Disposition to Work

Can Do Task	**Will Do Task**
Can Do Non-Task	**Will Do Non-Task**

The 'can do task' and 'will do task' aspect is relatively less complex as a number of human resources management tools are available to get heath workers to do them (78). Focussing on the 'can do' aspect, Franco and colleagues outline issues such as recruitment procedures that ensure a fit between the tasks required of individuals and the skills and knowledge that they bring to bear on these tasks; staff development to make the worker better able to perform the tasks expected of them; and, supervision and performance assessment processes to enable corrective feedback to workers on performance (78). As for the 'will do' aspect, actions such as good communication to make health workers to be aware of organisational goals, and of the role which they are expected to play in achieving these goals; and offering various incentive packages such as salaries, bonuses, promotions, performance-related pay, sanctions and training opportunities are available and can be used as appropriate (78).

The 'can do non-task' and 'will do non-task' aspect is far more complex for the simple reason that much literature has focussed on the task aspects of work and less on the non –task aspects of work as detailed previously. Here, the question is whether the heath worker has ability and is willing to successfully manage the non-technical aspects of their work life. Schneider and colleagues call this ability 'social competence' and comprises of traits such as agreeableness, social influence, openness to experience, social knowledge and socially appropriate behaviour (119). The key issue here is whether health workers are knowledgeable about social competence as to our knowledge, it is not taught in any school curriculum yet is an essential component of organisational life. A further question is whether organisations value it (and thus clarify what it is and require its practice) and if health workers are willing to translate their knowledge of the rules of social interaction into appropriate social behaviour (119).

3.3.3. Perspectives on Individual Performance

Task and non-task performance that is derived from what institutions want of their workers and the 'can do' and 'will do' aspects which refer to what individuals can offer suggest an interaction between employees and their employer. Sonnentag and Frese's (104) work is

particularly useful (Table 3-2) to guide the exploration of this interaction with a specific focus at the individual level. As shown in the table below, three perspectives have been used to study performance: a) an individual differences perspective that suggests that the sources of variation in performance arise from individual differences; b) a situational perspective which focuses on factors in an organisational setting that can hinder or facilitate performance; and, c) a performance regulation perspective which describes the performance process as comprising of issues at the process and performance management levels. For each of three perspectives, core questions and assumptions underlying the core questions that can be linked to potential explanations and thus interventions that can be put in place to improve performance are described (104).

Table 3-2: Overview of Perspectives on Performance

	Individual Differences Perspective	**Situational Perspective**	**Performance Regulation Perspective**
Core question	Which individuals perform best?	In which situations do individuals perform best?	What does the performance process look like? What is happening when someone is 'performing'?
Core assumptions and findings	Cognitive ability Motivation and personality Professional experience	Job characteristics Role stressors Situational constraints	Action process factors (sequential aspects accomplishing a job) Adequate hierarchical level (reflecting the structural elements of work e.g., a CO cannot do heart surgery as this is above his/her level)
Practical interventions to improve performance	Training Personnel selection Exposure to specific experiences	Job design	Goal setting Feedback interventions Behaviour modification Improvement of action process Training Job design

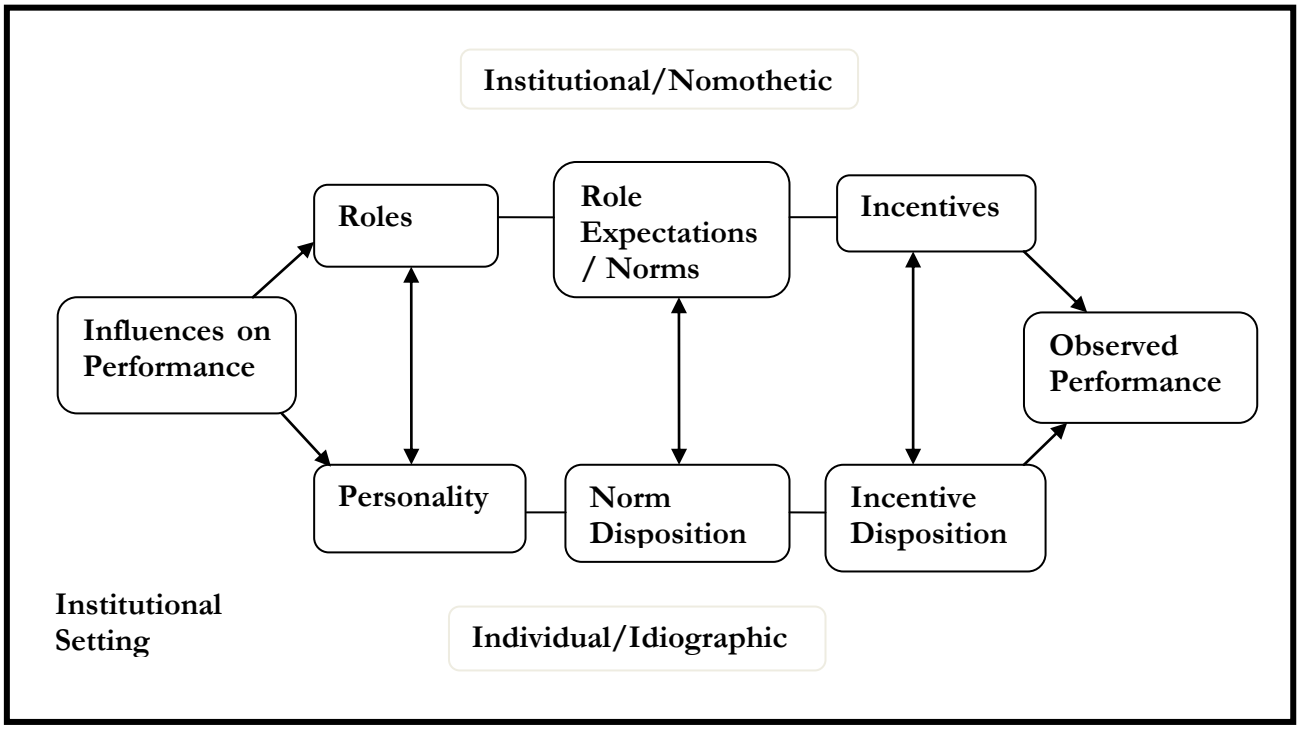
Source: Sonnentag and Frese (2002).

The conceptual framework used in this thesis has two aspects, the institutional and the individual (Figure 3-1). The importance of Sonnentag and Frese's work is that its individual differences perspective provides pointers to issues that can further be explored in the individual dimension of the conceptual framework while the situational perspective outlines questions to be explored in the institutional dimension. In addition to these, Sonnetag and Frese add a third dimension that explores the relative influence of performance management interventions (incentives and sanctions) and the effort that individuals put in their work (process) (104). The process regulation idea is further developed in the task and non-task area- whether individuals know what they should do.

3.3.4. Influences on Individual CO Performance

The section above describes a way of exploring and understanding observed performance among COs in Kenyan district hospitals. This next section conceptually explores the various factors influencing CO performance in district hospitals. Getzels and Guba's Model (120) which conceptually delineates the interaction between organisations and individuals forms the basis of this thesis' conceptual framework and is described in Figure 3-1. The framework is informed by considerations on how to explore individual performance as outlined by Sonnentag and Frese (104) and the task and non-task performance approach. These issues are dealt with in turn hereafter.

Figure 3-1: Influences on Individual Performance



Source: Adapted from Getzels & Guba (1957) and Sonnentag & Frese (2002).

3.3.4.1. Nomothetic - Idiographic Model

The nomothetic-idiographic model is a useful framework for studying and understanding behaviour in a hierarchical setting that is a social system (121), (122). Drawing on sociology, the term social system is seen to be conceptual rather than descriptive, referring to 'an aggregation of individuals and institutional organisations located in an identifiable geographical location and functioning in various degrees of interdependence as a permanent organized unit of the social order' (122). It can be characterised by the interdependence of

parts, their organisation into some sort of whole, and the intrinsic presence of both individuals and institutions (122). Analytically, a social system has two interdependent but interacting dimensions, the nomothetic (or normative) and the idiographic (or personal) (121), (122). The institution (nomothetic dimension) consists of roles, role expectations/norms and incentives (and sanctions) (122). The purpose of these factors is to address the goals the institution. As such, any institution has four common but important characteristics (121), (122):

- Purpose. Institutions are established to carry out certain goals and are legitimized by their users on the basis of these goals.
- Structural. Institutional goals are achieved through the diversification of tasks that are described and assigned certain responsibilities, resources and authority for implementing the assigned tasks. They are careful to state that roles are filled with actors rather than personalities.
- Normative. The behaviour of any individual occupying roles in an institution is prescribed by the role they occupy. The individuals are expected to behave in certain ways in order to justify their position in the institution.
- Sanctions (and incentives). In any institution are tools (positive and negative) that can be used to ensure compliance with the established norms.

Within the institution are individuals (idiographic dimension) with certain personalities, need dispositions and motivational dispositions (121). By occupying the roles (job positions) in the institution, they help it to achieve its goals. Inherent in the model is conflict that may simply be defined as the 'mutual interference of parts, actions, and reactions in a social system' (121), (122). The problem of conflict in the nomothetic-idiographic model does not mean that its approach is more prone to discontinuities than any other but rather that it enables it's users identify certain systematic sources and types of conflict (122). Knowledge of these can help illuminate significant day to day practices for systematic investigation and in so doing find possible solutions that may enable organisations to function more smoothly (121), (122).

The nomothetic-idiographic model is similar to other organisational theory based approaches dealing with human behaviour in an organisation such as the agency dilemma (123), motivation (78), and incentives (124, 125), among others.

3.3.4.2. Description of the Framework

In this subsection, the various elements making up the conceptual framework are described.

Roles

Roles are the actions and activities assigned to, required of or expected of a person or a cadre in a substantive organisational position (117), (126). At the institutional level, roles are derived from tasks that are developed to achieve an organisation's goals and purposes. Each role has given responsibilities, resources, authority and facilities for implementing the assigned tasks (117), (120). It is thus clear that it is the duty of the organisation to facilitate its employees to achieve its goals and purposes. Each role in an institution requires an individual to carry out the tasks assigned to it. Role conflict is a type of social conflict resulting from an individual being forced to take on separate and incompatible roles. In organisations, role conflicts occur as a result of different issues such as multiple obligations to different groups and people, individuals having conflicting responsibilities and when individuals are required to perform conflicting tasks. How well individuals manage these conflicts depends in part on their personality. Some individuals are able to cope with the conflict while others cannot.

While COs are acknowledged to be a critical component of the health care team in many countries, there is little literature available that describes who they are and what they do. The sparse literature available suggests that they play a distinct and important part in the day to day delivery of health services (2, 10, 93). While initially, the work of a CO comprised of diagnosis and treatment of patients in primary healthcare, this has since expanded to include administrative duties, provision of specialist services (e.g., surgical procedures or HIV care) especially in rural areas that are classically regarded as being in the purview of medical professionals based in larger health facilities (87), (127). In Kenya currently, COs offer services from lower level facilities to national teaching and referral hospitals and the advent of higher diploma training in specific areas has seen them take on the role of 'specialist' in a number of settings (10). However, beyond these general descriptions of what roles COs may play in the health system, what they actually do, their opinions of this, how it impacts on their day to day practices and how this impacts on their long-term performance is little understood.

Personality

Personality is defined as the dynamic organisation within the individual of his dispositions that govern his unique reactions to the environment (120). Disposition is viewed as individual tendencies (such as personality characteristics, needs, attitudes, preferences and motives) to orient and act with respect to objects (e.g., characteristics of the job, the organisation and co-

workers) in certain manners and expect certain consequences from these actions (113), (120). For many years, many authors have been sceptical whether personality predicts performance positing that personality measurements are not useful for understanding job performance (113), (128). Recent work has however shown that well-constructed measures of normal personality (now known as the big 5 personality traits[11]) are valid predictors of a wide range of occupational performance, and they can be linked to performance defined in terms of productivity (113), (128).

Employees' personality was not directly examined in this thesis. This was because the public sector does not investigate the personality traits of new recruits before hiring them into the civil service. This is not the same for the FBH hospitals that did actively seek to recruit employees whose personality could fit in the relatively restricted work environment. Due to this position, I used the task and non-task performance categorisation to explore perceptions whether COs worked well or not and in which situations that may indicate which personality traits were prevalent in either public or FBH settings.

Role Expectations/Norms

For each organisational position, there are expectations about appropriate behaviour and performance which can be formally stated or informally learnt (117), (126).These role expectations or norms provide guidance on how activities should be carried out and prescribe behaviours tolerable for that position (120), (117). Explicit norms for COs in Kenya are drawn from legal (e.g., CO Act - CAP 260 of the Laws of Kenya (53)) and policy statements (Second National Health Sector Strategic Plan II-2005-2010 (39)); Norms and Standards for Health Service Delivery (51)). COs, as members of the medical fraternity, are also subject to the Kenya Medical Practitioners and Dentists Act (CAP 253 of the laws of Kenya (129)). In addition, COs are subject to the general Code of Regulations for the entire civil service that describes pay regimes and rules of day to day conduct among other rules and regulations (59). Implicit norms can be seen as a part of the cultural values or expectations in play at the workplace (78), (15). For example, it is possible for workers to have a separate informal set of values and objectives parallel to those formally espoused by the health system (130), (131). An examination of the alignment of implicit and explicit norms associated with performance may be especially important to make sense of CO's behaviour as individuals and as a cadre.

[11] The big 5 personality traits are neuroticism, extraversion, openness to experience, agreeableness and conscientiousness

Norm Disposition

While role expectations or norms exist to guide behaviour and practices in an organisation, it is known that individuals have their own idiosyncrasies and will in any position, try to either adapt to and/or modify these rules and regulations to fit in with their needs and personality. While the range of behaviours that can be tolerated is not wide, literature does suggest that individuals can (and do) interpret the hospital's rules and regulations regarding a position to favour their needs and personality. Employee's behaviour towards the prevailing norms in an organisation can be referred to as their norm disposition. Justifying the importance of norms is the argument that should organisations consciously set and enact appropriate norms in any work environment, all groups would prove more productive and less conflicted (132).

Three types of norms found within organisations may be of particular interest; obedience, commitment and reciprocity (133). The norm of obedience requires employees to obey legitimate authorities and to take responsibility for their work. Commitment as a norm requires individuals to stand by their agreements and fulfil their obligations which tend to foster group cohesion and support (134), (133). In Mozambique for example, variations in interactions between COs and medical doctors have been reported where poor working relationships exist in some sites (resulting in COs having high workloads) and the reverse in others (1). The norm of reciprocity directs individuals to return to others goods, services and concessions they offer to them. Conversely sometimes, norms can be used as a method of resistance (reactance) which undermines performance (133).Thus, the nature, existence or lack thereof of norms (whether explicit or implicit) can be used to explore how COs as individuals and groups interact with their setting or organisation to influence performance.

Incentives

In addition, there is need to explore at the institutional level whether organisations also adopt approaches that meet an employee's needs. These approaches can generally be described as incentives (and sanctions), which may be generally thought of as tools used to improve motivation, direct effort appropriately, direct sanctions if needed and thus improve individual and aggregate performance (6, 14, 15, 21, 103, 135) . In general, literature views incentives to be of two types, financial and non-financial (136) and each can have intended and unintended effects (14). Financial incentives may be direct (salary, pension, transport allowances) or indirect (subsidised meals, childcare facilities, and support for further studies, etc) (6), (136). The critical importance of incentives however, is that they may in theory be used to manage

the tensions between individuals' or cadres' demands or aspirations that may well conflict with the idea of, or system requirement for, a worker fitting and performing well in a specific technical role. Thus from the system point of view, and perhaps particularly for cadres occupying mid-level worker niches, the desire would be for continued high performance at a specific level in a specific location – the durable, fixed, cog in the machine. The degree to which these tensions are apparent, how incentives are implemented and their success (or not) to manage them would seem to be key questions when considering who to sustain a well-performing CO cadre.

Literature indicates considerable attention has been given to the use of financial incentives in recruiting, retaining and improving performance of workers in health systems (137-141). There is however, less reported experience of their utility in improving performance in low income countries. In some examples where such incentives have been provided, staff performance has improved as experienced in Guinea Bissau (138) and Rwanda (142), (143). Further, the lack of performance-related rewards and recognition are perceived to be particularly de-motivating in Malawi (93), Kenya (10), North Vietnam (144), Mali (5), and Armenia (25), among other countries. However, careful attention may need to be paid to the process of implementing financial incentives (145) as they can have unintended, perverse effects (10, 14, 142, 146). For example additional salary supplements such as hardship allowances in Kenya, may cause resentment if not given to all cadres (10) or might result in workers paying attention to the areas attracting the supplements and neglecting those without (143).

While recognising the potential value of financial incentives there is also an increasing trend in the literature promoting the use of non-financial incentives (e.g., (6, 145)). These can include praise and recognition, career breaks, study leave, provision of recreational facilities (among others) which have been shown in some settings to be valued highly as well as financial incentives (1, 6, 25, 93, 124). Although it should be noted that some of these are often an indirect financial incentive since their provision has a financial cost to the employer (for example study leave may require locum cover). Other incentives such as upward career progression may also be motivating but have been seen to move staff members away from patients and into managerial roles, or make them unaffordable or over-qualified for the roles actually needed (14). Appropriate policies may therefore need to tailor incentives to specific cadres and levels of the health system (68).

Incentive Disposition

Incentive disposition pays attention to how individuals in an organisation value and respond to incentives and sanctions available in a setting. From a valuing perspective, the notion here is exploring the range and type of performance management activities in place that organisations use to encourage workers to have positive dispositions towards the organisation (104). The response perspective focuses on how employees respond to the prevailing performance management environment in their work places. Studies in two low income settings (Vietnam and Mali) suggest that performance management activities are not well implemented leading to poor performance (144), (5). This response can be examined by exploring the way individuals carry out activities that combined form the whole of a particular task. In the case of COs, the focus is on health service delivery that comprises of task issues (diagnosis, examination, investigation, and treatment) and non-task issues (collaboration, cooperation, etc). Thus, understanding whether organisations support individuals to achieve organisational goals is also important.

Work Environment

While financial incentives, at least in a public system, are most likely to be centrally determined and implemented, the potentially powerful influence of incentives attributable to the organisational contexts of work may be considerably more varied even within nominally the same system (15, 90, 135, 147). Thus the characteristics of the organisational setting (e.g., its reward / recognition systems, ownership of goals, or degree of formalization) in which the employee works may all influence performance (93), (147). This means that more attention has to be paid to ensuring that institutions identify and adopt features that motivate workers which in turn influences them to perform.

There are reports from health care settings suggesting that the type of facility in which the provider works has been associated with good performance in Armenia (25) and Tanzania (24), (148), with similar anecdotal experience in Kenya. Further it may not only be the type of facility but the management styles or provider schemes of service that are conducive to good performance as is suggested by comparisons between the faith-based and government sectors (24). Interestingly such differences may be observed despite the fact that faith-based facilities may pay their workers lower salaries (146).

In particular it has been suggested that organisations that ensure clear job expectations,

provide performance feedback, the environment and tools, knowledge and skills that enable good performance can achieve good performance (15, 25, 134, 135, 149). Further support for this idea is work that suggests that immediate managers practising forms of supportive and inclusive management, creating working environments where staff can practice to a high professional standard, and enacting cultures that promote teamwork, openness and collaboration are important factors that could be used to motivate workers to perform (15, 21, 147, 150, 151). As an example, although focusing on retention among FBH employees in Kenya, Mwenda and colleagues (152) found that factors such as good management (26%), a clean environment (20%), being closer to home (18%), and availability of supplies (18%) promoted retention.

The importance of getting the context right is further illustrated by findings indicating that even where workers are clearly committed to work that this can be prevented by difficult working conditions (24, 28, 93, 153). This is not just a result of inadequate resources. Poor working conditions are thought to decrease employee concentration and result in low productivity, poor quality, physical and emotional stress (10, 35, 77, 99, 154). As COs, an example of a long-established task shifting approach, are and are likely to remain a critical element of Kenya's health system such observations therefore raise the question of what can we learn about approaches to optimise the performance of such a cadre from an understanding of their current functions and the influence of context on these functions and their performance.

3.3.4.3. Analytical Questions Arising From The Framework

Based on the conceptual framework, five overarching analytical questions were developed to interrogate the data. The answers derived from the interrogation of the data form the result chapters of this thesis. These analytical questions are described hereafter.

The Interaction between the Individual and the Institution

Inherent in the Getzels-Guba model is the tension between what the institution demands and what individuals feel they can or are motivated to do. The tension reflects the institution's need for its employees to be efficient and effective (i.e., good performance) versus whether the individual feels motivated to achieve these goals. The first set of analyses thus explored

whether there was coherence between the institutional and individual levels. Following Kerr[12] (135), the exploration here involves examining whether what the institution desires and what individuals do in reaction to institutional desires match or contradict each other.

Task and Non-Task Performance

The next set of analyses seeks to understand whether individuals can differentiate between task and non-task performance. Here, the analyses sought to examine whether performance expectations are known and communicated; how the institution deals with discrepancies and the reactions of individuals to this. This will end with an assessment of which factors at institution or individual levels, contribute more to the observed performance seen. If it is the individual, then organisations should put more effort into selecting and retaining personnel whose convictions are similar to their own. If it is at the organisational level, then more effort should be put into creating environments where any individual with an interest similar to that of the organisation is encouraged to perform.

The Difference between Settings

The perceived variability in CO performance between those working in GOK and FBH facilities is a major issue that was explored in this thesis. Data was interrogated to find out whether the perceived variability in performance could be attributed to features found either in GOK or FBH facilities. The analysis further explored differences in the clinical settings where COs work, identified to be the outpatient department (OPD), specialist clinics (SC) and vertically supported programme clinics (VC) such as HIV/AIDs and TB clinics. Here, explorations of how roles, norms and incentives are formally espoused or informally practised by respondents in each setting where COs work were done in order to identify mechanisms that could perhaps be used to positively influence performance.

The Interaction between Roles, Norms and Incentives

This explored whether there was coherence between roles, role expectations/norms and incentives at the institutional level. To begin to explore the issue of performance variability between settings and institutions, a review of documentation on COs focussing on

[12] Kerr (1975) states that organisations concerned with production should not expect results similar to those achieved in firms concerned with people. This is supported by Blake and Mouton (1964) who find organisations to exist in a continuum that ranges from those that are either concerned with people or concerned with production, and argue that many organisations do combine aspects of these two features.

descriptions of their roles, expectations/norms and incentives was done. The main focus here was to examine documents from the Government that provide guidance to the entire CO workforce regardless of whether they are employed in the public, faith or private sectors. The information drawn from this exploration was supplemented with information drawn from hospital level documents that specify what that particular facility required from its employees. This account was contrasted with accounts from respondents on the frontline regarding their perceptions of the roles, norms and incentives as written or as applied in the settings they work in. This was done in two ways; first, by examining roles, norms and incentives in detail in chapters five through seven in order to allow a deeper examination of each core area. Second and drawing on the results chapters is a crosscutting discussion of roles, norms and incentives in the discussion chapter.

Influence of the Broader Context on the Study

Though exploring influences on the performance of COs in Kenyan rural hospitals in various ways as outlined above, it is important to recognize and explore influences arising from the broader context of the study that include among others, incentives offered by the system to COs, and effect of professional and regulatory aspects on COs work, etc. This appreciates the fact that COs as professionals are not only accountable to their local facility managers, but also to the system through the professional and regulatory bodies that oversee their professional life. Further, what influences their work is not just at the hospital where they work but also can arise from the system. These are issues that are discussed in Chapter's Five and Seven of this thesis.

3.3.4.4. Application of the Getzels-Guba Model

Though Getzels and Guba's model was formulated to explore administrative issues in the education sector, it is still a helpful approach to use in the health sector as our interest is in exploring how features of the hospital as a social system work to encourage COs to perform. Like the education sector, hospitals employ professionals to produce services and have a service orientation (155). For purposes of this thesis, the conceptual framework serves three purposes. The conceptual framework for this study is based on review of relevant literature and understandings acquired from the pilot phase of the study. The appropriateness of the conceptual framework is seen in terms of providing a common language from which to describe the phenomenon being explored and to report the findings about it as follows (156) (157). The framework enabled the exploration of the tension between what health workers do

which might differ from what is formally stated and required of them. Focussing on the institutional level, helps to describe what the system formally wants or expects in terms of task and non-task performance; what the administrators want or expect in terms of task and non-task performance; explore whether norms and CO behaviours vary depending on the work environment; and, explore the nature of levers (incentives and sanctions) that are used to direct performance and the extent to which they function as intended. At the individual level, it helps describe what COs feel is reasonable to deliver in terms of task and non-task performance, taking into account the influence of their personality and need disposition. Also, the conceptual framework allowed me to interpret why performance might vary between different hospital settings. Also, the key components of the framework provided a series of reference points from which to derive the research questions and subsequent theorising and finally, provided the structures within which to organise the content of research and to frame conclusions within the context.

3.5. Conclusion

> "When looking for ways to improve performance, we have found nothing works so well as talking to health workers themselves. Their ideas are just amazing. They will tell you what to do".
> Director of Human Resources in Africa (WHO, 2006:81)

While literature exists that suggests what can be done to improve health worker performance, much of it is drawn from high-income countries suggesting a need to undertake similar studies in low - income countries. This literature rarely addresses the specific challenge of performance amongst those in roles created as a form of task shifting. The current literature on COs dwells much on their technical competence to undertake tasks previously carried out by doctors with little attention being paid to the much wider issues affecting their work performance. This thesis does not seek to measure performance. Instead, an investigation of how CO performance in routine work settings in Kenya is understood and perceived by COs themselves, the system generally and their professional colleagues using explorations of explicit and implicit roles and norms as a lens is undertaken. Also, additional work was done to explore what workers felt influenced their performance by exploring specific contexts within which COs work.

Previous literature on work exploring COs in low-income settings and that informing theoretical approaches has been examined that helps offer a means of understanding what it is to be a CO and how their work and performance might be shaped. Within the work is an

appreciation of the nomothetic-idiographic dimension which illustrates the tension between what is formal and what actually gets done. The value of examining work performance as being made up of task and non-task (contextual) performance components is discussed and draws on theories that help unpack the interactions between individuals and their setting. These may be drawn together to help understand how work contexts that differ in organisational structure and culture, and locally constructed, day to day working definitions of roles and norms may influence performance. To examine these complex inter-relationships a qualitative approach is adopted. The exploration of issues such as the niche's COs occupy, how these are defined and constructed and how performance might be influenced by examining COs and their work in routinely occurring but different settings or contexts was also undertaken. The work aimed both at understanding the challenges as well as identifying potential solutions to better performance of CO's in Kenya and more generally at drawing lessons to influence policies and strategies related to task shifting, particularly related to non-physician clinicians.

Chapter 4. Methodology

4.1. Introduction

In the previous chapter, relevant literature on HRH, mid-level workers and non-physician clinicians (as an example of mid-level workers) has been reviewed. The review suggests the need to explore COs as an example of non-physician clinicians and in particular, to understand how they work. This chapter now describes the specific methods used to produce this understanding. The chapter begins by providing an overview of the study design and the theoretical commitment embraced. Next, an overview of the study settings and the strategy utilised are described following which the fieldwork experience is outlined in terms of the data collected, analysis, and interpretation. Then the strengths and limitations of the entire approach are reviewed in addition to ethical concerns for the study.

4.2. Exploratory Multiple Case Study Design

Understanding COs requires an analysis of the context and processes that illuminate factors that influence CO performance in their work settings (158), (159). In this sense, the exploratory multiple case study design was adopted. The design allows the exploration of COs (as the subject of interest) in their natural environment as a contemporary phenomenon (160), (161). The study design also allows the generation of detailed information on COs that is invaluable for understanding every day practices and their meanings to those involved (159), (162). To acquire this data, qualitative methods were used because they are well suited to generate information from a variety of respondents, appreciating that little information on COs in Kenya currently exists (158, 161, 162). The methods used were primarily qualitative in nature and included participant observation, key informant and in-depth interviews, and document review. Three reasons underpinned the methods chosen for the study: first to help respondents reflect on their day-to-day practices and experiences beyond mere narration of accounts; and second, to enable me to play active role in breaking down the notions of performance and norms light of the difficulty of respondents to engage with these concepts as observed in the pilot phase. Third, the tools enabled the collection of data from multiple sources of evidence which in this case included GOK and hospital level documents, COs, their colleagues, supervisors and policymakers (160). Included in the study design was an emergent design flexibility, enabling the researcher to be open to adapting the investigation as understanding increased and/or as situations changed (163). Thus the researcher is able to avoid getting locked into a rigid approach that eliminated responsiveness and the pursuit of

new paths of discovery as they emerged (163).

A review of other studies that used qualitative approaches to explore issues related to COs supports the adoption of these methods .Many of these lumped COs with other mid-level cadres making it difficult to tease out what COs themselves felt about the issues being studied (23, 93). An example of such a study was done by Manafa et al (23) who used focus group discussions to explore the retention of health workers in Malawi. No indication of the proportion of respondents who were COs was given (23). Bradley and McAuliffe (93) also report findings from a study that explored the factors affecting the performance and retention of mid-level providers in Malawi. While they state that they used focus group discussions to explore these issues among nurses, medical assistants and COs, they do not indicate how many COs participated (93). Yet, most of the quotes used to support their arguments cited COs. Further, these and other studies have focused on COs without appreciating the fact that they are not a homogenous group since COs can be sub-divided in to specialists, generalists and interns. Each of these sub groups has its issues which also need to be understood.

Using qualitative approaches, various assumptions about COs (e.g. that they will work happily and continuously in niches carved out for them by policy and in practice by system managers) and the places they work (e.g. better CO performance seen in FBH facilities is because they are different from GOK facilities) could be explored. Talking to COs and other respondents clearly highlighted the tension between what they want and what the system wants and that the tension could be managed to a degree depending on the ability of facility managers to create a working environment that supports COs (and others) to perform as desired. Further, while acknowledging the importance of financial incentives, the study revealed that non-financial incentives did have a major role in improving CO performance, an issue that needs to be considered in GOK sites. The study also outlined the need to manage the images held of COs as these seemed to influence the amount of resources as well as support that enabled COs to work well and the respect accorded them by colleagues.

In this thesis, case studies were both the public and faith-based hospitals as well as the settings within them in which COs worked. Three settings within the hospitals were indentified: outpatient department (OPD), vertically supported clinics (VCs) and specialist clinics (SCs). These were located in six hospitals chosen from both public and faith-based hospitals. A number of authors suggest the need to undertake case study research in multiple informative

contexts since they facilitate a deep understanding of how the issues under examination (i.e., roles, norms and incentives that influence performance) interact with the context thus influencing each other (90, 159, 164, 165). Complex interventions literature also supports this approach, showing that different contexts can create different outcomes despite apparently similar inputs (164-167).

The analytical process involved the use of a deductive analysis approach that allowed for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action [Elo, 2008 #377]. Deductive analysis is used when the structure of analysis is done on the basis of previous knowledge. In the case of this thesis, the study sought to examine the roles, norms and incentives that influence CO performance, issues that were the subject of previous knowledge. The deductive analysis approach supports open–ended interview approaches thus allowed me to undertake in-depth interviews with people who have directly experienced the phenomenon of interest [Elo, 2008 #377] (163). The approach also allowed for the exploration of several cases where first, individual cases are constructed, followed by cross case analysis to search for patterns and themes that cut across individual experiences. This helps ensure that emergent categories and discovered patterns are grounded in specific cases and their contexts (168).

The entire approach was informed by the phenomenological tradition that posits the need to explore how people make sense of experience and transform experience into consciousness, both individually and as shared meaning (163, 169, 170). Phenomenology studies relevant subjective, practical, and social conditions as experienced from the first-person point of view (163, 170, 171). The goal of phenomenology is to reconstruct the worlds of individuals (in our case COs), their actions and the meaning of the phenomena in those worlds to understand individual behaviour (169).

4.3. Study Sites

The focus of this study was COs who mainly worked in district hospitals. District hospitals serve a population of between 100,000 to 300,000, and form an intermediary between primary care and specialized curative care (51). They host about 50% of Kenya's health workforce, made up of both general and specialist health care providers. As such, district hospitals are able to provide the first level of outpatient or inpatient care for patients who have been

referred by primary care providers and are also, in theory, the gatekeepers for those who need more specialized care in regional or national-level health facilities (51), (172). In addition, district hospitals serve other functions such as providing supportive clinical supervision to lower level facilities, logistical support to and coordination of health information from the lower facilities in their catchment areas, and the training of health care workers (51), (172).

The sites included in this study were drawn from government and faith-based hospitals. Services offered in hospitals include outpatient and inpatient care; specialist clinics; community outreach; and HIV/AIDs, tuberculosis (TB) and related services that are generally supported by specific programme funds through the National AIDS/STD Control Programme (NASCOP), the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and various implementing partner organisations.

The GOK hospitals chosen were Meru, Isiolo and Thika district hospitals. The government hospitals were chosen with the expectation that they represent routine practice in typical Kenyan hospitals including those perceived to have problems with performance. As for faith-based hospitals, AIC Kijabe Hospital, Maua Methodist and St. Mary's Mission Hospitals were chosen for the comparative aspect of the study. Interest in these facilities was heightened by the fact that they are part of the Christian Health Association of Kenya (CHAK) which has been requesting the government to pay for the deployment of COs to work in these facilities as they serve a significant proportion of Kenya's rural population. While non-Christian hospitals such as those run by the Muslim faith could have been chosen, they were deemed less suitable because they are few in number and rarely employ COs. A summary of features characterising the six hospitals is presented in Table 4-1.

Initially, four hospitals (AIC Kijabe and Maua Methodist from FBH and Meru and Isiolo district hospitals from GOK were chosen. During the course of the study, it was found necessary to add two more hospitals to ensure that information was acquired on all aspects of the study as described in section 4.5.3. The choice of the six hospitals equally distributed between GOK and FBH facilities was driven by the following factors; logistically accessible, had an adequate number of COs, and served a wide population with various common illnesses. The availability of Consultants was another factor influencing choice of hospitals. While all hospitals had Consultants, AIC Kijabe, St. Mary's Langata, Meru and Thika District hospitals had much higher numbers. Their presence could be construed to mean they

provided local support to COs with the expectation that the COs would work better.

Table 4-1: Summary Hospital Characteristics[13]

Hospital	No. of Beds	No. of Staff	No. of Theatres	Training Centre	Geographical Location
AIC Kijabe Hospital (FBH) – H1	220 (+60 cots)	564; 35 MOs ; 2 Kenyan Consultants; 25 foreign consultants	5; planned expansion to 9	Nursing; Internship centre for COs & MOs; train registrars	47kms from Nairobi. Rural. Agricultural area; highly influenced by Nairobi. Technical support from the African Inland Mission
St. Mary's Langata Hospital (FBH) – H6	280	8 consultants; 8 MOs; 7 COs.	3	Plans underway to begin nursing courses with Catholic University of East Africa	Located in Nairobi's Langata suburb, next to expansive Kibera slums. Affiliated to the Catholic Church- mainly supported by patients fees
MCK Maua Hospital (173) (FBH) – H4	275 (+16 cots)	3 resident MOs; 4 Consultants; various local and international volunteers	1	Internship centre for COs; Accredited CPD centre (KMPDB); Training centre for student physicians via formal collaboration with KEMU;	209 kms from Nairobi. Rural. Highly agricultural. Support from the United Methodist Church; infrastructure, personnel and equipment support though MOMS; various local and international NGOs
Meru District Hospital (GOK) – H2	306 (+17 cots)	Consultants – 11; MOs – 12; MO Interns – 7; RCOs – 21; CO Interns – 30;	2	Internship centre for COs & MOs; Meru MTC located next to hospital	174kms from Nairobi. Highly agricultural; location of national wildlife reserves. Urban centre.
Thika District Hospital (GOK) – H5	265 (+24 cots)	5 MOs, 12 MO Interns,10 Consultants,; 10 RCOs, 50 CO interns	3	Training centre for COs, Nurses, MOs, BSN,	39 kms from Nairobi, considered its satellite town; major highway connecting them; agriculture & industrial enterprises
Isiolo District Hospital (GOK) – H3	305 (+35 cots)	4 MOs, 4 MO interns, 4 Consultants, 5 RCOs, 2 CO anaesthetists, 3 CO specialists	1	Internship Centre for MOs	200kms from Nairobi. Semi-arid region. Rural. Location of wildlife conservancies & armed forces (including police) training bases. Livestock keeping, market farming

Source: http://www.ehealth.or.ke/facilities/facility.aspx?fas=13218

There were some differences in the hospitals that were thought to add to the richness of data. For example, Meru and Thika District Hospitals, AIC Kijabe Hospital serve as internship sites

[13] Derived from a list of facilities last updated on 8th February 2010 and interviews with the hospitals' management.

for CO and MO Interns which means that more COs were likely to work here than in non-internship hospitals. Maua Methodist Hospital also accepted CO Interns and was additionally a training centre for physicians studying at the Kenya Methodist University. Unlike the other faith-based sites, the AIC Kijabe hospital is also accredited to host both CO and MO interns. To counter this, Isiolo District and St. Mary's Hospitals were chosen as they did not accept any interns.

There was no particular arrangement in visiting the hospitals. Each site was visited depending on its distance from Nairobi where AIC Kijabe Hospital was closest (80kms) while Maua Methodist Hospital was the furthest (approximately 350kms). Thika District and St Mary's Langata Hospitals, which are within the greater Nairobi region, were visited after the main study to acquire additional information on SCOs, interviews of whom were few in sites the four initial sites; and, to acquire further information on perspectives of COs working in a FBH facility.

4.4. Study Settings

Exploration of perceptions and experiences of COs was done for those working in the outpatient department (OPD), specialist clinics (SCs) and vertically-supported clinics (VCs) in the study hospitals. The first setting, OPD in both Government (GOK) and Faith-Based hospitals (FBH), shares similar purposes and functions, which simply are to receive and treat all walk in patients seeking health services in the hospitals. General COs will mainly be found working here. OPD tends to be a high volume environment with a team of COs and where possible, MOs for second opinion or referral. In hospitals with few doctors[14], COs will also be found working in the inpatient departments.

The second setting, a feature of public hospitals, are specialist clinics (SCs) where COs with appropriate specialist qualifications provide services specifically related to their 'expertise' (e.g., ophthalmology, ENT, orthopaedics, etc). With the exception of CO Anaesthetists who will be found working in any facility with a theatre, few specialist COs will be found working in FBH hospitals, though as was found during the study, some FBH hospitals were considering expanding their employment of specialist COs in areas such as ENT and ophthalmology to meet demand for services.

[14] For government facilities, reasons given for shortages are either due to location (rural) or doctors leaving to go back to medical school. For mission hospitals, shortage of doctors is largely attributed to the cost of maintaining them.

Third are VCs offering either Tuberculosis (TB) or HIV/AIDS services. Though they are staffed by personnel drawn from the hospitals where they are located, they operate differently, having different supervision and reporting mechanisms attributed to the fact that their funds are also sourced from Kenya's development partners who have their own reporting requirements. They additionally have stronger systems related to medical supplies, including drugs and equipment, often through parallel supply chains to address problems commonly mentioned as hampering clinicians' ability to offer health services.

4.5. Study Strategy

In this section, the steps followed to accomplish the study's goals are described. The strategy was iterative in nature to ensure that questions posed were answered. Though not originally intended, the study was undertaken in three phases in cognisance of the theoretical sampling approach adopted as well as in light of how the study sites were visited and the interactions with my supervisors over the data collection process. In Table 4-2 below, I the data collection methods used in the study are linked to the three phases of fieldwork. It should be noted here that the phased approach, while not originally planned, describes the data collection methods used in those phases and not a phasing of methods.

Table 4-2: Data Collection Methods and Study Phases

Phase	Data Collection Method
Phase 1	Document Review Key Informant Interviews
Phase 2	In-Depth Interviews Participant Observation Review of Hospital Statistics
Phase 3	Key Informant Interviews In-Depth Interviews Participant Observation Feedback of Results

As can be seen from the table above, some of the data collection methods were used throughout the study (e.g., interviews) while others played roles in key phases (document review, phase 1). In the next three sections I describe how I used these tools to acquire data for this study.

4.5.1. Phase 1

As described in Chapter 3, literature review for this thesis explored debates concerning the problem of improving the existing HRH complement as a critical component of health systems strengthening. Suggested solutions were the use of mid-level workers to increase the number of health workers complemented by efforts to improve the performance of existing health workers. The first phase focussed on developing tools, piloting them and revising them based on findings drawn from analyses of the initial work. To undertake this work, review of relevant official documents was done to get a sense of the issues and context for COs.

Two separate interview guides were developed, one that targeted policy makers and another that focussed principally on COs with additional questions for CO colleagues, their supervisors and hospital managers. These were based on literature review, experiences of colleagues who had worked in public hospitals, initial interviews conducted with policymakers at the Ministry of Health, and prior experience of undertaking research in similar settings (31), (10). Due to the iterative nature of the study and in appreciation of the nomothetic - idiographic tension inherent in undertaking the study, careful attention was paid to issues emerging during the pilot interviews not initially thought about which needed attention, an example of which was breaking down the concept of performance to ask questions on meanings of good and poor performance.

Piloting of Tools

Pilot interviews were conducted in two GOK hospitals due to the difficulty of getting faith-based hospitals to agree to undertake the work. 11 participants (principally COs) were purposively selected to the end that both general and specialist clinical officers were interviewed. Interviews were also conducted with policymakers who included the Deputy Director of Medical Services (DDMS) and Chief CO from the Ministry of Medical Services (MOMS). Findings from piloting of tools suggested that most respondents had difficulty engaging directly with the concept of performance beyond that there was a new, annual appraisal process that they had to comply with. Also, there was a tendency to highlight de-motivating factors posited as the primary reason when poor performance was being discussed although motivation was not the focus of the study (I have previously reported on motivation in similar settings (31), (10)). Additionally, some respondents had difficulties in agreeing to be taped during the interviews which led me to hire a field assistant to take notes.

In light of these difficulties, I revised the interview tools. To get at technical aspects of their work and to help maintain focus on the issues of interest, the original questions were revised to help respondents reflect on their daily practice, such as their roles (e.g., what do you do on a daily basis?) or asking them to make a judgement on daily practice (e.g., in your opinion, what are the characteristics of a good performer?). Answers to these and other questions formed the foundation for asking the study's questions such as: 'what does the term performance mean to you'? The specific questions targeting non-technical aspects of their work were revised in order to help respondents to talk about aspects of their work which helped them to perform their jobs, but perhaps were not directly expressed as part of their jobs. The end result was the development of a revised single interview guide with separate sections targeting COs, their colleagues, supervisors/hospital managers, and policymakers (see appendixes 5 and 6 for the revised tools).

4.5.2. Phase 2

Phase two primarily focussed on undertaking substantive fieldwork for the study in the four initial sites. Prior to visiting any hospital identified for the study, I wrote a letter requesting permission to conduct the study in the institution. Two faith-based hospitals additionally requested a copy of my PhD proposal for ethical committee review prior to granting this permission. As the study commenced in each of the hospitals after their acceptance, there were no refusals.

The usual practice in public hospitals was that after making my presence known to the hospital's administration and on gaining their consent to proceed, I was handed to the District Clinical Officer (DCO) or supervising CO to take me around the hospital. During the tours, I took opportunities to introduce myself and the study to the staff I was being introduced to and during this process, discuss my study with potential interviewees and asked them for dates when I could interview them. I spent two weeks in each hospital to allow an immersion into the life of the hospitals as well as have enough time to explore issues under investigation.

4.5.3. Phase 3

On completion of the fieldwork for the first four sites, preliminary analysis of the data was done. During the analysis, I perceived that H1 appeared somewhat different to the other hospitals due to its ability to integrate the work of COs with other health professionals and the presence of many consultants reportedly promoting good performance from the COs.

Further, I had interviewed a relatively small number of SCOs based in the public hospitals, a shortcoming also identified during an interim PhD seminar held to review progress. To address persisting questions I continued data collection in one additional faith-based and one additional public hospital. This extra work in the FBO site was to find out whether it too was able to elicit similar levels of perceived performance from COs while visiting the public hospital site would enhance the soundness of data relating to SCOs. The same process of requesting permission and undertaking fieldwork as carried out in the first four hospitals was followed for the latter two hospitals. Upon completion of fieldwork, data analysis of the last two hospitals was done.

4.6. Sampling Procedures

Purposive selection of hospitals and respondents was done to identify information rich and illuminative cases for study with sites expected to offer useful manifestations of the phenomena of interest (163, 174, 175). Initially, the study's sampling procedure focussed on purposeful sampling of COs in the three settings of interest and, doctors, nurses, supervisors, hospital management and policymakers who directly worked with or influenced what COs did. With respect to COs, this resulted in an initial attempt to interview a minimum of 6 COs per hospital. 6 COs per hospital meant that I talked to more than half of the available COs in the hospitals visited thus giving me a good picture of issues facing COs in those facilities.

As the study progressed, I found the need to adopt a theoretical sampling approach[15] which guided me in determining appropriate data sources (e.g., individuals, documents, bodies of literature, etc) that could yield the richest and most relevant data to address persisting or emerging questions (174), (175). A flexible approach was utilised to ensure that the final number of interviews was driven by the point at which data saturation was achieved (176). This was enriched by undertaking the fieldwork in two phases (described in detail further below) so that emergent issues could be explored in similar groups at other hospitals to triangulate the data as well as acquire more insight into the real life experiences of being a CO in the Kenyan health system.

[15] Theoretical sampling is the process of data collection whereby the researcher simultaneously collects, codes and analyses the data in order to decide what data to collect next (Coyne, 1997; Draucker et al, 2007; Bowen, 2008).

4.7. Data Collection Methods

This section details the methods used to collect data. Table 4-3 below links the methods used with the objectives of the study. All four study objectives are linked to insights into performance which is not mentioned in any of them specifically.

Table 4-3: Linking Methods to the Study Objectives

Objective	Methods
1. To explore and compare the perspectives of Clinical Officers, their colleagues, supervisors, hospital management with the formal legal and policy frameworks regarding Clinical Officers' roles.	• Document review • In-depth interviews
2. To investigate notions and understandings of performance and performance norms from the perspectives of Clinical Officers, their colleagues, supervisors, hospital management with the formal legal and policy frameworks informing Clinical Officers performance.	• In-depth Interviews
3. To determine the influence of incentives in different organisational settings (FBH and GOK hospitals; and, outpatient department, clinics run by specialist Clinical Officers and HIV/AIDS and TB clinics that are vertically supported) on Clinical officer performance.	• In-depth interviews • Review of hospital statistics • Participant Observation

4.7.1. Document Review

Review of documents was done with a focus on COs of which two were done, i.e., review of formal documentation and review of hospital statistics.

Review of Formal Documentation

For purposes of this thesis, I was interested in Kenya specific documents that supported my work. I reviewed relevant government publications to describe the formal legal and policy framework that outlines the roles, norms and incentives for Clinical Officers in the Kenyan health system. Each document was first scanned to see if have relevant information on CO roles, norms and incentives. Next, I looked for information specifying activities that should be

done by COs, norms guiding the accomplishment of these actions and lastly, whether there were any incentives for these activities. Where necessary, norms and incentives that were broadly meant for all health workers that included COs were reviewed. This information is provided as part of the factual background to this thesis in Chapter 2.

Documents identified and reviewed included the 'Clinical Officer's Act (53)', the 'Second National Health Sector Strategic Plan: 2005-2010' (39), 'Human Resources for Health Strategic Plan for the Ministry of Health (47)' and 'Pay Policy for the Public Service DPM (69)', among others. Through a snowballing approach and from interviews with senior MoH officials, other documents were identified and acquired. Effort was made to acquire similar documents detailing the job descriptions of COs in hospitals where these existed (in fact, these were only found in FBH facilities). A list of documents reviewed is provided in Appendix 1.

Review of Hospital Statistics

I sought consent from the hospital CEOs to review data on workload handled by the hospital. The number of patients seen in hospitals is collected routinely as part of hospital management information systems. For this study, a visit was made to the hospital's records department. Upon introduction of myself and purpose of the visit, I asked for help in tabulating data retrospectively collected on the numbers of patients seen in the outpatient departments of hospitals per day as well as the number of COs present in the outpatient department that day. The purpose of this was to link the numbers of patients seen to a CO so that I could triangulate their reports of being busy and overworked with an indication of the number of patients they saw per day. This in a sense provides a small window into developing a picture of their working environment. Using this data, the daily average workload per clinician was calculated by accumulating the number of COs working per day over a period of a month and dividing that number with the total workload (i.e., number of patients seen) for that month. The result is shown in Table 7-1.

4.7.2. Interviews

In-depth interviews were utilised to acquire information in this study and are described below with a focus on the category of respondent.

Interviews of Policy Makers

Interviews were undertaken with senior policy makers at the Ministry of Health that included the Chief Clinical Officer, the Principal Human Resources Officer, and the Deputy Director of Medical Services were done with the help of the Chief Clinical Officer with whom I continuously engaged prior to and during the course of the study. The purpose of these interviews was to flesh out the information gained through review of documents related to COs and covered issues such as:

- The legal and policy framework outlining roles, norms and incentives for COs and any specific current thinking not detailed in formal documents
- The utilisation of COs, challenges to their use in a task shifting role and how these are being, or have been addressed
- Their understandings of performance and how it is assessed.

Each interview was conducted in person and took about one hour to complete. I began each session by informing the key informants about the purpose of the study (Appendix 2) and asked them for consent to undertake the interview (Appendix 3) and tape record it (Appendix 4). A key informant interview guide was developed to direct the process of the interview and is provided in Appendix 5. Both the Chief Clinical Officer and the Deputy Director of Medical Services agreed without hesitation. I however did not have a fruitful discussion with the Principal Human Resources Officer as the individual was new to the office.

Interviews of Hospital Staff

To ensure that the best possible picture of the CO's life world was captured and to address the problem of respondent recall, ability of the respondent to articulate his or her experiences within the timeframe of the interview, and the ability of the researcher to ask the "right" questions to prompt more detailed discussion and aid the analysis (177), in-depth interviews of several cadres of hospital staff comprising of both general and specialist COs, doctors, nurses, CO supervisors and hospital management were done. I sought to interview equal numbers of COs in each site drawn from those working in specialist clinics (SCs), vertically supported clinics (VCs) and the outpatient department (OPD). The focus on COs working in SCs and VCs was because these provided specific, different contexts with anecdotal reports suggesting COs perform better in these settings than those based in OPD. At their convenience, in-depth interviews taking between 60-90 minutes of the health worker's time were conducted. The interview began with respondents being informed of the study (Appendix 2), being asked for

consent to undertake the study (Appendix 3) and tape record the interview (Appendix 4). The interview followed the in-depth interview guide as outlined in Appendix 6 and explored issues such as:

- The working history of the respondents,
- The perceptions of each cadre of respondents on expected or actual roles, norms and incentives and how these might influence CO performance,
- Tacit group norms (working relationships, rules, regulations), roles (jobs, leadership) and incentives (rewards and sanctions) provided and their perceptions of these in operation in different clinic, hospital and system levels
- Understandings of performance and its evaluation
- Justification of their attitudes and behaviour

I conducted all interviews face to face with my research assistant being present to take notes of the discussions. I strived to conduct interviews in environments where the interviewee was comfortable and tried not to take more than 1 hour of the health worker's time. During the process of interviewing health workers, I found it more fruitful to explore first the idiographic aspects of work (i.e., their personal experience of being a CO or to MOs and other colleagues, their experience of working with COs) before launching into the nomothetic aspects (e.g., expectations such as contents of job description). This was as a result of my experience during the pilot phase that asking nomothetic type questions first invariably resulted in less open, sometimes monosyllabic responses. While in the first two initial interviews (conducted with a senior hospital manager and CO) I strictly adhered to the predetermined interview structure/questions, I found it easier to allow the interview process to proceed more naturally, allowing subsequent questions to be contingent on reactions to my initial questions and probing where I felt an issue had not been explored in its entirety. As the interviews developed, there was a shift in emphasis to exploring respondents' perceptions on performance and the influences of the various work settings.

During fieldwork, I found the skill of being flexible and adaptable to be important. For example, the hospital CEO of the first public hospital visited immediately launched into a discussion of issues he faced working with COs which the research assistant[16] was able to

[16] The research assistant did not undertake any interviews or transcribe the interviews, but instead supported the researcher by taking notes. These notes were very useful for finding out issues not properly covered that could then be pursued in subsequent interviews.

capture without much loss of data. An opportunity to complete gaps in the data and explore further emergent issues was availed during a follow-up interview. Care was taken when visiting subsequent public hospitals to be ready to take notes after introduction of the study to the hospital management. Some respondents in the public institutions did not agree to be tape recorded though all agreed for notes to be taken, an issue encountered earlier (31). Notes were taken and written up on the same day by the research assistant. I reviewed these and made additional notes or comments to the interview transcripts as required. The presence of the research assistant did not, to my knowledge, affect the interview process negatively. The specific interview methods used were key informant and in-depth interviews, and are discussed hereafter.

4.7.3. Participant Observation

Participant observation is a method in which the researcher takes part in everyday activities related to an area of social life in order to study an aspect of that life through the observation of events in their natural contexts (178), (179). Its usefulness is because it allows the researcher to study social phenomena where the behaviour of interest is not readily available to public view as well as allow a deeper understanding of a particular situation through the meanings ascribed to it by the individuals who live and experience it (178), (179). A number of participant observation approaches exist ranging from complete observer (no participation) through participant-as-observer (more observer than participant) and observer-as participant (more participant than observer) to complete participant (179).

The method allowed me to study daily experiences and practices of COs in their work context aiming to develop a thorough understanding of factors that influence their performance (180), (178). The *participant-as-observer* approach (where the researcher forms relationships and participates in activities but makes no secret of an intention to observe events) was heavily used (178). Participant observation was done over a period of two weeks in each hospital. In each site, I came to hospital early (before 8.00am) so that I was able to observe the hospital as it began to operate and also stayed late to see how it operated when patient queues had reduced. In the cases where I was waiting to interview a CO, I sat in the benches outside their rooms but away from the patients and observed for example the time spent with a patient and also how they handled patients before they entered into their office. In other times especially when they had breaks, I was able to join in or observe discussions with and between COs and observe how COs interacted with other health professionals (doctors/nurses). I also ensured

that I attended any CO meetings held during the time I was in the hospitals so that I could observe their behaviour. Notes of these discussions were noted down immediately after the discussions. In two cases, COs asked me not to take note of any issues they discussed as they felt that these were not work related. As used in this thesis, this method allowed me to be open to a greater breadth, complexity and depth of information as well as corroborate different impressions and observations in an iterative process (180). The method additionally helped me to follow up through interviews emergent discrepancies arising from COs' subjective reporting of what they believed and did. While the data acquired through this method might not be described more in the thesis, insights from this tool does inform the results reported in the thesis.

4.7.4. Feedback of Results to Study Respondents

Part of the study's design was to test the researcher's interpretations of data through feedback to the study's respondents. This served several purposes that included recognising and appreciating the effort made by study respondents to give information, ensuring that the interpretations made were correct and also to gain new insights from the issues raised by the respondents. This was reinforced during the fieldwork period where numerous requests were made by the respondents to feedback the results of the study to them. Upon completing my analysis, I developed a generic report that outlined broad issues of interest to the cadre. I did not focus on specific problems that I may have discovered in each hospital (181), (182). The process of providing feedback began by requesting permission to provide feedback as requested while at the same time, suggesting possible dates for visiting each site. The feedback was done over a period of one week where I spent one day per hospital. The feedback was done at a venue chosen by the hospital management and at a time that they deemed would not disrupt the provision of services. This was generally done between 12.00pm to 1.00pm and in one case, between 3.00pm to 4.00pm. I did request that a good number of COs be available but also including nurses, doctors and other colleagues interested in the presentation. However, it was not easy to get the large numbers of COs to attend. Also, though invited, no medical officer (with the exception of the hospital CEOs) attended the presentations. Due to time constraints, I was unable to find out the reasons for this.

In all sites, I thanked all participants for attending and the hospital for allowing me the time to provide the feedback. I then took about 20-30 minutes describing the work. I did inform the participants that the work was meant to showcase the important role that COs played in hospitals, even if I did find them doing some practices that were not 'good'. After presenting

my findings, I then invited the participants to comment on the work and to ask any questions they had on the issues I raised during the presentation.

One FBH hospital declined to allow me permission to provide the feedback stating that my request had come at a time when the hospital was particularly busy. The hospital did however ask for feedback and I sent them the generic report. Despite the hospital's lack of concern over what I may have found and how the hospital staff might respond, the hospital asked me to send another report detailing 'management issues' that the hospital could address, which was not the reason for doing the work. Since I had agreed to provide feedback, I wrote the report addressing their issue.

4.7.4.1. Issues Discussed During Feedback Sessions

In this section I present a summary of issues that respondents engaged with during the feedback sessions. Some of the findings I presented were not discussed much, perhaps meaning that they represented a 'true' picture of COs. These included issues such as COs playing an important role in the health system, an idea that all COs used to support their request for better salaries because of the volume of work they do. Another issue that was given little attention was performance improvement which GOK based COs thought was possible if issues related to motivation (read increased financial incentives) were first addressed. The role of non-financial incentives was little discussed although FBH COs generally appreciated the effort that facility managers had put in to ensure that they were enabled to do their work.

Related to the idea of addressing staff motivation (beyond improving their financial standing) for improved performance were numerous requests by all COs for increased staff numbers. This would enable them to see fewer patients and address performance contract issues such as reduced waiting times in GOK hospitals. Linked with this was my perception that GOK respondents did not want to talk about issues related to the quality of the clinical encounter before they saw efforts being made to address salary and promotion related constraints. There was some concern whether the views of specialist COs, especially anaesthetists were captured in the study as this particular group of COs worked long hours (since they were few). Upon assurance that I did interview them, this issue was not pursued further.

The issues discussed previously while highlighting important issues for COs, were given less attention compared to those discussed hereafter that provoked the most active discussions

with the audience. Thus, they could be said to represent areas of concerns for COs.

Mr. 'Fix-it' of the Health System

Most respondents, especially those from FBH facilities, were quite amused with my idea of COs being a 'Mr. Fix-it' of the health system as it seemed to summarize their situation. Supporting the image of being the system's backbone, they argued that despite COs being 'workaholics' (i.e., they work for many hours, treat many patients, and do good work), their output was not recognized. They also felt that they could do anything that they had been trained to do but needed space and time to do so – suggesting any lack of good performance was forced upon them. There was consensus among FBH COs that their colleagues in GOK settings sometimes faced a hard time since some senior MOs refused to allow them to undertake procedures such as caesarean surgery yet they were trained for it and the need for the skill was high. Such concerns indicate how professional space may be defended with an attempt to keep COs in their role of a basically-skilled 'outpatient filter' within hospital settings.

Salaries and Promotions

As expected from prior studies in Kenyan district hospitals (10, 31), salaries and promotions were mentioned as a major issue affecting CO performance. The comments received regarding this issue seemed to coalesce around the notion that appropriate recognition and appreciation required their salaries be reviewed and improved. Linked to the idea of COs being the 'Mr. Fix-it' of the health system was a distinct perception of organizational injustice as regards salary and promotion issues, especially among GOK respondents, related to the large salary differential between MOs and COs that was felt to be untenable. They argued that the work they did was similar to that done by MOs which has resulted in feelings of not being taken care of. Thus by documenting what each cadre did, their contribution to clinical care could be valued and paid for as happens in the private sector.

Glass Ceiling and Career Advancement

The issue of a glass ceiling in the Ministry of Health that had a negative influence on the career advancement of COs and nurses was highly debated. In particular it was agreed that non-doctors had few chances of holding senior positions in the Ministry of Health. Breaking through was perceived to be difficult as all senior positions in the Ministry were held by doctors who would be unwilling to make space for those from other cadres. This was related

to a general perception of a skewed system that rewarded doctors (perceived to do less work) with opportunities to progress and gain higher salaries rather than COs and nurses (perceived to do more work) but got fewer opportunities to progress and had lower salaries. For example, doctors begin getting management experience starting as Medical Superintendents (head of GOK hospitals) quite early in their careers, especially in small hospitals, while the system might rarely offer even COs with many years of experience such chances.

For career advancement to happen, COs argued for the medical profession to be opened up so that they could take advantage of the wider opportunities available. One such avenue is joining the medical degree program in the third year to complete the (physician) medical training program in a much shorter time. The present practice is to join the class in the first year which they argue belittles their experience and qualifications. However, this route clearly aims at allowing COs to become doctors rather than build the CO cadre itself.

From a mid-level perspective, this is an important consideration. The widespread use of COs is based on the premise that they are happy and willing to work in their assigned niche in the health system. The discussion above suggests otherwise – that it is a priority for COs to escape from being a CO, either to places where they are recognized and appreciated (e.g., non-governmental organizations reportedly offer them an attractive remuneration package with attendant technical support) or out of health system.

The Notion of Being a 'Sandwich'

There were mixed responses to this notion with many GOK COs feeling that they worked between doctors who had all the power and nurses who could effect change due to their historically powerful hierarchy supported by their huge numbers. This meant that COs were powerless to change anything in the policy arena dominated by these other two professions. However, at an organisational level FBH COs generally felt that though there was a perception of being sandwiched between doctors and nurses, FBH management generally emphasized that they were professionals with a clear role to play in the facility. Supporting this is the fact that FBH facilities are unable to hire the number of doctors they need, they thus ensure that the COs they have are appreciated and, for some hospitals, offered additional incentives to improve their performance that included housing (H6), monthly bonuses (H6), dedicated, individual clinic rooms and availability of tools, equipment and supplies.

4.8. Data Management

Interviews were recorded and the audio files were stored in a secure server before being transcribed. A trained typist transcribed all the interviews, and they were later checked against the audio files by the researcher for completeness. This was done to ensure that there was no missing data or mistyped sentences which could lead to different interpretations of the transcript data. Each transcript had a unique identifier comprising of hospital code, date, type of interview and participant type allowing exploration of data by sub-group (e.g. specialist vs. general CO). All interviews were transcribed into Microsoft Word 2007 which were then imported into NVIVO 8 software (QSR International, Australia) categorised by source (hospital) and type of interview (key informant, in-depth or data from participant observations).

4.9. Analysis

Coding into themes was done iteratively in a three-fold manner: First during fieldwork, notes were examined at the end of every day to identify issues that needed further exploration or clarification. This was achieved by returning to the same individual or exploring issues arising with new participants. The second process took place during transcription where, independent of the first phase, emergent issues were marked for further exploration. Third, after importing the transcripts to NVIVO 8, conventional/open coding (where coding categories are directly derived from the text data were used without reference to the results of the first two coding processes (162), (183).

Results from the three processes were combined and subsequently collated into relevant larger thematic categories to improve explanatory ability following the directed content analysis procedure. Initially, coding was done separately by hospital to enable a description of the setting and to tease out hospital level differences. An examination of this data revealed that the codes could be pooled into one major project without risk of losing site specific information (that was achieved in Table 5-1). In addition, I examined differences emerging from the three clinic contexts (OPD, SC, VC) examining what in each setting encourages or discourages good performance from COs. Particularly in OPD, I also examined how 'busy' these settings were by using the number of patients seen per CO/team of COs per month as a crude indicator of workload. While this measure is a characteristic of a hospital and not individuals, it provided a comparison with data acquired from COs and participant observation notes on workload and its relation to performance. Later, all codes from the six

hospitals were combined into one major project. This initial result was presented in a seminar to a group of social scientists to find out whether all possible information had been drawn out from the data and whether the data could have different interpretations. The result of this process was a re-examination of the codes and development of better explanatory themes that are presented in the results chapters.

The validity of the findings were enhanced mainly through seeking evidence from a wide range of different independent sources and feeding back preliminary findings to participants to establish whether they regarded them as a reasonable account of their experiences and paying attention to negative/deviant cases in the findings (160). I took care to reflect on what is known about COs, what I knew about them prior to the study and my role in the process of studying their (CO) reality, a process known as reflexivity (163). To support my findings, selected transcripts from each category of respondents were shared with members of the research team[17], who independently identified their themes, and were later compared in order to improve reliability of the findings. Regular consultations of the research team were held to discuss the emerging issues.

4.10. Data Representation

The opinions and experiences of respondents are reported in the study through the use of direct quotes. The opinions and experiences of respondents have also been used to frame the analytical categories and narrative used in presenting empirical data shown in chapters six, seven and eight to show the basis of my interpretations. In some cases, I have edited the verbatim quotes in order to improve readability and maintain confidentiality of respondents. It should be noted here that the data reported is mostly what informants reported on the topics of interest supported by participant observation notes where appropriate. This was done to allow the 'voice' of the informants to be seen rather than overshadow this with my interpretations arising from what I observed.

To further illuminate the data acquired and also address respondents' requests for feedback, direct feedback to participating hospitals was done. The process of providing the feedback has been presented in chapter three. Feedback was provided in September 2010 after establishing the main thematic findings emerging from analysis of data from the six study hospitals. The initial analytical ideas presented were grouped in three areas; roles, performance in general;

[17] Comprised of the two supervisors who also read transcripts prior to the discussion on the issues arising and the way forward

and, issues related to the work environment, including incentives. This followed the main themes emerging from the data which, from my interpretations, seemed to naturally fall into these three groups. The next three sections comprise of a summary of the issues presented, results of the discussions held with feedback respondents during the feedback meetings and emerging issues not originally presented by the researcher. Insights from the feedback meetings were subsequently merged with the main fieldwork data to form the three core results chapters (Chapters 5, 6, and 7).

The results presented during the feedback sessions, while fairly preliminary, showed the direction of thoughts and arguments to be made in the thesis. For this reason, it was thought prudent to present them at that time in order to get feedback on the issues I thought were important as well as my interpretations of the data. This was also done in recognition of the need to take advantage of the sessions to get any additional information that may not have been captured before.

4.11. Ensuring Rigour of the Study Methods

Getting at the 'truth' of an issue is difficult to ascertain but given the breadth of the term 'performance', I found my open approach to examining the term to have been useful especially my examination of performance as 'what happens'.

Adopting a phenomenological theoretical commitment had several implications on both the process and the assessment of the nature and quality of knowledge produced through this study. The idea of validity[18] or credibility of the findings as envisaged in this study is one based on interpretation and negotiation of the meaning of the lived world as experienced from the first person (163, 169, 184). The interview encounter provided the context for the exploration of COs lived experiences in their work settings (185-187). To confirm the accuracy and stability of COs reports over time, I undertook multiple interviews with COs in six different hospitals (156). During the interview process, I took care not to ask leading questions and to ask them in a sequence that began from the general to the specific in order to eliminate researcher bias (156). Other attempts to strengthen validity of the data collected included the recording of interviews, continual checking of information given, and thoroughly pursuing emerging issues and contradictions. The use of multiple methods of data collection enabled me to gain multiple viewpoints or check details from prior interviews and in the process,

[18] Golafshani (2003) reflects on the meaning of validity and reliability from a qualitative research perspective.

triangulate data (156).

Following Mishler (188), interview transcription was done verbatim, and the findings were interpreted inductively to ensure that the insights were drawn from the data. Inductive analysis was used as it is more likely to identify multiple realities represented in the data and makes explicit, the investigator-respondent interaction, and provides a better description of the context which increases transferability to other contexts. The interpretations derived from this analysis were fed back to the participants to ensure that I had developed an adequate understanding of the phenomenon under investigation (156).

I was aware of my personal and institutional potential influence in the entire process of the interviews. Drawing on previous experience of interviewing health workers in district hospitals, I took care to present myself as a researcher from the Kenya Medical Research Institute (KEMRI), a parastatal within the Ministry of Health, with an interest in understanding issues related to COs in Kenya (31). I also reported that I was collaborating with senior policymakers so that what they reported would eventually be accessed by them and be used to shed light on COs in Kenya. In addition, I was alive to my involvement in shaping the content and direction of interviews and how this may have contributed to the production of the discourse by the respondents (156, 187, 189).

Some criticisms of the approach adopted include research participants not necessarily doing what they say they do, that they might not tell the truth, and may deliberately choose to mislead me (156), (187). This was addressed though the use of the conceptual framework which highlights the tension between what institutions want from health workers and what health workers choose to do or not at the workplace and was assisted by the use of participant observation as an alternative means of data collection.

4.12. Ethical Considerations

Ethical approval was sought and received from the National Ethics Review Committee housed in the Kenya Medical Research Institute and the University of Witwatersrand's Committee for Research on Human Subjects. For participants, consent to participate in the study was approached in three phases. The first phase involved informing the Chief Clinical Officer in Kenya's Ministry of Health on the proposed work and seeking information on the issues being explored. This ensured two things, first that I would get approval to carry out the

study and his support would be acquired which was useful in enabling access to both public and faith-based hospitals, and second, that the results of the study will be acceptable since I would inform the Chief Clinical Officer of the study's progress and findings as and when ready. This was achieved in a meeting held with him on the 16th of July, 2008.

The second phase involved seeking consent from heads of identified hospitals, after introduction by the Chief Clinical Officer. I found that it was difficult to proceed without having such an introduction from the Ministry. After informing them about the study (Appendix 2) and gaining consent from them to conduct it in their facility, requests were made to allow me to hold an introductory information session with the respondents. The purpose of the introductory information session was twofold, that is to appraise all respondents in general of the study purpose and methods, and second, to seek their approval for undertaking the participant observation method.

The third phase involved health workers working in the hospitals during the survey period. An initial meeting with hospital management was done where information on the study and its purpose was explained (Appendix 2). Consent to carry out participant observation was requested (Appendix 7). Health workers such as doctors, nurses, COs, SCOs, their supervisors, and hospital management were subsequently approached to be interviewed. In-depth interviews proceeded after each health worker agreed to be interviewed and signed the informed consent sheet (Appendix 3). A separate request for consent for the use of a tape recorder was made (Appendix 4). Individuals were offered the opportunity to refuse an interview without prejudice.

Due to work pressure and other constraints, I acknowledged the need to be flexible and adaptable accepting that interviews could take place at any time that was convenient to the volunteer. As for the participant observation, I made it clear that all I observed was part of the study. For this reason, I always sought their consent before commencing any observation of their practices or having informal conversations and discussions with them. Any health worker who felt uncomfortable with my presence, was at liberty to ask me to leave without discrimination. I emphasized to all respondents that an individual's performance was not being judged and that I would not highlight or cause an individual to be punished for "poor performance". I assured all respondents that my aim was to understand the perceptions of CO performance, and, influences of roles, norms and incentives on an individual's performance.

All data was acquired on the understanding that it was confidential and was to be used only for purposes of the study. No informant was asked for their name. Instead, each informant that accepted to be interviewed was given a code comprising of the name of the hospital, date of interview and cadre of worker. All data was kept under lock and key (tapes) as well as in a password protected computer accessible only to the investigators.

4.13. Conclusion

This chapter has laid out the overall design and approach that was used in carrying out this study. The chapter further presents both the theoretical and logistical decisions that shaped the production of data used in answering the questions that are addressed in this thesis, to illustrate the methodological rigour and overall steps taken to ensure the quality and credibility of the knowledge produces. The next chapter provides an overview of the results as well as the analytical decisions made to interrogate the data.

Chapter 5. Results

5.1. Overview of the Chapter

Chapter 4 describes the methods used to gather data as well as the underlying philosophical foundations for the procedures undertaken. This Chapter provides an overview of the results as well as the basis for the structuring of the results reported in chapters 6, 7 and 8. It forms the basis for understanding the results based on a description of the data on which the results are drawn as well as the analytical procedures used.

5.2. Description of Study Sites – Hospitals

In Table 5-1 below I summarise, compare and contrast factors arising from national or hospital level within and between GOK and FBH facilities to highlight certain features that might differentiate them as settings. The grading is based on my observations, information from respondents and the data from the set of six hospitals visited which is presented in detail in Chapters Six to Eight. The highlighted blocks of text show interventions that have positive benefits on CO task and non-task performance and are discussed in detail in Chapter Eight.

An issue that needs explanation is the shift system as shown in Table 5-1, a system of scheduling health workers in order to be able to provide care to all clients visiting the hospitals. The shift system in GOK sites comprises of three parts, 8.00am-2.00pm; 2.00pm-8.00pm; and, 8.00pm-8.00am. FBH's shift systems either were straight duties (8.00am-6.00pm, Monday through Friday) seen in H1 and H6, and, 8.00am-3.00pm; 3.00pm-8.00pm and, 8.00pm to 8.00am seen in H4. Though the FBH duty shifts in H1 and H6 had the same number of working hours as the GOK ones, they were generally felt to place undue pressure on COs because they did not allow them to have time off to rest during the week. Unlike H1 and H6 that operated on a straight duty shift system, H4's shift system involved COs frequently coming back to work. The CO in charge informed me that the shift system had to operate in that manner due to a shortage of COs in that hospital.

Table 5-1: Comparison of Hospital Facilities

ITEM		H2	H3	H5	H1	H4	H6
Financial Incentives	Salaries	GOK			Equivalent to GOK		Higher than GOK due to monthly bonus
	Allowances	Some allowances available e.g. risk allowance; others given to other cadres (uniform- nurses; non-practice allowance –MOs)			Consolidated salary given (compared with GOK that has several components but cumulatively is similar). In H1, allowances given to nurses.		
	Performance bonus	None, though good performance appraisal improves promotion prospects			Departmental awards; annual salary increase based on performance appraisal	None	Monthly bonus given
Non-financial Incentives	Training	Sponsored training in CCC/Tb clinics; for other departments generally self –sponsored; CMEs not regular;			Available due to link with own college; regular CMEs; some sponsorship available	Available if worked for 3yrs; some sponsorship available	Self - sponsored
	Meetings	With the exception of H3, generally clinicians do not meet			COs meet Tuesdays; staff fellowship on Wednesdays	Daily clinician meetings; daily worship at hospital chapel	
	Shift system	Regular working hours with time off to rest			8hrs per day, 5 days per week	Shift system affected by shortage of COs	8hrs per day, 5 days per week with Saturday coverage
Physical Space		With the exception of H3 that is underutilized; H2 & H5 have little physical space; good space and privacy in CCC clinics			Expansion programme in place; adequate space in OPD for COs	Adequate space for COs in OPD to work	Adequate space in OPD for COs
Resources - tools, equipment & supplies		With exception of CCC/TB clinics, generally poor			Strive to avail basic resources at all times, rarely not have resources to work		
Culture - Team work, inter-cadre relationships		Not well managed; 'silo' effect			High expectations, reinforced by fellowship, emphasised by management		
Standards of work		Mixed expectations – clear queues, some emphasis on quality; affected by population pressure			Clearly stated and reinforced; expectations also outlined in meetings; COs expected to seek advice from Consultants		
Communication		Not well managed			Communication of performance expectations is good; of other issues needs to improve		
Leadership (access to hospital management)		H3 & H5 – quite involved; BUT H2 presently seen as intrusive			Generally accessible; perceived to be in touch with employees; BUT H4 – presently perceived as highly punitive		
Performance thinking		Performance contracting available BUT 'business as usual' routines still prevails			Great effort to create environment where employees can perform.		

5.3. Description of Study Sites - Clinical Settings

Part of the objectives of this thesis was to examine whether different clinical settings where COs work could be differentiated to explain why some settings were thought to be better to work in than others. It should be noted here that the features described below specifically focus on GOK hospitals that had all three settings. Specialist clinics were not commonly found in FBH hospitals, as the services offered in these clinics were provided by doctors. However, this is changing due to the high costs of recruiting and retaining doctors. While a summary of these features is shown below, this is discussed further in chapter 8.

Table 5-2: Summary Comparison of CO Work Settings

Item	OPD	Specialist Clinics	Vertical Programme Clinics
Patients	Filtering patients with variety of conditions	See already 'filtered' patients	See patients with known existing condition
Guidelines about work	No guidance	Specialist training	Clear guidelines available
Workload	Heavy workload	Lower workload	High workload but well managed
Autonomy	Less autonomy	High autonomy	Medium autonomy
Working hours	Shift system plus night duty	Scheduled activities, no night duty	8 hours per day, no night duty
Pressure for productivity	High	Low-Medium	Medium-High
Emphasis on quality	Varies	Varies	High
Supervision	Varies	Low	High
Tools, equipment and supplies	Varies with type of facility	Varies with specialist service offered	Well supported

In Table 5-2 above, I summarise, compare and contrast issues to highlight certain features of the settings examined that differentiate them and that appeared related to the way in which COs performed. The characterization of the settings provided here is based on my observations and is supported by interview data and a review of policy documents that describe their expected functions and features.

From respondent's comments and my own observations, settings that were best to work from the CO's point of view were VCs, especially the CCCs. This was because the workload was planned with a good supply of resources to work. The long term relationship arising from the

nature of illnesses they handled meant that they could see the result of their work which all respondents working in this setting said was gratifying. From a system perspective (as well as that of the hospital), the most productive setting, based only on the volume of patients handled, was the OPD.

5.4. Description of Study Informants

The table below summarises the respondents interviewed and the sites visited. A total of 68 interviews were undertaken during the course of the study as shown in Table 5-3. Interviews were conducted with COs (both general and specialists), MOs, pharmacists, hospital management (comprising of hospital CEOs, medical officers in charge, hospital matrons, hospital administrators, human resources officers, CO supervisors), nurses and policymakers. The Secretary General of the Kenya Association of Clinical Officers was also interviewed. All nurses interviewed were female while the officers interviewed at hospital management level were male. Most of the policymakers were interviewed in the early stages of the study to inform the issues to be explored in the study and after undertaking the pilot study. The perspectives of male respondents did not differ from those received from female respondents.

Table 5-3: Population of Interest

Category of Interviewees	**Hospitals**						**Policymakers**
	H1	**H2**	**H3**	**H4**	**H5**	**H6**	DDMS (1); CCO (2); Sec. Gen. KCOA (1)
COs (OPD)	6	9	5	7	7	6	
Nurses	2	1	5	3	0	0	
MOs/Pharmacist	1	1	1	1	0	0	
Administration	3	1	3	1	1	0	

In the table above, zeros can be seen in the columns for nurses and MOs in hospitals' 5 and 6. No additional data was collected from these categories of respondents as the data already collected from the first four hospitals was deemed to be sufficient. 68 transcripts and 8 sets of notes of participant observation activities I carried out in the hospitals were analysed. This data was supplemented with other data collected from review of relevant government (18) and hospital documents (3), and government related websites (2). The specific documents reviewed and websites visited as part of data collection are provided in Appendix 1.

The main focus of this study was CO's working in FBH and GOK facilities in rural areas of

Kenya. In terms of gender, there were more male COs than female across all sites visited. From an age perspective, I observed that COs in FBH facilities were generally younger and had worked for less than 5 years compared with those working in GOK facilities who were generally older (approximately above 35 years) with over 10 years working experience. The exception to this was in one GOK facility (H2) which served as an internship site for COs where I found recently graduated COs and in FBH sites where the CO supervisor had worked in the facility for long (over 5 years). Perhaps explaining this was the general trend reported in FBH sites that they lost COs to the Government each time there was a recruitment in the public sector. There are two types of COs – general COs (registered clinical officers – RCOs) and specialist COs (those who have undergone additional medical training – SCOs). The majority of SCOs were found in GOK settings with SCO anaesthetists being found in all sites and SCO paediatrics being found in H4.

CO's professional trajectories across all sites appeared to be similar where the highest achieved position in the hospital hierarchy was to be a CO in charge. A nurse could rise to be the hospital matron (a more powerful position compared to CO-In-Charge) while a doctor could rise to be the head of the hospital. In the GOK setting, a CO could possibly progress upwards to be the Chief Clinical Officer but these positions are few. It is unlikely that a CO will have a more senior position to nurses or doctors in district hospital level and above. However, they do hold positions of authority in lower level facilities such as health centres and dispensaries (level 2 or 3 facilities, Figure 2-1). In FBH facilities, the trend is that they will remain in one position for long as upwards mobility is very poor.

5.5. Reporting of the Results

The data presented in chapters 6 to 8 is both descriptive and normative in the sense that it articulates interviewees' experiences as well as formal expressions of what COs ought to do. The rationale for presenting these together was supported by my experience during fieldwork where respondents described both their experiences of being COs (e.g., in terms of what their role entails them to do) and their expectations (some of which were based on formal expectations and others on what they would like to have). The results chapters were organised following the analysis of respondents' responses that were grouped into the three main issues investigated in the thesis - roles, norms and incentives. This was supplemented with data drawn from document review to provide a comparison for the issues being explored.

Chapter 6 focuses on broader contextual issues influencing or impacting upon the CO with reference to roles. The issues discussed here are those that affect COs regardless of the employer's orientation (GOK or FBH). Issues to be explored here focus on both formal and informal descriptions of CO roles and respondents' reactions to these. This was supplemented with a description of the professional and regulatory environment within which COs operate to help understand the issues under discussion. This chapter addresses the issues described in the first analytical question regarding coherence between roles, norms and incentives at institutional level.

Chapter 7 examines the next issue of concern which is CO's norms of performance. While cognisance of the issues discussed in the previous chapter is taken, the discussion in this chapter will focus only on norms of CO performance, task and non-task aspects of CO performance. As such, the chapter explores these issues by examining the ways in which performance is understood, norms of CO performance, how performance is operationalised and lastly, perceptions around how well COs work. The assumption here is that good performance is seen in settings where there is coherence between roles, norms and incentives and vice versa. This chapter focuses on the analyses outlined in the second analytical question.

Chapter 8 explores the incentives offered and operating in the different settings where COs work. Here, the answers being sought focus on finding out which incentives are offered in the different work settings and how these might cause the variability in performance among COs working in these settings.

5.6. Conclusion

In this chapter, I have briefly described the hospital and clinical settings where the study was carried out as well as described briefly who COs are, being the main focus of this thesis. I have also outlined how and why I have arranged the chapters, that has been done because of the interrelatedness of the data. The next chapter presents results that seek to understand the meaning of the CO in the Kenyan health system.

Chapter 6. The Role of COs in the Health System

6.1. Introduction

Roles are the actions and activities assigned to, required of or expected of a person or a cadre in a substantive organisational position. This chapter explores the roles that COs play in the Kenyan health system. It shall focus on the role and personality aspects of the conceptual framework described in chapter two in order to describe the broader institutional context of COs work. Based on interview data collected from respondent's regarding their opinions of the functions carried out by COs, this is compared with descriptions by policymakers and those found in official policy documents that outline their functions. This is done as follows, first, respondent's views of their functions followed by a discussion of the perceptions held of COs by themselves and others that aims to capture the informal or routine aspects of their work is outlined. Then I explore whether there is coherence between institutional expectations and individual reactions to these through various aspects of role conflict that COs face while carrying out their roles.

6.2. Opinions Regarding Roles of COs

This section - drawing on interview data from respondents - describes what COs, their colleagues and hospital management staff as individuals thought CO roles were. It offers an alternate view of institutional perspectives of CO roles to describe what respondents thought were CO roles that have been presented in Chapter Two. These are discussed with regard to the category of COs of which two exist, general (or Registered) COs and Specialist COs.

6.2.1. Roles of General COs

General COs form the bulk of the CO cadre. The quote below offers a commonly held perspective of the function performed by general COs in the hospitals visited.

> 'We see all patients unless we have difficult cases which we refer to other hospitals'.
> *Hospital CO in Charge, H3.*

There was a general consensus that the CO role involved providing a considerable portion of physician type health services serving walk in patients in the Kenyan health system. In undertaking this role, there appears to be an acceptance that general COs will inevitably have a high workload, a common issue reported across all hospitals visited. In clinics providing almost exclusive primary care and outpatient services (dispensary or health centre facilities) a CO is often

the overall manager, running the entire facility. Managing lower level facilities appears to be a challenging position as COs are alone and have to take responsibility for the decisions they make. The District Clinical Officer (DCO) in H2 supported this saying that '…*The problem is that the CO might know the procedure but is not allowed by law to do it'*. Thus for serious cases, they have to refer the patient to senior clinicians, an action that is complicated by issues such as whether the patient has funds to go to a higher level facility. However, other respondents saw it as an invaluable learning opportunity especially for younger COs who did not have much experience working in hospitals.

In addition to the functions carried out at dispensaries and health centres, RCOs working in hospitals serve both outpatient and, where there are few or no doctors, inpatient departments as shown in the quote below.

> 'Clinical officers employed by the hospital board… work in OPD but sometimes work in paediatrics'.
> *SCO ENT, H2*

Due to the shortage of COs hired by the Government in many rural public hospitals and considering the fact that only the Public Service Commission has the authority to centrally hire professional staff, hospital management boards were allowed by the central government to hire COs to supplement the number of government employed general COs in that facility. The COs hired by the hospital board generally work in high volume settings in the hospital which are the OPD and sometimes offer support to other areas such as the paediatric clinic, and are paid by the hospital from user fees collected from patients.

Having COs in the health workforce of FBH facilities is a relatively new trend that is partly driven by the inability of these facilities to maintain a predominantly MO dependent physician workforce. Many faith-based organisations have in the past 10 years been resorting to hiring COs to work in OPD and the wards as they are cheaper to remunerate. They are however supported by MOs who additionally manage services that COs are not technically competent or allowed to do. However in GOK hospitals, the shortage of MOs makes it difficult to ensure that they were available to support COs in OPD.

6.2.2. Roles of Specialist COs

At district and provincial hospitals respectively, CO roles are often expanded to include specialist positions where COs with appropriate specialist training work as Specialist Clinical Officers

(SCOs) in their area of qualification. The quotes below provide a summary description of the duties of specialist COs of which there was consensus in the basic role of SCOs.

> 'Seeing patients, that is diagnosis, prescriptions, minor procedures like removing foreign bodies, admissions and ward reviews'.
> *SCO ENT, H2*

> 'Actually…managing patients and also managing resources'.
> *SCO Chest & Lung, H2*

The difference between the work of an SCO with that of a general CO is that SCOs generally focus on one disease condition and also are allowed to perform surgical procedures related to their area of specialisation. In addition, SCOs specialized in chest and lung diseases are required to supervise lower level facilities where TB services are offered.

> 'You have eye problems? Go to the eye clinical officer. You have an orthopaedic problem? Yes. Go to the orthopaedic clinical officer. I mean, really, when you look at that, we are not saying that the general clinical officer…yes, he has a lot to do, he'll treat common ailments, but he'll give the specialist clinical officer, his work!'
> *Policymaker1*

> 'And they are very important! In a country like Kenya where you have very few doctor-specialists, they are very important because they are the same guys who actually play a big role in these specialized areas'.
> *Policymaker1*

As described by the Policymaker above, these officers routinely work in specialist clinics (ENT, ophthalmology, etc) or in chest and lung clinics that offer treatment of tuberculosis which is supported by the National HIV/AIDS control programme (NASCOP). However, any CO (general or specialist) who has undergone training in Anti-Retroviral Therapy (ART) can work in the HIV/AIDS clinic (i.e., the Comprehensive Care Clinics). Overall, SCOs can commonly be found serving in the following critical areas in hospitals[19]:

- Child health – there are few paediatricians in district hospitals. This service is mainly provided by COs specialized in paediatrics.
- Ophthalmology – over 90% of eye care is offered by specialist COs.
- Anaesthesia – over 90% of anaesthetists working in Kenyan hospitals (private and public) are COs who have specialized in anaesthesia.

Probably due to the poor availability of specialist services in obstetrics and gynaecology and

[19] Chief Clinical Officer, Personal Communication, Ministry of Health. July 2008

psychiatry in rural areas, COs have recently begun to specialise in these two areas. With reference to reproductive health, their training covers obstetrics and gynaecology emergencies including abortion, and adolescent health. As a result of their work in the health system, all SCOs interviewed felt that they were an important feature of the health service delivery chain due to the lack of MO specialists in many rural areas. In addition to the fact that they do offer much needed health services in many rural areas, my discussions with them suggest that they attached great importance to their job position and felt that they were not the same as general COs.

6.2.3. Additional Roles Undertaken By COs

In addition to the tasks outlined above that generally focus on the curative aspect of COs work, there are other tasks that COs do. Some as shown by the quote below are managerial referring to ensuring COs are available to offer services as needed in the hospital, appraising their performance, organizing continuous medical education sessions and others.

> 'I manage COs in the hospital, prepare the duty roster, assign working areas, schedule leave and outreaches, and handle outbreaks'.
> *Deputy CO in Charge, H3*

As outlined in section 5.2.3 above, COs working at levels 2 and 3 also double as the facility managers. Other functions include offering supportive supervision to lower level facilities by specialist COs especially as relates to TB services; and, mentoring students and interns attached to the hospital. At higher levels, curative functions become less as teaching, managerial and policy guidance tasks increase, an issue clearly highlighted in the Revised CO Scheme of Service. What should be done but does not often happen is carrying out outreach services where they carry out community prevention activities for example through screening patients in the community as to as well as identifying patients who need their interventions.

6.2.4. Summary of Perspectives on Roles of COs

> 'Clinical officers play a very important role in the provision of … services at even level four and level five because they run the casualties, they run the Outpatients and then they run specialized clinics'.
> *Policymaker 2*

> 'COs still have a role to play in the health system because they stay longer in health facilities and they have the skills to do tasks'.
> *Specialist Reproductive Health COs, H5*

I have described who COs perceive themselves to be and have outlined the functions they carry out in the health system and what their perceptions of this are. It is clear that whether in public or mission hospitals, there was consensus about the similarity of roles carried out by COs which they clearly understood. What they do in practice however depends on what is emphasized as being expected from them by the hospital management. For example, the existence of basic job descriptions in mission hospitals makes it easier to describe what this role is, unlike in public hospitals where officers directed me to their Act that covers many aspects of COs life.

6.3. Images of COs

In the next section, I begin to explore the tension between institutions and individuals by outlining 'images' of COs that describe how COs and others perceive CO roles to be from an individual level. In this thesis, this is presented as 'images' of COs which have been derived from ideas provided by COs themselves and others. It should be noted here that due to the position of some individuals such as hospital CEOs, their views are taken to speak to the institutional aspect while the statements made by COs refer to issues at the individual level.

6.3.1. 'Filter'

The predominant image held of COs by policymakers, hospital management, doctors and COs was seeing the cadre as a 'filter', an idea that borrowed also from institutional prescriptions of COs. The 'filter' image interprets COs role to be the gate keepers of the health system suggesting a narrow, mechanistic understanding of their place in the health system. The norm across all sites is that the CO acts like a patient 'sieve': any patient visiting the hospital would have to first be seen by a CO then if necessary, be referred to a doctor, admitted to the wards or be referred for specialist treatment as shown by the quotes below.

> 'Every patient who comes to the hospital must pass through the hands of a clinical officer in the outpatient department after which they are discharged home, directed to special clinic, referred to the medical officer's office, or admitted to the wards'.
> *CO FGD, H2*

> 'We deal with the patients that they refer to us…they are a sort of filter'.
> *OPD MO, H2*

> 'Clinical officers will provide the first referral level for outpatients, managing the clients as referred by the nurses. This will largely be at the outpatients'.
> *MOH (2006:10): Norms and Standards for Service Delivery.*

In the hospitals visited, the prevalent perception expressed by MOs was that they would only deal with patients who had been 'filtered' by COs. The same applied to SCOs who only dealt with patients seeking their specialist services. The exception, mainly in faith-based hospitals, was that some patients would be directly seen by MOs but they paid a higher consultation fee to be treated by them. However, not all COs liked the term 'filter' because it de-professionalized COs. The argument was that the term did not encompass all COs as they treated, referred and admitted patients after giving them first-line treatment.

6.3.2. Backbone of the Health Service

The image of the 'backbone' commonly came up when respondents were probed about the value of CO's services to the country. The image was also commonly reported by all categories of health workers. Through it, COs show their importance in the delivery of physician type health services in the country as shown by the quotes below.

> 'As you are aware, the clinical officers in Kenya form the back bone of health services particularly in the rural areas'.
> *SCO Ophthalmology, H2*

> 'There is a big number of patients who will not be treated if clinical services were to be offered only by doctors. In delivering services to those people, I think the clinical officer has been vital in the health care system to reach those people'.
> *Consultant, H1*

Partly explaining why COs were considered as the 'backbone' of the health service was the fact that most provided physician type services in rural areas where there were few MOs. Thus, there would be a shortage of service provision in these areas if the system was to rely on MOs as shown by the second quote. In exploring the basis for why COs are considered as a 'backbone' of the health service, issues such as remaining static in one place for long and working for long periods in the OPD were frequently mentioned. Previous work in public hospitals visited shows that the number of MOs were generally few with the exception of hospitals that have been granted permission to host MO interns [Mbindyo, 2009a #50], [Mbindyo, 2009b #58]. Further, rural hospitals find it difficult to retain MOs for long as a significant proportion of these MOs were waiting to go back to medical school for further education or were looking for ways to transfer to major urban sites. In some cases, anecdotal evidence[20] showed that some simply refused to report for duty to the more rural areas, reducing the number of MOs who should

[20] Chief Clinical Officer, Personal Communication, Ministry of Health. July 2008

preferably be working in these areas. Supporting the notion that COs were the backbone of the health system was the perception of their availability (in the sense that they stayed for longer in their workplaces) to provide care for patients as required as shown by the first quote below.

> 'It won't work because doctors are scarce in number and they are already dealing with patients in the wards. We need the COs to man the outpatient'.
> *Medical Superintendent, H3*

> 'Maybe we are more consistent because like in the wards we have consultants and then we have intern M.Os. You know…those ones (who) come and go, don't you?'
> *CO2, H1*

Further reinforcing the backbone image is what they do. Because they are the first to see patients, they determine what happens to them as seen in the quotes below.

> 'If all COs were to quit, all the other people would not have work'.
> *DCO, H3*

> 'They are also the ones who, by ninety percent, open up other units for them to run, because of the investigations and referrals. Of course ten percent of the cases are referred maybe to the doctor for further management'.
> *Policymaker 2, MOH*

> 'If you talk of good service, patient charter[21], waiting time in the hospitals, it is the clinical officers who are the implementers. Because, for laboratory to move, a clinical officer must prescribe investigations'.
> *Policymaker 2, MOH*

In this sense, all other health workers are dependent on them for their work. This idea was commonly expressed by most respondents in the hospitals visited. Particularly in H3, some nurses told me that they were bored when COs came late or did not turn up to work because they had nothing to do. In addition to this, a senior policymaker felt that any fruitful implementation of various performance improvement initiatives targeting the health sector must focus on COs.

6.3.3. Face of the Hospital

The image of the face of the hospital appears to construct COs from a public relations perspective of which there was consensus among all respondents. Study respondents informed

[21] Patient charter refers to a document that that spells out the patients' rights, duties and obligations. It is publicly displayed in all Kenyan public hospitals.

me that hospital users translated what COs did and how well they performed their work to be what the hospital stands for and what is to be expected therein. This perception can be understood in light of the implementation of the performance improvement initiative that, in addition to contracting hospitals to meet certain performance targets, hospitals were also required to develop and implement service charters that outlined standards of services to be expected from providers working in that facility as well as the rights of patients seeking services from the hospital. As such, there is a lot of pressure for COs (and other cadres) to 'conform' to the expectations that the hospital management has of them.

> 'OPD is the image of the hospital. Whatever service is given reflects on the hospital. The first clinician to see patients is the CO. So, if our service is good, it determines how well patients are treated. If poor, the hospital gets the blame'.
> *CO in Charge, H5*

> 'The clinical officer is the first one to come into contact with the patient in the hospital and meets with patients with cholera or tuberculosis directly'.
> *CO FGD, H2*

> 'COs are the first-line medics of the nation. They are more at risk of getting infectious diseases than other cadres, yet they are the least considered'.
> *Policymaker 3*

However, being the face of the hospital has its risks. As first line medics of the nation, COs feel that they are at a higher risk of getting infections than other cadres though this is yet to be proved. They also feel that they manage high numbers of patients without being given risk allowances that reflect on the risky nature of their work. Drawing on their perceived importance, COs have used this image to advocate for better working conditions.

6.3.4. Sandwich

This image acts as a counterpoint to the other three images described previously. It shows how the hospital management views the ways in which COs have reacted to how they are perceived at their places of work. This image was mainly reported by hospital management and COs themselves.

> 'They assume they are a sandwich between doctors and nurses. They disappear from work, sometimes; they disappear for a whole week'.
> *Medical Superintendent, H2*

> 'The hospital blames clinical officers for poor service without negotiating with them, they don't discuss their problems'.
> *CO resigned from service, H3*

'They feel pressured from every side'.
SCO Paediatrics, H4

The notion of being 'sandwiched' refers to the COs feeling that they lie between doctors who have hierarchical authority and nurses who have numerical authority. While there is pressure for COs to accomplish the tasks that are allocated to them, many feel that they are not given due consideration when things go wrong as shown by the second quote. As a result, they report feeling pressured to which they respond by reporting late to work or being absent as shown by the first quote. In the case of COs, such practices are easily noticed considering their role in generating work for other health workers in the hospital.

6.3.5. Primary Health Care Clinician

The image here amalgamates positive aspects of the previous images to present one of an individual who is trained to do specific tasks and is responsible for providing these at the primary level.

'The clinical officer is one of the key service providers in this country especially at the primary health care level'.
Policymaker 2

'I might say that from the experience I have had with the clinical officers that I have met, that they are relatively well trained in dispensing healthcare at the primary level and I think they are relatively well trained in recognizing limitations that there are'.
Consultant, H1

Considering the variety of functions they are trained to do and currently perform, this image presents the CO as a key feature of health service provision at the lower levels (1-3, Figure 2-1). It supports the notion that COs are well suited to providing preventive or primary health care services and if well utilised, might begin to reduce the number of patients seeking care from higher level hospitals (4-6, Figure 2-1). This image fits quite well with the ailments that COs in private practice are allowed to treat as outlined in appendix 2. It is interesting that this was never mentioned by COs as a function that they were well prepared to undertake.

6.3.6. Summary of Images of COs

While the institutionally defined roles and role expectations are relatively clear, how these are perceived by COs and others differ. The 'images' of COs presented above talk to the role expectations as perceived by the COs and other respondents in the sites visited. Three images in particular, i.e. the Backbone and Filter and PHC Physician, suggest a macro level approach to

how CO roles and jobs are perceived and are broadly consistent with the pictures outlined in the documents reviewed. The other two images, i.e. Face of the Hospital (showing their importance from a public relations aspect) and the Sandwich (explaining how COs are 'squeezed' between doctors and nurses) are important actual but unspecified aspects of the CO cadre. This suggests a sense of ambiguity regarding role expectations that should be addressed. Further, it is likely that the image one holds of a CO influences the support given. Where COs are perceived to be an integral part of the team, support mechanisms have been put in place to support what they do and vice versa. These issues are discussed further in Chapter 6.

6.4. Task and Non-Task Aspects of CO Roles

The 2009 CO scheme of service clearly outlines the tasks that COs are to perform and are shown in Table 6-1 below. Table 6-1 focuses on whether the tasks assigned to COs incorporate both a task and non-task perspective to COs roles. The table shows that CO roles are very varied and depend on an individual's position. These generally focus on patient care and management with a little community work and training for junior COs and increase in complexity up to the policy level for COs based at the Ministry of Health.

Table 6-1: CO Roles from a Task and Non-Task Perspective

Roles	Junior to Mid-Level COs	Senior Level COs
Task	**Junior** 1. Patient Care and Management: 2. Planning and conducting Community Health Care activities; 3. Teaching, supervising and counselling students attached to the health facilities 4. Supervising and counselling a small number of staff engaged on routine patients' care and giving support and health education to patients **Mid-level – Above Plus:** 5. Training of community health workers 6. Secretary to Health Committees: 7. Management of clinical services in a Provincial/ District hospital or health centre 8. Curriculum development, its implementation and evaluation 9. Partnership for development that involves liaising with division heads on health services.	Management of Clinical Services involving: 1.Formulation of clinical services policies 2.Maintenance of clinical standards and ethics 3.Deployment of clinical officers in the Ministry 4.Training and development of clinical officers 5.Staff performance appraisal 6.Planning, implementation and Supervision of curriculum development; 7.Evaluation of training programmes 8. Research

The 2009 CO scheme of service pays much attention to task issues where task aspects of a COs

work combine both curative (e.g. patient care and management) and preventative (e.g., community health care activities) aspects. From the respondents' description of CO roles, it is clear that there is much focus on curative aspects and less on preventative aspects. FBH facilities were found to hold monthly community outreach services but these also served a secondary purpose of proselytizing to the community. The only departments in GOK settings that carried out outreach services were the TB and HIV/AIDS clinics which were externally funded. In GOK settings, COs leadership roles were seen when they worked in lower level facilities such as health centres and dispensaries where they managed these institutions. However, no leadership roles were allocated to them (e.g., secretary to the health committee) at district level to my knowledge.

Both the 1994 and 2009 CO schemes of service are silent on what non-task aspects of CO roles are. As for the FBH facilities visited, two hospitals had outlined what their non-task expectations of COs were. These covered behaviour at work and also outside work. H1 strictly enforced the rules of conduct to the extent that behaviours such as using tobacco products imbibing alcoholic drinks would result in severe repercussions for the employee. H4 and H6 were less strict on these behaviours but the facilities did expect their staff to conduct themselves in accordance with the fact that their employers were Christian institutions.

6.5. Differences between Settings

An important analytical idea explored in this thesis was whether there are any differences in CO roles that could be attributed to the settings where COs work. Some discussion of GOK and FBH requirements of COs has been provided in section 5.3.2 above. The section finds that FBH facilities have provided a basic job description for COs that was supplemented with a code of conduct document that further described expected staff behaviours.

Interview data from COs and others suggests that both FBH and GOK facilities accorded COs similar roles which generally coalesced around patient care and management. However, COs from FBH settings additionally reported receiving more clarifications regarding expectations of their role compared to GOK based COs who were expected to function from what they had learnt in college or from their peers. An additional difference between GOK and FBH facilities was the lack of specialists in FBH settings. This was attributed to the fact that FBH facilities had generally preferred a doctor led medical system. Due to the cost of recruiting and retaining MOs,

they had begun to recruit COs to run their outpatient departments (with support from MOs) while MOs focussed their effort on covering the FBH's inpatient departments and theatres. With the exception of CO Anaesthetists due to the shortage and high cost of MO Anaesthetists, very few CO specialists work in FBH facilities.

Variation in the roles played by COs in OPD, specialist CO and vertically supported clinics were also seen. In OPD, their role generally focussed on patient care and management. This focussed on seeing all patients who were in OPD and referring them accordingly to the various hospital departments or sending them home after prescribing appropriate drugs. This role differed between FBH OPD who generally supported their COs by either providing an MO (H4) or Consultant (H1) in OPD for consultation while GOK OPD had to rely on their knowledge or that of their peers and in difficult cases they admitted the patient for further care or referred to a Consultant or SCO. SCOs generally focussed on taking care of patients with defined conditions which depended on the qualification of the SCO. This gave them some autonomy. In VCs that provided care for patients with TB and/or HIV/AIDS, the roles were very clear in that the care provided for patients with these illnesses followed set rules and guidelines making it easy for COs to work in such environments.

6.5.1. GOK and FBH Requirements of COs

A clear distinction between public and faith-based facilities was the provision of a basic job description by faith-based hospitals of what they expected from a CO from a task perspective. However, the tasks outlined in the FBH document did not significantly differ from what I gathered from interview data from respondents in GOK facilities.

It is in the non-task aspects of work that differences were seen even between FBH institutions. In two faith–based facilities, the job description was supplemented with a 'code of conduct' document that outlined acceptable non-task behaviours within and outside the workplace, acknowledging that the role of a CO extends beyond the task perspective. This document formed part of the employment contract between the CO and hospital. It covered issues such as workplace behaviours (timeliness, civility to patients and colleagues) and behaviour outside the hospital such as the requirement to attend church regularly. Some of the areas covered in the FBH code of conduct could be considered to infringe on the employee's rights, for example, the prohibition of behaviours such as drinking alcohol or smoking even outside the vicinity of the workplace, among others.

6.6. What Is It Like To Be A CO?

The previous sections have outlined who COs are supposed to be and contrasted this with actual perceptions held by themselves, fellow health workers and policymakers. However, it is known that COs face many challenges ranging from motivation (addressed elsewhere (31), (10)) to their role expectations when enacting expected roles. The existence of these challenges suggests a tension between institutions and the individuals within them. This section now seeks to analyse the meaning of these issues based on the analytical positions outlined by the nomothetic - idiographic model (122) (120). Three analytical ideas regarding role conflict are outlined by the model and are 1) lack of clarity at institutional level on CO roles (role conflict); 2) Institutional - individual level conflict, referring to COs having different notions of their roles from the prescribed ones (role - personality conflict); and 3) Individual (personality) conflicts, referring to tensions within the individual health worker about their role. These are discussed hereafter, drawing on data from interviews and review of documents to highlight the conflict and its results where possible.

6.6.1. Institutional Conflict (Role Conflict)

Role conflict is where there exist multiple expectations at the institutional level for one job position that are contradictory or inconsistent such that conforming to one set of expectations makes it difficult to meet the other expectations (120, 122). In theory institutions ascribe a number of roles to be performed by COs. In practice however, COs are limited to performing only patient care especially from a 'filter' perspective as described previously. While there were some possibilities for expanded roles, e.g. outreach in VC clinics and mentoring students in hospitals with an attached training institution (e.g., H2 and H5), a number of other roles that might satisfy and motivate COs were rarely encountered, e.g. managerial responsibility. A number of issues at institutional level that result in role conflict are outlined hereafter.

Issues With Specialist COs

SCOs generally see their specialist skills as making them different from RCOs. By specializing, they have gained additional skills which they feel restrict them to practising in their area of expertise. It is in light of this that efforts by hospital managers to get SCOs to work in OPD due to the shortage of RCOs have been resisted with some respondents feeling that their elevated status was not being recognized.

'When you go for specialized training you are supposed to practice within your area of

> expertise although you are not supposed to forget general medicine'.
> *SCO ENT, H5*

> 'The care given is more specific, the workload is less, but there is friction between us and the administration because they want us to work in OPD. But who will see our patients? They won't help when we have an overload'.
> *SCO Paediatrics, H3*

Also as will be shown in Chapter Six, COs do not define expectations of their roles. The responsibility for doing so is by system design left to MOs who have the authority due to the fact that they hold most senior positions in the Ministry of Health hierarchy. Even the CO council that is tasked with the responsibility for overseeing the training, regulation and licensing of COs in Kenya has by law three (3) MOs in its governing body (53).

Lack of Financing for CO Roles

Another issue showing role conflict is the position of the District Clinical Officer (DCO) who manages COs in an entire district. One of the tasks of this post is the supervision of COs working in lower level facilities (L1-L3). Anecdotal evidence suggests that the District Clinical Officer (DCO) does not have any funds allocated to their office which hampers their ability to supervise COs working in the lower level facilities (usually, a DCO is based at the district hospital).

> 'I am there for convenience; they just have someone to pin on the title'.
> *DCO, H3*

To do their work, DCOs have to tag along when other officers, whose positions have been allocated funds such as the District Public Health Nurse or the District Medical Officer, visit lower level facilities in the course of their duties. The lack of funds implies that their office is not important and can be ignored by the other officers whose job positions have funds allocated to them.

6.6.2. Institutional – Individual (Role-Personality) Conflicts

Role-personality conflicts result from discrepancies between the pattern of expectations for a given role and the pattern of need-dispositions of the role holder (120, 122). In the case of COs, role-personality conflict would refer to a scenario where COs are conflicted about their given role in the health system (e.g., filter), preferring or believing that they have much to offer over and above the given role. COs reported conflict at the individual level to arise from their limited role

that inhibits their need to grow in their chosen profession. One way that individuals have responded is by focussing on patient care perhaps because they feel they do not have the authority to demand for support to carry out other activities that would lessen work in hospitals Another example of conflict is the notion held by some COs that they are 'doctors in waiting'. The reason for this is the thought that since the system wishes to have a physician led service and their numbers are still few, it would be fruitful if their qualifications and experience can be considered when applying to join medical school as opposed to the current practice of ignoring this and joining from first year (which they think is derogatory). This would help to rapidly reduce the time taken to produce doctors who can then be deployed as need be all over the country. This however goes against the need of the system to have a cadre carrying out a 'filter' function so that in their niche, they can reduce the work that doctors would necessarily do and allow them to concentrate on other duties since their number in the public health system is still low. The question here is whether there is clarity of the role of a CO and their place in the system, and whether COs accept this. Some examples of such conflict are shown below.

Lack of Recognition and Appreciation

All COs interviewed reported the need for recognition of what they do. Many COs felt that their contribution to health service delivery was not acknowledged with some advocating for documentation of the work COs do on a daily basis to support this. The lack of recognition also includes issues such as poor promotion or upward movement prospects that to an extent have been addressed in their revised scheme of service. However, many COs reported not knowing whether a revised scheme of service existed nor what is contained.

> 'You see…one thing…people have to be recognized. You may give somebody a lot, maybe either material, but you must recognize somebody is doing something'.
> *SCOs TB, H2*

Being accorded the appropriate recognition and appreciation would address COs perception that much credit is given to doctors for work that they do. They also had an expectation that such recognition could be seen in areas such as promotions taking place on time and having better work relationships with their clinical colleagues.

Limited Roles

As described previously, a role that should be carried out by COs is management. In practice however, there are few chances for them to do so especially at senior level which is a major bone

of contention among COs. At the district hospital, COs contend that delegation of authority to nurses where, when the medical superintendent leaves for out of station duties, management of the hospital is usually left to the hospital matron is not appropriate.

> 'When the medsup (medical superintendent) leaves, the hospital is left under the management of the hospital matron. COs feel that this is an injustice as they are next to doctors'.
> *Policymaker 3*

This has displeased COs for many years as they argue that they are senior to nurses. On review of the schemes of service for both COs and Nurses, it appears that the CO **IS** senior to the Nurse as the Chief Nursing Officer is at Job Group 'Q' while the Chief Clinical Officer is at Job group 'R' (190). In addition, some senior COs wondered why it was difficult for qualified COs (there are COs with Masters degrees) to hold senior positions in the Ministry of Health (many of which are held by doctors).

Glass Ceiling

A felt issue among COs is the perception of a glass ceiling that exists in their careers. One form that the glass ceiling takes is the few chances for COs to join medical school. A number of COs mentioned that while they would prefer that their training and work experience be recognised, this is not done. So they have to join medical courses as first years which can be time consuming and is an expensive undertaking. In explaining the apparent difficulty faced by COs in joining medical school, some respondent suggested that it was due to the need for MOs to protect their territory from COs whom they saw as their competitors. The other aspect that the glass ceiling notion took form was upward progress in their scheme of service. The lack of upward progress was also reported by a policymaker who felt that the present forms of advancement moved COs away from clinical medicine to other areas, an issue that was not desirable.

> 'There appears to be a 'glass ceiling'…upward movement is very poor, unless one moves out of CO medicine into other areas'.
> *Policymaker 3*

> 'For those who go for the additional training to specialize, the qualification does not result in an increase of their salary. They come back and work at the same job group as they left. This is quite de-motivating'.
> *Policymaker 3*

Further highlighting the glass ceiling idea is the fact that while a number of COs do wish to return to college and acquire additional specializations, many reported seeing no value in doing so. Since COs pay the college fees, there is an expectation that after resuming their duties, their additional qualification would be recognized through promotion to the next grade. As shown by the quote above, this does not happen.

Specialization is a Way Out of Being a General CO

A response to the few opportunities for upward progress in the CO career ladder as well as few employment opportunities in general is seen in the practice of some COs to specialise in an area of medicine. At policy level, there is general agreement that there is need for SCOs in rural areas especially considering that MO specialists are few and many prefer working in large urban centres. The need for SCOs has further been reinforced by the increase in population and a general awareness among the public of what they can do.

> 'You know, service is also needed in the clinics. And we are the people to give the service so that's why we specialized. Again, getting something else is not bad. To remain with only the basic certificate, it's not as good as when you have two'.
> *SCO Orthopaedics, H2*

For the COs and despite the fact that a promotion may not be forthcoming once they qualify, a perceived incentive of being an SCO is that it offers access to better opportunities, whether in terms of free time, autonomy or having a regular work routine that were not available before as shown by the quotes below.

> 'The only good thing is that when you do a higher diploma in something, you are no longer overworked. You get free time to do other things and work without so much supervision….'
> *SCO ENT, H2*

> 'There are not so many procedures…and…we don't do night calls while the general clinical officers do nights and public holidays'.
> *SCO Paediatrics, H2*

> 'They get already diagnosed patients and only work half day shifts. Sometimes they alternate days or even weeks, and by three in the afternoon they have cleared their queue while we are still seeing patients'.
> *CO Small Group Interview, H2*

General COs felt that SCOs were in an enviable position since they received patients whose conditions had been diagnosed or had made informal arrangements to work in a shift system that favoured their ability to pursue other productive.

6.6.3. Individual (Personality) Conflicts

Personality conflict is thought to result from opposing needs and dispositions in the personality of the job holder (122) (120). Personality conflict occurs within individual health workers (120, 122) and relates to health workers need to be altruistic but are at the same time disposed to being self-interested (38). While many health workers stated that they joined the profession because of the intrinsic rewards associated with helping others and the associated prestige, it has however not helped them to live the life associated with such a position (10), (122). They are expected to be courteous and kind but at the same time are frustrated by low salaries and poor promotions, among other issues. An example of this is shown by the quotes below that explain the issues that general COs have with specialist COs:

> 'Some have forgotten that they are clinicians and have forgotten the general practice. They only know their specialty and want to work there'.
> *CO4, H3*

> 'The situation is getting worse, those who have specialized don't want to work with general patients and the outpatients are neglected'.
> *Nurse, H3*

The quotes above suggest that some of the reasons for specializing might not be driven by altruistic intentions. While many SCOs empathised with the workload borne by COs working in OPD due to the inherent workload in that department, most did not want to work in OPD regardless of the fact that the COs working there were under a lot of pressure. In addition to the reasons outlined above, specialization offered more recognition as a professional, and the ability to earn extra money from locum or running private clinics, an issue that was not readily acknowledged as a major reason for specializing.

Another aspect of the personality conflict relates to the health workers need to provide a good service that is constrained by inability of a system to provide adequate tools and supplies to accomplish this. While not formally stated, there seems to be an implicit assumption especially in the public sector that health workers need to innovate to accomplish their jobs since the reality is that one will not always have adequate supplies and equipment. This goes against their training

which teaches them to work in systems where nearly all of the tools and supplies needed to do their work are provided. To an extent, FBH facilities have strived to meet this need by providing the basic tools and supplies for their work, issues discussed in Chapter Seven.

6.7. Conclusion

In this chapter, I have described informant's opinions regarding the roles that COs play in the Kenyan system and presented perceptions of COs through the images held by COs and others which were found to vary between the cadres and also from a policy level. An examination of CO roles from a task and non-task perspective revealed that while task issues are emphasized, there is still little attention being given to non-task issues. A description of some of the challenges faced by COs in performing their roles was done by examining three types of tensions that exist between institutions and individuals. The first tension focuses on whether the institution is clear about its expectations of COs (role conflict). The data presented above suggests that at institutional level, some role conflict occurs especially with regards to SCOs being asked to work in OPD or not funding the DCO to do their work. The second tension focuses on whether COs agree about their role in the health system. This is shown by the variety of images held of them, suggesting the need for role redefinition and clarification so that all who work with or manage COs understand them. Also, there is need to consider the effect of the third tension that focuses on conflict within health workers that arises from their need to be altruistic as well as be self – interested so as to make a living from their profession. This is important in light of the proposed use of MLWs to substitute for physicians that mainly considers their technical abilities with little consideration of the non-technical aspects of their work. The next chapter examines notions of CO performance.

Chapter 7. Norms of CO Performance

7.1. Introduction

Norms are formal or informal expectations providing guidance on how activities assigned to a job holder should be carried out and prescribe behaviours expected for that position. Chapter 2 explored the concept of performance and described how it was approached in this thesis through the nomothetic-idiographic model. The literature reviewed suggests that discussions over performance are common in any employer-employee relationship. However, what performance means to them and how it is viewed was unclear. This chapter begins to shed light on these issues by first exploring how norms of performance have been operationalised then how performance at present is understood among COs. Following this, I examine task and non-task aspects of CO's jobs and then how settings influence norms of performance. I then examine these issues focussing on the tension between what institutions desire and how individuals respond.

7.2. Understanding of Performance

This section explores informal notions of norms of CO performance by examining respondents opinions of how well COs work with a focus on the district hospital setting. This was done in cognizance of the fact that no respondent mentioned having seen the 2009 CO scheme of service that outlined their norms of performance. So, to get at what respondents understood norms of CO performance to be, several approaches were used. First was to interrogate the idea of perceived variability in CO performance between settings by examining hospital statistics on COs workload and respondents opinions of what influenced it. This is then contrasted with an exploration of respondents' normative judgment of whether CO performance is good or poor.

7.2.1. Workload

In the sites visited, high workload was reported to be a critical influence on CO performance. To understand exactly what high workloads meant, Table 7-1 below shows the daily average workload per clinician in the four hospital OPDs initially visited.

Table 7-1: Comparison of Workload Statistics

Hospital	Daily Average Workload per CO (OPD)								
	May 08	June 08	July 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Av.
H1	37.5	29.0	36.1	36.2	40.7	42.2	37.7	35.9	32.4
H2	59.0	60.1	57.7	43.5	47.0	44.4	36.8	41.4	48.7
H3	28.2	28.1	28.1	25.3	25.6	25.4	26.5	24.7	26.5
H4	31.7	27.4	29.7	28.7	27.6	28	22.7	23.6	27.4

The table shows the daily average workload per CO working in OPD for 4 hospitals. The reason for this is that in the additional two hospitals visited, my interest was to explore further issues related to SCOs as their number in the GOK hospitals previously visited was small. Also, I wanted to understand organisational features of a third FBH setting in order to acquire more understanding of FBH facilities. While I did try to get workload data in both facilities, I found the records of the FBH facility to be poorly kept, mainly due to the high numbers of patients seen in the facility. In the case of the GOK hospital, the issue was that the records officer was not available that made access to workload data for that facility to be difficult.

Though not formally expressed anywhere, a major issue facing all COs whether in FBH or GOK settings was the issue of productivity. Productivity here is taken to mean the number of patients seen by a CO in a shift or on daily basis that gives a picture of how well they work. In OPDs average workloads seemed reasonably consistent across three sites but were considerably higher in one GOK site (H2), a finding consistent with participant observations in that site. However, experience from elsewhere (10, 31) would suggest that H2 is more representative of the average number of patients commonly seen by COs working in many GOK sites while H3 might be considered a relatively quiet GOK setting. This is probably due to H3's location in a semi-arid district where population densities are lower and because of its specific position two kilometres outside the district town. H1 is more representative of the workloads seen in FBH facilities though this number may vary depending on the location. Though I was unable to acquire workload data for H6, a FBH facility, the volume of patients is thought to be similar to that seen in H2, a GOK facility.

It was not possible to get separate data for SCO and VC clinics due to the way statistics were reported for these settings. The number of patients seen in VC and SC clinics was however established through participant observation and responses from staff working in those two

settings. In absolute terms, the setting that is busiest is OPD, followed by the VC for HIV care (CCC) and the SCO clinics generally had the least numbers of patients. However, it should be noted that one SCO clinic, the paediatric clinic, routinely has high numbers of patients as it frequently acts as a walk-in outpatient department for children.

Table 7-1 has shown the typical workloads for COs in four of the six hospitals visited. These figures on CO workloads represent what a typical performance exercise might come up with. So, we might then reward H2 as it is the busiest and punish H3 for performing 'poorly'. However, these figures, while making it very easy to compare worker productivity across sites, do not explain the underlying drivers that explain the productivity seen. First, there was general consensus among all respondents that the workload at OPD was higher than other hospital work settings, with varying opinions regarding what a reasonable workload was and its effects. Interestingly while absolute workloads were clearly linked to feelings of having difficulty in providing good task performance the quotes below indicate that this relationship is not simple and linear.

> 'As a clinician, if I get twenty patients, I may work well, but if you gave me a hundred, you become irritable and it is not my true nature but you know the overworking will make me behave in a manner that will not make you happy'.
> *Policymaker 1*

> 'Working the whole day in that clinic? It's not easy. You know those mothers are not sick, they are the babies who are sick, so those mothers abuse here, you work there two days alone, you are hurting!'
> *SCO Paediatrics, H2*

A CO can feel overworked and perform poorly with relatively fewer patients while another can perform well in a high workload setting because of the effect of the environment on their work. Further, performance is perhaps mediated by patient demands where some settings were perceived to be more tasking than others. For example, working in the OPD is seen to be more tasking than working in the specialised clinics, which could explain why some COs specialised in order to 'escape' from OPD as explained in chapter Six and later in this chapter.

Second, these perceptions are perhaps modified by the issue of productivity expectations. In both GOK and FBH settings there is an attempt to see all patients seeking care from their facilities but also to maintain quality. While GOK settings generally had 6 hour day time shifts staff in FBH facilities had longer working shifts as shown in Table 5-1. To manage the inevitable feeling of being overworked in FBH, interview data showed that the involvement of FBH managers in

ways such as insisting on quality (even if COs are busy, task performance is better), availing resources and providing supervision helped to ensure that performance was sustained and staff motivation was maintained. With the exception of H3, such involvement was not seen in the other two GOK facilities. The quote from the policymaker above is representative of a commonly held perception that GOK settings were busy, explaining why staff could at times behave in an uncivil manner. This should be understood in light of the fact that the policymaker had managed a busy district hospital for a long period of time before being promoted.

7.2.2. Good Performance

To explain the preceding and also to understand what respondents felt were norms of CO performance, respondents were asked to characterise what they felt was good and poor performance. These characteristics are inferred to be the norms of CO performance as informally espoused in the CO work settings.

With a focus on good performance, two major issues were described as characterising it: quality of work and discipline. While discipline was an issue that was mentioned in all sites, quality of work was less so. FBH respondents and SCOs, CO supervisors, MOs and hospital management in public facilities frequently reported the emphasis that their facilities paid to the need for high quality of work. Participant observation and conversations with COs in GOK sites suggest, however, that they do not have time to reflect on the quality of their work – good performance was more aligned with meeting the demands of the workplace. It is possible that while most respondents from the public sites could engage with the concept of good performance, they did not relate or necessarily act these out in their daily practices. Many GOK respondents suggested that good performance was meeting the expectations of others. The question then is whether the expectations of others approximate the standards outlined in the revised CO scheme of service as outlined in Chapter Two of this thesis, an issue further explored hereafter as well as in section 7.5.1 of this chapter.

7.2.2.1. Quality of Work

The first broad normative area characterising good performance was the quality of work notion that was manifested in various ways.

Maintaining Standards

With regards to maintaining standards, there was consensus among respondents that maintaining

standards during the clinical process of a patient encounter was an important norm. It involved taking a patient's history, conduct of the examination, ordering of investigations and planning treatment with counselling to ensure it is adhered to, issues that are detailed in the revised CO's scheme of service. This points to a great focus on the patient management and care area described in Table 2-4.

> '…(he/she) has not examined the patient, just symptoms: cough, diarrhoea, taking alcohol. Such a kind of a person, even if he comes to work at eight, he is very obedient, the end of the day he is not a good person. He is not performing to the standard'.
> *CO in Charge, H1*

> "…what I am always impressed with is someone who has been able to…to present me a good case history. So they can present me a history in a…in a logical fashion, and present me the examination findings…. Rather than just saying…'oh I have so and so who has abdominal pain and I don't know what is going on"'.
> *Medical Administrator, H1*

> 'It usually comes out in…those kind of…situations when you've got a clinical officer who is bringing you a case to discuss and you can usually immediately tell… even just looking at the notes that they've made, whether they've taken a good history, whether they have examined the patient…, and really …whether they've really listened to the patient'.
> *Medical Administrator, H1*

Much emphasis was given to doing the right thing to a patient over and above behaviours such as punctuality or obedience as shown by the first quote. An important indicator of whether this was being done could be seen in the clarity of a clinician's notes as shown by the latter two quotes that are illustrative of this emphasis in FBH settings. As described by the Medical Administrator of H1, a FBH site, good performance as a norm included the ability to take good notes from which it could perhaps be inferred that the CO had taken time to listen and examine the patient to come to a working diagnosis. My discussions with hospital CEOs as well as COs suggests that when the hospital management took time to inform COs the expected standards, COs tended to conform to the expectations. However, GOK managers were generally less likely to engage with their COs compared with their FBH counterparts.

> 'You see, a good performer must be guided by the standards of whatever you are given to do because you might be doing a lot but not within the standard'.
> *SCO Chest & Lung, H2*

> 'Because a good performer...will follow the standards of whatever they were taught. That they have to take a good history, do a proper examination, yeah, because if you take a good history then it means you won't miss but if you miss…. And the reason you miss

> sometimes you're exhausted and there are so many patients that want to be seen….'
> *SCO Chest & Lung, H2*

Examining the issue of standards from the perspective of respondents in GOK hospitals shows less clarity regarding what the performance standard is or how it should be maintained. While there was an understanding of the expected performance standards among general COs, they rarely clarified what they thought the performance standards were. The second quote that was stated by an SCO suggests that maintaining standards was an issue that they paid attention to, perhaps because they saw fewer patients than COs working in OPD. As shown by the second quote, the respondent states that wrong diagnoses are the result of being exhausted from the high number of patients to be seen.

Time Spent Per Patient

Linked to the idea of quality was the ability to spend adequate time with a patient that allowed space for exploration of any issues that the patient might have. COs were expected to be flexible with their patients as some had issues that took longer to address than others.

> '…on average (there are) less than 15 minutes if there are investigations to be ordered; otherwise 5 to 10 minutes without investigations'.
> *DCO, H3*

> Because per day, at least per day, now according to rules here you should see 27 patients.
> *CO4, H1*

> The recommended workload is up to 50 patients so that you are not in a hurry, take appropriate history but with the current workload you are forced to see all the patients, even the quality of work is minimized.
> *SCO Paediatrics, H3*

> And because of purely the pressure of time, I would say that the quality of the history that's taken and the physical examination that's done (in GoK settings)…you know, could be a lot better...could be a lot better.
> *Medical Administrator, H1*

Taking the first two quotes, together, it would take roughly seven hours to see 27 to 32 patients (27patients*15minutes or 10 minutes/60minutes) which is equal to an eight hour working day when the lunch hour is included. As shown in Table 7-1, clinicians generally saw more than 27 patients per day which required them to use their time more judiciously.

While more time spent per patient is a key feature of good performance, participant observation suggested that clinicians in GOK OPD sites generally spent less time with patients than those in FBH sites. Participant observation and respondents' opinions in these sites offer two reasons. The first, reiterated by the fourth quote, arises from pressure to clear queues that coupled with a shortage of COs in OPD forces the COs to choose to spend little time with each patient in order to ensure that all patients were seen. In one GOK site (H3), I noticed that despite having few clients (meaning that they could spend more time with each patient), COs spent very little time with them. In one participant observation session, I calculated that the CO spent no more than two (2) minutes per patient in a clinic that started at 10.00am (though it was required to start at 8.00am) and was completed by 11.30am.

Continuous Professional Development (CPD)

There was consensus among policymakers, hospital management, doctors, and COs that technically competent COs could perform well especially if the CO was up-to-date with the latest technical standards.

> 'And then in terms of maintaining standards, who also updates himself or herself. And that's why we are introducing this CPD'.
> *Policymaker 2*

> 'But you see with competence, you need also to be having regular refreshers. Because now, when we used to treat people with Chloroquin, those days are gone and if you are not updated…'
> *CO7, H1*

There is now an acceptance in the practice of medicine in Kenya that there is need for medical professionals to update themselves regularly. An assumption driving this, whether true or not, is that health professionals need to update their knowledge and skills every three years or they become redundant. This has also been reinforced by the adoption of regulations that base the continued registration of COs and MOs at present on a verifiable record of CPD attendance in seminars, workshops, scientific conferences or courses offered by accredited or recognized institutions. For COs, CPD attendance is now being promoted as a way to ensure COs knowledge and skills was frequently updated by the Clinical Officer's Council[22], a body registered under CAP 260 of the laws of Kenya (53). However, the modalities of how it will be done practically are not yet clear.

[22] http://clinicalofficerscouncil.com/training.php

Appropriate Consultation and Referral

All respondents agreed on the importance of consulting one's seniors (administrative and medical) when dealing with cases that surpassed their competence.

> 'We are well able to handle most cases unless it is traumatic and we consult the medical officers in MOPC and SOPC'.
> *CO5, H4*

It is an expectation in all facilities as well as in the revised CO scheme of service that difficult cases be referred, suggesting that knowing one's limitations is an important aspect of COs work. Discussions with medical administrators in FBH facilities saw this as an opportunity for learning thus further improve one's performance. Participant observation and interview data from GOK sites show that the opportunity to do this happened rarely in public facilities. Consulting one's seniors was seen as a constructive process in FBH facilities while the process had negative connotations in public sites, though not in all sites and not with all Consultants.

7.2.2.2. Discipline

Discipline formed the second broad normative area characterising good performance and grouped several issues such as timeliness, punctuality, self drive and, teamwork.

Punctuality and Self Drive

> 'A good performer is one who is punctual to report to work, are thorough in their work and are able to attend to majority of the patients who present to them and also know when to refer'.
> *SCO ENT, H2*

> 'We look at whether they come to work on time. When they come, are they available and are they able to handle the workload of the day?'
> *Hospital Administrator, H3*

Though quality of work was given high priority, issues such as timeliness, punctuality and self drive were also seen to be important. As shown by the quotes above drawn from GOK respondents, punctuality and availability of COs to attend to patients was a major area of concern for the hospital management. Taking the example of H3, a GOK facility, my discussions with the Hospital CEO showed that there was much emphasis in ensuring that staff (COs included) came on time and did their work. Similar issues were seen in FBH facilities where senior officers stated that they expected staff to be available to serve patients seeking services in their facilities.

Teamwork

> 'Finally, the interaction between the other workers… he has self-control, he respects and is respected'.
> *CO2, H1*

> '…when you are working with nurses, when you are working with the patient assistant, when you are working with the other doctors....how do you work with them? Is you a person who keeps tossing people here, 'do this!'…you command everyone, you go there, you collide with everybody?'
> *CO in Charge, H1*

The provision of medical care by nature is a team effort and requires smooth collaboration within and between cadres to be done well. In particular, I observed that teamwork was highly encouraged and required in FBH sites in more cases than in GOK facilities. FBH respondents attributed this to the expectation that addressing patients' issues was a collaborative effort and the fact that the hospital management routinely reinforced the need for all cadres to work together. GOK facilities seemed to deal with each cadre separately even when they were working in the same department.

7.2.3. Poor Performance

While most respondents stated that poor task performance was simply considered as the opposite of good performance, their responses went beyond task performance to illustrate poor performance as including poor social skills and particularly relational skills within the workplace. These are discussed below.

Poor Attitudes towards Work

Various aspects of poor attitudes towards work are illustrated by the quotes below. The poor performance reported among GOK COs was generally attributed to the poor attitudes they hold towards work which included doing the minimum amount of work, not working well with others, and feelings of injustice where COs felt that they were castigated a lot more for mistakes than MOs were, among others.

> 'They (poor performers) are the opposite. They come to work late, do their own things instead of seeing patients…they go to the wards to greet people or see their sick relatives during working hours, not caring that patients are kept waiting….'
> *SCO ENT, H2*

> 'They…are absent…sneak around and don't perform duties. Their patients move around complaining'.
> *Deputy CO in Charge, H3*

> 'They do not update themselves and are not ready to learn from others. They also do not ask for other's opinions'.
> *2 SCO Ophthalmologists, H5*

> 'We also get bored when they come late because they are delaying our work and you have more work when you are supposed to be going home'.
> *Nurse, H3*

Poor attitudes towards work was seen in various ways including coming late to work or CO's not being present at their workstations even though they had reported to work. The workers who reported late to work did so despite the existence of a memo from the MOH prohibiting such practices and the presence of attendance registers aimed at curbing such behaviour. Participant observation in some sites provided illustrations of staff who did not stay in one place and work but kept on moving around chatting with other staff or taking care of sick relatives and friends who had come to the hospital seeking care. Other respondents felt that workers who were unwilling to learn were poor performers. The result was that their colleagues have become dissatisfied with negative work habits of COs which constrain their ability to do their work. The combination of these issues indicates that there is a real performance problem.

> 'Mainly, people are seen not to be performing if they are not fulfilling their basic role'.
> *HR Administrator, H1*

> 'You see I said about the standards, if you are performing, isn't it? So what is the quality of whatever you are doing? If the quality is poor, then actually, you are a poor performer. But if the quality is good, then it means you are a good performer. Because, I believe, if the quality is good, you are now following the standards'.
> *SCO Chest & Lung, H2*

> 'It is also possible to tell one's effectiveness through re-attendances then we can know whose services are not helping us. Re-attendances tell us that one did not deal with the patient well'.
> *CO7, H1*

The basic role of the CO was to provide acceptable care to patients who sought their services in the hospitals as shown by the first two quotes. In fulfilling their basic role (patient care and management), COs had to follow the available standards so that they could provide good quality care. As shown by the third quote, a way of knowing whether a CO had provided a good service

was by looking at patient records to see the number returning to hospitals (re-attendances) to seek additional care because they had not improved.

> 'You cannot go wrong as long as you are seeing patients…maybe some few cases of negligence or benefiting from the patients, ordering unnecessary investigations…'
> *CO FGD, H2*

> '…You can't expect my performance to improve if I am uncomfortable…so many things are not OK. I don't think performance can be ok when even the most basic needs are not met….'
> *Nurse Ophthalmologist, H3*

Mainly in GOK settings was a rather cavalier attitude towards task performance as shown by the first quote. COs felt that so long as they were turning up to work and seeing patients, they were performing. Little consideration of how well they worked was seen among many general COs in GOK settings. Explaining this is the idea shown by the second quote that staff performance will not improve if workers were uncomfortable. This is where many respondents blamed their poor performance of tasks on external influences but did not seem to accept that it was their responsibility to do their best.

> 'They can do the work but they have an inherited attitude towards work. Even MOs (can) come at 8am but they don't, they say it is a hardship area and give themselves off days. At times there is no clinical officer in the whole hospital for the whole day!'
> *Nurse, H3*

Some respondents felt that COs could do better but only if they changed their attitudes. It was reported that the attitudinal problem existed not only among COs but was seen also among MOs. In the case of MOs, the major issue was that they could not see any patient who had not first been examined by COs, and in other cases, looking down upon COs.

Poor Handling of Patients

> 'You can know a poor performer by the way they talk to their clients. You know, they examine patients by looking at them across the desk, provide inappropriate management and miss things during diagnosis'.
> *SCO Paediatrics CCC, H5*

> 'Other times we know from patient's complaints, especially when they tell us 'we do not want to be seen by so and so'.
> *CO7, H1*

The result of the poor work attitudes held by COs was seen from CO's behaviour during the CO – patient encounter as shown by the above quotes. While not formally outlined in any job description, there was consensus that managing the good patient management also included the quality of the clinical encounter. There were suggestions that if the clinician involved patients in their care, they would accept and comply with the treatment provided because the patient understood the reasons for it.

> 'They don't take appropriate history so some of the time they are just shooting at diagnoses hoping to get it right'.
> *OPD MO, H2*

> 'If they just see a sickly patient, admit. This one looks…well and…she is walking…this one can go. But that's a very poor way of judgment'.
> *Medical Superintendent, H2*

> 'They end up with the wrong diagnosis especially the young ones. (So) we try to start from the basics, ask them what they know and then we correct and teach them'.
> *CO In Charge, H3*

The previous section has shown how important quality of work is regarded thus making poor quality of work unacceptable. However, not all COs do the right thing. Acknowledgement by the CO in Charge of the existence of the problem and the fact that ways of addressing the problem were in place is clear indication of awareness of poor performance. The problem however arises when some non-CO respondents (especially MOs) felt that the problem of a single CO was an indicator of problems with the entire cadre and treated all COs as having performance problems. This is perhaps one reason for the poor working relationships between MOs and COs.

Lack of Conscientiousness

> 'The biggest (problem) is not seeing the patients, they are doing a disservice. The patients now only come to hospital when desperate, and you see patients coming back being given the same treatment even if it is not working for them'.
> *Pharmacist, H3*

Another social aspect of the CO job is the issue of conscientiousness. The argument raised by the Pharmacist here was the issue that COs not performing their duties was a disservice to patients seeking care from the facility. In the quote above, whether the COs turned up to work at all and if they did, how good the encounter was between themselves and their patients influenced patient's decisions to visit the hospital to be treated. Participant observation and interviews with

other respondents in that hospital (H3) showed that COs came late and sometimes never turned up to work. As reported in Chapter 8, I later found out that COs work habits had improved after intervention from the hospital CEO.

7.3. How Have Norms of Performance been Operationalised?

In this section, I report respondent's descriptions of elements of norms of performance that relate to task and non-task aspects of performance as practised daily by COs. Unlike task performance, describing issues comprising non-task performance was not easy for the respondents to do since there is no formal teaching of what non-task performance issues are. Much of the training as suggested in chapter two focuses on the task aspects of COs work. As presented below, issues describing task and non-task performance appear to be drawn from respondent's reflections of their observations of what happens around them. Though appreciating the fact that respondents rarely saw the two aspects as separate, where possible, distinctions between issues related to task and non-task aspects are made. Overall, responses on how norms of CO performance have been operationalised could be grouped into three areas – inputs, process, and outcomes. This suggests that there might, perhaps, be differences in expectations arising from facility level influences, issues that will further be explored in the next section.

7.3.1. Performance as What One Is Expected To Be (Inputs)

> 'For me, performance is meeting the expectations and attending to patients'.
> *Deputy CO in Charge, H3*

When asked what they thought performance meant, there was consensus among CO's responses that generally seemed to coalesce around the following statement: 'What it (performance) means to me is what you do and what is expected of you' (CO4, H1). GOK COs simply viewed performance from a task perspective focussing on their daily activities (e.g., attending to patients) and expectations regarding these, a notion also held by one of their supervisors as shown by the quote above. It was therefore interesting to note greater specificity in depictions of performance expectations amongst COs from FBH where specific job descriptions were provided to staff.

> 'Doing what is expected to the best of my ability depending on where I am and what I have'.
> *SCO Paediatrics, H3*

Even for SCOs, performance predominantly meant meeting relatively easier task expectations since their work focused on a single medical area (e.g., ophthalmology), an issue also seen in vertical clinics. They however qualified their perceptions by making performance dependent on issues such as ability, context and tools.

> 'You know they are at least…they are given a kind of CME on how to behave, what they expect from them, something like that'.
> *SCO ENT, H2*

> 'We just know what we are supposed to do and we learn from those that we find here'.
> *FGD COs, H2*

The other perspective in the notion of performance as inputs was the non-task aspect of work. It appeared that COs on joining the GOK workplace are given some sort of training on how to behave in work setting. More likely, new COs are mentored by COs that have been serving for long in that facility so that they can pick up the skills they need to navigate that workplace. The question here is whether GOK hospital management is involved in their preparation to work in their facility in any way. Where the GOK hospital management was involved an example being H3, staff reported seeing better outcomes from COs than where there were reports of low involvement such as in H2. In a previous study, H3 was found to perform poorly in motivating its staff to work well [Mbindyo, 2009a #50], an issue that the hospital CEO at the time of this study reported to be an area of concern. FBH management generally took a more proactive approach to inducting COs into the workplace so that they could get the performance they desired.

7.3.2. Performance as How One Carries Out Their Tasks (Process)

> 'It is how you go about your duties, the way you do your work'.
> *CO2, H4*

Though there emerged a general consensus in linking the conception of performance to workplace expectations regarding 'inputs', there was considerable variation in responses categorized under the notion of performance as how an individual carried out the tasks assigned to them as shown by the following quotes.

> 'Somebody who likes their job, they do core duties…improvise to be comfortable…love for the patients so that despite shortcomings, we give the best to the patient.
> *Nurse Ophthalmology, H3*

> 'I am looking for not only the…you know, the medical skills but also the attitudes of the clinical officers. Just even how the…the COs…the clinicians working there (OPD) even how they greet the patients…er…you know. Do they just… call(ing) their name…, 'uka' (come here)'.
> *Medical Administrator, H1*

The ideas described above suggest that employees have to go over and beyond the requirements of their tasks even though it is expected that all necessary tools and supplies to do one's work will be provided. This might include improvising in order to meet the needs of one's patients as shown by the first quote. Thus, CO's approach to work was just as important as their ability to actually perform the tasks assigned to them. These ideas seem to relate well to the non-task aspects of the conceptual framework described in chapter two and are described further.

> 'A good CO to me is somebody who observes professional ethics and standards in terms of approach to his or her patients...who serves patients with that human face'.
> *Policymaker 2*

> 'The other thing, because we are here for the patient, we are supposed to be kind to the patient or a good C.O. should be kind to the patient'.
> *CO3, H1*

> 'I am looking for not only the medical skills but also the attitudes of the clinical officers. It's not just all about knowledge and skills, but it's also about attitudes'.
> *Medical Administrator, H1*

Following on the ideas outlined above is the association of process-related issues with how well the COs served their patients. Good interactions between COs and patients as a form of non-task norm of performance were valued from an ethical perspective where COs dealings with patients had to be done with the understanding that patients were human and needed to be treated as such, and not as a number. This was also seen in respondent's reports of patients asking for a particular CO because the patients felt that the individual handled them well.

Another aspect is the focus on process which is an important facet underlying how well the tasks described under the patient care and management are done. Notably, responses from FBH respondents had a significant focus on process issue while those from public hospitals seemed to pay less attention to this aspect of performance:

'… you examine your patients well, you investigate well, you treat well. If you see something that you cannot handle, you refer to the seniors'.
CO5, H1

'Because when you take the history, obviously it will help us in good diagnosis, and then whoever manages the patient according to the problem. You know there are others who just put patients on treatment because the patient has come to the hospital'.
CO6, H1

The ethos of these statements goes beyond the idea of simply performing tasks by adding an evaluative aspect to the routine aspect of any clinician's work, that is, diagnosis, examination, investigations, treatment and asking for support when facing difficult cases. The focus on this routine aspect of a COs work was highly reported by FBH COs as a core operational aspect of their work suggesting that FBH facilities laid greater emphasis on procedural issues than GOK sites. I saw little of this sort of emphasis in most of the public hospital OPD sites visited. In one site where the public hospital manager (H2) took great exception to poor diagnoses made by some COs and made some effort to address the issue by closely monitoring their work, the COs reported that they felt 'over supervised', perhaps suggesting that they did not appreciate the additional attention.

7.3.3. Performance as Outputs and Outcomes

'And the end point…(is) whether the officer attains the tasks. You know, each and every clinical officer has roles to play depending on their level of operation'.
Policymaker 1

'It is when the targets that you have set are reached; the required number of patients a day, improvement of patients, patients are healed and not coming back'.
CO FGD, H2

The idea of performance as outputs seemed to overshadow the process aspect and was highly emphasized by public sector COs whose responses generally pointed to a need to meet quantifiable targets such as number of patients per day, number and type of diseases treated as shown by the first quote. Some reflection on the quality of GOK CO's work could be seen in the second quote where outcomes such as improvement of patients or patients getting healed are stated. FBH COs in contrast did not seem lay much emphasis on this area, probably because it was not an issue that was highly emphasised by their leaders. The responses of COs in public hospitals appeared to result from their need to meet targets outlined in the hospitals' performance contracts as shown by the quote below.

> 'We always argue about the parameters...number of patients seen, waiting time, customer satisfaction. It is hard to prove I am performing or not… As for the waiting time, many departments come to play for example, a delay may be blamed on the CO while he was waiting for lab results'.
> *DCO, H3*

For some time now, Kenya's public hospitals as is the case with other public institutions, have been signing performance contracts with the central government as a way of ensuring that health system targets are met. Providing an example of some of the targets outlined in performance contracts, the quote above can perhaps be interpreted in the context that there is some negotiation over what it means to perform and providing explanations when performance targets are not met, discussions that are relatively new to the public sector. Such thinking may also explain why in one site where I observed a CO seeing patients for only about 2-3 minutes at a time, a time probably inadequate to see each patient well in terms of proper history taking, physical examination and correct diagnosis. While I did not get to ask the reason why that CO behaved this way, this behaviour contrasts with performance as acting in the best interest of the patient as shown by the quote below:

> 'It is whether the work that has been done has given the best care to the patient, if you have thoroughly exploited the reasons that brought the patient to the hospital and not just prescribing drugs without proper investigation and diagnosis…. (Not just) walking around with an unused stethoscope instead of doing a thorough workup or consulting'.
> *CO6, H1*

> 'You see now, for you to be working well, it doesn't mean you come here 8 to 6. You see we also have indicators…. And those indicators, they are standards now. How we can achieve them. If you are not achieving those indicators, then how can you convince people you are doing something anyway? You see, there might be some problems why you are not achieving those targets and everybody will understand because you are making a move, but there are some complications. But now if all other things are addressed then you are not attaining what you are supposed to attain, then that performance is poor'.
> *SCO Chest & Lung, H2*

The unavailability of clinicians in public facilities has been as a major hindrance to service delivery. To deal with this, there have been efforts to improve attendance at the facility level and redressing health worker shortages at national level. Among GOK respondents, there was a sense of explaining away performance shortcomings by blaming others for not providing them with the necessary materials to do their work. The significance of this can be seen if we consider that time taken with patients (they take a short time), proper history taking (this is rarely done) or patient

examination (this is also rarely done) are factors within their control. This perhaps could suggest that using a short time to see patients, ensuring that clinic hours (for specialist COs) end before 13.00 hours creating a norm among patients that clinics did not run in the afternoon especially in GOK settings has become normative even when there are few patients in the hospital.

7.4. Difference between Settings

While overarching norms of performance have been outlined in the revised CO scheme of service, many respondents reported that they were not aware of its existence. Also as shown in the preceding subsections, CO norms of performance between GOK and FBH differed especially in those that they emphasised. While norms in GOK settings seemed to focus on ensuring that the care provided was acceptable to the general public, FBH settings seemed to add an ethos of serving God, an issue explored further in Chapter Eight. Both GOK and FBH have formalised norms related to tasks but as seen from the section above, but FBH settings also gave similar emphasis to non-task expectations of its employees.

In OPD, there the emphasis on task performance, especially in GOK settings was largely around productivity rather than quality maybe because of the long patient queues. While productivity was required in FBH, emphasis was also given to non-task issues such as politeness and courtesy to patients.

In SCO run clinics, the norm was that their added qualifications moved them away from OPD to settings where they could treat patients with regard to their specialist training and this provided more autonomy than compared with OPD COs. The result was that they generally saw fewer patients making them more able to be polite and to provide better service than the OPD COs.

In VCs, each person working there was expected to follow the laid out guidelines that guided practice especially in relation to HIV/AIDs and TB treatment procedures. Due to the social nature of the illnesses, there was an expectation that staff working in these two settings extended compassion to their patients and expected to ask for help when needed.

7.5. Tension between the Institution and Individual

In this section, I examine issues arising from the tension between what institutions demand and what workers within them feel able to do. Before making this analysis, I first explore the question

whether COs work well or not. This is based on the fact that while I did not seek to measure performance using quantitative tools, some of the issues arising from interview data give some insight to this question. Thus, the first sub-section of this part examines perceptions on whether COs work well or not while the second sub-section explores the reasons for the performance seen drawing on various aspects of the tension between institutions and individuals.

7.5.1. Do COs Work Well or Not?

The answer to the question whether COs are performing well or not as an example of mid-level workers is mixed. Amongst respondents' descriptions of good and poor performance, I did find some indications of poor task performance as well as good non-task performance.

> 'Generally I would say they are performing well considering the constraints'.
> *Nurse In Charge ANC Clinic, H3*

> 'They (COs) work well even doing extra sometimes depending on the workload. Sometimes they exceed the standard for the week and the patients are so many, it can be overwhelming but they are able to cope'.
> *Nurse In Charge OPD, H1*

The basic result area for COs in task performance is history taking, examining, diagnosing, and treating patients and clients in a medical health institution as outlined in the 2009 scheme of service. Task performance was basically judged as to how well COs performed their tasks for which performance expectations have been defined. A common perception among nurses was that COs were doing well despite the various obstacles that hampered their effort to do a good job. These included lack of equipment and supplies, high patient population coupled with shortage of COs, and sometimes poor relationships with doctors who were supposed to support them to do their tasks well.

Though the working conditions might be difficult, COs are disposed to serve their patients. Drawing on the many discussions I had with study respondents, my sense of the issue, especially in the public sector where there is much focus on productivity over other considerations, is that there seemed to be an overriding concern among these COs to be 'seen to be working' whether or not that work was of the appropriate quality. I also observed that senior members faced some difficulties in handling other cadres than their own especially when they were found not to be working. An example is COs who felt that senior nurses could and should not chastise them, but needed to channel their issues to their superiors.

> 'You can't expect my performance to improve if I am uncomfortable...so many things are not OK. I don't think performance can be OK when even the most basic needs are not met'.
> *Nurse Ophthalmologist, H3*

Reactions to work related constraints could be seen in CO behaviour that included lateness and absenteeism among others. In one site, I observed that some COs consistently reported late to work, an observation that was reiterated by their colleagues. The lateness of COs was major obstacle to service delivery since patients had come to understand that COs did not report on time to work. This caused much friction with other cadres whose work depended on CO's output.

7.5.2. What Explains This?

In seeking to answer the question whether COs work well, the sections above have detailed the institutional expectations (role expectations/norms) of COs and CO's reactions (norm dispositions) to these, including other respondents' opinions of CO's performance. Normative judgements outlining respondents' opinions about the performance of COs have also been outlined. This section now seeks to analyse the meaning of these issues based on the analytical positions outlined by the nomothetic - idiographic model. Two areas of conflict are outlined by the model and are 1) whether the institution is clear about norms of performance; and 2) whether the individuals within it understand and apply these norms. These are discussed hereafter.

7.5.2.1. Norms of Performance at Institutional Level

> 'All the duties of the clinical officers are written, from the office of the chief clinical officer to the office of the clinical officer at the facility level'.
> *Policymaker1*

> 'A clinical officer who is working in outpatient will know, he knows his work: to see all the patients, admit, refer, and that kind of thing so their guidelines are very clear'.
> *Policymaker, MOH*

> 'If you look at the job description for clinical officer outpatients, which we have, you are very clear about what the expectations are of them'.
> *Medical Administrator, H1*

> 'I have not seen one but there is the Clinical Officers Act which we can access on the internet, with laws and consequences to not doing what is expected. However no guidelines have been offered by the hospital to the people on the ground'.
> *CO FGD, H2*

The first two statements by a senior MOH policymaker summarises a consensus seen in the responses from policymakers and public sector managers that COs knew what is expected of them. However, many COs were unaware of the 2009 scheme of service, appearing to discuss their norms of performance from the Clinical Officers Act. The CO Act was developed in 1989 and generally focuses on their legal status (53). Some guidance was provided in the 1994 CO scheme of service but as shown in chapter 5, the guidelines were not specific requiring these to be revised so as to provide better guidance to COs. However, respondents interviewed during this study were not aware of the existence of the 2009 CO scheme of service. Thus, it is not clear whether COs truly know what the new scheme of service expects them to do. This suggests that there is a gap between managers and policymakers assumptions about the knowledge that COs have of their performance expectations. Though FBH COs were also not aware of the new scheme of service, FBH managers have closed this gap by providing job descriptions and ensuring that they explained what they needed from COs and engaged with them continuously to reinforce their requirements. In some cases, norms in specific clinics e.g. HIV/AIDS or TB have been provided from national level and these are strictly followed regardless of whether in FBH or GOK.

In terms of non-task performance, both the 1994 and 2009 CO schemes of service did not outline any issues that could be deemed to be within the remit of non-task performance (57, 58). Thus, many respondents were unaware of what non-task performance meant upfront which required further clarification of the meaning of the term before discussions on it could ensue. FBH facilities were found to have documents that described non-task behaviours internally (all hospitals visited) and externally (H1) that were reported to be greatly enforced by the respective hospital management. This ranged from issues such as timeliness, courtesy, collegial work relationships to other issues which determined how facility users perceived the hospital and included no taking of alcohol or smoking, among others.

While acknowledging system limitations, it is apparent that variations in performance could be attributed to hospital leaders who had the task of defining and communicating performance expectations. FBH leaders seemed to have better defined what they needed from COs which lead to less conflict over COs work than their GOK counterparts. However, how these expectations were communicated varied ranging from use of the command structure, meetings with COs, and direct information giving through interactions between management and junior staff which helped to create good working relationships in these sites. Though not commonly reported in

GOK sites, the CEO of H3 did begin using these methods and there were reports that COs had responded positively to them.

7.5.2.2. Norms of Performance at Individual Level

In the settings visited, norms are practised with regard to a referent authority that delineates norms of performance. The referent authority could either be peers, supervisors or hospital management. What is clear is that if a hospital or health system does not make its expectations explicit, variations in how COs construct ideas of norms of performance will be seen. Drawing on the task and non-task distinctions of norms of performance we see that while both FBH and GOK sites had a primary focus on CO productivity, FBH facilities paid much attention to process issues that lay on the pathway to productivity while GOK settings appeared to be more interested in the outputs. GOK COs did not lay much emphasis on these issues focussing much attention to ensuring that all patients that needed to be seen were treated. This is not to suggest that their quality of work was lower, but that they were conforming to the organization's expectations of their work in OPD. While most performance expectations could be said to emanate from the institutional level, the annual performance appraisal process could be said to offer individuals the opportunity to define their performance expectations but based on departmental goals. Though linked to promotions and salary increases both in GOK and FBH facilities, the process appeared to have more impact in FBH facilities that actually based promotions and salary increases on performance appraisal reports than in GOK settings.

The end result is conflict that arises between the institution that has delineated norms of performance but has not communicated them to their intended users and the users (COs) who have to make up their norms of performance e depending on what they were taught in college, their peers, supervisors and hospital managers. As such, COs reacted in three different ways to resolve or cope with this conflict. The first coping mechanism was to do the minimum amount of work to avoid censure and second, exit by moving on to higher positions (COs moving up to be SCOs). The first coping mechanism was quite prevalent in GOK OPD settings where COs were not willing to extend their work hours to cover for others or to provide a service to the hospital which they did not see as appreciating their work. In terms of the second coping mechanism, moving up to be an SCO enabled COs to remain in public hospitals but take advantage of the lighter workload and autonomy accorded to the SCO position. The third coping mechanism adopted was to do all that was required of them but resign when the opportunity to exit presented itself. This practice was very common in FBH sites where COs felt that while FBH

sites helped them to become better care providers, they preferred a working environment that allowed them to be free as found in GOK settings. Positive outcomes were seen in the VC clinics where the support, training and generally good working environment were very encouraging. Negative outcomes (to the hospital) were seen in SC clinics where SCOs reported that their expectations of work were to perform their clinic duties that in most cases were light, not to do night duty or work in the outpatient department that was reportedly a busy work environment. Conflict between them and hospital management was reported in sites (e.g., H3) when asked to support their colleagues in the outpatient department, reporting that their staff in their position were not expected to work in that department. These issues are discussed further in the next chapter.

7.6. Summary

A major issue emerging from the discussion of norms of performance and what performance means is that the hospital management and frontline health workers respondents have different priorities in terms of task and non-task performance. This then forms a barrier between the cadres especially where poor communication exists. For example, while norms of performance have been clarified, they are not known to the people who need to apply them. Also, much emphasis on norms of performance has been given to task performance with far less attention being paid to aspects of non-task performance. The result for example is that from a simple mechanical 'productivity' perspective, GOK settings would appear to often have better performance when compared with FBH settings though at risk of COs generally reporting feeling being overworked. However, in terms of quality of the tasks performed, FBH settings seemed to have better mechanisms of encouraging their employees to perform well which the COs appreciated. It would be preferable that both aspects are equally promoted which means that there is need for a multidimensional focus that integrates and promotes all aspects of performance and that this, when formalised, be communicated to all. The next chapter discusses the influence of incentives on CO performance.

Chapter 8. Incentives and Performance

8.1. Introduction

Incentives are generally thought of as tools used to improve motivation, direct effort appropriately, direct sanctions if needed and thus improve individual and aggregate performance (14, 21). From the review of literature on Mid-Level Workers that was undertaken in Chapter 3, the incentive environment that COs operate in was thought to have a considerable influence on their performance. This chapter focuses on the incentives provided to COs to provide an additional explanation for the observed performance. The chapter illustrates in more detail how these performance patterns are shaped, not just by generic issues at system or facility level but also by particular factors implemented or operating at a facility or a clinical area that motivate COs to perform better.

Various forms of incentives exist both in GOK and FBH settings. Based on interview data and document review, incentives are seen to take three forms: (i) financial incentives; (ii) non-financial issues found in work settings that motivate health workers to perform better; and, (iii), factors arising from contextual features of the Kenyan health system that influence the motivation of health workers. The chapter is organised as follows. First is a comparison of incentives that exist in both GOK and FBH settings. This is followed by an examination of financial then non-financial incentives found in the hospitals visited as reported by study respondents. Following this is an examination of incentives at the clinic settings to see whether there are similarities and differences at this level. Recognising that the hospitals visited operate within and are influenced by features of the Kenyan health system, an examination of factors operating at this level that health workers reported to influence their motivation is done. This is then followed by an exploration of the tension between institutions and individuals and the conclusion of the chapter.

8.2. Financial Incentives

This sub-section pays attention to financial incentives, an important issue for COs and other hospital staff. As reported in the results of feedback to hospitals in chapter 8, remuneration was still an important issue for all respondents. Questions around incentives invariably focussed on financial aspects with all respondents stating how de-motivating the current salaries and promotions were. I explore informants' opinions regarding financial incentives, some of which are summarised in Table 5-1.

Incentives for Performance

In the first two hospitals visited (H1 and H2), I sought to find out from respondents whether there were any performance related incentives offered to COs when they performed well. I did also ask about performance incentives in other hospitals and the responses commonly coalesced around the quote below.

> '(Incentives) For COs I don't know. I have never come across. For those months I've stayed, I've not seen'.
> *CO2, H1*

> 'Yes, every month the management pays those staff who worked past 5 pm. The money collected from patients from 5 pm is termed as overtime and a fraction of it is divided to those staff who worked overtime equally, including the subordinate staff working at that time. The amount is not that bad and we don't mind working overtime because we are well paid. Also the weekend which we work are paid at a higher rate than normal working rate because it is considered to be a form of overtime work'.
> *2 COs, H6*

As shown in Table 5-1, there were two FBH hospitals that used discretionary financial incentives. In H1, a departmental performance bonus was offered after every four months that was shared by all employees working in that a department. However, this incentive was negatively perceived because of lack of clarity over the criteria used to determine which department would be awarded the performance bonus. Despite its existence in H1, a CO in that hospital stated that there were no incentives for performance as shown by the first quote. The second quote from a CO in H6 explains how finances from working overtime were shared among staff in a department. While pay for overtime may not be considered strictly as a performance bonus, all COs that I interviewed in that site reported it to be a significant morale booster for them. In the GOK sites visited, no CO reported any incentive being given for their performance.

Salaries

In light of a common response across all respondents that there were no incentives given, I probed the issue further by asking respondents about other incentives such as salaries. Common consensus among GOK COs was that their salaries were too low for them to consider these as incentives. On asking an SCO from H2 to inform me about general feelings about salaries, the response was that they were too de-motivating to be considered. The quote below from a policymaker in the Ministry of Health perhaps explains the reasons for such ambivalent responses about salaries:

> 'The truth is that our salaries are fixed, our monthly salaries are fixed. If you work, it's just on understanding that you are assisting….'
> *Policymaker 1*

In general, considerable dissatisfaction was expressed with salaries both in FBH and GOK hospitals. Many GOK COs felt that they had low salaries which did not motivate them to perform well. This view was in a sense reinforced by a policymaker who felt that if one worked for the government, they had to be altruistic as shown in the quote above. This however contrasts with the perceptions of FBH respondents who reported losing many COs to the public service each time the government had a recruitment drive. I did investigate whether the salaries offered by GOK were higher than those offered by FBH's that might explain the reason for movement. As shown in Table 5-1, I found that the basic pay for COs between GOK and FBH was not significantly different to explain such movement. The reasons for movement seemed to arise from the fact that GOK offered job security, pensions, and perceived shorter working hours (six hours per shift vis-à-vis eight hours in FBH settings) that from CO responses in FBH settings, were apparently quite attractive incentives.

> '…because when you are working in the government, you have shifts therefore you have time and are allowed to do other business. Here we work all weekdays eight to five. You have to be fully committed to the hospital…you can't have another job'.
> *CO6, H1*

Focussing on the differences in working hours, many FBH COs felt that while FBH sites were excellent for getting good working experience and qualifications, they were not suitable for long term employment. Interviews of FBH COs in H1 and H4 showed that many preferred working for GOK as it had a more relaxed (less supervised) working environment that enabled them to seek opportunities for earning an additional income. It should be noted here that H1 and H4 did not allow their employees to operate or work in clinics outside the hospital. As both are located in small towns, this allowed the hospital management of the two facilities the ability to track and enforce this norm.

Promotions

Linked to the issue of salaries were promotions that many respondents felt did not happen as should be.

'Many (staff) accumulate in the same job group. For example, I qualified in 1980 while others qualified in 1990 and we are all lumped in the same job group'.
2 SCO Ophthalmologists, H5

'Promotions are not automatic. One has to follow up the issue (with the Ministry of Health)'.
SCO Paediatrics, H5

'The other issue relates to motivation. What motivation do we get? Promotions are few with the backlog being high'.
CO In Charge, H5

A common issue reported among all cadres in GOK settings is the accumulation of staff in one job group for long as shown by the first quote. Stagnation in one job group with few opportunities for upward movement was reported to be a significant de-motivavtor in GOK settings. Perhaps the reason why this was a strongly felt issue was that one's pension was calculated based on the salary at retirement. So, if an individual stayed for long in one job group, it meant that their eventual benefits would also be few, an issue that all cadres strongly felt about. Explaining why stagnation occurred is the second quote that suggests that though promotions within the common establishment (Table 8-1) are reportedly automatic, it did not happen as expected. Across all cadres, respondents informed me that they had to make special journeys to the Ministry headquarters to resolve this issue. If they did not follow up, they would remain in the same position for long even if they were due for promotion to the next grade.

Table 8-1 compares the grading structures between CO's 1994 and 2009 schemes of service. The first CO scheme of service grouped COs into three bands. New employees started at the common establishment band. In this band, an employee is automatically promoted from one job grade to the next without the need for interviews by the Public Service Commission. An employee is supposed to stay in one job grade for three years before being promoted to the next level up to the highest job grade (L for diploma and N for degree holders). Promotion from common establishment to the next higher band (i.e., middle management or top level management) is based on the publication of vacancies by the Public Service Commission that a CO with appropriate experience and work service can apply for. Since these vacancies are few and were published infrequently, the result was that many COs stayed (stagnated) in one job grade for long periods.

Table 8-1: Comparison of Grading Structures

First Version (1994)		*Revised Version (2009)*	
Category	**Grades**	**Category**	**Grades**
Common establishment	H: COIII J: COII K: COI L: Senior CO	Common establishment Diploma: H/J/K/L Degree: K/L/M/N	H: COIII J: COII K: COI L: Senior CO M: Chief CO N: Principal CO P: Asst. Dir. Clinical Services Q: Snr. Asst. Dir. Clinical Services R: Dep. Dir. Clinical Services S: Dir. Clinical Services
Middle Management	M: Asst. Chief CO N: Dep. Chief CO P: Snr. Dep. Chief CO		
Top level management	R: Chief CO		

In an attempt to address the issue of stagnation, the revised CO scheme of service removed the job bands outlined in the 1994 scheme of service in order to create a career ladder that would attract motivate and retain COs in the Civil Service (58). The problem of stagnation was attributed to narrow job grades (as seen in the 1994 scheme of service), an issue that has resulted in much frustration over promotions as there were many qualified people but few posts. Though the new career ladder might work, upward movement is still dependent on existence of vacancies and the fact that these have to be advertised and processed by the public service commission. An additional issue is that the Public Service Commission that handles the recruitment of officers into the Civil Service is known to take a long time to do so (26), thus the problem of stagnation might still continue.

Performance Appraisal

> 'Performance appraisal is an annual thing. It is a routine activity... it has no effect on promotion'.
> *SCO Paediatrics, H5*

> 'Performance appraisal is done annually. We fill in forms as a routine and send them to the MOH. Sometimes the forms are not filled. But the appraisal has no effect on salary or promotion'.
> *2 SCO Reproductive Health, H5*

Linked to promotions is the annual process of performance appraisal by all staff whether in GOK or FBH facilities. The link between annual performance appraisals with promotions is a recent development in the GOK sector attributed to the civil service performance improvement initiative. Comments from GOK respondents however suggest that performance appraisals are a routine activity and have no effect on promotion as shown by the quotes above. While the

revised scheme of service states that promotions would only be done on basis of good performance appraisal reports, many respondents in GOK settings felt that it was 'just a routine activity', as suggested by the second quote. For this reason, performance appraisal does not, as yet, affect the current dilemma of many qualified people staying in the same job grade for a long time. My discussions with medical administrators of the FBH facilities visited suggest that they also were concerned with ensuring that performance appraisals were a useful activity and could be used to appropriately gauge and reward an employee's contribution to the facility.

Fairness in terms of Pay and Allowances

The application of incentives was felt to be systematically uneven with COs commonly reporting feelings of lack of fairness when compared with other categories of staff. They felt that the health system favoured other health professionals over COs in relation to a number of incentives that included salaries, additional financial allowances and other incentives such as housing. As can be seen from the quotes below, this is an important consideration as the whole idea of using mid-level workers (and task shifting) is based on the implicit premise that cheaper workers will happily accept their position.

> 'Even when we qualify, we still see the same thing. I think we are paid about a quarter of the salary an MO gets yet we do more work. MOs get better houses but do basically the same thing as us. Why can't we get similar facilities (incentives)?'
> *CO7, H1*

While accepting that differences in training could result in different pay scales, CO's still felt poorly treated as they carried out much work in the hospitals visited. As shown by the quote above, some respondents felt that their duties were comparable to those performed by doctors but were remunerated far less. With the exception of H6 (FBH) that offered housing to all staff when available, the same organisational injustices were reported by both FBH and GOK COs.

> 'Nurses get a risk allowance of KES 3,800 and we only get KES 3,000. We encounter more risks because by the time a patient is in the ward, they have already been diagnosed with an infectious disease and the nurses there will be cautious from the beginning'.
> *CO Small Group Interview, H2*

> 'Sometimes there are gaps or hiccups because of the increased nurse salaries...they (COs) don't see why a fellow diploma level practitioner should be paid more than them in terms of practice allowances…they feel they should be ranked equally'.
> *Matron in Charge of OPD, H1*

These organisational injustices can be seen from the quotes above. Though from different settings, it is interesting that they state the same thing – that nurses receive higher allowances than COs. In the case of the first quote on differences in risk allowances, COs felt that they were at a higher risk since they had to determine the illness of the patient by which time they could perhaps have been infected. The second quote shows what happens when employees feel unfairly treated by their employer. Since the nurses receiving the higher allowance were at the same level with COs in H1, COs in that site did not see the reason for the higher pay given to nurses, feeling that they should at least be given equal allowances. This might perhaps begin to explain why COs in that facility, though performing well, took up opportunities to work elsewhere when they became available.

8.3. Non-Financial Incentives

The section above has outlined some of the financial incentives available as well as the opinions of the respondents regarding these in the sites visited. This section now pays attention to non-financial issues operating in the hospitals visited that respondents reported to motivate them. The issues described here are factors also perceived to be, to a degree at least, in the discretionary control of hospital management whose application has been reported to influence the motivation of their workers (study respondents) thus positively impacted on their performance.

8.3.1. Performance Thinking

Drawing on interview data of medical administrators in FBH facilities, it appears that some thought has been paid to creating mechanisms that ensure these facilities first get employees who will fit in their environments. Having recruited the right individuals, the facilities then strive to provide them with a supportive working environment so that supports them so that they can easily achieve the goals set out for them by the facility. In the following sub-sections, examine these mechanisms in further detail.

Focussed Staff Recruitment Procedures

A difference in performance thinking between GOK and FBH sites visited relates to their recruitment procedures. While public facilities centrally recruit staff through the Public Service Commission, FBH sites handle their own recruitment locally.

> 'We...recruit staff who have worked with us before as we know their behaviours and performance through their supervisors. So it is easy for us to get people who are willing

to stay and work in this environment'.
Administrator, H1

'...we have people who've said 'you know, sorry…this is not for me'. But we usually pick that up…even at the interview stage'.
Medical Administrator, H1

As shown by the first quote, two FBH sites (H1 and H4) mainly recruited COs who had carried out their internship in that facility. During the internship period, suitability to work in that facility was assessed in various ways such as whether they identified with the goals and values of the facility as well as their general disposition towards work. As will be discussed in section 8.3.3, this approach is driven by the need to identify individuals who will be comfortable not only with the work ethic of the facility but also its ethos, especially as relates to issues of a spiritual nature. In seeking to do so, it was inevitable that some employees could not fit in such an environment as shown by the second quote. Such recruits were allowed to go as the management recognised that some individuals may find the working environment to be unattractive. GOK hospitals at present are not able to adopt such an approach as their staff, as mentioned before, are centrally recruited.

Clear Job Procedures That Support Performance

Participant observations in GOK and FBH settings showed variations in the way OPD was organized and managed. In general, FBH settings appeared more engaged in designing workplaces and services that matched patient demands[23], improved patient flow and supported good practice.

'Ok, we have three sort of levels of service to outpatients. So we have general outpatients which provides walk in outpatient care for anybody who's sick. Then we have a sort of express track whereby if you don't want to join the general queue, then you can pay a little bit extra and you will be seen in what we call the express clinic whereby we aim to see you within 1 hour. And then we have private clinic where basically you have an appointment and you're given a day and a time to come and you will be seen'.
Medical Administrator, H1

'…it's the nurse who takes vitals and also, if there is a very sick patient, she can give them priority here or straight to casualty'.
CO1, H1

I found OPD work procedures in FBH facilities in general to be more organized than GOK

[23] The three levels of service were created in response to patient demands from a specific ethnic group (Somali tribe) who heavily utilise the hospital but do not want to queue.

facilities. As shown by the quote above, H1offered three levels of services in response to patient demands. As shown by the second quote, one way of supporting COs (and MOs) to work better is by providing Nurses to help them as they work. All FBH sites visited not only had patient attendants who helped patients to navigate through the system, but also had nurses working in OPD who sorted out patients according to their presenting ailments.

> 'For COs in OPD to feel good about their work, there is need to address the shortage of health workers. The workload is too high. Patients also need to be organized. There is need for a nurse to do triage of patients'.
> *SCO Paediatrics, H5*

In GOK settings, the provision of a nurse to support COs work in OPD was made difficult by the general shortage of health workers as suggested in the third quote. One GOK site (H2) had allocated a student nurse to take patient's vital signs but COs stated that they did not record all vital signs as required. Conversely, FBH facilities had nurses who supported COs work through undertaking triage of patients for example.

It is government policy that MOs provide a second level of care to clients referred by COs whether from the same or other facilities (51). In the three GOK sites visited, only H2 allocated an MO to OPD. Prior research experience in other GOK hospitals also supports this finding (10). In one FBH facility (H4), there was an MO based in OPD while in H1, the facility had provided a Consultant (qualified in family medicine) to support OPD COs. Though MOs were not based in the OPD of the third FBH (H6), specialist clinics were located in the same building as OPD and medical expertise was easily accessible.

Support Towards Better Performance

> Q: 'Are you supervised?'
> A: 'Yes, by the AIDS relief team. They check data and follow up files and offer patient management sessions, which helps us to improve'.
> *CO Palliative, H4*

Support towards better performance can be seen in several ways. One of these is supervision support that was reportedly provided by internal and external staff. Internal staff includes consultants, MOs and SCOs who work in that hospital. In the GOK settings visited and based on prior research experience in district hospitals (10), Consultants were not commonly available to support other staff. Also, due to the shortage of MOs and the relatively high workloads in

GOK settings, frequent CO supervision was not commonly reported. Within GOK settings are vertically supported clinics (VCs) which either provide HIV/AIDS or TB services (discussed in section 5.5.2 below). These settings are relatively unusual in that external staff provide support on technical aspects of HIV/AIDS care as well as supervision of work procedures and processes.

Another way of supporting workers to perform better was by recognising and appreciating what they did.

> 'Well, like maybe I attend to a patient, then the relatives will say: "thank you, you have done…you have at least attended me well". Only that, but for the administration of the hospital…no, they are not bothered'.
> *CO2, H2*

On asking whether anyone in management had publicly appreciated their work in the previous two weeks (before my visit to the facility), many respondents found the question amusing. The common response was that none remembered being appreciated by the hospital for what they did. SCOs reported that that only the community appreciated them which they could see through attendance at their private clinics. As for other COs, this was seen when patients came to hospital and specifically requested for them. This was further reinforced during feedback when on asking the same question again, many respondents also reported not being appreciated for what they did.

8.3.2. Co-producing the Workplace Culture

Workplace culture is understood to refer more to norms (the way things are done in a place) than incentives (levers to influence worker motivation towards a desired end). It is explored here because of its positive influence on employee motivation which in turn has an effect on their performance (15). Aspects of workplace culture that respondents reported to improve their motivation are discussed below and a summary is provided in Table 5-1.

Learning Environment

One way that some of the hospitals visited went about creating a workplace culture that supported the performance they desired from COs was through the creation of a learning environment as shown by the first quote below.

> 'We try very hard to cultivate an environment whereby if you don't know, then ask. We

> are…we like to make doctors quite available for the clinical officers in order that they…they are not shy about asking. There is somebody there…physically in the department all the time so that the CO can just say… 'oh you know, I got this…this problem I'm not sure of what to do'.
> *Medical Administrator, H1*

> 'I play the role of a consultant in the OPD. So mostly it's colleagues who need advice on a certain patient that they have seen and would like to get some second opinion'.
> *Consultant, H1*

The norm was that should a CO need assistance with a patient, they were highly encouraged to seek assistance from the doctors in OPD or specialist support from Consultants based in other departments as shown by the second quote. The cultivation of such an environment appreciated that learning is a lifelong activity and could only take place if good relationships were maintained between doctors and COs as discussed in the previous sub-section. Such support took various forms such as directly seeking assistance from doctors or consultants (H1, H4, H6 - FBH), holding early morning meetings to review and discus cases seen the previous night (H4), or holding continuous medical education (CME) seminars (H1, H6). This served to improve the knowledge that the COs had so that the care they gave to a patient improved. The creation of a learning environment is reported to be one of the factors that attracted a considerable number of COs to intern and if possible, work in H1.

> 'They are first employed as general clinical officers and then we train them for ART, counselling, psychosocial for paediatrics, opportunistic infections among others'.
> *Nurse In charge VC, H4*

The other aspect of creating a learning environment was to actually enable employees to access training opportunities for staff to improve their knowledge and skills. Access to training opportunities was commonly reported by all respondents as an important incentive. Respondents generally agreed that working in the vertically supported clinics (VCs) enabled one to attend training courses more regularly than in other departments. Though the stated intent of training staff was to improve their skills, staff saw it as an incentive to work in that clinic.

Managing Inter-Cadre Relationships

Inherent in a positive workplace culture is the importance of a respectful environment where different cadres work as a team to deliver the best possible patient care to their patients.

> 'And again, you know,…sorry to say but…our colleagues, especially the doctors, you know they don't find anything positive with what we do. Yes you are saying …that there is what you were trained to do and what you were trained not to do but now…when you give a prescription and then you find somebody putting a big cross like that as if you have prescribed poison…you know you also feel bad. And they won't even tell you, 'what you have prescribed does not go into'….somebody does not even read….'
> *SCO ENT2, H2*

> 'Some consultants have very negative attitudes towards COs…they feel unable to work with us. It is like they have a superiority complex'.
> *SCO Reproductive Health, H5*

Many respondents in GOK settings reported a general lack of collegial relationships between doctors and COs, though some individual respondents did acknowledge having mutually respectful relationships with doctors. One outcome of the lack of collegiality between COs and MOs is mistrust by doctors of the work done by COs as shown by the first quote. It was also reported that at ward level in some GOK settings that some nurses waited for MOs to affirm a treatment schedule prepared by COs in OPD before implementing it. This in a sense humiliates COs as well as undermines their credibility. My conversations with many GOK COs suggested that they had little interactions with Consultants. This can create pressure on the CO especially when they need to consult their seniors on an issue but the seniors are unwilling to work with them.

> 'That is where now this place is exceptional. People are very friendly and understand each other, care for each other and support each other'.
> *Consultant, H1*

> '...we work with the consultants...from every specialty. If it's paediatrics there is paediatrician. If it is gynae, gynaecologist'.
> *CO4, H1*

Participant observation and conversations with senior FBH management suggests that collegiality between cadres was an issue that they actively sought to create. As shown by the first quote, the Consultant based in H1's OPD (FBH) appreciated the friendly working relationships that existed between different cadres. The second quote by a CO in the same site showed that they found it easy to approach Consultants and ask them for advice as need be. Similar issues were reported in the other two FBH sites visited.

Scheduled Meetings

A common issue found in FBH sites that was not implemented in all public sites was holding regular meetings with clinicians (COs included) to discuss matters of mutual interest.

> 'We have meetings every week to write problems and work it out'.
> *Medical Superintendent, H3*

> 'We have a meeting once a month for all clinicians where they discuss issues'.
> *SCO Paediatrics, H4*

> 'We also pray together, we go to chapel meetings every morning, and everyone is encouraged to participate, which brings us together. At times maybe once a year, we go for a team building outing to evaluate ourselves, what challenges we have faced, give staff a chance to express themselves, fill in the gap between the juniors and in-charges'.
> *Nurse in Charge of Community Health, H4*

These meetings form a crucial component of encouraging diverse staff to work together to deliver good patient care. Various forms of meetings took place depending on the issues being discussed. The first quote above from a GOK site suggests a forum where COs met weekly to discuss issues facing them and to mutually agree upon a common course. Such meetings were also commonly held in FBH sites. In H4 (FBH), such meetings were less frequent as shown by the second quote. Another form of meeting in H4 was that staff came early each morning to pray together in the hospital's chapel. As shown by the third quote, this action served to create a common basis from which to engage with other staff in the hospital. Similar prayer meetings were also held in H1 but only once per week.

At a higher level, COs across all sites often complained of poor representation at management level meetings. The common practice was that MOs were given the responsibility of reporting their issues. Many COs felt that they may not represent them as well as a CO could.

Communication

Good communication between staff and hospital management is felt to be an important facet of a supportive workplace culture.

> 'On Mondays we have a weekly memo that indicates what has been happening for the past week and explanations are given. For example, last week there was a delay in disbursement of salaries and during the Monday meeting the management was kind enough to assure staff that salaries would be paid and apologized for the delay'.

Nurse in Charge Community Health, H4

In the sites visited, I perceived that there was less communication between staff and management in GOK sites as compared to FBH ones. This is not to say that FBH sites did not face challenges in communicating information to their staff, but that they made an effort to ensure that employees were aware of what was happening as illustrated by the quote above. In the GOK sector this may in part reflect that management decisions were often made at levels above the hospital while in the FBH sites management was closer to the employees.

Faith Based Hospital Values

A major difference between FBH and public sites is the fact that FBH sites are upfront about their spiritual values and sought to recruit staff that would fit in to their environment.

> 'Now, really, you need to appreciate the fact that the faith based organizations have…been put in the back ground of certain beliefs and values, right? They have certain values they stand for and their workers… have to comply with those values. And when you work there, then you look like them. That is why they have a difference'.
> *Policymaker 1*

> 'So even in the selection of our staff, we try and see people who are motivated to practice medicine by the example of Jesus Christ. I think that's right at the heart of what we're doing….'
> *Medical Administrator, H1*

It was clear in H1 and H4 (FBH) that a religious approach to all day-to-day activities was paramount. Particularly in H1, explicit efforts were made to hire staff who adhered to their norms the core of which was faith in Jesus Christ as shown by the first and second quotes. Further reinforcing these values were hospital rules and guidelines for behaviour that were routinely reinforced to create a clear workplace culture. Any emerging issues were considered in relation to these clear rules and values. This was to the extent that about a third of their code of conduct related to inculcation of behaviours associated with Christian beliefs. In the third FBH site (H6), there was no mention of faith as a requirement to be hired or informing their day-to-day activities. While all respondents did mention having belief in God, this was seen as separate from their responsibilities as clinicians. This suggests that it may be incorrect to crudely view all FBH facilities as having the same practices when there may be important variations in practice.

> 'Here it is supreme…one needs to be a Christian in order to fulfil the mission and vision of this hospital…to give quality health care service to the patient for the glory of God. That is why we go to the chapel every morning for prayers….'
> *Medical Officer in Charge, H4*

> 'The ability to work within an...environment whereby you are actually free to talk about your faith, actually minister to people spiritually as part of your medical work…is also something that people find quite encouraging, quite liberating for them to be able to do that…rather than feeling constrained'.
> *Medical Administrator, H1*

> 'In the sense that I assume everyone…that works here is born again. Ok, that wouldn't change how I treat even people who are not born again but somehow I think people are more kind. You will not hear cases of people who are shouting…abusing people, such things…. I don't think I've heard that here'.
> *CO1, H1*

The reason for adopting such an approach was that medical practice was seen to be an example of faith in God as shown by the first quote. Thus, in order to meet the goals of the hospital, one also had to have similar faith in God. The second quote perhaps speaks to the general climate in Kenya where it is anecdotically acknowledged that a predominant number of Kenyans are nominal Christians. Thus, by creating a culture that encourages staff to work out their faith as they provide health services was reported to be a major motivating factor. This is perhaps a form of incentive that can only be employed in FBH settings and it may complement specific policies to employ staff with a sense of 'mission'.

Holistic Treatment Approaches

> 'I think…that's right at the heart of what we're doing and as I said before, we try and look at the whole person in our treatment. We're not just looking at the physical symptoms but the impact of those physical symptoms on all areas of the patient's life'.
> *Medical Administrator, H1*

> 'Not all patients need medical care. If guided by faith, medics can do better and patients can request for that person as they feel that the person is handling them well. It really helps managing patients and has worked very well here'.
> *CO7, H1*

As indicated earlier many FBH respondents felt that the freedom to be guided by their religion while providing medical care offered them an unprecedented opportunity to address a patient's needs holistically. Such an approach as shown by the first quote required COs as they treated the patient, to also examine the effect of illness on all aspects of the patient's life. Thus, besides offering medical service, the CO could also refer the patient either to the chaplaincy and/or

outreach departments depending on the issues discussed with the patient.

8.3.3. Influence of Hospital Management

An issue that emerged during the study and reinforced during presentation of feedback of the study results to study participants was the influence of management on employee's disposition towards work. Taking the case of H3 as an example, one reason for choosing this site was the questionable CO performance that was uncovered during previous work that explored health worker motivation in Kenyan district hospitals (10). Even during fieldwork that took place two years after this study, many COs were found to still exhibit the same poor behaviours that had been seen previously such as not turning up to work and when they did, their performance was questionable. A new CEO who had been posted to the hospital as the fieldwork for this PhD began informed this researcher that the issues facing COs would be a core focus of efforts to revamp the hospital. During feedback in that site which took place approximately three months after, many respondents mentioned efforts made by the hospital's CEO that focussed on non-task aspects of COs work (such as having a common room, holding regular meetings, being held accountable for results) had borne fruit.

8.3.4. Summary of Non-Financial Incentives

The data presented above suggest that differences in worker performance between GOK and FBH facilities do occur but are largely the consequence of localised aspects of incentives in the local work environment rather than being related specifically to membership of the faith based or GOK sectors. For example, hospital level factors may be important in H1 which unlike other sites has many Consultants with salary support from external (non-Kenyan) sources. Focussing on local factors, I found variations in performance to emerge from the extent to which the facility's senior staff actively managed performance. While perhaps facilitated by their greater management autonomy differences between FBH and GOK facility managers suggest the latter have much unused 'space' to improve performance. The key issue then becomes how get senior managers to become more engaged in the daily routines in GOK facilities, something that may be complicated by their rapid turnover (31).

8.4. Incentives at the Clinical Settings

Above, I have contrasted the non-financial incentives offered in the FBH and GOK facilities to develop insights into factors affecting CO performance at an organisational level. In this section I

explore whether different clinical settings within the hospitals offer different incentives which could result in variations in CO performance, a summary of which is shown in Table 5-2 .

As described in Chapter 6, the out-patient department (OPD) together with the maternal and child health clinic is among the most visible departments of any hospital whose major function is to serve as a walk-in or emergency clinic as well as offering specific, booked, clinic appointments. As such it is usually located in a place that is easily accessible from the hospital's main entrance. Drawing on data presented in this and other chapters, a general OPD is typically characterised as exhibiting the following features: walk-in, busy, fixed hours for COs (shifts), night calls, and in GOK; less well resourced, few nurses / assistants, and with poor physical space impacting on privacy, among other features. These features however vary when one examines features exhibited by specialist and vertical clinics.

8.4.1. Specialist Clinics

Many specialist clinics are run by COs who have specialised in an area of medicine as described in chapter 5. In these clinics, they provide a second level of care for referral for outpatients and in some cases such as TB, also provide outreach services to lower level facilities. A summary of features of this setting is provided in Table 5-2**Error! Reference source not found.**. With the exception of SCO Anaesthologists, FBH facilities did not yet employ any SCOs, thus insights are drawn predominantly from within GOK settings.

> 'The care given is more specific, the workload is less'.
> *SCO Paediatrics, H3*

SCOs mentioned autonomy as a major incentive for being a specialist and in several disciplines this was linked to lighter workloads as shown by the quote above. The notable exception to the general feature of lighter workloads among specialists was those specialised paediatrics as they worked in busy walk in maternal and child health clinics. Forms of autonomy included being only expected to treat specific conditions and being able to choose whether or not they also handled any general conditions that their clients had.

> 'We are pushing for the specialists to practice in OPD because they really don't see many patients. In fact, the workload is light….'
> *Medical Superintendent, H3*

As shown by the second quote, managers have been trying to get them to support their

colleagues in OPD as the workload they handle in their clinics is light. However, many SCOs have lobbied against such roles as their 'elevated' status however meant they were often exempted from performing general night duties or working in OPD. This suggests on their part relatively poor non-task performance as they are not willing to help out in settings where they are needed. However, working in OPD would curtail their ability to schedule their clinics (for example offering them only on certain weekday mornings) and restricting the number of booked appointments such that they had time for other activities that included running private clinics in the local town. Their status and autonomy meant that they were much less accountable within the health system, something clearly to their advantage.

8.4.2. Vertical Programme Clinics

I considered two vertically-supported programme clinics; the clinic dealing with tuberculosis and related chest and lung infections, and the Comprehensive Care Clinics (CCC) that deal with all issues related to HIV/AIDS. Here, care is provided mainly by COs with some support from MOs. A clear issue that sets these clinics apart from other hospital departments and/or clinics is the fact that TB clinic is heavily supported by the National Leprosy and Tuberculosis Control Programme (NLTP) based at the Ministry of Health while the CCC clinic is supported by the National AIDS and STI[24] Control Programme (NASCOP). Taking the case of the CCC, NASCOP has employed staff to support work being carried out in the clinic with funds sourced either from President's Emergency Plan for AIDS Relief (PEPFAR) or the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Such support has seen CCC clinics occupy new buildings that are usually located apart from other general hospital settings. Most CCC settings then provide a good working environment in terms of adequate space to work, building design to support patient flow and material support in terms of equipment and supplies.

> 'You see now in the programme there are specific details. There is the rules and responsibilities of all those who are working here with the programme'.
> *2SCO Chest & Lung, H2*

> 'In the CCC...we have everything we need. There is enough staff, equipment, implements and working conditions…you are motivated and would not mind working from six to six'.
> *SCO ENT, H2*

The first quote shows that those working in vertically supported clinics are given specific

[24] Sexually Transmitted Infections

guidelines that illustrate what they should do and when. This is reported to be an important incentive when compared with OPD that has fewer or no guidelines. This support for work guidelines was complemented by support both in terms of equipment and supplies as shown by the second quote. Other incentives provided include staff development through training to promote technical competence on provision of various aspects of HIV/AIDs care. Thus compared with other settings, respondents from CCC's seemed to enjoy their work. Even in GOK settings, and in contrast to general OPD settings, it was also clear to all respondents what their task and non-task duties and responsibilities were while working at the CCC and the TB clinics. Such settings therefore did appear to be able to produce good task performance, despite high workloads, with staff who appeared more satisfied although salaries and allowances were no different to that of colleagues in SC and OPD settings.

8.5. Contextual Influences on CO Performance

Contextual factors are issues emanating from the health system and/or relatively fixed attributes of the physical or institutional setting that were reported to affect the performance of COs in the hospitals visited. I explore these issues here in light of the fact that even as we seek to improve the performance at hospital level, external factors such as the ones described below may affect the motivation of health workers that in turn constrains their performance and needs to be considered.

8.5.1. Hospital Financing

In theory, district hospitals receive recurrent funding from the central government that is usually supplemented by revenues generated from cost-sharing. However, central government funding is generally unreliable and unpredictable in terms of the amount given and time received so many public hospitals have now become reliant on raising funds by charging user fees for services rendered in the hospital. This has created pressure on clinicians to raise revenues to the extent that they have adopted practices that are normally not desirable such as admitting patients not needing the service especially those perceived to have the National Hospital Insurance Fund (NHIF) card. This is because NHIF pays hospitals a fixed sum per day for taking care of a paid up member of the fund. Should the patient stay for long in the hospital, the sums paid by the NHIF can be significant. Another practice is discharging patients early especially those perceived not able to pay in order to create bed space for others deemed to be able. In OPD, adopting 'clearing and forwarding' practices to clear queues does result in patients being seen in a cavalier

manner. Underlying this is the fact that all patients seeking services from the hospitals have to be seen in a context of high population pressure and health worker shortages.

8.5.2. Paperwork

There has been an increase in the burden handled by clinicians in terms of paperwork that details the work they have done.

> 'It is a lot. In terms of paperwork, you have to fill 15 forms for a first time patient. Then the kind of patients we deal with require counselling and follow up of defaulters so the work is more intense'.
> *CO in charge - Palliative, H4*

Though the quote above is from a CO working in a vertically supported clinic in an FBH setting, it is representative of VCs in other settings. Here, COs not only have to complete the basic MOH paperwork, but they also have to complete paperwork from collaborators who have funded the operations of the clinic. While the need for accountability is acknowledged, the difficulty here is that each collaborator wants a report in their own format which means that the clinician may have to write the same report twice or thrice depending on who they report to. This adds an additional burden to the clinicians who also have to deal with patients needing their services.

8.5.3. Physical Space

Another issue impacting on CO performance is space to work, a summary of which is provided in Table 5-1. Both general and specialist COs especially in public sites reported having little space to work as most public hospitals were built a long time ago but had not been expanded despite large increases in the population utilising the facilities.

> 'We had a very small room…in fact we even feared for our health because our patients come with very infectious conditions. And if you are occupying a small room where there is even no ventilation, you know…'
> *2 SCO Chest & Lung, H2*

> 'It is a good hospital to work in but it has some challenges. The first one is that it was built along time ago. Congestion is high. Space is an issue and you know that space goes with confidentiality. So patients may not talk about issues that they don't want others to know'.
> *CO in Charge, H5*

> 'Also, the physical space to work needs to increase. Currently, there is no privacy nor confidentiality'.

SCO Paediatrics, H5

The quotes above show that there are challenges arising from the low amount of space in some of the facilities visited. These were generally hospitals that were constructed a long time ago and have not been expanded since then even though the number of persons using the facility could have increased. This meant that COs had to share rooms when seeing patients that resulted in little confidentiality and the risk that some patients may not tell the CO all their symptoms resulting in poor care or misdiagnosis (poor task performance). Unlike FBH settings, I observed that many COs in GOK OPD settings generally did not examine their patients. This happened even when there were few patients suggesting that it was a habit that they had gotten used to.

8.5.4. Resources

All respondents reported that tools, equipment and supplies were a critical factor influencing how they performed.

> 'The worst thing about OPD is that you can even miss gloves, cotton wool or bandages. Nurses are given one roll of strapping to use for the day and night in all of OPD. They had developed a habit of sticking it to the walls and peeling off the paint. You can make noise but it was the only way to share the strapping'.
> *SCO Ophthalmologist, H2*

Responses from respondents based in GOK sites reported that these sites faced considerable issues in ensuring staff had adequate supplies to do their work. As illustrated by the quote above, the informant links the practice of sharing strapping to poor work environment. As described in the quote above, the peeling of the paint is as a result of peeling the strapping from the wall when needed (which makes the room unsightly) that also brings into question whether that form of sharing resources is useful. In general, the shortage of tools and supplies in GOK settings was reported to have a significant effect on worker's ability to do the right thing. Part of the reason explaining such shortages is the lack of finances to acquire the necessary resources as needed. The other aspect is that the hospitals had to order supplies from a central location (Nairobi) which means that delays were inevitable if other hospitals had ordered first. FBH settings were able to avoid such shortages as they generated their income internally thus could purchase resources as needed.

> 'But they have so many constraints that I wouldn't chastise them for practicing the way they do because they don't have another way of getting to the end of their line by the end

> of…you know, before its getting dark. So you find the quickest route and therefore you go for the most likely diagnosis and treatment maybe without what I would say actually going into the details of the history and the physical examination'.
> *Medical Administrator, H1*

In explaining why differences in the way COs worked in GOK and FBH facilities existed, the Medical Administrator of H1 thought that the combination of high patient numbers coupled with lack of supplies to do their work resulted in the clinicians taking short cuts. This could have been different if they were under less pressure and perhaps were provided with more resources to do their work.

> 'The TB clinic have their own drugs and on top of that, they are supported by the hospital to go for outreach services so that they can reach their patients'.
> *SCO Paediatrics, H2*

Providing a different picture to the lack of resource issues in OPD were externally supported settings such s those providing HIV/AIDS and TB services. Whether in GOK or FBH sites, these settings were better supported than other hospital departments and reported very few cases of shortages as shown by the quote above. Also the support went beyond ensuring that these settings had enough supplies to ensuring that they could follow up patients and provide outreach services outside the hospital. Generally, responses from COs working in VC settings showed that the availability of resources enabled them to work better thus was a more motivating environment than OPD that sometimes lacked resources.

8.6. Tension between Institutions and Individuals

8.6.1. Institutions have limited capability to provide incentives

Inasmuch as institutions know that the provision of incentives can and does encourage employees to perform better, making them available incurs costs. In the case of hospitals, funding from central government to GOK hospitals does not entirely cover their needs as explained in section 8.5.1 above. This means that they have to raise funds from other sources such as user fees. However, they cannot raise adequate amounts funds from this source as recent policy proclamations prohibit public sector facilities from charging high user fees for their services. In the case of FBH facilities, there has been dwindling funding from their external partners and they do not receive any funds from central government (although they do receive staff and consumables). This has limited these hospitals' ability to provide local incentives to their employees.

Section 8.5 has outlined a number of contextual factors that were reported to hinder the operations of the hospitals visited in various ways. An example is the limited financing available from central government that does not adequately meet all the requirements of hospitals meaning that they have to be innovative in order to secure funding from other sources. While this might be the case, I have argued that both FBH and GOK hospitals can (and have) in a limited fashion overcome these limitations by implementing several actions that together can mitigate the effect of the contextual factors. Indeed, section 8.3 has outlined several non-financial factors that respondents reported to greatly influence their motivation to perform in the settings provided. It is also clear that the provision of these incentives does not necessarily mean that hospitals have to incur financial expenses. An example is the creation of a supportive workplace culture which, while not incurring any direct costs, may require hospital management to invest more time in creating it.

8.6.2. Individuals have their own needs and dispositions

The perennial problem facing any institution is the creation of a system that attracts and retains good employees and motivates them to behave in ways that meet the employer's interest. Indeed, Getzels and Guba's model seeks to address such problems in a school environment by focusing on the tension between what institutions desire and what individuals feel they can do. Understanding the needs and dispositions of health workers will go a long way in ensuring first that incentives are chosen on basis of their reported effect on motivation improvement and, second, that their application does not create feelings of animosity among those not receiving the incentive. For example, while the provision of a non-practice allowance to MOs has increased the number joining and remaining in public service, it has not increased their productivity and has served to alienate COs who feel that they are doing much more work than the MOs for much less reward. As discussed in chapter 6, employees needs range from internal, where work has to satisfy workers' altruistic tendencies to external, where the work will enable the employees to live comfortably and in line with societal expectations. Thus incentives applied have to meet both these needs if they are to be valued and direct worker's disposition to remaining in the institution and performing well.

Since COs feel that they are inadequately compensated for what they do, they have resorted to opportunism where they deliberately pursue their own goals at the expense of the hospital. Their responses as discussed in chapter 6 take several forms such as evading their duties by not

working hard in GOK settings or working hard and exiting if an opportunity for doing so presents itself for those in FBH sites. It should be noted here that opportunism is not a problem with COs alone as MOs and Consultants also pursue their own goals at the expense of the hospital. The fact that COs have shown agency in various ways is an issue that needs further consideration at system level and responses to it must begin with addressing a major problem reported by them: their remuneration and career prospects in the system.

8.7. Conclusion

The primary reason for exploring FBH and GOK working environments was to examine the influence of the different incentives provided by different contexts as an explanation for variation in performance. In explaining the factors that render one setting more likely to induce better performance from COs than another, I found these factors to fall into hospital and system level factors. Generally, system level factors were found to operate across all sites and were issues that hospital CEOs could do little about in the short term. Considering the example of hospital financing, while GOK hospitals prepared budgets and sent these to their head quarters for negotiation with the Ministry of Finance, they had to work with what they eventually received from the central government, often much less than requested. FBH facilities had more leeway to use their finances to create work environments that supported COs to perform well but were also constrained by the low flows of finances. In both situations with limited levels of resources hospital managers were invaluable as a tool in the effort to mediate the effects of system level factors by creating good local working conditions. This is where despite the prevailing difficult circumstances, workers could see and respond to efforts by the hospital management to make their working conditions better. This could be in various ways such as undertaking hospital renovations (H5), offering monthly performance bonuses (H6), improving resource availability (H3) or simply respecting COs contributions as professionals among others.

Focussing on the specific work settings (OPD, SC and VC), good task performance was seen in FBH OPD (high support, teamwork, clear performance expectations), then VC clinics (related to the resource and training support given), followed by SC (lesser workload and autonomy to arrange work) with least evidence of good task performance in GOK OPD settings (poor teamwork, focus on addressing high workload). From a non-task performance perspective, FBH OPD was the best followed by VCs. Neither GOK OPD settings nor SCs appeared to support

good non-task performance. In the case of SCs this was largely because SCOs autonomy and higher qualifications were used to limit wider contributions to the hospital by for example refusing to work in OPD even when they handled low numbers of patients, an issue that threatened their productivity. In terms of which work settings were preferred by COs I found some mixed reactions. Some OPD COs liked their work due to its variety and compared with the limited range seen by SCs. Others preferred working in VCs because of the support given and that they could see the results of their work. Most however aspired to or preferred to work as specialist COs because of the status, minimal oversight and control of their work schedule.

Chapter 9. Discussion

9.1. Introduction

In chapters 6, 7 and 8, data on perceptions regarding CO roles, performance and work environment in FBH and GOK settings in Kenya has been presented. In this chapter, I reflect on these findings in the light of the conceptual and theoretical basis of the study and its analytical position and consider the findings within the broader body of relevant literature. Underlying the discussion is a reflection on the influences of the tension between institutions and individuals.

The Chapter begins with a consideration of the strengths and limitations of the study design and methods followed with a summary of the study's key findings. After this is a reflection and discussion of the major issues likely to influence performance of COs in the Kenyan health system following which is the conclusion of the chapter.

9.2. Limitations and Strengths of the Study Design and Methods

Small Sample Size

A limitation of the study design was the small number of sites from which empirical data was acquired which might not represent the entire country. However, the decision to focus on the six sites was based on two factors; first whether undertaking data collection in more sites would result in a substantially different picture than the one presented in the study and second, cost and time implications involved in exploring more sites. Authors mention that case study research does not need many sites and respondents to get informative data (160), (159). The purpose of using the method was to get a detailed understanding of Clinical Officers in the six settings visited. Thus while there were differences between hospitals and the clinical settings within them, these were very useful to explain the issues being explored. Also the sample size for COs at other health workers at the hospital level was not very large. As shown in Table 5-3, the total number of COs in each site was not high but due to my two week stay at each site, I was able to interview a high proportion of COs in the sites visited. It should however be noted here that the study reported here is qualitative and not a quantitative survey of a representative sample of COs. I was thus able to explore in depth what CO issues were as well as the explanations for their behavior. I could have talked to more doctors in the sites visited but are these are fewer in number and many did not work in OPD. Also I could have acquired more data from VC sites. This was hampered

by the fact that the respondents gave primary attention to their clients which reduced the time available for interview even when I had booked their time. The data from these sites was enriched, however, by visiting VC settings in the last two sites and depending on their work schedule, trying to interview again the respondents whose initial interviews had perhaps been limited by time.

Hospital Data on Workloads and Absenteeism

Another limitation that the study faces is the quality of data that hospitals have as relates to absenteeism and workload data that I had initially planned to collect and utilize in the study. While I did not experience any problems in gaining access to workload data that were collected and tabulated daily, I found that data from the specific clinic settings (specialist clinics, HIV/AIDS clinic) was merged and reported in a single category and it was not possible to disaggregate these so the analysis of workload data from specific clinic settings was abandoned. Data from general OPD settings was better but it is possible that the number of patients seen per day, especially in GOK settings, could be higher than reported as sometimes COs did not send their daily tally sheets to the records officer. For this reason, the data reported in table 6-3 is drawn from the months of May to December for which complete records were available for the GOK hospitals. FBH hospitals did not have this problem. Discussions with my supervisors and respondents during feedback sessions suggest H2 workload averages to be representative of the average workload per clinician in a typical GOK district hospital facility.

Conducting participant observation in hospitals

The aim of participant observation was to acquire nuances on social interaction which is described as the continuous interplay and interpretation of meaning by individuals in groups. To acquire such knowledge and to identify the personal interrelationships between the actors in a hospital context, the researcher would require regular contact time with informants as well as be able to accurately record impressions. However, there were some barriers to continuous contact time with health workers influenced by whether there were adequate health workers when I wanted to do participant observation and the fact that interviews also had to be done at the same time. Further is the fact that there has been an erosion of trust in the health sector arising from effects of industrial actions (strike) where my observation could be seen as part of information gathering ('spying') for the Government. Also, there is the question whether I was seeing and recording normal (i.e., routine) interactions between health workers and their patients where there was a possibility of the Hawthorne effect (workers behaving well because they know they

are being observed) could have affected behaviour. To address the issue of erosion of trust, I made sure that I always had a copy of the letter authorising me to do the work in the hospital and reminded informants that I was ethically bound to ensure confidentiality was maintained. With a focus on the Hawthorne effect, it is not possible for individuals to keep on doing what they do not normally do for long periods (24, 191). As I was in each hospital for 2 weeks, I did not made sure that I visited most places where COs worked which meant that I did not stay in one place for long. I also informed each health worker interviewed that my intention of undertaking the work was to understand COs, not to find problems about them which eased their concerns.

Review of Methods

In order to explore perceptions, meanings and understandings of influences on the performance of COs, qualitative methods were used to capture data from review of documents, interviews and ethnographic observation. These methods were well suited to getting data not only on issues that COs felt strongly about, but also to explore what their colleagues, supervisors, managers felt in order to get a clearer picture of their worlds. A further tool used to interrogate the data was the provision of feedback of the findings of the study to respondents so that additional engagement with the issues arising from their reports of influences over the performance of COs could be gained. Underlying these methods was the use of the phenomenological approach that enabled the acquisition of a real world picture of what it was to be a CO in the Kenyan health system (170, 171). This enabled the reconstruction of the worlds of COs, their actions and the meaning of these actions in their worlds in an effort to understand COs behaviour (192, 193).

On Performance

A challenge faced in this thesis was the question 'what is CO performance?' This is because there is no consensus on what performance is and there are no widely accepted, broad performance measurement tools for assessing individuals. This work did not attempt to directly quantify or evaluate clinical performance; indeed formally evaluating this multi-dimensional construct is very challenging (13, 42). The purpose of this study was to examine how COs worked in real life, and explore what appears to work / not work so as to understand how to improve things. Measuring performance is a problem for all in this area and capturing the breadth of what performance is or can be is perhaps impossible.

For this reason, qualitative approaches were utilised to explore the range and breadth of issues respondents considered to form performance in relation to COs roles and norms. This however

presents its own problems as the work sought to explore an issue that is already loaded with preconceptions (performance improvement is a topical issue in Kenya) with multiple ways of defining thus approximating what performance is. To ensure that the exploration of the notion of performance was not limited to these preconceptions especially from the researcher's perspective, COs were not presented with a description of performance as this would perhaps have been limiting. Instead, respondents were encouraged to reflect on what they thought performance was within the context of roles, norms and incentives in a district hospital. The end result was not necessarily a consistent idea of performance across respondents but a broad set of 'real' views from COs themselves on what can comprise performance and respondents' ideas on the influences over performance expressed in their own language.

To facilitate engagement with the topic at the start the notion of performance was split into task and non-task aspects in order to enable respondents' engagement (111, 112). I believe this approach to framing discussions around task and non-task features helped to characterise or 'flesh-out' the nature of performance thus forming an innovative feature of the study. Thus the output of the model encapsulated in the study's conceptual framework is recognised as a diverse construct with multiple factors perhaps influencing various components of what is seen or reported as performance. Other studies as reviewed in section 2.3 of this thesis approached performance with a focus on task aspects of a COs work that was seen to be limited (2, 94, 194). The use of the task and non-task performance approach enabled the respondents to move beyond discussions of (de)motivation and reflect on multiple formal and informal requirements of the COs job as well as other influences impacting on the way they carry out their duties. Interestingly in some FBH settings performance expectations for COs were actually expressed in task and non-task terms by managers suggesting they may be intuitively understood characteristics. However, in general COs, other health care workers and even managers often provided rather limited conceptualisations of performance within the health system unless prompted. This suggests a similarly limited and superficial discourse around performance within the health system. Such a view was supported by detailed work exploring influences on performance where active performance management was uncommon, particularly outside the FBH sector or VC clinics.

Use of the Conceptual Framework

A methodological strength of the study is the extensive use of the conceptual framework to understand and frame the results of the empirical work. As a framework to explore individuals'

performance in an organization, the Getzels-Guba model that describes the tension between the institution (Nomothetic) and individual (Idiographic) aspects of an organization was chosen (195). The model suited the study since it helped the exploration as well as understanding of this tension helping therefore to contribute to interventions that can be applied to begin resolving the institution – individual tension (23). Even though the personal propensities of individuals who take up roles in an institution was not the focus of this thesis, some pertinent issues were explored through finding out what institutions require from COs (role expectations) and the need dispositions of individuals who take up such roles in the organizations (hospitals). This was achieved by focussing on roles, norms and incentives and trying to distinguish between institution and individual in each as described in the results chapters.

Approaches such as those based on the New Institutional Economics that attempts to explain social institutions using the language of economics could have been used but their overwhelming focus on the institutional perspective without attention to the individual level was found to be wanting (196), (197) . The reason is that both the institution and individuals within it interact to create social environments that differ from one organization to another (122). The social systems theory, on which the Getzels – Guba model is based, was deemed more appropriate to the needs of the study. The theory refers to the relationship between an individual (idiographic) and their social environment (nomothetic). The social environment can be a hospital or (for example) a department within a hospital that defines a social / organisational boundary. The theory emphasises that human behaviour is influenced by complex and diverse factors and adds that the individual and environment are interdependent.

While mainly applied in education to understand issues such as role conflict among teachers (198) teacher burnout (199), roles of special administrators (200), the Getzels – Guba model has also been applied to other areas such as evaluation of educational personnel (201), job satisfaction and salaries (202) and safety leadership in university laboratories (203), among others.

There were however aspects of the model that were seen to be rather rigid and in the end limiting more analyses of data. One such aspect focussed on analyses regarding the nature of leadership-followership styles, and the problem of morale in an institution (121). With regards to leadership-followership styles, three types are defined and include the nomothetic (focuses on the needs of the institution), the idiographic (focuses on the needs of the individual, and the transactional (negotiated state between nomothetic and idiographic leadership-followership styles) (121). While

I was unable to assess the utility of these aspects as my data did not seek out to test these issues, issues arising from data around incentives at an organizational level suggest that the type of leadership practised by a hospital's management influences the motivation of its employees. The other aspect focuses on morale that seeks to find out whether, at individual level, there is congruence between role expectations, needs dispositions and goals (121). In the model, an employee will have feelings of belongingness if there is congruence between role expectations and need dispositions, rationality if there is congruence between role expectations and goals, and lastly, identification where there is congruence between needs disposition and goals (121). While these formulations suggest a rigid linear relationship between these variables, data from this study demonstrates that these variables are interlinked and can be influenced by a number of factors both internal and external to the organization. For this reason, an attempt was made in this work to examine external factors influencing COs roles, incentives and performance, in a sense, expanding the nomothetic aspect of the model to include external influences arising from the economic, political and social aspects of the Kenya wherein hospitals function. In doing so, this expanded the model and enabled an understanding of the societal context that COs work in which was found to have an influence on their perceived performance.

Differences between Settings

A major reason for comparing FBH and GOK facilities was to explore whether CO performance could be modified by features of their work environments (6, 204-206). Though work has been done in Tanzania and Malawi that focuses on COs working both in public and FBH sectors, no attempt was made in these studies to explore variations that might arise from differences between the two sectors (98, 207). The data presented in this thesis suggests a clear modifying effect of the settings on CO's performance. Differences between settings mainly related to whether and how well facilities and work settings within them addressed constraints and resolved (or did not) conflicts related to CO's work performance.

As demonstrated in Chapter 8, CO's task performance at the hospital level was affected by features of the facility management and the procedures adopted to enable work to be done. These issues differentiated FBH and GOK sites as well as CO work settings such as SCs, VCs and OPD. Facility management was found to have a great influence on CO work attitudes by whether it tended to be respectful and supportive or operated on simple, hierarchical notions of COs being a 'filter' (91, 208, 209). Mcauliffe et al's (91) study that used the organisational justice concept found that health workers to be happier with their jobs if they believed that their

managers were considerate. Dieleman and colleagues' (209) study that explored the impact of HIV/AIDS on staff in four rural hospitals in Uganda found that supportive management was motivating to health workers to cope with the emotionally difficult working conditions. This effect was seen in how well facility managers mediated the effects of system level factors by the judicious use of hospital level resources or procedures under their control. For example, FBH management tended to go out of its way to create an environment that encouraged COs to work through the provision of adequate resources, technical support and generally being open to COs to help address any arising issues, all factors under their control – which have been found to lower turnover and increase job satisfaction (91, 208, 209). In supporting this, a realist evaluation by Marchal and colleagues (208) using in-depth interviews of 6 members of the management team of a well performing hospital in Ghana reported similar results. They found that accessibility to top management and their involvement on the daily routine of the hospital improved staff's motivation to work (208). Great variability in GOK management was seen with some managers not seeing their managerial role as getting involved in the day to day issues of running a hospital while a few others made great efforts to improve the working situation even if circumstances were difficult, an issue also found in previous studies (10), (31). The result is that without resources and clarity of performance expectations hospitals can sustain the appearance of high productivity but at the expense of relatively low quality of care in some GOK settings. This can be contrasted with performance characterised by good work in the presence of basic resources and clear expectations seen in FBH sites. The effect of the settings was clearly shown in variations between CO preferences to work in VC or OPD sites. Since VC sites were spacious, well supported, and had clear work procedures, CO's were more comfortable working there than in OPD which tended to be cramped, overcrowded with poor work organization (especially in GOK sites). In such VC sites COs expressed greater satisfaction and tended to perform well and under noticeably better supervision.

Researcher Reflexivity

The case research method, by its very nature, demands working closely with a variety of informants in their organizational settings (159). This means that I had to pay close attention to my behaviour and its possible effects on others. This is particularly important as during the course of my study, I gained information on activities that could be damaging if made public (159), an example of which was some CO interns selling drugs to patients. In this case, the choice is to ensure that confidentiality is maintained and nobody is made less able to carry out their responsibilities. I however found that these activities were known and in some sites, the COs

themselves were actively engaging with their colleagues and the hospital management to solve these problems.

Another aspect of this was my prejudices as an individual due to my experiences during prior work or engagement with COs. This is whether respondents reported felt issues or told me what I wanted to hear and whether I saw what I expected to see. Whether respondents told me the truth is difficult to say but I believe that the consistency of issues reported in the six sites suggests that what is reported in the thesis were truly 'felt' issues. I also had to guard against prejudice arising from prior work (10, 31) by actively seeking information that could confirm or deny what I thought and also seeking alternative explanations from many sources. This was particularly useful during my comparison of settings, particularly GOK and FBH. The comparison was not blinded as I knew which setting I was observing. I sought to find whether the setting I was observing exhibited similar features with other settings and if different, sought explanations for this. This was also addressed by visiting additional two hospitals to explore the issues found from the initial four hospitals.

Country Context and Generalizability of the Results

Affecting the study is the fact it was done after the country had undergone the post-election crisis whose effect among others was the splitting of the former Ministry of Health into two; Ministry of Medical Services that dealt with curative issues, and, Ministry of Public Health and Sanitation that focused on preventative issues. Discussions with senior policymakers showed that they tried hard to assure all employees in both ministries that they were working to improve the health of Kenyans so the split should not affect their work. During interviews, I did feel a sense of reticence among some respondents due to fear of the issues discussed during the interviews being reported to hospital management[25], an issue also found during earlier work leading to a high number of respondents refusing to be tape recorded (10), (31). Though the fear may have limited the possible range and depth of information acquired, my position as an employee of a research institution widely known in the country helped to alleviate this fear.

[25] The fear of tape recording was additionally reinforced by the actions of Mr. John Githongo, a former permanent secretary in governance and ethics who had been hired to deal with perceptions of high level corruption in Kenya in 2006. He had secretly tape recorded supposedly confidential conversations between senior government ministers and when this was found out, he had to seek asylum in the United Kingdom. Many staff were thus not willing to speak on record as they felt that despite assurances, the record could still get to the authorities and affect them. Please see: http://www.accessmylibrary.com/article-1G1-142561905/githongo-tapes-get-record.html

I believe that the results reported here are indicative of major issues within Kenya. This is because I sought to explore in-depth the world of COs to uncover issues that a superficial survey of more sites might have failed to reveal. This was supplemented with a review of GOK and hospital level policy documents that focused on COs and strengthened by interviewing other staff who worked with COs in the sites visited. Also, giving 'voice' to the COs by allowing them in their own words to speak about issues that they feel hamper their performance is important. Also to my knowledge, this is perhaps the first study in Kenya that has sought to qualitatively explore issues faced by COs in a country that has had a long history of using them.

In terms of generalizability of the results to other similar countries, it should be noted here that a number of countries in sub-Saharan Africa have had a long history of using COs (2),(11). Many of these were under British colonial rule thus the health systems established, to an extent, are similar to that in Kenya (11). Therefore my findings should be considered useful by countries with these characteristics, examples of which include Tanzania, Mozambique, Malawi, and Uganda. Countries like South Africa that has only recently begun training clinical associates might be in a better position to address some of the problems raised by Kenyan COs especially since the Clinical Associates will enter into a hierarchy where doctors have been established for a long time.

9.3. Discussion of Main Findings

In this section, I summarise and discuss key findings arising from the presentation of results as detailed in Chapters Six to Eight. This provides an opportunity to raise issues likely to influence performance of COs in the Kenyan health system for further reflection and discussion in the next section.

9.3.1. Roles

There is literature that provides general descriptions of the roles that COs play in various health systems where they are utilised (2, 35, 88, 91). Though CO roles as performed slightly differ in the different settings they work in, there is consensus on the fact that all respondents knew what role COs played in the hospitals visited and generally in the health system. They form a large portion of the clinical workforce and from the policy position outlined in the Second National Health Sector Strategy (39), it appears that their production and use in the system will continue.

However, there is little information that describes their opinions of what they actually do in the health system, how it impacts on their day to day practices and how this impacts on their long-term performance. What this study found was first, that a variety of images were attached to being a CO which suggests that there is limited knowledge about CO qualifications, understanding of their prerogatives and scope of practice (210). Notably, COs themselves contested conceptualizations that seemed to limit who they are (e.g. a 'filter') although some were resigned to accepting their in-between status ('sandwich') as shown in section 5.5. Second and though in the same cadre, COs and SCOs do not see themselves as one and the same, with specialisation being a potential form of escape from the 'filter' or 'sandwich' roles. The difference in the two groups is, however, not always appreciated by other cadres leading to some hospital managers requesting SCOs to work in OPD, an issue that SCOs felt diminishes their advanced professional status. Third, informants' views also tended to confirm the perception that COs have a lower status compared with other cadres, notably physicians within the medical hierarchy (2, 93). Interestingly the document review of nurses' and COs' schemes of service suggests that COs should have a higher position in the hierarchy than nurses but this does not seem to play out in practice as the career pyramid for nurses, while having a narrow apex, provides for more obvious advancement to decision-making levels that for COs.

It could be said that the notions encapsulated by the images held of COs are perhaps driven by the unstated mechanistic view of COs by policymakers and managers as passive health workers who are not engaged with the complexity of negotiating who they are and what they do. This can partly be attributed to their lack of power in such negotiations so that they end up in a fixed niche as subordinates to doctors in many ways such as pay. This lack of power arises from the fact that doctors have hierarchical authority and can enforce it while nurses, besides the power due to their numbers, might wish to side with doctors since they need recognition that the COs are also fighting for. How this is overcome in workplaces results in work relationships that can either be positive (support the CO to perform their roles) or negative (hinder them). Thus where COs were recognised as being important to patient care and management, good task and non-task performance was seen (e.g. H1, H3) as compared to sites where this did not happen (e.g. H2, H4). However, perhaps most often the end result is that COs have low status which they do not like as they see themselves as more than just a 'filter' serving a subordinate role to doctors in providing patient care and management.

The study also found COs to be internally conflicted perhaps as their expectations at entry are not supported by the reality of the workplace. The first internal conflict relates to their need to make a good living out of their work as opposed to providing an altruistic service that may not be well remunerated. The living standards that can be accorded by their salaries do not quite match their own expectations or societal expectations of the standards of living for health professionals considered 'doctors' (and both COs and physicians are regarded as 'daktaris[26]' in the public's eyes). For COs the remuneration that their position gives is inadequate vis-à-vis their expectation related to the perceived importance of their work. The second internal conflict relates to the need to do a good job which is undermined by the unavailability of resources, especially in GOK settings. Previous work in Kenyan district hospitals showed that many COs (as well as other cadres) became health professionals because they found serving people to be fulfilling (10). Not providing them with the resources to do so is de-motivating and does affect their performance. Overall, COs also reported the need to be appreciated and recognised by other cadres and the health system for the work they perform in the health system. When this did not happen, various responses were seen that included shirking duties or escaping from being a general to a specialist CO all of which have negative effects on performance.

Thus at the workplace, the norm for the position is that COs adopt a mechanistic approach to their work whereby they function like automatons in a factory line. After some time, such kind of work becomes repetitive and boring which makes it imperative that alternatives are sought. At present and especially in GOK OPD settings, the CO role as presently practiced does not seem to excite COs compared with FBH settings. Importantly, the narrow definition will also hamper CO's ability for better remuneration since the system has no reason to pay highly for a simple narrowly defined 'factory floor' position.

Nohria and colleagues (15) suggest that a way out of this problem is to focus on job design, a key organizational lever of motivation. There is no doubt that the CO role is distinct and that their work is important to the facilities and the system as a whole. However, this acknowledgement has not translated to CO jobs being viewed by COs as meaningful. What might be useful then is to provide more support for the CO role through clarification and communication of norms for CO jobs as well as incentives such as supervision, career advancement and in-service training. A study done in Mali (5) suggested that the provision of job descriptions might improve job clarity.

[26] 'Daktari' is the Swahili name for doctor.

In this study, Dieleman et al (5) found that though many respondents were convinced of the importance of job descriptions, those available were related to professions and not posts such that a nurse at a health centre had the same job description with one based at a hospital (5). Also, though the idea of a job description is to provide guidance such that staff do not exceed their scope of practice, Bradley and McAuliffe's (93) study in Malawi reported that the reason that they did so was to help their countrymen.

9.3.2. There is Poor Communication about Formal Norms

Chapter 7 explored whether COs knew, understood and applied the norms regulating their performance and behaviour in the niches assigned to them by the health system. Data from respondents and policy documents showed that formal norms were available for two areas; performance and behaviour. Unprompted views on the norms of task performance were mostly very narrow focussing on seeing many patients or being technically competent, issues that have been found in other countries (1, 2, 211). Formal norms in the GOK sector are outlined in the general civil service Code of Regulations that offers guidance on issues such as pay regimes and day to day conduct among others (59) and the public service code of ethics that describes expectations on public officer behaviour (60). However, many GOK respondents did not mention these as their sources of norms. Most spoke of norms in practice arising from their daily routines which generally focussed on meeting the expectations of others (i.e., their supervisors, hospital management or peers). This was despite the existence of the 2009 CO scheme of service that explicitly described expectations regarding CO performance. Interviews with respondents showed that the existence of this document was not known to the respondents indicating that better communication of expectations is needed. Thus COs relied on supervisors and peers for guidance on norms, which they reported not to be forthcoming especially in OPD. In comparison, SC and VC settings had more defined norms since they basically addressed one illness which they either had been trained (e.g., ophthalmology) or had clear guidance (e.g., treating TB) on management. Working in these settings was thought to be better than OPD due to reasons such as autonomy (SC settings), collegial atmosphere (VC settings), and incentives such as less workload (both SC and VC) and support in various forms (VC). These findings are supported by the work of McAuliffe and colleagues (90) who found these issues to strongly resonate among mid-level workers in Malawi. In particular, managers who provided clear guidance to their staff were reported to be motivating (90).

Norms related to task performance included for example clarity of the patient record and

correctness of treatment. The importance of a good patient record of a provider – patient encounter is further emphasised when one wishes to review retrospectively what has been done by the clinicians (a measure of task performance). Despite recognition of this important area of task performance poor record keeping is generally tolerated. There have been some efforts, in child health especially, where paediatric admission records have been introduced with initial implementation results being relatively successful (33, 34), however, sustaining this approach, largely a task of COs, is another major obstacle to be overcome (30).Such an example points to a more general issue noted within the system that while task performance topics are considered important and are reasonably consistent across settings, efforts to provide supervision to promote such good performance is largely lacking. This does mean that norms for performance will be sourced from supervisors, hospital management and CO's peers, many of whom might not have much knowledge of the provisions that the new CO scheme of service has on what COs should do. Further, the tension observed between cadres, particularly between doctors and COs may exacerbate such problems, except in settings such as H1 where specific efforts are made to engage all professionals in promoting quality care.

In terms of norms of behaviours, FBH facilities exhibited a wider range of these norms ranging from facilities that had more codified and formalized norms such as (H1) to those that had implicit norms (H6). Considering the FBH facilities further, norms of behaviour ranged from the very restrictive (H1), for example prohibiting smoking cigarettes or consumption of alcohol in the hospital and its confines, to those that had norms which were not different from those existing in GOK settings (H6). Norms in GOK settings were seen to be more implicit than those in FBH settings. For this reason, many COs, even those working in FBH settings, preferred working for the GOK as they felt that it allowed more freedom than was available in FBH facilities. The fact that FBH settings have enforced the norms in their settings is perhaps one reason why they are reported to elicit better performance from their employees. Explicit norms that are frequently reinforced such as happens in FBH settings does make FBH sites to be a tougher working environment compared with the GOK one that has less enforcement thus is more attractive as individuals can escape and not be sanctioned. Despite this, the provision of adequate resources and support in FBH settings made it a more attractive than GOK settings that had less resources and support.

9.3.3. Underestimation of the Influence of Incentives

As illustrated in Chapter Eight, COs in general felt that the incentives provided were weak with many COs stating that those available e.g. salaries and promotions are not adequate, an issue also reported in Malawi (23). Positive incentives to improve performance especially in the GOK sector were also few resulting in a high number of generally dissatisfied COs. When asked to describe performance related incentives, many respondents had to be prompted before describing any. Respondents from GOK settings were more negative regarding incentives given for performance (stating that there were none) when compared with those from FBH settings. Incentives such as salary and promotions were considered to be remuneration or compensation for work done and not considered as incentives per se. A sore point for COs is that they felt more attention was being given to improving the salaries of nurses and doctors and that they were being neglected.

Across all facilities, career advancement was reported to be a major de-motivating factor. Drawing on focus group discussions of sixty four participants done in a study that explored the experiences of health workers in Kilimanjaro region in Tanzania, Manongi and colleagues found more structured and supportive supervision from their managers, and improved transparency in career development opportunities to be important to health workers (35). These issues have also been reported in this study, in Swaziland (212) and Malawi (93), among others. The problem with the provision of financially related incentives is the low financial flows to the health system. Thus there is need to explore other incentives. Ndetei and colleagues, in a study that explored incentives for health worker retention in Kenya, found non-financial incentives such as provision of in-services training through continuous medical education, better supervision and a professional job grading and salary structure with opportunities for career advancement should be implemented (18). Some of these issues such as job grading have been addressed in the revised CO scheme of service; the question that remains is implementing them.

Within clinical work settings, OPD was reported to have minimal incentives which made it a less attractive place to work in. In comparison, there were more incentives in vertical clinics that were mainly provided through external support as shown in section 7.6.2. FBH respondents did mention incentives such as financial performance bonuses in specific settings and sometimes verbal recognition. Most were however drawn to work in FBH facilities by the opportunity to improve their skills as facilities appeared to work to create a learning environment where they could access and learn from Consultants. Despite this, FBH COs still reported a concern for the

provision of better financial incentives.

Beyond financial and non-financial incentives, COs also expressed dissatisfaction with the working conditions. Environments that lacked resources and were less responsive to COs needs were found to be de-motivating which negatively influences the effort that COs will put in to work. What this study found is that COs are not as passive as they have sometimes been characterised, and do exhibit evidence of agency. Many make calculations on which setting is better and show their dissatisfaction by moving from one to another (e.g., FBH to GOK settings) or in the case of SCOs, arranging work so that they had more time to engage in their personally fulfilling activities outside the hospital.

9.3.4. Issues related to Task and Non-Task Performance

The notion of task and non-task performance was adopted to allow respondents to allocate activities or work contributions they routinely carried out either as task or non-task. In general, task aspects refer to the core duties of a CO that may include treating patients to the best of their ability (among others) while non-task aspects refer to issues not formally outlined as core duties but that help all undertake their duties. Non-task aspects appear to capture notions of organizational citizenship that includes the social and psychological environment in which task performance takes place (213, 214). This for example may include having good attitudes, being courteous and respecting colleagues (213, 214). In adopting this approach, performance was given a more complex treatment where task performance was not the only aspect seen to comprise of performance as seen in a number of studies exploring CO competence (1, 2, 194). Non-task aspects of performance are also important even though they have received insufficient attention in health literature. Some recent studies such as that carried out by McAuliffe and Colleagues in Malawi have begun to shed light on non-task aspects of work but do not explicitly use that term (207). For example McAuliffe et al reported that when welcoming new employees, workers acted out of professional obligation to their work rather than any sense of camaraderie (207). This suggests that there might be tension between the workers suggesting a need for more emphasis on non-task issues at the workplace (91).

Task performance was seen to fall in three dimensions (inputs, process and outcomes). These were prioritized differently depending on the setting where COs worked. For example, GOK settings strongly emphasized task related issues focusing on simple 'productivity' per CO, while care might be of questionable quality. With the exception of H3 and VC's, non-task aspects of

work were found to have been largely ignored in the other GOK sites and settings. Findings from FBH settings that paid attention to non-task aspects of work, while combining this with an equally high emphasis on task related aspects of work, suggest that this combined approach had a positive effect on productivity and quality. To achieve this FBH's clearly communicated performance expectations regarding job procedures, courtesy in the patient-clinician encounter and outlined the consequences for not meeting expectations (215).

In terms of non-task performance, there was evidence of considerable variability in general and specialist CO's non-task performance. One aspect of this relates to the notion of general COs as 'filters', expected to routinely undertake much work from their base in OPD. The other aspect views SCOs as a form of escape from the drudgery and low status associated with being an RCO. Thus there is a clear sense that becoming an SCO is not a step up the ladder as much as a diagonal step, slightly up (at present with no real seniority or pay improvement) – and sideways out of the general CO role. SCOs could afford to have good non-task performance with their clients since they might even be considered to be grooming clients for their services offered outside the hospital. In addition SCOs generally had fewer patients to attend to and were more in control of their work as compared with general COs, something that often appeared personally advantageous as workloads could be limited. However with relation to supporting general COs work and that of the hospital at large, many SCOs had poor non-task performance manifest as unwillingness to work in OPD even when they did not have many clients and abuse of their autonomous status to their own advantage, for example allowing them to moonlight in clinics they owned or ran.

CO's performance was found to be affected by hospital level factors that included: supportive management, recruitment policies that reinforced some specific (spiritual) aspects of intrinsic motivation, the active use of incentives, active and supportive supervision and provision of adequate resources. While financial incentives were important (which impact on CO status), non-financial incentives were also clearly motivating especially where these targeted CO's ability to work (adequate resources, appropriate infrastructure) and morale (recognition and appreciation, encouraging teamwork) (216), (217). Nohria and colleagues view these factors as comprising of hospital culture which is an important organizational lever for improving motivation (15). McAuliffe and colleagues' findings in Malawi suggest that these variables enhanced workers job satisfaction if they were practised both by fellow colleagues and managers/supervisors (207). At institutional level, COs tended to report experiencing more rewarding work in FBH settings

because hospital level factors were addressed as compared with GOK settings. This may explain why GOK hospitals seemed to elicit poor to moderate task and non-task performance from OPD COs, poor non-task performance from SCOs and generally better task and non-task performance from COs in VCs as these are settings with additional programme level support structures.

9.4. Are COs A Solution to the Human Resources Crisis?

COs see themselves as an important facet of health service delivery in Kenya, an issue recognised by other cadres and reported from other countries (93), (2). This awareness of their importance has led them to agitate for better terms of work and greater recognition and appreciation of their work with growing demands for a clear career ladder in the health system, issues that COs feel have been neglected for too long. Similar concerns have been reported in Malawi (93), (23), Mozambique (2), Vietnam (144), Uganda (218), Tanzania (35) and Mali (5) among other countries. Although the revised CO scheme of service has began to address some issues that affect COs such as career progression, it is still unknown whether these will work as expected or not. This however faces two problems; first that broader health system problems also impact on COs just as they affect other cadres and these need to be addressed if CO performance is to improve. Second, that COs do have agency thus expecting them to continue to be pliant and put up with the career-limiting role prescribed for them by the system might lead to increased dissatisfaction with their position. These are discussed hereafter. These two issues are discussed as crosscutting concerns arising from the data highlighted in Chapters Six to Eight of this thesis.

9.4.1. There are CO Specific Issues that Need to be Addressed

Broader system problems that affect the performance of doctors and nurses also undermine that of COs. As such, continuing to use the CO cadre in the present poor state of affairs will not solve the problems that have led to their use. As shown in Chapters Six and Eight, though the 'niche' role of COs appears to work well for the health system, it comes with a major problem – the need, particularly by general COs, to escape as they often perceive the general CO role to be a thankless, low status position. In a setting with greater job opportunities than Kenya this would likely result in poor recruitment and retention. In Kenya where opportunities are limited it may result in retention but poor job satisfaction. In fact the absence of COs expressing their dissatisfaction by leaving posts, while an attractive feature of mid-level workers to policy makers, may have prevented any attention to COs satisfaction, retention or work performance since

health system measures tend to focus on only the number of employees not what they do. Therefore while the literature indicates that adequately supported NPCs can deliver good services, attention also must be paid to putting in place mechanisms that sustain such performance by positively influencing their job satisfaction and retention in an NPC role. These issues are important in any discussions regarding the use of NPCs as posited in the mid-level worker literature (42, 93). Some specific issues that could perhaps be addressed are outlined as follows.

The Social Position of Being a CO

Emerging from discussions around the role of a CO, the social aspect of their work was highly discussed, with many COs feeling that this aspect did define part of their problems. They argued that while they were seen to perform the functions of a 'doctor', their livelihoods outside the hospital did not reflect this social status. As a result of this tension, that compounded frustrations they face in trying to make ends meet, they felt it inevitable that practices such as absenteeism, alcoholism, taking money from patients, etc were experienced.

COs Are Their Own Enemies

Some study informants thought that COs in general seemed to expect that others will sort out their problems, an attitude that they allude to have resulted in their current 'niche' situation. The argument made was that COs did not engage well with other cadres on issues that faced them and did not want to own up to the mistakes that COs make during the course of their work. When required to make effort to do well, many COs did not want to do so. It is for these reasons that the some informants felt that COs were their own enemies. To remedy the situation, they argued that COs needed to be more active in presenting their issues to the authorities since other cadres or professions would focus just on their own interests.

The Role of the CO Council

Some saw the work of the CO Council being among others, to represent them to the authorities. However, many COs felt that the Kenya Association of Clinical Officers (KACO), a voluntary professional association similar to a 'union', was doing better than the CO council, a government regulatory body, in this role. They attributed the poor performance of the CO Council to the fact that their council, when compared to those of doctors and nurses, had no 'teeth'. They supported this by focussing on the rapid increase in the number of colleges offering clinical officer training that had no facilities and manpower. The result was that the graduates were not well trained

which reflected poorly on their profession. On the other hand, institutions that had facilities were overwhelmed by large student numbers. Since quality had to be maintained amongst trainees to prevent damage to COs professional standing, they suggested that the CO Council should only accredit institutions that were well equipped and had appropriate manpower – student ratios.

FBH Human Resource Problems

All senior FBH officers interviewed felt that the Government was taking away their employees by offering more attractive benefits which included pensions that FBH facilities were not able to match or provide. They argued that their inability to match what the government offered was due to lack of financial support from both the government (that had withdrawn giving FBH facilities grants worth 50% of their expenses) and their donors. This made it difficult to meet the needs of their employees since they needed to be self-sustaining and at the same time charge fees that reflected the 'mission' status of the facilities. At the level of the COs, most felt that incentives such as less pressure to work (or perform) combined with less regulated environments with more malleable working hours and more personal freedom to make additional income were as least as important as attractions of the government sector as salaries offered were not that much higher than those offered by FBH facilities.

9.4.2. Coping Mechanisms Adopted by COs

Having outlined in the preceding section some of the problems that affect the daily lives of COs, I consider in this section some of the solutions they have adopted to either overcome and/or make a good life while in public service or even in FBH hospitals that could work against the goals of the system. The coping mechanisms examined here reflect COs' their efforts to find balance that allows them to meet both their needs and (some of) those of the institution. This acknowledges that COs have agency and will not simply comply and their responses undermine the original institutional objectives.

Movement between Settings

One way that COs used to cope with adverse working conditions was movement between settings. Even in good performance environments there still remained a desire to escape, for example from FBH to GOK settings. This was largely driven by perceived better salaries; an easier life from shorter, regular hours; job security; and ability to generate private income. Such movement from FBH to GOK is perhaps surprising since data presented in Chapter 7 suggests that FBH facilities provided work environments that COs reported to be more satisfying from a

technical, task perspective and more suitable for improving one's skill, thus illustrating the over-riding importance of financial incentives. Movement to international organisations working in health was also reported to be attractive but the opportunities to do so are few. The other form of escape was from being a general CO to a specialist CO driven by the need for status, autonomy, an easier role, and the ability to generate private income. A third possible form of escape out of being a CO is to become a physician. However, the route at present is difficult to pursue because of the few chances available to COs to join medical schools and the current high costs involved. In some ways therefore the creation of the cadre could be viewed as a 'success' as few COs change profession because few other employers exist who can employ them other than government, FBH facilities and the small number of international organizations providing health care services. Movement between settings indicates dissatisfaction with the working conditions where COs work. Ndetei et al (18) argue that internal migration (from poorer to richer areas, from rural to urban areas) is a major problem affecting the performance of health institutions in Kenya that is primarily driven by worker's need to improve their livelihoods. They find that institutions that provided both financial and non-financial incentives to their employees were able to retain them for longer as compared with those that did not (18). There is then need to begin considering appropriate incentives for not only retaining but also motivating COs.

Varying their Performance

Just as movement between settings suggests the dissatisfaction that COs have with a particular work setting, their performance can also indicate dissatisfaction. This thesis has shown that incentives to motivate health workers to perform are few and that not all work settings favour good performance. From a performance perspective, COs responses can be seen in three ways. The first is seen in FBH settings where due to the nature of the work environment as described in Chapter Seven, many COs will work well as expected but migrate when an opportunity to do so occurs. The second aspect is seen in GOK settings especially the OPD where COs do the minimum to avoid censure. The issue with this behaviour is whether the minimum they do is good enough. The third aspect is seen in specialist clinics and vertical clinics where the work environment is less stressful and more supportive when compared to OPD yet two divergent outcomes are seen. With the specialist clinics, work is done in a way that it gives the SCOs an opportunity to get time to do extra mural work (i.e., locum) outside the hospital. As for vertical clinics, good work is seen and respondents tended to want to stay in that site as they often felt able to do a good job, received opportunities for training and were supervised.

Work done by Meessen et al (219) in Rwanda provides some insights as to why workers would vary their performance depending on the setting where they work. In their study that examined an intervention to improve the performance of health workers in two districts in Rwanda, they found varied levels of performance to exist between government and mission facilities that could not be explained by ownership status or staff numbers (219). The intervention focussed on contracting facilities to deliver agreed outputs for which they would be remunerated. While improvements in productivity were reported, they seemed to be in the areas that the intervention was targeting meaning that other areas not within the contract were neglected. This suggests that to improve CO performance, a holistic focus is needed that ensures that COs also deliver on the other areas of performance as outlined in the revised CO scheme of service (Table 2-4) and not only on patient care and management as is currently done.

Specialization

Another coping mechanism adopted by COs is to specialize but use the specialization to generate additional income as will be discussed in the next sub-section. However, others have been refusing to undergo specialist training due to the perceived lack of benefits for doing so. For example, COs have to pay for the course themselves and when they graduate, their additional qualification does not result in an increase of their salary or a promotion. They come back and work at the same job group as they left which they feel to be quite de-motivating. There is also a big number of COs who have remained in the same job group for many years. While there have been instances of mass promotion, it does not work well since it lumps all employees in one group appearing unfair to those that have been in a job group for much longer than others. So despite the 'escape' that it offers the trend is that COs are refusing to go for additional specialist training as even if their skills are needed, there is no financial recognition of the additional qualification.

Engaging in Dual Practice

Dual practice is taken to mean health professionals employed by government who also run their private practice. Ferrinho et al (220) in a study of dual practice in the health sector state that the reason for adoption of this practice is to deal with unsatisfactory living and working conditions that happens when one is reliant on government income alone. Observational data collected as part of this thesis has shown that SCOs also routinely carry out private practice in clinics outside

the hospital, some of which they own. Also, dual practice has been observed among more-experienced general COs who have stayed long in the towns hosting district hospitals.

Areas of practice such as anaesthesia, paediatrics, and ophthalmology, among others, attract few MOs thus SCOs working in these specialties do not facing much resistance from doctors. The reason might be that these are either skills that doctors often do not have (anaesthesia and ophthalmology) or are not as lucrative (paediatrics) when compared to reproductive health, a traditionally lucrative area. SCOs trained in reproductive health have reported facing difficulties in carrying out even their official work as they are blocked or given very few opportunities by Obstetricians who hope to secure GOK patients as private patients. However this does not happen in all hospitals, but is an indication of the underlying problem of competition in the private sphere impacting on public service delivery.

Despite the positive effect of dual practice on the financial status of COs and SCOs such practices raise the potential for conflict with other cadres. Other negative issues raised by the dual practice literature include predation (getting moneyed patients to go to their private practices), competition for time, brain drain and conflict of interest (220), (221), (141). In particular, conflict of interest can be clearly seen among Kenyan doctors when the issue of a monthly non practice allowance of KES 70,000 (ZAR 7,000) is considered. This allowance was introduced to induce them to come to work for government by replacing part of their 'lost' private income. However, the inducement has now come to be seen as part of their salary as most still continue to run clinics outside the hospital. This is especially the case for medical specialists who spend less time in hospitals compared with general (often younger) doctors. This might begin to explain why doctors feel that COs should be in OPD since COs do in fact reduce their burden of work which means that they have less workload and can pay attention to other issues such as their own locum work (which would render COs presence in OPD to be a perverse incentive for MOs). That COs as an MLW cadre can engage in dual practice is an issue that is little explored in health literature, probably because it is not expected that they can resort to such activities and needs further inquiry.

9.5. How Should The System Respond?

The implications of CO's coping mechanisms suggest that COs have been relatively neglected while issues concerning other cadres especially doctors and nurses are being addressed. If it is

accepted that COs are doing an important job and that they do fill a felt need in the system, then their needs also have to be addressed. With this in mind, how should the system respond? Two types of responses are possible (220, 222): (i) See dual practice as a necessary self correction and ii) address the underlying problems.

Dual practice can be seen as a necessary self-correction in the absence of other alternatives. At the individual level, the alternatives would be to exit from being an SCO and join other professions (opportunities to do so are few) or to continue in the existing state that SCOs find uncomfortable. Also, it might also be in the interest of the SCO to remain in employment as it offers access to information, opinions of colleagues and doctors, and job security, among others (220). Since the system is unable to maintain SCOs at the level they would like, SCOs would be 'allowed' to carry out dual practice so long as that practice does not negatively impact on their normal duties. The issue then is what forms of regulatory mechanisms can be introduced to manage the practice and whether allowing dual practice as practised at present creates a conflict of interest (220).

With a focus on the idea of a self regulating mechanism, one such process could be to empower the Clinical Officers Council to perform its functions better. While not the focus of this thesis, questions were raised around its functions and ability to monitor and regulate COs. The CO Council has a significant role to play in raising the profile of the CO profession by instituting mechanisms and supporting regulation around the training, registration and licensing of all Clinical Officers[27] to improve their actual and perceived quality as professionals. Discussions with the Chief Clinical Officer suggest that the CO Council is now working towards resolving issues of quality of COs – both at training and after employment. An issue perhaps hampering the board is its effectiveness. The Council has in its membership four doctors by law, one of whom is the Director of Medical Services (DMS) or his representative. Due to the authority that the DMS has, the issues discussed and the directions the Council is likely to take could be heavily influenced by the powerful doctors' interests.

If dual practice is not an acceptable alternative, then the system needs to solve the underlying problem making SCOs resort to dual practice (220), (222). By providing good incentives, career paths, and fair management of COs among others, the system can send a message to COs that

[27] http://clinicalofficerscouncil.com/about-coc.php. Accessed March 22nd, 2011.

they are an important facet of the health system which should encourage them to work better and not resort to dual practice. This approach is however beset by a number of hurdles. The first is whether it is in the interest of the system to allow the CO cadre to be able to progress up the MOH system as they are an invaluable workforce providing essential services in many rural areas. While this may be true, it does not negate the need to ensure that its employees are fairly treated and receive a fair compensation for what they do. Thus, improving the working conditions might be the best way out of this issue and the revised scheme of service provides guidance on how this may be done. It however needs to be communicated to all COs and implemented.

Another response by the system could be to empower public district hospitals by giving them more management autonomy perhaps including responsibility for discipline, hiring and firing employees as seen in FBH facilities. Hospital performance would then be within the remit of the hospital management. Giving hospital manager's management autonomy to make such decisions might begin to send a message that the system is concerned with the performance of its employees and will enforce it through local facility managers. Further, facility managers are an important but hardly utilised resource in the effort to improve the performance of existing health workers. Though not the primary focus of this study, my work shows that facility managers have the ability to mediate and/or modify employees' disposition towards work which has a positive effect on organizational performance (208, 223-225). Work in Ghana shows that they need to be available and get involved in the hospital's daily activities to improve the performance of health workers (21),(208). Such involvement may include engendering organizational commitment, loyalty and aligning themselves with the organization's values and culture (225). In turn, the managers can ensure that as far as possible, employees' expectations and demands are addressed. In light of this important role, it is vital to explore their competency and mechanisms of retention of which little literature from low resource settings exists (224), (226). It is thus important that the health system begin exploring ways of getting more out of its facility managers in particular by equipping them with skills to manage COs, among other cadres.

9.6. Conclusion

Considering that the system does not seem to be dealing well with many human resources problems at present and that COs have to work in this dysfunctional system, how can we expect them to do better? The answer to this question depends on how the system and the stakeholders within it view COs and their work such that it would be in their interest to seek, consider and

implement strategic solutions both at system and facility level. In doing this, there is need to consider whether COs are a cheap substitute waiting for more MOs or are a real part of the system. It seems in Kenya that the model is for the COs as a substitute while the reality is likely to be that they are a real part of the system and will continue performing their present tasks. Thus, accepting that a much longer term CO strategy is needed is important.

Chapter 10. Conclusions and Recommendations

This chapter presents the conclusion of the thesis and describes the contributions made by the thesis. In summary, COs are felt to be a quick fix with a strong focus in the official discourse on technical roles and competence. This ignores the issues of actual roles and performance in real life that are influenced by the 'system' and the organisation within which COs work is conducted, the latter being the hospitals that were the focus of this study. What COs actually do is a product of the tension between institution and individual expectations as outlined in the results chapters. These data clearly illustrate that the current assumptions about COs and the apparent simplicity of utilising NPCs to extend quality clinical services need to be reconsidered. The institution for example, often considers COs to be a malleable tool that can be used according to the whim of the system without recognising that they have individual needs and aspirations. However, the evidence indicates that they are not passive and that much greater attention must be given to shaping the context, at all levels of the system, within which they work to promote the performance desired by the health system. Recommendations for improving the performance of COs arising from the findings are made in addition to outlining issues that will require further work.

10.1. Conclusions

In this thesis, perceptions of and influences over the performance of COs in Kenyan district hospitals were investigated. The findings suggest that while COs are an important facet of the health system, perceptions of who they were and what they did tended to be rather formulaic and limited in scope (e.g., filter). This might explain the sense of sense of unfairness reported by COs regarding discrepancies between their role and the remuneration and career progression it attracted. This had a negative effect on their identity and status resulting in many COs reporting the need to escape from what they perceived to be a thankless role.

In terms of norms of performance, few respondents reported having seen the new scheme of service for COs that outlined the expected norms of performance. Generally, performance was narrowly understood with many respondents viewing it from a technical competence or productivity aspect. GOK settings seemed to pay little attention to non-task aspects of performance as opposed to FBH facilities that appeared to have seen its importance with some efforts to engender it in their workplaces. Performance also differed between RCOs and SCOs. RCOs generally worked in OPD where workloads in terms of patient numbers tended to be high

while SCOs had fewer patients, less frequent clinic duties and did not want to work in OPD. Since the need for a bigger number of COs to work in OPD still remains, it might be useful to get SCOs to work in OPD but compensate them for being SCOs.

Perceptions of performance was found to have been influenced by system factors (e.g., pay, physical infrastructure, etc) that operated across all sites over which few facilities had much control. However, facility managers played an important role in mediating the effects of some system factors through implementation of interventions (procedural factors) that resulted in variations in performance between facilities. For example, GOK sites' emphasis on patient throughput resulted in higher productivity in numerical terms while FBH's emphasis on quality resulted in reportedly better treatment in these sites. Further, the availability of resources and a supportive organisational culture was found to be crucial in positively disposing COs to work.

Two groups of strategies have been outlined to deal with the issues found during the study and are described in more detail in the next subsection. The first group outlines Kenya specific recommendations aimed at improving the performance of COs. These include improved management practices among senior hospital officials, neutering existing perverse incentives and developing a long term career development strategy for COs. Currently the mid-level approach puts COs in a niche sandwiched between physicians and nurses and expects them to work indefinitely in that position. Such thinking seems deficient suggesting the need to re-examine the long term strategy for CO careers that provides for improvements in their identity, status and roles to which they can aspire over the long term.

10.2. Contribution of This Thesis

To my knowledge, this is the first piece of work that has comprehensively examined perceptions regarding who COs are and what they do in a developing country health system in light of emerging interest on their expanded use. The study makes a case for considering the long term career strategy of NPCs such as COs and not just their potential as a quick fix to provide clinical services cheaply. As such it is important to put in place mechanisms to identify and meet their needs where feasible. A clearer understanding of the environment where the COs will work and how it may influence their expectations is also required prior to their use in settings where they have not been utilised before as work context can significantly influence performance and thus value to the health system.

10.2.1. Knowledge and Practice

A key contribution is the consideration whether COs are a short or long term solution. The label 'substitute' in itself implies that the system is waiting for the time when the role is no longer needed perhaps due to a favourable number of doctors. Even though it may be decades to achieve this, the implication is that COs will always be a temporary solution thus there is no need to expend resources on developing them. If COs are a viable long term solution, then what is needed is a complete mind shift to make them primary health care clinicians but then provide them with a career path that goes with it. Many COs regarded themselves as professionals – and not 'physician substitutes'- which means that the assumption regarding their willingness to work for long periods in a specific, limited niche with few prospects for personal development is not valid. In addition, they reported the need to be accorded appropriate recognition and appreciation of their roles (remuneration) in line with their status and identity as an important cadre in health service delivery.

Also and as reported elsewhere, the performance of COs can be positively influenced by the provision of incentives in their work environment even if the said environments were undergoing difficult circumstances. Work environments that motivate COs to perform exhibit features such as a strong work ethic, supportive organisational culture and management that avails resources to enable COs to carry out their workers. Within these environments is the previously unacknowledged but important role that facility managers. They play an important role in inculcating organisational commitment in their employees and supporting it by creating a supportive work environment as described previously. In Kenya such managers must become more adept at managing all cadres rather than the often seen, within cadre, vertical systems of management. Their importance is additionally heightened by the fact that they should provide direction on the mission, vision and goals of the facility that all facility employees work to meet.

10.2.2. Theory

There are few examples of work exploring what COs in their work settings feel about their work and their careers, i.e. the emotional content of NPC or mid-level work that will greatly influence what COs do. By undertaking to explore these issues in Kenya, explanations have been provided on how COs as a form of NPCs actually work in a low income setting and why their work may or may not achieve high-level system aims. An innovative way of doing this as adopted in this thesis was the examination of both task and the non-task aspects of work of the NPC cadre, an

approach that may be used to inform further work on this important aspect of human resources and health systems research.

Methodologically, the work sought to carefully adhere to the dictates of the nomothetic-idiographic conceptual framework that was used to explore the tension that exists between institutions and individuals through respondents' data on CO roles, norms of performance and incentives. This was found to be particularly useful in highlighting the difficulties that COs face as they perform their work in the Kenyan health system and also helped to uncover the fact that the problems faced by other cadres (doctors or nurses) also affect COs. Thus there is need to address these general system problems if performance, not only for COs, will improve.

10.3. Recommendations

Recommendations arising from the discussions of key findings outlined in Chapter Nine focus on two areas. First, Kenya specific recommendations are outlined aimed at offering suggestions to address issues found during the study, aimed at hospital and system levels. The second set of recommendations explores the strategic implications of the continued use of mid-level workers/the task shifting approach.

10.3.1. Improving CO Performance in Kenya

These recommendations are made in light of the need to implement interventions that seek to improve the performance of COs in the Kenyan health system.

Consistency in Communication

Poor communication of various issues has been found to impact on CO performance as reported in this thesis. This for example, relates to communication about the roles and norms of performance as found in the revised CO scheme of service or by the CO Council about what it was doing. Further, variations in communication about expectations regarding roles, norms and incentives for COs also affects their performance as there is confusion regarding what to do. Thus, there is need for the system to improve the way it communicates issues to its employees especially when such communication will not only make employees aware of what they need to do, but also the standards by which they will be assessed.

At hospital level, environments that were thought to elicit better performance from COs were those that had good communication channels between hospital management and its employees. Thus, hospital management should be encouraged to communicate its expectations better to its employees by for example, following up to find out if their wishes have been understood and address any emerging issues that might impact on worker performance.

Redefining the Role of COs

The primary role of the CO is patient care and management. In a sense, that role can become repetitive and boring with time as the tasks can be repetitive. To ensure that COs engage more with their work, it is important that that the CO job be enriched using practices outlined by Hackman and Oldham (227) in their job characteristics model. The job characteristics model can help to diagnose jobs that need to be redesigned by determining the existing potential of a job for engendering internal work motivation, identifying specific job characteristics that are most in need of improvement, and to assess the willingness of employees to respond positively to enriched work (227).

It might be important to redefine the basic role carried out by COs to be 'primary care clinicians'. The current notion of COs as a 'filter' is de-motivating as it renders their role to be a simplistic, subordinate one. In addition, there is not much recognition or appreciation of them while performing the 'filter' function even if it is important. The 'primary care clinician' concept is a much broader term that captures what COs do on a daily basis especially in district hospital and in lower level facilities such as health centres and dispensaries.

As the revised scheme of service for COs has already outlined some roles that go beyond patient care and low-level management, there is need to allow or give COs space to undertake these. An example of this is to consider giving COs access to more senior managerial positions since a significant number of them run lower level facilities (Level 3 and 2, Table) in addition to managing vertical programmes at the district level (e.g., District AIDs Coordinators are usually COs). Provision for this has been made in the Revised CO scheme of service but it not yet operational. It would be useful to begin considering the management role of COs themselves in delegated authority at higher levels in the health system. This could take two forms; one where temporary management authority is given to COs to run, for example, the district hospital when the hospital CEO is away. Second would be to adopt a long term approach which would eventually allow COs to manage a Level 4 or similar facility (table). This will open up new career

paths for COs in hitherto closed career options for them. The new CO scheme of service outlines some managerial roles that can be played by COs. Opening up career alternatives that have a strong link to the current work done by COs would be important in this aspect and also suggest to COs that their long term career progress is important to the health system. It should be noted here that upward mobility of COs in the Kenyan health system will always reach a limit (referred in this thesis as the 'glass ceiling') that has been imposed by the existing health laws. For example, the head of clinical services in the Kenyan Ministry of Health is the Director of Medical Services whose qualifications include having a bachelor's degree in medicine. This fact alone ensures that even pharmacists and dentists cannot progress to hold this position. This issue needs to be accepted by the COs, unless there is a change in these laws that will make the position competitive and open to other cadres.

Address CO's Needs

A clear issue arising from the thesis is the need to address COs needs. At the system level, CO needs range from better remuneration, promotions to opportunities for career progress in the system. Some of these issues have been outlined the revised scheme of service that needs to be operationalised urgently. Additionally, it is fallacious for the system to expect good performance from its employees when it does not support them to do so. Thus the provision of adequate tools and resources for COs to work is an issue that the system needs to take up.

At the hospital level, GOK settings can learn from FBH facilities that appear to have adopted approaches that have more successful outcomes. For example, incentives such as recognition and praise do not require high levels of financial investment yet may yield substantial gains in quality and productivity. Others such as ensuring the availability of resources to work or ensuring Consultants were available to advise COs may involve some financial investment which need not be high. In GOK OPD settings, MOs who have worked in the hospital for more than two years (and thus have established their credibility with COs) could be assigned to support CO's working in OPD. On the other hand, GOK clinical staff could be required to meet every morning or every week to build team-based approaches, set up goals and assess achievement of these. This will help address perceptions related to poor quality of work in GOK settings and perhaps reduce the number of COs desiring to specialise in order to avoid working in OPD. In doing this, GOK hospitals could produce performance similar to that found in FBH facilities with minimal investment.

The norms reviewed in this thesis do not explicitly mention the need for good working relationships among the various cadres working in hospitals. Yet, such relationships are vital to the smooth functioning of these facilities as shown by the experience of FBH facilities. Thus it is also vital that emphasis be given to hospital managers to put more effort in creating supportive working environments that will in turn have positive effect on CO performance.

Opening Up Medical Education to COs

A solution that might be particularly useful if the system insists that it wants a doctor led health service is borrowing an innovation from the United States of America called the Graduate Entry Medical Programme (GEMP). This is where any first degree holder in one of the biological sciences can apply to join medical school and follow a four year training programme to graduate as a medical doctor (228). Though developed in the west, some countries in Africa such as South Africa and Ghana have adopted the programme. For example, the Ghanaian GEMP programme hosted at the University of Ghana's Medical School accepts students with degrees in basic medical, biological, physical sciences or any relevant science related subjects (229). Even though COs have asked to be considered to pursue a similar programme in Kenya, it is still under debate. Should Kenya adopt the GEMP approach, there will be urgent need to consider who is chosen to be a CO. At present, the medical programme in Kenya accepts students who have achieved quite high scores in their secondary education. This restriction might be applied to applicants to the CO programme so that perceptions of quality of students in the CO programme are addressed.

10.3.2. Additional Research

This work has shown some of the issues that COs reported as being important in this regard. However, few hospital were visited thus it is vital that more work be done to explore issues faced by COs in a much bigger sample of hospitals. Alternatively, the work could also explore these issues a national survey that could survey a bigger representative sample of COs. Such work will also need to pay particular attention to the mechanisms that COs adopt to cope with dissatisfaction with their jobs as well as the issue of internal conflict within them.

Another issue that needs further exploration is the status and identity of COs in Kenya and other similar health systems that arguably is a major factor affecting their willingness to continue working. This is based on the argument that simply having a person in a post does not mean effective work is being done. Although COs may be staying in their posts because few

employment opportunities exist, they perhaps want to escape and their dissatisfaction will likely influence their performance. Thus, having an unhappy large workforce may not be that effective even if on paper the human resources density looks better.

There is also need to explore the role of facility managers in creating work environments that encourage employees to work. Little is known about their competencies and disposition to work and be retained especially in GOK settings. Additionally, there are questions whether there is need to use professionally trained hospital managers to run hospitals (at present, most hospitals in Kenya are run by doctors), releasing doctors to carry out clinician related work.

10.3.3. Mid-Level Workers and the Human Resources for Health Crisis

The issues described previously suggest that current approaches to the utilisation of mid-level workers may need to be re-examined, in particular with regard to developing a long term strategy for their careers. Getting COs commitment to their organizations must begin with a recognition and appreciation of their role in the health system and putting in place mechanisms that tell them that the system values their work (225), (230). This means moving away from the simple view of the cadre as a specific fix for a technical niche exemplified by COs being described in terms such as 'filter'. Viewing them as low-status, limited competence physician substitutes reveals a narrow mechanistic perception that draws on notions of a CO as a cog in the health system machine with the expectation that they will be happy and willing to work in this niche. This work suggests, however, that such a view is faulty since COs see themselves as a specific cadre with specific responsibilities and obligations to the health system, an assertion supported by the existence of the CO Act. Additionally, broader system problems that constrain their ability to deliver expected services also have to be addressed in order to make COs more useful.

Their de facto position may explain the negative perceptions that COs have regarding their own identity which they see as manifest in terms of their remuneration. While the government might view the remuneration and opportunities available to be fair for that position, COs however report a sense of unfairness in remuneration, career progress, and opportunities for professional development, all of which at present seem to inhibit their ability to maintain an identity and status befitting a medical professional in society (218), (231). To explain why there is a lack of long term thinking on COs is perhaps due to the consideration of COs as a temporary state of affairs as the system waits for a physician delivered form of health care. This seems short sighted as it might be better to limit physician roles in terms of cost (they attract higher wages and allowances than

COs) and access (not many stay and work for long in rural areas). At a more senior level, supporting the work carried out by District Clinical Officers and Provincial Clinical Officers through allocation of adequate financial resources can begin to create the perception that their cadre has a specific position with a unique sense of importance.

Considering the many issues faced in utilising NPCs, there is a question whether LMIC health systems would be better off if NPC roles were taken over by nurses who want to develop clinical skills rather than creation of a cadre of 'not quite doctors' (232), (11). In the West and some countries in Africa, nurse practitioners have emerged who take on roles performed by NPCs and as an avenue for career progression (232), (11), (12). However, and similar to the issues faced by NPCs, serious consideration of training and education, supervision, legislation and regulation of the promotion of nurses to be nurse practitioners is needed (232). If it is envisaged that NPCs will continue to be utilised, then ways of addressing issues related to their status and identity have to be explored.

This work began with a major concern on the considerable emphasis that was being placed on COs as a means to deliver a range of health services in an increasing number of countries with little understanding of what influences their performance. In an effort to determine influences over CO performance, various aspects of COs work were explored in the areas of roles, norms and incentives. The work suggests that COs can and do perform a wide range of functions in the health system and that their work is important especially in rural areas where MOs are few. While the study did not measure their performance, COs were reported to perform well if they were adequately supported and provided with the necessary resources to do their work. Further, hospitals management was found to have a considerable influence over the performance of COs if they actively sought to improve the working conditions for COs. However, some issues arising from the system such as career progress and remuneration were found to de-motivate COs and need to be addressed. Also, in light of the continuing emphasis on COs to deliver basic physician type services, it is vital that more work be done to explore the issues raised in this thesis further among a wider sample of COs in order to manage them better.

References

1. Cumbi A, Pereira C, Malalane R, Vaz F, McCord C, Bacci A, et al. Major surgery delegation to mid-level health practitioners in Mozambique: health professionals' perceptions. Human Resources for Health. 2007;5(27).
2. Chilopora G, Pereira C, Kamwendo F, Chimbiri A, Malunga E, Bergström S. Postoperative outcome of caesarean sections and other major emergency obstetric surgery by clinical officers and medical officers in Malawi. Human Resources for Health. 2007;5(17).
3. Vaz F, Bergstrom S, Vaz M, Langa J, Bugalho A. Training medical assistants for surgery. Bulletin of the World Health Organization. 1999;77 (8):688-91.
4. Blaauw D, Gilson L, Penn-Kekana L, Schneider H. Organisational relationships and the 'software' of health sector reform. Washington, DC2003.
5. Dieleman M, Toonen J, Toure H, Martineau T. The match between motivation and performance management of health sector workers in Mali. Human Resources for Health. 2006;4(2).
6. Mathauer I, Imhoff I. Health worker motivation in Africa: the role of non-financial incentives and human resource management tools. Human Resources for Health 2006;4(24).
7. Hongoro C, Normand C. Health Workers: Building and Motivating the Workforce. In: Jamison D, Breman J, Measham A, Alleyne G, Claeson M, Evans D, et al., editors. Disease Control Priorities in Developing Countries. 2nd ed. New York: Oxford University Press; 2006. p. 1309-22.
8. Anyangwe S, Mtonga C. Inequities in the global health workforce: the greatest impediment to health in sub-Saharan Africa. International journal of environmental research and public health. 2007; 4(2):93-100.
9. Chandler C, Chonya S, Mtei F, Reyburn H, Whitty C. Motivation, money and respect: A mixed-method study of Tanzanian non-physician clinicians. Social Science & Medicine. 2009;68:2078-88.
10. Mbindyo P, Gilson L, Blaauw D, English M. Contextual influences on health worker motivation in district hospitals in Kenya. Implementation Science. 2009b;4(43).
11. Mullan F, Frehywot S. Non-physician clinicians in 47 sub-Saharan African countries. The Lancet. 2007; 370(9605):2158-63.
12. Dovlo D. Using mid-level cadres as substitutes for internationally mobile health professionals in Africa. A desk review. Human Resources for Health 2004;2(7).
13. Rowe A, de Savigny D, Lanata C, Victora C. How can we achieve and maintain high-quality performance of health workers in low-resource settings? . The Lancet. 2005;366(9490):1026 -35.
14. WHO. World Health Report 2006: Working Together for Health. Geneva: World Health Organization; 2006.
15. Nohria N, Groysberg B, Lee L-E. Employee Motivation: A Powerful New Model. Harvard Business Review. 2008;July-August:78-84.
16. Campbell J, Stilwell B. Kenya: Taking forward action on Human Resources for Health (HRH) with DFID/OGAC and other partners. . Nairobi: *DFID and PEPFAR/OGAC*2008.
17. MOH. Human Resources for Health strategic Plan - 2007/08 - 2009/2010. Nairobi: Ministry of Health; 2007.
18. Ndetei D, Khasakhala L, Omolo J. Incentives for health worker retention in Kenya: An assessment of current practice. Harare: EQUINET with African Mental Health Foundation, University of Namibia, Training and Research Support Centre, University of Limpopo and ECSA-Regional Health Community2008.
19. Mwaniki D, Dulo C. Managing the migration of human resources for health in Kenya: the impact on service delivery. Harare: EQUINET, IOM, Kenya Technical Working Group for

Managing Migration of Health Workers, EAC and ECSA HC2008.
20. Martinez J, Martineau T. Rethinking Human Resources: An Agenda for the Millennium. Health Policy and Planning. 1998;13(4):345-58.
21. Dussault G, Franceschini M. Not Enough There, Too Many Here: Understanding Geographical Imbalances in the Distribution of the Health Workforce. Human Resources for Health. 2006;4(12).
22. Diallo K, Zurn P, Gupta N, Poz M. Monitoring and evaluation of human resources for health: an international perspective. Human Resources for Health. 2003;1(3).
23. Manafa O, McAuliffe E, Maseko F, Bowie C, MacLachlan M, Normand C. Retention of health workers in Malawi: perspectives of health workers and district management. Human Resources for Health. 2009;7(65).
24. Leonard K, Masatu M, Vialou A. Getting Doctors to Do Their Best: The Roles of Ability and Motivation in Health Care Quality. Journal of Human Resources 2007;42(3):682-700.
25. Fort A, Voltero L. Factors affecting the performance of maternal health care providers in Armenia. Human Resources for Health. 2004;2(8).
26. Adano U. The health worker recruitment and deployment process in Kenya: an emergency hiring program. Human Resources for Health. 2008;6(19).
27. Hornby P, Forte P. Guidelines for Introducing Human Resource Indicators to Monitor Health Service Performance. Staffordshire, UK: Centre for Health Planning & Management, Keele University; 2002.
28. Rossel-Cambier K. The Health Workforce and Workforce Performance. CEB Working Paper N° 03/0112003.
29. Byrne M. Implementing Performance Management in the Irish Health Sector. The Health Care Manager. 2006; 25(2):114 -21.
30. Nzinga J, Mbindyo P, Mbaabu L, Warira A, M E. Documenting the experiences of health workers expected to implement guidelines during an intervention study in Kenyan hospitals. Implementation Science. 2009;4(44).
31. English M, Irimu G, Wamae A, Were F, Wasunna A, Fegan G, et al. Health Systems Research in a Low Income Country - Easier Said Than Done. Archives of Disease in Childhood 2008;93:540-4.
32. Irimu G, Wamae A, Wasunna A, Were F, Ntoburi S, Opiyo N, et al. Developing and introducing evidence based clinical practice guidelines for serious illness in Kenya. Archives of Disease in Childhood. 2008;93:799 - 804.
33. English M, Ntoburi S, Wagai J, Mbindyo P, Opiyo N, Ayieko P, et al. An intervention to improve paediatric and newborn care in Kenyan district hospitals: Understanding the context. Implementation Science. 2009;4(4).
34. Mbindyo P, Blaauw D, Gilson L, M E. Developing a tool to measure health worker motivation in district hospitals in Kenya. Human Resources for Health. 2009a;7(40).
35. Manongi R, Marchant T, Bygbjerg IC. Improving motivation among primary health care workers in Tanzania: a health worker perspective. Human Resources for Health. 2006;4(6).
36. Kombe G, Galaty D, Mtonga V, Banda P. Human Resource Crisis in Zambia's Health System: A Call for Urgent Action. Bethesda: The Partners for Health Reformplus Project/ Abt Associates Inc2004 Contract No.: PN-ADE-011.
37. Muula AS. Is There any Solution to the "Brain Drain" of Health Professionals and Knowledge from Africa? . Croat Med J. 2005;46:21-9.
38. Le Grand J. Motivation, Agency, and Public Policy: Of Knights & Knaves, Pawns & Queens. Oxford: Oxford University Press; 2003.
39. MOH. Second National Health Sector Strategic Plan of Kenya - Reversing the Trends (NHSSP II 2005-10). Nairobi: Ministry of Health; 2005b.
40. Buchan J. Scaling up Health and Education Workers: Increasing the performance and

Productivity of an Existing Stock of Health Workers.: DFID Health Systems Resource Centre2005.
41. Kruk M, Prescott M, Pinho H, Galea S. Are doctors and nurses associated with coverage of essential health services in developing countries? A cross-sectional study. Human Resources for Health 2009;7(27).
42. CBS. Population and housing census, counting our people for development: Population distribution by administrative areas and Urban Centres Vol II, pp 1-363, Central Bureau of Statistics (CBS), Ministry of Finance and Planning, Government of Kenya, Nairobi. 2001.
43. MOMS. Facts and Figures on Health and Health Related Indicators 2008. Nairobi: Ministry of Medical Services; 2008.
44. GoK. Investment programme for the economic recovery strategy for the employment of Wealth and employment creation 2003-2007, Ministry of Planning, Kenya. 2004. p. 1-152.
45. Gakuru W. Vision 2030. Official Launch of the Kenya Vision 2030 Making Process; Nairobi: National Economic and Social Council; 2006.
46. MOH. Human Resources for Health Strategic Plan (2007/08 - 2009/10). Nairobi: Ministry of Health; 2007.
47. Bank W. Kenya: Country Brief. Washington: World Bank; 2008 [updated September 2010; cited 2009 27th January]; Available from: <http://go.worldbank.org/YZJLVL3LX0>.
48. MoH. The Health sector; MTEF 2006/7-2008/9, Sector Working Group Report. 2006.
49. KNBS, Macro I. Kenya Demographic and Health Survey 2008-09. Calverton, Maryland: Kenya National Bureau of Statistics and ICF Macro; 2010.
50. MOH. Norms and Standards for Health Service Delivery. Nairobi: Health Sector Reform Secretariat; 2006.
51. JLI. Human resources for health: Overcoming the crisis. Cambridge: Global health Initiative/Harvard University Press; 2005.
52. Grepin KA, Savedoff WD. 10 Best Resources On . . . Health Workers In Developing Countries. Health Policy and Planning. 2009;24(6):479-82.
53. Kirigia J, Barry S. Health challenges in Africa and the way forward. International Archives of Medicine. 2008;1(1):27.
54. Lehmann U, Dieleman M, Martineau T. Staffing remote rural areas in middle- and low-income countries: a literature review of attraction and retention. BMC Health Serv Res. 2008;8(19).
55. WHO-ARO. Placing Health Workers at the Heart of Health Services Delivery in Africa. Brazzaville: Regional Office for Africa, World Health Organisation; 2002.
56. Anand S, Bärnighausen T. Human Resources and Health Outcomes: Cross Country Econometric Study. Lancet. 2004;364 (9445):1603-9.
57. Kenya. Human Resource Development Sector Report 2010: Achieving Economic Growth through targeted, Effective and Efficient Public Spending. Nairobi: Ministry of Finance; 2010.
58. Chankova S, Muchiri S, Kombe G. Health workforce attrition in the public sector in Kenya: a look at the reasons. Human Resources for Health. 2009;7(58).
59. MOH. The Report on Human Resource Mapping and Verification Exercise. Nairobi: Ministry of Health; 2005a.
60. DPM. Pay Policy for the Public Service. Nairobi: Government Printer; 2006.
61. Ohito D. Nyong'o Admits Crisis In The Health Sector. The Standard. 2010;Sect. February 23, A:1 (Col 1).
62. Gross J, Riley P, Kiriinya R, Rakuom C, Willy R, Kamenju A, et al. The impact of an emergency hiring plan on the shortage and distribution of nurses in Kenya: the importance of information systems. Bulletin of the World Health Organization. 2010
88(11):824-30.

63. Siringi S. New order freezes public service pay. Nairobi: Nation Media Group; 2011 [cited 2011 Friday, June 17]; Available from: <http://www.nation.co.ke/News/-/1056/1184446/-/item/2/-/dy64u/-/index.html>.
64. Sanders D, Lloyd B. Human Resources: International Context. In: Ijumba P, Barron P, editors. South African Health Review 2005. 10th ed. South Africa: Health Systems Trust; 2005. p. 76 - 87.
65. Huddart J, Picazo O. Health Sector Human Resource Crisis in Africa: An Issues Paper. Washington: Academy for Educational Development, United States Agency for International Development2003.
66. Lehmann U. Mid-Level Health Workers: The State of the Evidence on Programmes, Activities, Costs and Impact on Health Outcomes. Geneva: World Health Organization2008.
67. Lehmann U, Van Damme W, Barten F, Sanders D. Task shifting: the answer to the human resources crisis in Africa? Human Resources for Health. 2009;7(49).
68. Kenya. Clinical Officers (Training, Registration and Licensing) Act. Nairobi: Government Printer; 1989.
69. Franco L, Franco C, Kumwenda N, Nkhoma N. Methods for assessing quality of provider performance in developing countries. International Journal for Quality in Health Care. 2002;14(Supplement 1):17-24.
70. Dieleman M, Harnmeijer J. Improving health worker performance: in search of promising practices. Geneva: Department of Human Resources for Health, WHO 2006.
71. Franco L, Bennett S, Kanfer R. Health sector reform and public sector health worker motivation: a conceptual framework. Social Science and Medicine. 2002;54(1255 -1266).
72. Hughes R, Ginnett R, Curphy G. Leadership, enhancing the lessons of experience. New York: McGraw-Hill/Irwin; 2002.
73. Olenja J, Godia P, Kibaru J, Egondi T. Influence of Provider Training on Quality of Emergency Obstetric Care in Kenya. Calverton, Maryland, USA: Macro International Inc.2009.
74. Wasunna B, Zurovac D, Bruce J, Jones C, Webster J, Snow R. Health worker performance in the management of paediatric fevers following in-service training and exposure to job aids in Kenya. Malaria Journal. 2010;9(1):261.
75. MacLeod J, Jones T, Aphivantrakul P, Chupp M, Poenaru D. Evaluation of Fundamental Critical Care Course in Kenya: Knowledge, Attitude, and Practice. Journal of Surgical Research. 2011;167:223-30.
76. Chankova S, Kombe G, Muchiri S, Decker C, Kimani G, Pielemeier N. Rising to the Challenges of Human Resources for Health in Kenya: Developing Empirical Evidence for Policy Making. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc.2006.
77. Fulton BD, Scheffler RM, Sparkes SP, Auh EY, Vujicic M, Soucat A. Health workforce skill mix and task shifting in low income countries: a review of recent evidence. Human Resources for Health 2011;9(1).
78. Callaghan M, Ford N, Schneider H. A Systematic review of task- shifting for HIV treatment and care in Africa. Human Resources for Health 2010;8(8).
79. Fonn S, Ray S, Blaauw D. Innovation to improve health care provision and health systems in sub-Saharan Africa - Promoting agency in mid-level workers and district managers. Global Public Health Affairs. 2010.
80. Pereira C, Cumbi A, Malalane R, Vaz F, McCord C, al. e. Meeting the need for emergency obstetric care in Mozambique: Work performance and histories of medical doctors and assistant medical officers trained for surgery. BJOG. 2007;114:1530-3.
81. Brentlinger PE, Assan A, Mudender F, Ghee AE, Torres JV, Martínez PM, et al. Task shifting in Mozambique: cross-sectional evaluation of non-physician clinicians' performance in HIV/AIDS care. Human Resources for Health 2010;8(23).
82. Kruk M, Pereira C, Vaz F, Bergstrom S, Galea S. Economic evaluation of surgically

trained assistant medical officers in performing major obstetric surgery in Mozambique. BJOG. 2007;114:1253-60.
83. McAuliffe E, Bowie C, Manafa O, Maseko F, MacLachlan M, Hevey D, et al. Measuring and Managing the Work Environment of the Mid-Level Provider - The Neglected Human Resource. Human Resources for Health. 2009;7(13).
84. McAuliffe E, Manafa O, Maseko F, Bowie C, White E. Understanding job satisfaction amongst mid-level cadres in Malawi: the contribution of organisational justice. Reproductive Health Matters. 2009;17(33):80-90.
85. van Amelsfoort JJC, van Leeuwen PAM, Jiskoot P, Ratsma YEC. Surgery inMalawi - the training of clinical officers. Tropical Doctor. 2010;40:74-6.
86. Bradley S, McAuliffe E. Mid-level providers in emergency obstetric and newborn health care: factors affecting their performance and retention within the Malawian health system. Human Resources for Health. 2009;7(14).
87. Saswata B, Omar F, Aubery R, Jaffer B, Michael W. Bridging the health gap in Uganda: the surgical role of the clinical officer African Health Sciences. 2005;5(1):86-9.
88. Vasan A, Kenya-Mugisha N, Seung KJ, Achieng M, Banura P, Lule F, et al. Agreement between physicians and non-physician clinicians in starting antiretroviral therapy in rural Uganda. Human Resources for Health 2009;7(75).
89. Gessessew A, Barnabas GA, Prata N, Weidert K. Task shifting and sharing in Tigray, Ethiopia, to achieve comprehensive emergency obstetric care. International Journal of Gynecology and Obstetrics 2011;113:28-31.
90. Hounton S, Newlands D, Meda N, De Brouwere V. A cost-effectiveness study of caesarean-section deliveries by clinical officers, general practitioners and obstetricians in Burkina Faso. Human Resources for Health. 2009;7(34).
91. McCord C, Mbaruku G, Pereira C, Nzabuhakwa C, Bergstrom S. The Quality Of Emergency Obstetrical Surgery By Assistant Medical Officers In Tanzanian District Hospitals. Health Affairs. 2009;28(5).
92. Kahya E. The effects of job characteristics and working conditions on job performance. International Journal of Industrial Ergonomics. 2007;37:515 - 23.
93. Jawahar I, Carr D. Conscientiousness and contextual performance: The compensatory effects of perceived organizational support and leader-member exchange. Journal of Managerial Psychology. 2007;22(4):330 - 49.
94. Farr M, Cressey P, Purcell J. How do staff know they are doing a good job? Developing performance measurement and management in a Primary Care Trust. Performance and Reward Conference 2007; Manchester, www.business.mmu.ac.uk/parc/2007/farr.pdf. Accessed 24th January, 20102007.
95. Kantrowitz T. Development and Construct Validation of a Measure of Soft Skills Performance. Atlanta (GA): Georgia Institute of Technology, http://smartech.gatech.edu/bitstream/1853/6861/1/kantrowitz_tracy_m_200505_phd.pdf; 2005.
96. Scott A, Farrar S. Incentives in health care. In: Scott A, Maynard A, Elliott R, editors. Advances in Health Economics. West Sussex: John Wiley & Sons Ltd; 2003. p. 77-98.
97. Sonnentag S, Frese M. Performance Concepts and Performance Theory. In: Sonnentag S, editor. Psychological Management of Individual Performance. West Sussex: John Wiley and Sons Ltd; 2002. p. 3-26.
98. Giddens A. The Constitution of Society. Outline of the Theory of Structuration. Cambridge: Polity; 1984.
99. Kielman K. Personal Communication, June 23rd. 2009.
100. Bouckaert G, John H. Managing Performance, International Comparisons. London: Routledge; 2008.

101. Bouckaert G. Pride and Performance in Public Service: Some Patterns of Analysis. International Review of Administrative Sciences 2001;67:15 -26.
102. Holton EF. Performance Domains and Their Boundaries. Advances in Developing Human Resources. 1999;1:26-46.
103. Bates RA. Measuring Performance Improvement. Advances in Developing Human Resources. 1999;1:47-67.
104. Borman W, Motowidlo S. Task and Contextual Performance: The Meaning For Personnel Selection Research. Human Performance. 1997;10(2):99 -109.
105. Viswesvaran C, Deniz S, Ones D. Perspectives on Models of Job Performance. International Journal Of Selection And Assessment. 2000;8(4):216-26.
106. Rothmann S, Coetzer EP. The Big Five Personality Dimensions and Job Performance. SA Journal of Industrial Psychology. 2003;29(1):68 -74.
107. Viswesvaran C. Assessment of Individual Job Performance: A Review of the Past Century and a Look Ahead. In: Anderson N, Ones D, Sinangil H, Viswesvaran C, editors. Handbook of Industrial, Work & Organizational Psychology. London: SAGE Publications; 2001. p. 110-26.
108. Motowidlo S, Borman W, Schmit M. A Theory of Individual Differences in Task and Contextual Performance. Human Performance. 1997;10(2):71 - 83.
109. Borman W. The Concept of Organizational Citizenship. Current Directions in Psychological Science 2004;13(6):238 - 41.
110. Biddle B. Recent Development in Role Theory. Annual Review of Sociology. 1986;12:67-92.
111. Chandrakumara A. Does HRM fit really matter to citizenship and task performance? Sri Lankan manufacturing sector experience. Employee Relations. 2007;29(6):611 - 39.
112. Schneider RJ, Ackerman PL, Kanfer R. To "act wisely in human relations:" Exploring the dimensions of social competence. Personality and Individual Differences. 1996;21(4):469-81.
113. Getzels JW, Guba EG. Social Behavior and the Administrative Process. The School Review. 1957;65(4):423-41.
114. Getzels J, EG G. Social Behavior and the Administrative Process. The School Review. 1957;65(4):423-41.
115. Getzels JW, Lipham JM, Campbell RF. Educational Administration as a Social Process: Theory, Research, Practice. New York: Harper & Row; 1968.
116. Eisenhardt KM. Agency Theory: An Assessment and Review. The Academy of Management Review. 1989;14(1):57-74.
117. Dambisya YM. A review of non-financial incentives for health worker retention in East and southern Africa. Harare: Regional Network for Equity in Health in East and Southern Africa (EQUINET) with East, Central and Southern African Health Community (ECSA-HC) 2007.
118. Hammer JS, Jack WG. The Design of Incentives for Health Care Providers in Developing Countries: Contracts, Competition, and Cost Control World Bank Policy Research Working Paper No 25472001.
119. Diekman A. Roles and Role Theory. *Encyclopedia of Social Psychology*. London: SAGE Publications; 2007.
120. Sherr K, Pfeiffer J, Mussa A, Vio F, Gimbel S, Micek M, et al. The Role of Nonphysician Clinicians in the Rapid Expansion of HIV Care in Mozambique. J Acquir Immune Defic Syndr. 2009;52(Supplement 1):S20-S3.
121. Hogan J. Personality and Job Performance. Human Performance. 1998;11(2/3):125-7.
122. Kenya. Kenya Medical Practitioners and Dentists Act. Nairobi: Government Printer; 1978.
123. Kenya. Revised Code of Regulations. Nairobi: Government Printer; 2006.
124. Aitken JM. Voices from the Inside: Managing district health services in Nepal.

International Journal of Health, Planning and Management. 1994;9(309-340).
125. Chandler C, Jones C, Boniface G, Juma K, Reyburn H, CJM. W. Guidelines and mindlines: why do clinical staff over-diagnose malaria in Tanzania? A qualitative study. Malaria Journal. 2008;7.
126. Stevens-Long J. Norms. In: DiStefano A, Rudestam K, Silverman R, editors. Encyclopedia of Distributed Learning. London: SAGE Publications; 2003.
127. Smith ER, Mackie DM. Social Psychology. 3rd ed. Philadelphia: Psychology Press; 2007.
128. Amundson S. The Impact of Relational Norms on the Effectiveness of Health and Human Service Teams. The Health Care Manager. 2005;24(3):216-24.
129. Kerr S. On the Folly of Rewarding A, While Hoping for B. The Academy of Management Journal. 1975;18:769-83.
130. Adams O, Hicks V. Pay and Non-Pay Incentives, Performance and Motivation. Global Health Workforce Strategy Group; Geneva: *WHO*; 2000.
131. Bärnighausen T, Bloom D. Designing financial-incentive programmes for return of medical service in underserved areas: seven management functions. Human Resources for Health. 2009;7(52).
132. Biai S, Rodrigues A, Gomes M, Ribeiro I, Sodemann M, Alves F, et al. Reduced in-hospital mortality after improved management of children under 5 years admitted to hospital with malaria: randomised trial. British Medical Journal. 2007;doi:10.1136/bmj.39345.467813.80 <http://bmj.com/cgi/content/full/bmj.39345.467813.80v1.>
133. Caffrey M, Frelick G. Attracting and Retaining Nurse Tutors in Malawi: Capacity Project2006.
134. Ssengooba F, Rahman SA, Hongoro C, Rutebemberwa E, Mustafa A, Kielmann T, et al. Health sector reforms and human resources for health in Uganda and Bangladesh: mechanisms of effect. Human Resources for Health. 2007;5(3).
135. Roenen C, Ferrinho P, Van Dormael M, Conceicao M, Van Lerberghe W. How African doctors make ends meet: an exploration. Tropical Medicine and International Health. 1997;2(2):127-35.
136. Meessen B, Musango B, Kashala J-P, Lemlin J. Reviewing institutions of rural health centres: the Performance Initiative in Butare, Rwanda. Tropical Medicine & International Health. 2006;11(1303-1317).
137. Meessen B, Kashala J-P, Musango L. Output-based payment to boost staff productivity in public health centres: contracting in Kabutare district, Rwanda. Bulletin of the World Health Organization. 2007;85(2):108-15.
138. Dieleman M, Cuong P, Anh L, Martineau T. Identifying factors for job motivation of rural health workers in North Viet Nam. Human Resources for Health. 2003;1(10).
139. Lipinge S, Dambisya Y, Loewenson R, Chimbari M, Ndetei D, Munga M, et al. Policies and incentives for health worker retention in East and Southern Africa: Learning from country research. Harare: EQUINET2009.
140. Reinikka R, Svensson J. Working for God? evaluating service delivery of religious not-for-profit health care providers in Uganda. World Bank; 2003.
141. Moynihan D, Pandey S. Finding Workable Levers Over Work Motivation: Comparing Job Satisfaction, Job Involvement, and Organizational Commitment. Administration & Society,. 2007;39(7):803-32.
142. Mliga G. Decentralization and the Quality of Health Care in Tanzania Location. In: Leonard D, editor. Africa's Changing Markets for Human and Animal Health Services. London: Macmillan; 2003. p. 203-23.
143. Dieleman M, Gerretsen B, van der Wilt G. Human resource management interventions to improve health workers' performance in low and middle income countries: a realist Review. Health Research Policy and Systems. 2009;7(7).

144. Fako T, Forcheh N, Balogi K. Productivity amongst nurses and midwives in Botswana. African Sociological Review. 2002;6(1):148-60.
145. Forcheh N, Fako T. Determinants of effective productivity among service workers: the case of nurses in Botswana. African Journal of Business Management 2007;1(5):99-106.
146. Mwenda S. HR Crisis in Kenya: The Dilemma of FBOs. CHAs at a Crossroad Towards Achieving Health Millennium Development Goals; Bagamoyo, Tanzania: Christian Health Association; 2007.
147. Wallin L, Ewald U, Wikblad K, Scott-Findlay S, Arnetz B. Understanding Work Contextual Factors: A Short-Cut to Evidence-Based Practice? Worldviews on Evidence-Based Nursing. 2006;3:153-64.
148. Agyepong I, Anafi P, Asiamah E, Ansah E, Ashon D, Narh-Dometey C. Health worker (internal customer) satisfaction and motivation in the public sector in Ghana. International Journal of Health Planning and Management. 2004;19:319-36.
149. Morton A, Cornwell J. What's the difference between a hospital and a bottling factory? British Medical Journal. 2009;339(b2727):428 - 30.
150. Roulston K. Considering quality in qualitative interviewing. Qualitative Research 2010;10(2):199-228.
151. Smyth R. Exploring the usefulness of a conceptual framework as a research tool: A researcher's reflections. Issues In Educational Research. 2004; 14(2):167-80.
152. Shields P, Tajalli H. Intermediate Theory: The Missing Link in Successful Student Scholarship. Journal of Public Affairs Education. 2006;12(3):313-34.
153. Hartley J. Case Study Research. In: Bauer M, Gaskell G, editors. Qualitative Researching with Test, Image and Sound. London: Sage Publications Ltd; 2000. p. 323 - 33.
154. Yin R. Case Study Research: Design and Methods. 3rd ed. London: Sage Publications Ltd.; 2003.
155. Mason J. Qualitative Researching. 2 ed. London: Sage Publications Ltd; 2002.
156. Bryman A. Social Research Methods. 2nd ed. Oxford: Oxford University Press; 2004.
157. Patton M. Qualitative Research & Evaluation Methods. 3rd ed. London: Sage Publications Ltd. ; 2002.
158. McPake B, Koblinsky M. Improving Maternal Survival in South Asia-What Can We Learn from Case Studies? Journal of Health, Population and Nutrition. 2009;27(2): 93-107.
159. Blaauw D, Ambegaokar M, Penn-Kekana L, Hongoro C, McPake B. Neither robots, nor angels: the 'dynamic responses' of health workers and the unintended effects on health systems functioning. HSD working paper 2006.
160. MRC. Developing and evaluating complex interventions: New Guidance. London: Medical Research Council (UK).2008.
161. Plsek PE, Wilson T. Complexity, leadership, and management in healthcare organisations. BMJ. 2001;323: 746 - 9.
162. Glaser B, Strauss A. The Discovery of Grounded Theory: Strategies for Qualitative Research. New Brunswick: Aldine Transaction; 1967.
163. Kitchin R, Tate N. Conducting Research Into Human Geography: Theory, Methodology & Practice. Harlow: Prentice Hall; 2000.
164. Gibson S, Hanes L. The Contribution of Phenomenology to HRD Research. Human Resource Development Review. 2003; 2(181).
165. Smith DW. Phenomenology. 2008 [26th May 2010]; Available from: http://plato.stanford.edu/entries/phenomenology/. .
166. English M, Lanata C, Ngugi I, Smith P. The District Hopsital. In: Jamison D, Breman J, Measham A, Alleyne G, Claeson M, Evans D, et al., editors. Disease Control Priorities in Developing Countries. 2nd ed. New York: Oxford University Press/World Bank; 2006.
167. MMH. Annual Report 2009. Maua: Maua Methodist Hospital2009.

168. Coyne IT. Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? Journal of Advanced Nursing 1997;26:623-30.
169. Draucker C, Martsolf D, Ross R, Rusk T. Theoretical Sampling and Category Development in Grounded Theory. Qualitative Health Research. 2007;17(8):1137-48.
170. Bowen G. Naturalistic inquiry and the saturation concept: a research note. Qualitative Research. 2008;8(1):137-52.
171. Cook KE. In-Depth Interview. In: Given LM, editor. The Sage Encyclopaedia of Qualitative Research Methods. London: Sage Publications Ltd.; 2008. p. 422-3.
172. Waddington D. Participant Observation. In: Cassell C, Symon G, editors. Essential Guide to Qualitative Methods in Organizational Research. London: Sage Publications Ltd.; 2004. p. 154-64.
173. McKechnie LEF. Participant Observation. In: Given LM, editor. The Sage Encyclopaedia of Qualitative Research Methods. London: Sage Publications Ltd; 2008. p. 598-9.
174. Gaskell G. Individual and Group Interviewing. In: Bauer M, Gaskell G, editors. Qualitative Researching with Text, Image and Sound. London: Sage Publications Ltd; 2000. p. 38 - 56.
175. Mory E. Feedback Research Revisited. In: Jonassen D, editor. Handbook of Research on Educational Communications and Technology, 2nd Edn. Mahwah: Lawrence Erlbaum Associates; 2004.
176. Geister S, Konradt U, Hertel G. Effects of Process Feedback on Motivation, Satisfaction, and Performance in Virtual Teams
Small Group Research. 2006 37(5):459 - 89.
177. Hsieh H-F, Shannon S. Three Approaches to Qualitative Content Analysis. Qualitative Health Reasearch. 2005;15(9):1277-88.
178. Golafshani N. Understanding Reliability and Validity in Qualitative Research. The Qualitative Report. 2003; 8(4):597 - 607.
179. Carter S, Jordens C, McGrath C, Little M. You Have to Make Something of All That Rubbish, Do you? An Empirical Investigation of the Social Process of Qualitative Research. Qualitative Health Research. 2008;18(9):1264-76
180. Silverman D. Interpreting Qualitative Data: Methods for Analysing Talk, Text, and Interaction. 2 ed. London: Sage Publications Ltd.; 2001.
181. Alvesson M. Beyond Neopositivists, Romantics, and Localists: A Reflexive Approach to Interviews in Organizational Research. Academy of Management Review. 2003;28(1):13-33.
182. Mishler EG. Validation in inquiry-guided research: The role of exemplars in narrative studies. Harvard Educational Review. 1990; 60:415-42.
183. Briggs C. Interviewing, Power/knowledge and Social Inequality. In: Holstein JA, Gubrium JF, editors. Inside interviewing:New lenses, new concerns. London: Sage Publications Ltd; 2003.
184. Ndege GO. Health, State and Society in Kenya: Faces of Contact and Change. Rochester: University of Rochester Press; 2001.
185. DPM. Public Service Recruitment and Training Policy. Nairobi: Directorate of Personnel Management; 2005.
186. Council COs. Membership. Nairobi2010 [cited 2011 July 17th 2011]; Available from: http://clinicalofficerscouncil.com/membership.php.
187. Kenya. Revised Schemes of Service for Health Personnel. Nairobi: Office of the President; 1994.
188. Kenya. Revised Scheme of Service for Clinical Officers. Nairobi: Clinical Officers Council; 2009.
189. Kenya. The Public Officer Ethics Act Nairobi: Government Publisher; 2003.
190. Kenya. Revised Schemes of Service for Nurses. Nairobi: Office of the President; 2002.

191. Blyumin M, Kazanis M, Brown K, Kimball A. Lack of awareness of the medical professionals about nonphysician clinicians. Journal of the American Academy of Dermatology. 2007;56(2, Supplement 2):AB104.
192. Saswata B, Omar F, Aubery RJ, Jaffer B, Michael W. Bridging the health gap in Uganda: the surgical role of the clinical officer. 5. 2005;1(1):86-9.
193. Leonard K, Masatu MC. Outpatient process quality evaluation and the Hawthorne Effect. Social Science & Medicine. 2006;63(9):2330-40.
194. Gergen K. An Introduction to Social Construction. London: Sage publications Ltd; 2009.
195. Smith DW. Phenomenology. 2008 [26th May 2010]; Available from: http://plato.stanford.edu/entries/phenomenology/. .
196. Gibson SK, Hanes LA. The Contribution of Phenomenology to HRD Research. Human Resource Development Review. 2003; 2(181).
197. Brentlinger PE, Torres JV, Mart´ınez PM, Ghee A, Lujan J, Bastos R, et al. Clinical Staging of HIV-Related Illness in Mozambique: Performance of Nonphysician Clinicians Based on Direct Observation of Clinical Care and Implications for Health Worker Training. Journal of Acquired Immune Deficiency Syndromes. 2010;55(3):351 - 5.
198. Getzels JW, Guba EG. Social behavior and the administrative process. School Review. 1957;65(4): 423-41.
199. North D. The New Institutional Economics and Third World Development. In: Harriss J, Hunter J, Lewis C, editors. The New Institutional Economics and Third World Development. London: Routledge; 1995. p. 17-26.
200. North D. Institutions. The Journal of Economic Perspectives. 1991;5(1):97-112.
201. Getzels J, Guba E. The Structure of Roles and Role Conflict in the Teaching Situation. Journal of Educational Sociology. 1955;29(1):30 - 40.
202. Iwanicki E. Toward Understanding and Alleviating Teacher Burnout. Theory into Practice. 1983;22(1):27-32.
203. Porter K. The Role of the Special Education Administrator as Perceived by Principals, Superintendents, and Special Education Administrators in West Virginia. Morgantown: West Virginia University; 1999.
204. Stronge J. Balancing Individual and Institutional Goals In Educational Personnel Evaluation: A Conceptual Framework. Studies in Educational Evaluation. 1995;21:131-51.
205. Bame K. Job Satisfaction and Salary: An Illustration from Ghana. African Studies Review. 1974;17(1):151-8.
206. Wu T-C, Li C-C, Chen C-H, Shu C-M. Interaction effects of organizational and individual factors on safety leadership in college and university laboratories. Journal of Loss Prevention in the Process Industries. 2008;21:239-54.
207. McAuliffe E, Bowie C, Manafa O, Maseko F, MacLachlan M, Hevey D, et al. Measuring and managing the work environment of the mid-level provider - the neglected human resource. Human Resources for Health. 2009;7(13).
208. Chhea C, Warren N, Manderson L. Health worker effectiveness and retention in rural Cambodia. Rural and Remote Health (online). 2010;10(1391).
209. Songstad NG, Rekdal OB, Massay DA, Blystad A. Perceived unfairness in working conditions: The case of public health services in Tanzania. BMC Health Services Research 2011;11(34).
210. McAuliffe E, Manafa O, Maseko F, Bowie C, White E. Understanding job satisfaction amongst mid-level cadres in Malawi: the contribution of organisational justice. Reproductive Health Matters. 2009;17(33):80-90.
211. Marchal B, Dedzo M, Kegels G. A realist evaluation of the management of a well-performing regional hospital in Ghana. BMC Health Services Research. 2010;10(24).
212. Dieleman M, Bwete V, Maniple E, Bakker M, Namaganda G, Odaga J, et al. 'I believe

that the staff have reduced their closeness to patients': an exploratory study on the impact of HIV/AIDS on staff in four rural hospitals in Uganda. BMC Health Services Research. 2007;7(205).
213. Masango S, Gathu K, Sibandze S. Retention strategies for Swaziland's health sector workforce: Assessing the impact of non-financial incentives. Harare: EQUINET, ECSA-HC2008.
214. Podsakoff N, Whiting S, Podsakoff P, Blume B. Individual - and Organizational - Level Consequences of Organizational Citizenship Behaviours: A Meta Analysis. Journal of Applied Psychology. 2009;94(1):122 -41.
215. Podsakoff P, MacKenzie S. Impact of Organizational Citizenship Behavior on Organizational Performance: A Review and Suggestions for Future Research. Human Performance. 1997;10(2):133 -51.
216. Fried Y, Slowik LH, Shperling Z, Franz C, Ben-David HA, Avital N, et al. The Moderating Effect of Job Security on the Relation between Role Clarity and Job Performance: A Longitudinal Field Study. Human Relations. 2003;56(7):787-805.
217. Willis-Shattuck M, Bidwell P, Thomas S, Wyness L, Blaauw D, Ditlopo P. Motivation and retention of health workers in developing countries: a systematic review. BMC Health Services Research. 2008;8(247).
218. Chirdan OO, Akosu JT, Ejembi CL, Bassi AP, Zoakah AI. Perceptions of working conditions amongst health workers in state-owned facilities in northeastern Nigeria. Annals of African Medicine. 2009;8(4):243-9.
219. Kyaddondo D, Whyte SR. Working in a Decentralized System: A Threat to Health Workers' Respect and Survival in Uganda. International Journal of Health Planning and Management. 2003;18:329 - 42.
220. Meessen B, Kashala J, Musango L. Output-based payment to boost staff productivity in public health centres: contracting in Kabutare district, Rwanda. Bulletin of the World Health Organization. 2007;85(2):108-15.
221. Ferrinho P, Van Lerberghe W, Fronteira I, Hipolito F, Biscaia A. Dual practice in the health sector: review of the evidence. Hum Resour Health. 2004 Oct 27;2(1):14.
222. Van Lerberghe W, Conceicao C, Van Damme W, Ferrinho P. When staff is underpaid: dealing with the individual coping strategies of health personnel. Bulletin of the World Health Organization. 2002;80(7):581-4.
223. Lindelow M, Serneels P. The performance of health workers in Ethiopia: Results from qualitative research. Social Science & Medicine. 2006;62(9):2225-35.
224. Marchal B, Dedzo M, Kegels G. Turning around an ailing district hospital: a realist evaluation of strategic changes at Ho Municipal Hospital (Ghana). BMC Public Health. 2010;10(787).
225. WHO. Increasing access to health workers in remote and rural areas through improved retention. Geneva: World Health Organization2009.
226. Hult C. Organizational Commitment and Conflicting Values: The Impact of Systems of Norms in Six Western Countries. International Journal of Comparative Sociology. 2003;44(5):408-43.
227. Pillay R. The skills gap in hospital management: a comparative analysis of hospital managers in the public and private sectors in South Africa. Health Services Management Research. 2010;23:30-6.
228. Hackman JR, Oldham GR. Motivation through the design of work: test of a theory. Organizational Behavior and Human Performance. 1976;16(2):250-79.
229. Imperial College L. Graduate Entry Medicine - 4 year. London2011 [cited 2011 July 13 2011]; Available from: <http://www1.imperial.ac.uk/medicine/teaching/undergraduate/ge/>.
230. University of Ghana MS. The Graduate Entry Medical Programme (GEMP). Accra2010;

Available from: <http://ugms.edu.gh/2/index.php?option=com_content&view=article&id=28&Itemid=33>.
231. Chu K, Rosseel P, Gielis P, Ford N. Surgical Task Shifting in Sub-Saharan Africa. PLoS Medicine. 2009;6(5).
232. Cherian M, Choo S, Wilson I, Noel L, Sheikh M, Dayrit M, et al. Building and retaining the neglected anaesthesia health workforce: is it crucial for health systems strengthening through primary health care? Bulletin of the World Health Organization. 2010;88(8):637-9.
233. Smith SL, Hall MA. Advanced neonatal nurse practitioners in the workforce: a review of the evidence to date. Archives of Disease in Childhood Fetal and Neonatal Edition. 2011;96(2):F151 - F5.

Appendixes

Appendix1: Government and Faith-based Hospital Documents Reviewed

AIC Kijabe: Job Description – Clinical Officer. AIC Kijabe. No date.

DPM. Pay Policy for the Public Service. Nairobi: Government Printer; 2006.

DPM. Public Service Recruitment and Training Policy. Nairobi: Directorate of Personnel Management; 2005.

Kenya. Human Resource Development Sector Report 2010: Achieving Economic Growth through targeted, Effective and Efficient Public Spending. Nairobi, Ministry of Finance; 2010.

Kenya. Revised Code of Regulations. Nairobi, Government Printer; 2006.

Kenya. Vision 2030. Nairobi, Government Printer; 2007.

Kenya. Vision 2030 Medium Term Plan. Strategy for National Transformation 2008 – 2012: *Accelerating Equitable Economic and Social Development for a Prosperous Kenya.* Ministry of State for Planning, National Development and Vision 2030; 2008.

Kenya. Revised Schemes of Service for Health Personnel. Nairobi: Office of the President; 1994.

Kenya. Revised Scheme of Service for Clinical Officers. Nairobi: Clinical Officers Council; 2009. Source: http://clinicalofficerscouncil.com/data/scheme.pdf. accessed 18th June, 2010.

Kenya. Revised Schemes of Service for Nurses. Nairobi: Office of the President; 2002.

Kenya. Employment Act. Nairobi: Government Printer; 1976.

Kenya. Kenya Medical Practitioners and Dentists Act. Nairobi: Government Printer; 1978.

Kenya. Revised Schemes of Service for Health Personnel. Nairobi: Office of the President; 1994.

Kenya. Revised Schemes of Service for Nurses. Nairobi: Office of the President; 2002.

Kenya. The Public Officer Ethics Act Nairobi: Government Publisher; 2003.

Kenya. Revised Code of Regulations. Nairobi: Government Printer; 2006.

Kenya. Revised Scheme of Service for Clinical Officers. Nairobi: Clinical Officers Council; 2009.

Kenya. Staff Performance Appraisal Report, GP. 247 (Revised 2006). Nairobi: Government Printer; 2006.

MMH. Annual Report 2009. Maua: Maua Methodist Hospital, 2009.

MMH. Job Description for a Clinical Officer. Maua: Maua Methodist Hospital.

MMH. Staff Conduct. Maua: Maua Methodist Hospital.

MOH. Human Resources for Health strategic Plan - 2007/08 - 2009/2010. Nairobi: Ministry of Health; 2007.

MOH. Second National Health Sector Strategic Plan of Kenya - Reversing the Trends (NHSSP II 2005-10). Nairobi: Ministry of Health; 2005b.

MOH. The Report on Human Resource Mapping and Verification Exercise. Nairobi: Ministry of Health; 2005a.

MOH. Norms and Standards for Health Service Delivery. Nairobi: Health Sector Reform Secretariat; 2006.

MOMS. Ministerial Public Expenditure Review 2009. Achieving Economic Growth through Targeted, Effective and Efficiency Public Spending. Nairobi: Ministry of Medical Services.

Appendix 2: Subject Information Sheet

Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals

INFORMATION SHEET

Introduction:
Hello, my name is…….I work for the Kenya Medical Research Institute - Wellcome Trust Research Programme, a research unit based within the Kenya Medical Research Institute. I am also a Doctoral student at the School of Public Health at the University of Witwatersrand in Johannesburg. The Collaborative programme works with the Ministry of Health, Universities, District and National Referral Hospitals, non-governmental organisations, and research units to try to protect the health of African children and their families. I would like to invite you to participate in a study that we are currently conducting which aims to improve our understanding of roles, norms and incentives influencing the performance of Clinical Officers in rural hospitals in Kenya. This project will be conducted in Eastern, Western, Central and Rift Valley provinces and is funded by a Wellcome Trust Senior Research Fellowship under Grant Number 076827.

Background
The challenges facing human resources for health in sub-Saharan countries and increasingly in some developed countries call for new ways of addressing them. Among the solutions proposed to address the human resources problems is the use of Clinical Officers. Their importance is because they take a short time to train thus are less costly. Also, they have lower salaries, are least likely to emigrate but produce at least equivalent performance to better qualified health workers within the health system. However, their effectiveness as a solution is dependent on their long-term performance of which little is known. As there have been concerns about their performance, and considering that the Kenyan health system is planning to continue using them in addition to increasing the current functions they perform, it is imperative that an attempt to improve their performance is done. This work seeks to explore and understand how this might be done.

What the current study involves
Six methods will be used to collect data. The **first** method reviews and analyses data gathered from selected government documents that are related to Clinical Officers (such as the CO Act). **Secondly,** I shall conduct key informant interviews with policy makers at the Ministry of Health. The **third** method involves undertaking in-depth interviews with Clinical Officers, hospital managers, their supervisors and colleagues. The **fourth** is involves the administration of a self-administered questionnaire during the bi-annual Kenya Clinical Officers meeting while the **fifth** reviews hospital statistics for data on worker absenteeism and workload rates. The **sixth** and last method is the participant observation method.

Given the variety of methods I am using to collect information, I will need to interview a number of different respondents. You are one of the many respondents that have been selected to participate in this study.

Confidentiality
The information that you give will be kept confidential. None of the researchers who work in this

research project are staff members at any hospital. They will not report what you said to your managers, any other person who works in the hospital or anyone else in the health system. When analysing and writing up the research, we will acknowledge that the study was carried out in facilities in the Eastern, Western, Rift Valley and Central Provinces. However, the names of individuals and facilities will not be used. Only members of the research team will know who has been interviewed. This is assured by assigning a code to all interviewees by the principal investigator and this code will be used on the transcribed interview. These codes will only be known to the principal investigator and his supervisors who are working on the project.

With regard to the Health Worker Survey which uses a self administered questionnaire, an envelope will be provided to each respondent so they put their questionnaires inside whether the questionnaires are completed or not. The reason for providing the envelope is to ensure confidentiality and that those providers who did not complete the questionnaire should not feel answerable to the researchers.

Permission to carry out this project has been sought from the Ministry of Health (Office of the Chief Clinical Officer), and the directors of each participating hospital. Ethics clearance to conduct this study has been sought from the National Ethics Review Committee at Kenya Medical Research Institute, and the University of the Witwatersrand Ethics Committee for Research on Human Subjects.

Benefits and risks of participation
Participation in this study is voluntary and there will be no direct benefits to anyone who participates in the interviews. Similarly there will be no negative consequences for individuals who do not want to be interviewed. Also note that you will not be compensated for taking part in the study. During the interview, you have the right to decline to answer any question that makes you feel uncomfortable and you may stop the interview at any time. Since the Health Worker Survey uses a self administered questionnaire, it is your decision whether you want to complete it or not. However, I would really appreciate it if you do share your thoughts and feelings about the questions I will be asking you. Whether you choose to complete the questionnaire or not, we kindly request you to return it back to us with the statement of consent on the last page completed. The researchers would need this information to be able to identify the number of refusals.

Recording the interview
We would like to request your permission to audiotape the interview because we cannot write down all your answers quickly enough and might miss some important things that you will say in response to some of the questions that you will be asked if we do not record them. It is essential that you know that the tapes and notes will remain confidential and your identity will not be disclosed. The only thing we are interested in is your honest responses to the questions I shall ask.

The tape will only be listened to by the researchers from the principal investigator and his supervisors who are also working on the project. Tapes of interviews will be transcribed and transcripts of interviews will bear the code and not the name of the individuals interviewed. The information will then be discussed by the research team and organized into a report. The tapes will be kept in a locked cabinet at the Kemri-Wellcome Trust Research Programme offices. Following the national requirements, tapes will be destroyed two years after publication of the research findings.

Feedback
At the end of the project, a seminar will be organised whereby the findings of the research will be fed back to all participants. The report will also be accessible on both the Kemri-Wellcome Trust Research Programme and the Centre for Health Policy website for easy access by all those that are interested.

Contact Details of the Principal Investigators
If you have any further questions, or any complaints about the way that the study is being implemented you can contact the Principal Investigators of the project. Their details are listed below.

Mr. Patrick Mbindyo
Kemri-Wellcome Trust Research Programme
P. O. Box 43640-00100 GPO
Nairobi, Kenya.
Tel: +254-020-2715160/2720163
Fax: +254-020-2711673
Email: pmbindyo@nairobi.kemri-wellcome.org

Dr. Duane Blaauw
Centre for Health Policy
School of Public Health
University of Witwatersrand
Johannesburg
Tel: 011 242 9903 / 9900
Fax: 011 720 0010
Email: duane.blaauw@nhls.ac.za

Dr. Mike English
Kemri-Wellcome Trust Research Programme
P. O. Box 43640-00100 GPO
Nairobi, Kenya
Tel: +254-020-2715160/2720163
Fax: +254-020-2711673
Email: menglish@nairobi.kemri-wellcome.org

Appendix3: Informed Consent Form for Interviews

Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals

Consent Form for Interviews

I have been given the Information Sheet on the project entitled "Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals". I have read and understood the Information Sheet and all my questions have been answered satisfactorily.

I understand that it is up to me whether or not I would like to participate in the interview and that there will be no negative consequences if I decide not to participate. I also understand that I do not have to answer any questions that I am uncomfortable with and that I can stop the interview at any time. I understand that the researchers involved in this project will make every effort to ensure confidentiality and that my name will not be used in the study reports, and that comments that I make will not be reported back to anybody else

I therefore consent voluntarily to participate in the study

Interviewee's signature: _____ Date: _____

Interviewer's signature: _____ Date: _____

Interviewer's name
(please print): _____ Date: _____

Appendix 4: Consent Form for Tape Recording Interviews

Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals

Consent Form for Tape Recording the Interview

I have been given the Information Sheet on the project entitled "Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals". I have read and understood the Information Sheet and all my questions have been answered satisfactorily.

I understand that I can decide whether or not the interview should be tape-recorded and that there will be no consequences for me if I do not want the interview to be recorded.

I understand that information from the tapes will be transcribed and transcripts will be given a code and my name will not be mentioned. I understand that if the interview is tape-recorded, the tape will be destroyed two years after publication of the findings.

I understand that I can ask the person interviewing me to stop tape recording, and to stop the interview altogether, at anytime.

I consent voluntarily for the researcher to record the interview.

Interviewee's signature: _____ Date: _____

Interviewer's signature: _____ Date: _____

Interviewer's name
(please print): _____ Date: _____

Appendix 5: In-depth Interview Schedule for Senior Hospital Staff and Policymakers

1. Kindly describe your role, position responsibility

2. How would you describe a 'good' performer or 'bad' performer?

   Probe:
   - What might influence a health worker (CO) to be either?
   - How is the performance of health workers evaluated?
   - Is the performance evaluation process linked to rewards and sanctions?
   - Perceptions of performance improvement initiative and rapid results initiative
   - Does performance differ for health workers employed in the faith-based hospital sector? How? Why do you think this is so?

3. What do you regard as being the roles of COs in the health system?

   Probe:
   - Are their current roles contained in the legal and policy framework (CO Act)
   - Are there any proposed or new roles or functions?
   - How are COs prepared to carry out their roles?

4. Please describe the rules and regulations that are used for managing COs.

   Probe:
   - Are these drawn from the legal and policy framework of COs? Explain.
   - How do these work in practice?
   - How would you prefer they be utilised?
   - What about norms for CO in faith-based hospitals?

5. Tell me about the incentives provided in the health system

   Probe:
   - How do you think they influence CO performance?
   - Are there any proposed incentives to be provided? How will they be implemented?

6. How might the present realities in the health system influence:
   a) How COs feel about themselves,
   b) Their work,
   c) Their professional identity?

Appendix 6: In-depth Interview Schedule

1. Can you tell me how long have you been working in this hospital?
   Probe
   - Have you always been in this position or in other positions within the hospital?

2. Can you tell me what your main functions are in your current position in this hospital?
   Probe:
   - Is there a job description for your position? Are your functions dependent on need or follow the legal and policy framework (e.g., CO Act)?
   - How are COs prepared to carry out their roles?
   - Are there any new (or proposed) functions you are now doing that you were not doing before?
   - How are these remunerated?
   - How do you feel about your roles?

3. Are there any norms guiding what COs should do and how?
   Probe:
   - Which are these?
   - How do these work in practice?

4. Tell me about the incentives provided in the health system

   Probe:
   - How do you feel about this?
   - How do you think they influence CO performance?
   - Are there any proposed incentives to be provided? How will they be implemented?

5. How would you describe a 'good' performer or 'bad' performer?

   Probe:
   - What might influence a health worker (CO) to be either?
   - How is the performance of health workers evaluated?
   - Is the performance evaluation process linked to rewards and sanctions?
   - Perceptions of performance improvement initiative and rapid results initiative
   - Does performance differs for the following:
     - Health workers employed in the faith-based hospital sector?
     - General and specialist COs?
     - COs working in TB/HIV/AIDS Clinics
     - COs working in routine public hospital departments, e.g. outpatient department?
     - How? Why do you think this is so?

6. How might the present realities in the health system influence:
   a) How COs feel about themselves,
   b) Their work,
   c) Their professional identity?

Appendix 7: Subject Information Sheet for Participant Observation

Roles, Norms and Incentives Influencing the Performance of Clinical Officers in Kenyan Rural Hospitals

INFORMATION SHEET

Introduction:
Hello, my name is…….I work for the Kenya Medical Research Institute - Wellcome Trust Research Programme, a research unit based within the Kenya Medical Research Institute. I am also a Doctoral student at the School of Public Health at the University of Witwatersrand in Johannesburg. The Collaborative programme works with the Ministry of Health, Universities, District and National Referral Hospitals, non-governmental organisations, and research units to try to protect the health of African children and their families. I would like to invite you to participate in a study that we are currently conducting which aims to improve our understanding of roles, norms and incentives influencing the performance of Clinical Officers in rural hospitals in Kenya. This project will be conducted in Eastern, Western, Central and Rift Valley provinces and is funded by a Wellcome Trust Senior Research Fellowship under Grant Number 076827.

Background
The challenges facing human resources for health in sub-Saharan countries and increasingly in some developed countries call for new ways of addressing them. Among the solutions proposed to address the human resources problems is the use of Clinical Officers. Their importance is because they take a short time to train thus are less costly. Also, they have lower salaries, are least likely to emigrate but produce at least equivalent performance to better qualified health workers within the health system. However, their effectiveness as a solution is dependent on their long-term performance of which little is known. As there have been concerns about their performance, and considering that the Kenyan health system is planning to continue using them in addition to increasing the current functions they perform, it is imperative that an attempt to improve their performance is done. This work seeks to explore and understand how this might be done.

What the current study involves
The interview method directly asks your opinion of what you perceive influences the performance of clinical officers in relation to roles, norms and incentives. The other method is participant observation. This method involves me observing what routinely happens in the hospital. The process of doing this is informal, for example, I could sit with you at your workplace to see what you go through each day. We could have an informal chat about issues in the hospital that are affecting your performance. What I observe and your explanations of the observations through the conversations we will have will help me to truly understand what influences your performance and why. I will keep notes of my observations and our conversations in a summary form.

Confidentiality
There will be no mention in the notes of the names or designations of those that I might observe. If you are uncomfortable with my presence, please inform me and I will leave. If you tell me something and you do not want me to write it down, please tell me and I will respect your wishes. The information that you give will be kept confidential No researcher working in this project is a staff member of any hospital. We will not report what you said to your managers, any other person who works in the hospital or anyone else in the health system. When analysing and writing up the research, we will acknowledge that the study was carried out in facilities in the Eastern, Western, Rift Valley and Central Provinces. However, the names of individuals and facilities will not be used. Only members of the research team will know who has been

interviewed. This is assured by assigning a code to all interviewees by the principal investigator and this code will be used on the transcribed interview. These codes will only be known to the principal investigator and his supervisors who are working on the project.
Permission to carry out this project has been sought from the Ministry of Health (Office of the Chief Clinical Officer), and the directors of each participating hospital. Ethics clearance to conduct this study has been sought from the National Ethics Review Committee at Kenya Medical Research Institute, and the University of the Witwatersrand Ethics Committee for Research on Human Subjects.

Benefits and risks of participation
Participation in this study is voluntary and there will be no direct benefits to anyone who participates. Similarly there will be no negative consequences for individuals who do not want to be observed. Also note that you will not be compensated for taking part in the study. If you become uncomfortable with my presence when I observe what is happening or what you are doing, you are at liberty to stop me from continuing. You are also free to ask me not to record (and discard) any comment you make during our informal conversations.

Recording my observations:
With your permission, I will make simple notes of what I observe or what we discuss informally as an individual or as a group. These observations will be compiled at the end of the day as field notes.

Feedback
At the end of the project, a seminar will be organised whereby the findings of the research will be fed back to all participants. The report will also be accessible on both the Kemri-Wellcome Trust Research Programme and the Centre for Health Policy website for easy access by all those that are interested.

Contact Details of the Principal Investigators
If you have any further questions, or any complaints about the way that the study is being implemented you can contact the Principal Investigators of the project. Their details are listed below.

Mr. Patrick Mbindyo
Kemri-Wellcome Trust Research Programme
P. O. Box 43640-00100 GPO
Nairobi, Kenya.
Tel: +254-020-2715160/2720163
Fax: +254-020-2711673
Email: pmbindyo@nairobi.kemri-wellcome.org

Dr. Duane Blaauw
Centre for Health Policy
School of Public Health
University of Witwatersrand
Johannesburg
Tel: 011 242 9903 / 9900
Fax: 011 720 0010
Email: duane.blaauw@nhls.ac.za

Dr. Mike English
Kemri-Wellcome Trust Research Programme
P. O. Box 43640-00100 GPO
Nairobi, Kenya
Tel: +254-020-2715160/2720163
Fax: +254-020-2711673
Email: menglish@nairobi.kemri-wellcome.org

Appendix 8: Ailments that COs are Permitted to Treat in Private Practice

First Schedule (S. 13 (1)): Ailments Which A Clinical Officer Licensed To Engage In Private Practice Is Permitted To Treat

Immunization, health and nutrition education, dehydration, anaemia.

Advice on general care for newborn.

Respiratory diseases, upper respiratory tract infection, tonsillitis, pneumonia, mild otitis media, laryngitis, bronchitis, asthma.

Gastrointestinal conditions - with mild dehydration, with abdominal pain, constipation, vomiting, diarrhoeal diseases.

Skin diseases - scabies, impetigo, tineasis, jiggers, eczema, moniliasis.

Eye diseases - conjuctivitis, trachoma.

Parasitic - ascaris, hookworm, malaria, bilharzia. etc.

Blood disorders - anaemia, (especially iron deficiency).

Childhood diseases - measles, whooping cough, mumps, etc.

Poisoning - emergency treatment.

Respiratory tract diseases (see paediatrics).

Gastrointestinal diseases - diarrhoea, vomiting, constipation, dysentry, food poisoning, gastritis, peptic ulcer.

Skin diseases - scabies, impetigo, eczema, tinae tropila ulcers, etc.

Eye conditions - conjuctivitis, trachoma stye.

Parasitic - malaria, tapeworm, roundworm, hookworm, bilharzia.

Sexually transmitted diseases - gonorrhoea, syphyllis, moniliasis, trichomoniasis, pubic lice.

Poisoning - snakebites - emergency treatment.

Headache, anxiety.

Urinary tract infection.

Blood disorder - anaemia.

Uncomplicated arthritis, arthragia.

Antenatal care.

Urinary tract infection.

Anaemia during pregnancy.

Breast abscess.

Puerperal sepsis.

Pelvic inflamatory diseases.

Family Planning.

Cuts, abrasions.

Cellutis.

Abscesses.

Uncomplicated Arthritis, Arthragia.

Circumcisions.

Dental extraction.

Burns (emergency treatment).