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THE DESIGN AND IMPLEMENTATION OF THE HUMAN RESOURCE INTERVENTIONS IN SOUTH AFRICA AND THEIR INFLUENCE ON THE MOTIVATION AND RETENTION OF HEALTH WORKERS

PRUDENCE DITLOPO

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, June 2016

Supervisor: Dr Duane Blaauw

Co-supervisor: Dr Stephen Thomas

DECLARATION

I, Prudence Tabea Nana Ditlopo, declare that this thesis is my own work. It is being submitted for the degree of Doctor of Philosophy in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

27 June 2016

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Signature of candidate Date

DEDICATION

In loving memory of my long time mentor, my second mother and my dear friend, Efua Dorkenoo, OBE - for always believing that I am “PhD material”, and for your emotional and professional support since I began my career path. Sadly, you did not live to celebrate this momentous milestone with me.

And

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PUBLICATIONS

1. Ditlopo P, Blaauw D, Rispel L, Thomas S, Bidwell P. *Policy implementation and financial incentives for nurses in South Africa: A case study on the occupation specific dispensation.* Global Health Action. (2013) **6**: 19289

2. Ditlopo P, Blaauw D, Thomas S & Bidwell, P. *Analyzing the implementation of the rural allowance in hospitals in North West Province*. Journal of Public Health Policy. 2011. **32** (S1): S80-S93

PRESENTATIONS

1. **Ditlopo P**, Blaauw D, Rispel L. (2012). How do financial incentives influence the motivation and retention of nurses in South Africa: A case study on occupation specific dispensation. *Poster presentation made at the Second Global Symposium on Health Systems Research*. 31 October – 3 December 2012, Beijing, China.

2. **Ditlopo P**, Blaauw D, Rispel L. (2012). How do financial incentives influence the motivation and retention of nurses in South Africa: A case study on occupation specific dispensation. *Oral presentation made at the Faculty of Health Sciences Research Day*. University of the Witwatersrand. 19 September 2012, Parktown, Johannesburg.

3. **Ditlopo P**, Thomas S, Normand C, Bidwell P, Blaauw D, Mwisongo A, Chirwa M, Maseko F & Bowie C. (2010). Comparative analysis of the incentive strategies to motivate and retain health workers: Findings from South Africa, Tanzania and Malawi. *Poster presentation made at the Public Health Association of South Africa (PHASA) conference*. 29 November – 1 December 2010, East London.

4. **Ditlopo P**, Blaauw D, Thomas S, Normand C, Bidwell P, Mwisongo A et al. (2010). Comparative analysis of the incentive strategies to motivate and retain health workers: Findings from South Africa, Tanzania and Malawi. *Oral presentation at the WHO/Centre for Rural Health Symposium on the Launch of Global Recommendations on Increasing Access to Health Workers in Remote and Rural Areas through Retention*, 7th - 9th September 2010, Parktown, Johannesburg.

5. **Ditlopo P** & Blaauw D. (2010). An evaluation of the influence of the human resources interventions on the motivation and retention of health professionals in South Africa. *Oral presentation made at the North West Province Motivation Project Close-Out Symposium*, 21st September 2010, Mafikeng.

6. **Ditlopo P** & Blaauw D (2010). An evaluation of the influence of the human resources interventions on the motivation and retention of health professionals in South Africa. *Oral presentation made at the Motivation Project Close-Out Symposium.* 28th April 2010, Pretoria.

7. **Ditlopo P** & Blaauw D. (2009). Perceptions regarding the effectiveness of the human resources interventions on the motivation and retention of health professionals in South Africa. *Poster Presentation made at the 5th Public Health Association of South Africa (PHASA) conference*, Durban.

ABSTRACT

Rationale: Financial incentives are amongst the most widely used strategies to improve health worker motivation and retention. There is also growing evidence to suggest that non-financial strategies are just as important as financial incentives. However, evidence on the effectiveness of these strategies in low- and middle-income countries (LMIC) or in rural and remote areas is still limited. Available studies reported that the effectiveness of good incentive strategies with laudable intentions may be diminished as a result of negative consequences caused by weaknesses in their design processes and implementation. Yet, the process of the implementation of human resource for health strategies is less studied in low- and middle-income countries. There has also been limited policy analysis of human resource for health strategies to help explain policy outcomes.

Objectives: This thesis sought to conduct a process evaluation of the design and implementation of four incentive strategies and their influence on the motivation and retention of health workers. These were: the rural allowance, the scarce skills allowance, the occupational specific dispensations for nurses, and the hospital revitalisation programme.

Methods: Using a multiple-case study design comprising of qualitative and quantitative methodologies, we conducted a retrospective review and analysis of the relevant government documents, press releases and newspaper articles. In-depth interviews were also conducted with 35 key informants, eight hospital managers, five human resource managers and 118 health workers. A health worker survey was carried out with 588 participants. The study was conducted in 10 hospitals and 55 community health centres and clinics in North West and Gauteng provinces in South Africa. For qualitative data, thematic content analysis of documents and interview transcripts was done using the Atlas.ti software. Quantitative data

were analysed using Stata (Version 10). The descriptive statistics that were employed included frequencies, percentages, measures of central tendency such as mean and median and distribution of data (standard deviations and IQR). Inferential statistics that were conducted included Analysis of Variance (ANOVA) and Multiple Regression analysis.

Results: A notable finding of this study is that all the financial incentive strategies of interest (rural allowance, scarce skills allowance, and occupation-specific dispensation) were fully implemented at the time when the study was conducted while hospital revitalisation programme, the only non-financial incentive, was implemented to a certain degree. The finding that central level policymakers were the key actors driving the overall policy design processes across all the four incentive strategies of interest, suggests a top-down approach in the formulation of these retention strategies. The power of the different actors during the design stages varied across the four incentive strategies of interest; with the National Treasury consistently being an influential actor across all the four incentive strategies of interest because of their role of controlling the government budget.

In general, the qualitative findings with different groups of respondents in this study showed that all the four incentive strategies of interest were in principle, regarded as good policies for incentivising the motivation and retention of health workers. This study found that all four incentive strategies were partially effective in the motivation and retention of nurses and doctors. A notable effect of the three financial incentive strategies derived from the qualitative data in this study was that they boosted salaries of the health workers. These findings were contrary to the results of the aJDI scale which demonstrated that the participants were generally dissatisfied with pay and promotion; with the mean scores of 3.8 (SD=3.6) and 6.1 (SD=4.6) respectively. There were no significant differences between groups with regards to

the promotion subscale. However, with regard to the pay subscale, there were significant differences for health worker category (p=0.045). Significant differences were also observed for province (p=0.001), with Gauteng respondents reporting lower satisfaction with pay (*M* = 3.3, *SD* = 0.34) than North West respondents (M = 4.6, *SD* = 3.8). The pay subscale in hospitals also reflected significant differences between locations (p=0.02).

Two-sample t-tests revealed that respondents who benefitted from the interventions investigated in this study did not have significantly higher overall job satisfaction in either hospitals or clinic. However, the rural allowance, scarce skills allowance and OSD all increased satisfaction with pay for both hospital and clinic respondents. However, the differences were only statistically significant for the rural allowance (t=3.3, p=0.001) and for OSD (t=2.8, p=0.005) among health professionals in hospitals. In hospitals, rural allowance (t=-0.1, p=0.967) and scarce skills allowance (t=-0.2, p=0.840) increased the respondent's intention to quit, although the differences were not statistically significant. However, the occupation specific dispensation significantly decreased the intention to quit of hospital health professionals (t=-2.2, p<0.05). In clinics, all the financial incentive strategies decreased the respondents' intention to quit; however, there were no significant differences. The results also illustrates that all interventions under investigation in this study moderately increased the organisational commitment of hospital and clinic respondents.

Despite the popularity of financial incentives, this study found that the impact of their admirable intentions can be reduced because of process and implementation weaknesses. The process issues that are raised in this thesis that affected the design and implementation of financial and non-financial incentive strategies are weak coordination, lack of uniformity, sub-optimal communication, lack of training of implementers, and weak monitoring and

information systems. In order to avoid loss of morale and staff grievances, careful planning and management of the process of the implementation of financial incentives in particular, is essential. Based on the data, this study developed an integrated conceptual framework that converge ideas from motivation theories and policy analysis to improve knowledge on health worker incentives, motivation and retention.

Conclusions: The data presented in this thesis has demonstrated that as opposed to the assumption that financial incentives are easy solutions to addressing problems of health workforce motivation and retention, their implementation is complex. The results also showed that although motivation theories and policy analysis frameworks are often presented in isolation to explain human behaviour and policy processes respectively, these fields are quite complementary in studying the implementation of financial and non-financial incentives in the health sector.

Implications: Based on the results of this PhD research, a new integrated approach for understanding the implementation of financial and non-financial incentives is proposed. These results are critical in light of the accelerated pressure towards achieving the health MDGs as well as the recent drive towards re-engineering the South African primary health care (PHC) system, and the implementation of the National Health Insurance (NHI). The success of all these initiatives depends heavily on the availability, competence, motivation and retention of health workers.

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LIST OF ABBREVIATIONS / ACRONYMS

aJDI	Abridged Job Descriptive Index
aJIG	Abridged Job in General
ANOVA	Analysis of Variance
CEO	Chief Executive Officer
CHC	Community Health Centre
DENOSA	Democratic Nurses Organisation of South Africa
DHS	District Health Systems
DoH	Department of Health
DPSA	Department of Public Service and Administration
GHWA	Global Health Workforce Alliance
GSCC	Gauteng Shared Services Centre
HR	Human Resources
HRH	Human Resources for Health
HOSPERSA	Health & Other Services Personnel Trade Union of South Africa
HRP	Hospital Revitalisation Programme
ICU	Intensive Care Unit
ITQ	Intention to Quit
ISRDS	Integrated Sustainable Rural Development Strategy
JIG	Job in General
KII	Key Informant Interview
KZN	Kwa-Zulu Natal
LMICs	Low- and Middle-Income Countries
MDGs	Millennium Development Goals
NDoH	National Department of Health
MEC	Member of Executive Council
NEHAWU	National Education & Health Workers' Union
OSD	Occupation Specific Dispensation
PDoH	Provincial Department of Health
PHC	Primary Health Care
PIP	Project Implementation Plan
PHSDSBC	Public Health and Social Development Sectoral Bargaining Council
PSA	Public Servants Association
PSCBC	Public Service Co-ordinating Bargaining Council
SAMA	South African Medical Association
SANC	South African Nursing Council
SD	Standard Deviation
WHO	World Health Organisation

CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1 Overview

In many low- and middle-income countries (LMICs), especially in sub-Saharan Africa, significant progress has been made in describing the human resources for health (HRH) challenges including insufficient numbers of health workers, skill imbalances, mal-distribution, migration, poor working conditions and inadequate human resource planning and management [1-3]. Inadequate human resources are also a major constraint to the scaling up of priority health interventions and in achieving the health Millennium Development Goals (MDGs) [4, 5]. Sub-Saharan Africa, for instance, has 25% of the world's disease burden but it has only 1.3% of the world's health workforce [6]. Although the majority of the poor and disadvantaged patients live in rural areas, a number of cross-sectional studies have documented the geographical imbalances of the health workforce between rural and urban areas as a key challenge. Yet, attracting, motivating and retaining skilled health workers, especially in rural health facilities, has proven difficult [7].

South Africa, like other African countries, faces a variety of health personnel problems and these are exacerbated by the unique quadruple disease burden that the country is experiencing. The heavier burden of disease requires well-planned health interventions and proper structuring of the entire health system including human resources for health. Although South Africa is a middle-income country with more health professionals than neighbouring African countries, it has a severe mal-distribution of personnel between the public and private sectors and between rural and urban areas [8]. For instance, in 2004, 46% of the South African population lived in rural areas, yet they were served by only 12% of the doctors and 19% of

the nurses [9]. In addition, the under-resourced public health sector is over-burdened; taking responsibility for the health and wellbeing of 80% of the population while the private sector deals with the remaining 20% [9].

The international migration of health care workers, especially nurses, is also a major challenge facing the South African health system. A recent review on the extent of migration from sub-Saharan Africa reported that the United States (US) and the United Kingdom (UK) remain key destinations while the major sources are South Africa and Nigeria [10]. For instance, immigration of doctors from South Africa increased from 239 in 2003 to a peak of 427 in 2006; however in 2013 there was a rapid decline with only 10 registrations recorded [11]. This was attributed to the stringent registration requirements introduced by the Health Profession Council of South Africa [12]. Similarly, nurse migration from South Africa to the UK rose from 599 in 1998/1999 to a striking 2114 in 2001/2002 [10]. However it has since dropped to 933 in 2004/2005 [10].

Various authors have documented factors contributing to the decision to migrate and these include poor remuneration, job dissatisfaction, limited opportunities for career advancement, poor working conditions, lack of future prospects, high levels of crime and violence and a decline in the quality of the school education system amongst others [13-16]. Specifically, when doctors and nurses migrate, this results in increased pressure on the remaining health workforce and contributes to low morale and productivity as well as high turnover [13-17]. Other enduring consequences include loss of experienced personnel, resulting in lack of continuity and institutional memory; thus negatively impacting on future production of the nurses in particular and on the mentoring of those remaining [18].

This reported HRH crisis, has prompted the South African government to introduce several strategies to attract, motivate and retain health workers where they are needed most [19] as summarised in Table 1. This table illustrates that there has been an incremental development of HRH policies and interventions in South Africa since the late 1990s. These can broadly be grouped under those intended to enhance the training and experience of new graduates, those intended to address disparities in rural areas, those aimed at improving the motivation and retention of health workers and those intended to improve the working conditions of health workers. In addition, the governments' commitment to addressing the HRH crisis is demonstrated by launching the Nursing Strategy in 2008 [20], the National Human Resources for Health Strategy 2011-2017 [21] and further emphasised in key official documents such as National Development Plan (NDP) [22] and the Health Sector Strategic Framework, the 10-Point Plan.

Table 1: HRH Policy Initiatives and Key Milestones for South Africa

Year	HRH Policy Initiatives and Key Milestones
1997	Government released White Paper for the transformation of the health system containing recommendations on equitable health professional distribution
1999	Government made a decision to close nursing colleges
2000	Publication of the Pick report on Human Resources for Health
2004	Government introduced a: ▪ Rural allowance to attract and retain certain health professionals in rural facilities ▪ Scarce skills allowance to attract and retain scarce categories of health professionals in the public health sector
2005	Commonwealth Ministers of Health, of which South Africa is signatory, signed an agreement regarding the ethical recruitment of health workers
2006	Government released a National Human Resources for Health Framework to address the critical shortage of health professionals
2008	Government released a National Nursing Strategy for South Africa
2008-2010	Government introduced the occupation specific dispensation for nurses, a financial incentive strategy intended to attract, motivate, and retain health professionals in the public sector
2011	Government released the 2012-2017 Human Resources for Health Strategy

While these efforts are commendable, an evaluation of these interventions to determine their effectiveness is still lacking. It is against this backdrop that the current thesis sought to conduct a process evaluation of the design and implementation of four incentive strategies and their influence on the motivation and retention of health workers in two provinces in South Africa. This information is critical in light of the accelerated pressure towards achieving the health MDGs by 2015 [23], as well as the recent drive towards re-engineering the South African primary health care (PHC) system [24] and the implementation of the National Health Insurance (NHI) [25]. The success of all these initiatives depends heavily on the knowledge, competence, motivation and retention of health workers.

1.2 Problem Statement

Given the often extreme wage differentials across countries, a recent paper noted that salaries and benefits appear to be obvious pull factors towards foreign countries [26]. For instance, in

the UK, a family doctor gets paid more than US$200,000 per year which is more than 13 times the estimated Ghanaian doctor's salary of US$14,600, although when cost of living is taken into consideration, the real disparity is smaller [27]. Also, the monthly salaries of physicians range from US$50 in Sierra Leone to US$1,242 in South Africa [27]; while wages in Canada and Australia are approximately four times those in South Africa [28]. Other authors have described pay and income as affecting the motivation, performance, morale and the ability of employers to attract and retain staff [27]. Available evidence further suggests that the size of the pay differential between different cadres of health workers (e.g. doctors and nurses) can affect morale, working relationships and the available mix of cadres [27]. This in turn can have repercussions for retention both within and outside countries and on the distribution of health worker in general. It, therefore, comes as no surprise that financial incentives are amongst the most widely used strategies to improve health worker motivation and retention [29, 30]. However, evidence on their effectiveness in low- and middle-income countries (LMIC) [31-33] or in rural and remote areas is still limited [29, 31].

There are a number of other limitations of the available literature on HRH interventions. Although existing studies provide some insights into factors contributing to motivation, few studies have evaluated the effect of real-life interventions or programs [33, 34]. Linking these real-life interventions to motivation theories has also been limited [33]. Moreover, the majority of available studies on financial incentives have examined programs for doctors [35]. However, a few recent studies have drawn attention to strategies for other cadres such as nurses, pharmacists and dentists [36, 37]. Furthermore, while primary health care facilities are key health gatekeepers to the community, most of the existing health worker incentive studies were carried out in hospitals, with very few in primary care or community care settings [38, 39].

According to McDonald and Roland [40], the design of incentive programmes should consider the manner in which these strategies are implemented and the context within which they are implemented. For example, with regard to financial incentives, some researchers have noted that inequities or perceived inequities in the manner in which these incentives are designed and implemented could contribute to problems of demotivation [32]. However, Rigoli and Dussault [41] have cautioned that many incentive schemes fail to achieve expected results due to poor design. This is because policymakers in most countries have limited guidance on how to design incentive strategies to ensure that they can achieve the intended policy objectives [42].

Although some have highlighted the importance of investigating the implementation challenges that contribute to policy failure [43], there is still a paucity of research on the process of implementation of HRH strategies in LMICs [33, 44-46]. There is also limited policy analysis of HRH strategies in LMICs to help explain policy outcomes [45-47]. Other scholars have reported on the lack of more detailed documentation describing promising practices that would be useful to HRH leaders and practitioners [48].

There is also growing evidence to suggest that non-financial strategies are just as important as financial incentives. Some researchers have even argued that non-financial incentives are more important than financial incentives in motivating health workers [49, 50]. Although a number of service-linked scholarships, loans and loan repayment programmes are described in the literature [51], the effect of these and other non-financial incentives on the motivation and retention of the health workforce also remains limited [34, 51, 52]. The process of the implementation of these strategies is also unknown.

Against the backdrop of these gaps identified in the existing literature, in this thesis, I make an argument that the effectiveness of good policies with laudable intentions may be diminished as a result of negative consequences caused by weaknesses in their design processes and implementation [42, 53]. Therefore, this study investigates the process of the design and implementation of four HRH interventions and their influence on the motivation and retention of doctors and nurses in hospitals and clinics in two South African Provinces. These interventions include three that relate to financial incentives (rural allowance, scarce skills allowance, occupation-specific dispensation (OSD) for nurses), and one that relates to non-financial incentives (the hospital revitalisation programme).

1.3 Justification of the Study

Over the years, South Africa has introduced numerous reforms in an effort to improve the performance of its health system so as to meet the health needs of all its population. In line with the global policy directions on universal health coverage [54, 55], the South African government has placed renewed emphasis on strengthening primary health care (PHC) and district health systems (DHS) [25, 56]. As with other countries, South Africa is also under immense pressure to achieve the health Millennium Development Goals before the 2015 deadline. The success of these reforms depends heavily on the knowledge, competence, motivation and retention of the health workforce.

My research has both international and national relevance because human resources for health has been identified globally as one of the key elements for health systems strengthening [2, 57]. Internationally, this is evidenced by the Kampala Declaration of the Global Health Workforce Alliance (GHWA) in 2008 which called for global and national leaders to increase

funding for research on human resources for health [58]. The WHO policy recommendations for improving the retention of health workers in rural areas also signified global attention on the distribution of health workers in rural and underserved areas [59]. In South Africa, the government has identified the development, planning and management of the health workforce as one of the 10 strategic priorities of the National Department of Health for the period 2009 to 2014 [60]. As part of strengthening the health systems in the country, the Minister of Health also committed himself to a programme of key deliverables which includes improving human resources for health [56].

In addition, in October 2011, the new Human Resources for Health Strategy for the health sector covering the period from 2012 to 2017 was released by the National Department of Health [21]. This policy document lists 8 HRH priorities with stipulated objectives and activities, a number of which are relevant for this research. For example, Objective 1.4 of Strategic Priority 1 makes mention of the establishment of a National Recruitment and Retention Unit which will be tasked with overseeing the recruitment, retention and equitable distribution of health workers [21]. Objective 6.5 of Strategic Priority 6 calls for the review and implementation of the revised OSD, a financial incentive strategy to attract, motivate and retain health professionals in the public health sector [21]. In addition, Objective 8.4 of Strategic Priority 8 focuses on the development of financial incentives to attract health professionals to work in rural areas [21].

In light of this context, my study is important because it intends to investigate how the design and implementation of HRH policy processes may influence the motivation and retention of health workers, drawing on the perspectives of different stakeholders and relevant theoretical

approaches. This information is critical to inform and strengthen the implementation of identified HRH reforms and priorities.

1.4 Study Aims and Objectives

The overall goal of this study was to enhance knowledge on the complexity of implementing financial and non-financial incentives to improve health worker motivation and retention by providing a detailed account of the process factors that may influence the ultimate outcomes of these strategies. In particular, the study intended to examine whether the manner in which the four HRH interventions of interest in this study were designed and implemented affected the motivation and retention of doctors and nurses in two provinces in South Africa. This information is critical in order to inform and strengthen the implementation of current and future HRH policy reforms in South Africa. The specific study objectives were:

1. To describe the process of the design and implementation of the selected HRH interventions (rural allowance, scarce skills allowance, occupation-specific dispensation for nurses, and the hospital revitalisation programme).
2. To assess perceptions on whether the selected HRH interventions (rural allowance, scarce skills allowance, occupation-specific dispensation for nurses, and the hospital revitalisation programme) influenced health workers' motivation and retention.
3. To evaluate the influence of the selected HRH interventions (rural allowance, scarce skills allowance, occupation-specific dispensation for nurses, and the hospital revitalisation programme) on health workers' job satisfaction, organisational commitment and intention to leave.

This study was part of a larger multi-country project investigating health worker motivation and retention in South Africa, Tanzania and Malawi which had three components [61] as shown in Figure 1.

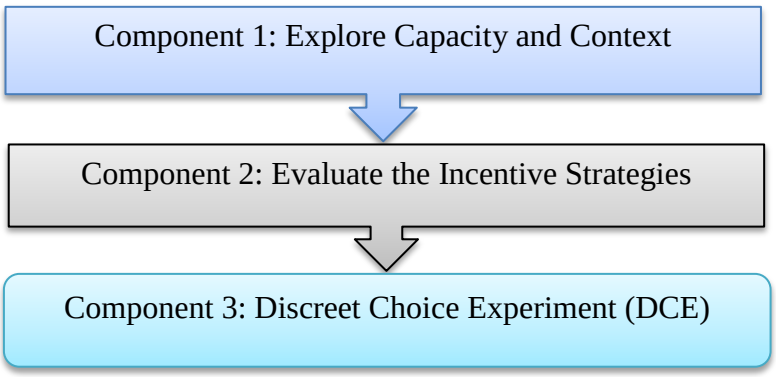

Figure 1: Three Components of the Motivation Project

The first component involved a systematic review of evidence on the critical factors influencing human resource capacity to deliver equitable effective health care efficiently at the district level [30]. The second component aimed to evaluate the strengths and weaknesses of HRH strategies which had intended to improve the motivation and retention of health staff through natural case studies in each of the three countries. The third component conducted a discrete choice experiment to determine the relative importance of different financial and other incentives on the motivation of different categories of health professionals. This PhD is based on the second component from South Africa. I was the principal investigator of this component and was responsible for all the research stages including proposal writing, ethics approval, gathering the data, data analysis, report writing and dissemination of the key findings through presentation at local and international conferences.

1.5 Structure of the Thesis

This thesis is divided into 11 chapters (including the present chapter) which are described as follows:

Chapter 2 reviews the literature on factors influencing motivation and retention, and the effectiveness of financial and non-financial incentives on job satisfaction, organisational commitment and intention to leave a job. Studies on the design and implementation of incentive strategies will also be explored. The chapter concludes with an outline of the initial conceptual framework used for the study, drawing from motivation and policy analysis theoretical approaches. In **Chapter 3**, the methodology of the study is described, including an overview of the case studies, the sampling strategy and the study setting.

In total, there are six different chapters reporting on the results (Chapters 4-9). **Chapter 4** is the first results chapter and will start off by describing the demographic characteristics of the participants in both the qualitative and quantitative components of the study. Thereafter, it will provide an overview of the human resource context at the study sites in order to contextualise the motivation and retention of health workers in this study. In **Chapters 5 to 7**, findings of the incentive strategies of interest in this study (rural allowance, scarce skills allowance, occupational specific dispensation and hospital revitalisation programme) are divided into two sections. The first section will provide a description of the design and implementation processes of each of these interventions. The second part will discuss the perceived influence of these interventions on the motivation and retention of health workers.

In **Chapter 8**, descriptive, bivariate and multiple regression analysis of health worker job satisfaction, organisational commitment and intention to leave will be presented. **Chapter 9** is

the last results chapter and it will provide a critical analysis of the cross-cutting findings where the commonalities and differences in the incentive strategies under investigation in this study will be discussed, as well as commenting on their influence on job satisfaction, organisational commitment and health workers' intention to leave. The chapter will conclude by proposing an integrated framework combining motivation theories and policy analysis as a new approach for understanding the implementation of financial and non-financial incentives. **Chapter 10**, which is the final chapter of the thesis, will synthesise the key findings of this study in relation to existing literature and conclude by discussing the strengths and limitations of the study, the implications of this study and recommendations for future studies.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chapter 1 set the scene for this thesis by justifying the need for this study. In this chapter, I explore in detail literature to determine the relationship between incentives and motivation of health workers by discussing theoretical and empirical evidence on incentives, motivation and retention. In addition to this, I review the job satisfaction and organisational commitment literature in recognition of the belief that motivated workers are likely to be satisfied with their jobs, committed and retained to their organisations. Literature on policy analysis in relation to human resources for health (HRH) will also be investigated. Based on the literature reviewed, the study's conceptual frameworks will be derived with the intention of relating the study to relevant theory and to emphasise the contribution of this study to the existing literature.

2.2 Definition of Concepts

In this section, I briefly review the key concepts related to this study as a way of mapping the terrain. In doing this, I will unpack the varied meanings of the concepts and consider their analytical usefulness. These concepts include: incentives, motivation, retention, job satisfaction and organisational commitment.

Incentives:

Incentives are defined as "all the rewards & punishments that providers face as a consequence of the organisations in which they work, the institutions under which they operate and the specific interventions they provide" [62] (p61). Buchan and McCaffery [48] added another dimension by defining an incentive in terms of its objective. According to them, an incentive

refers to “one particular form of payment that is intended to achieve some specific change in behaviour”. Incentives serve as a motivation for a health worker to perform better and stay in their job through better job satisfaction [63]. Incentives can be positive or negative, financial or non-financial, tangible or intangible [32]. Financial incentives involve “direct monetary payment from employer to employee”, (p3) [64] such as wages, bonuses and loans. Non-financial incentives include provision of work autonomy, flexibility in working time and recognition of work [64-66].

Motivation:

Franco et al [67] defined motivation in the work context as “an individual’s degree of willingness to exert different levels of efforts towards achieving organizational goals”. Gredler, Broussard and Garrison [68] on the other hand defined motivation as “the attribute that moves us to do or not to do something” (p. 106). To be motivated means *to be moved* to do something [69]. While there are many definitions proposed for motivation, there seems to be consensus in the literature that motivation is about the process that energises, directs and sustains individual behaviour [70]. Deci and Ryan [71] constructed two concepts to assist in understanding motivation and these are intrinsic and extrinsic motivation. Intrinsic motivation refers to motivation to engage in an activity because it is enjoyable and satisfying to do that activity whereas extrinsic motivation refers to actions carried out to achieve a reward or to avoid punishment.

Job Satisfaction:

A number of definitions have been proposed in the literature for job satisfaction. For instance, Spector [72] defines job satisfaction as “simply how people feel about their jobs and the different aspects of their job. It is the extent to which people like (satisfaction) or dislike

(dissatisfaction) their jobs." Job satisfaction has also been defined as an "affective response to specific aspects of the job" [73], and as a worker's "overall feelings about the job" [74]. A commonly acceptable definition of job satisfaction referred to this concept as "a pleasurable or positive emotional state resulting from the appraisal of one's job and job experience" [75] (p.1304).

Organisational Commitment:

Organisational commitment has been defined "as an acceptance of the goal and values of the organisation, a willingness to exert considerable effort on behalf of the organisation, and a desire to maintain membership in the organisation" [76]. Jans [77] broadly referred to organisational commitment as the degree that an individual in an organisation accepts, internalises, and views his or her role. The process of becoming committed to an organisation involves internalising the values and goals of the organisation, a willingness to help the organisation achieve its goals, and the desire to remain part of the organisation [77-79].

Meyer and Allen [80] discussed three independent types of commitment experienced at different levels by all individuals of an organisation and these are affective, continuance, and normative commitments. With the affective approach, an individual may stay with an organisation because the organisation's values, mission, and goals align with their own. Continuance commitment argues that an individual may stay with the same organisation because leaving may influence their prestige, benefits, or social networks; while normative commitment is when the values of the organisation produce a feeling of obligation.

Retention:

Workforce retention has been referred to in the literature as "the length of time between commencement and termination of employment" [81]. Polit and Hungler [82] defined nurse retention as the extent to which nurses stay in their present jobs. Although retention refers to some minimum length of stay [83, 84], it is unclear as to what constitutes the minimum and this is likely to vary between professions, positions or health services [81].

Waldman [83] makes a distinction between 'retention' and 'turnover' where retention is a measure of length of stay and refers to the time between engagement to a service and separation or departure from the service. Turnover on the other hand refers to the number of terminations in a specified time period divided by the number of active workers in the same category [83, 84]. While retention points to who is leaving, who is staying and for how long, turnover indicates the movement of individuals coming into or leaving a service [81]. Workforce retention is important to study considering that it has been linked to improved health outcomes mainly because longer duration of employment is associated with increased experience, local knowledge and skills as well as continuity of service and care [81]. On the other hand, low retention implies that personnel are not staying long enough to achieve job mastery [81].

Policy and Health Policy

Several scholars have commented that there is lack of agreement about what policy means and the context within which this concept is used [85]. Therefore, several definitions of a policy have since been proposed in the literature. For example, Anderson [86] defined policy as "a proposed course of action of a person, group or government within a given environment providing obstacles and opportunities which the policy was proposed to utilise and overcome

in an effort to reach a goal or realise an objective" (p3). According to Fox and Meyer [87], policy is "authoritative statements made by legitimate public institutions about the way in which they propose to deal with policy problems" (p107). A more acceptable definition for the purpose of this study is that proposed by Walt [85] which defined policy as "a series of more or less related activities and their intended and unintended consequences for those concerned" (p.41). This definition is considered because it resonates better with the aims and objectives of the current study. Health policy on the other hand, has been defined as "an agreement of consensus on the health issues, goals and objectives to be addressed, the priorities among those objectives and the main directions for achieving them" [88].

Policy Analysis

In understanding public policies better, some scholars proposed the use of policy analysis. Pal [89] defined policy analysis as "the disciplined application of intellect to public problems" (p2). Hanekom's [90] definition is that policy analysis is "an attempt to measure the costs and benefits of various policy alternatives or to evaluate the efficacy of existing policies; in other words to produce and transform information relevant to particular policies into a form that could be used to resolve problems pertaining to those policies" (p.65).

Policy analysis is diverse and draws from a wide range of skills and methodologies from disciplines such as history, sociology, political science and legislative studies. Many writers on policy analysis recognised the complexity and messiness of policy analysis given its broad scope which may include the analysis of policy process and the analysis of policy content [91].

2.3 A Review of Theoretical Approaches on Motivation and Incentives

Motivation is a complex and multidimensional concept and several theories have been proposed in the literature to explain it [70, 92-94]. Motivation theorists mainly intended to answer questions about what drives people to initiate action, what influences their choice of action, and why do they persist on their action over time [70]. As such, key concepts used in theories in this area of work include "needs", "values", "attitudes", "goals", "effort", "rewards" and "expectations" [70]. With regards to incentive theoretical approaches, traditional economics theories made assumptions that monetary incentives improved performance. The reasoning put forward was that individuals modify behaviours based on changes in incentives [95, 96]. Public sector employees for example, were assumed to respond to standard financial incentives by working harder if their pay increased with their work effort [96].

However, an alternative view in the psychology literature argues that money may not be the main driver of public sector employees work effort [97, 98]. This viewpoint suggests that since most public sector employees are highly skilled professionals with high professional standards, financial incentives may be less relevant for their work effort if these incentives conflict with their standards [97]. Given these theoretical arguments, this section will explore some of the incentive and motivation theories that may be useful to understand the influence of financial and non-financial incentives in the motivation and retention of health workers. The scale of this thesis does not permit a comprehensive presentation of the abundance of often overlapping theories explaining incentives and motivation. Therefore, only a synthesis of theoretical approaches in these fields which may be relevant in the health sector will be discussed. These are: *two incentive theories (intrinsic vs extrinsic motivation, and motivation crowding theory), five theories of motivation (Maslow's theory, Hertzberg two-factor theory,*

expectancy theory, equity theory and *goal-setting theory).* In the following sections, I will explain the key constructs of these theories, and highlight some of their key strengths and weaknesses.

2.3.1 Incentive Theories

Intrinsic and extrinsic motivations: Deci and Ryan [71], in their Self-Determination Theory made a distinction between the different types of motivation based on the different reasons or goals that give rise to an action and these are referred to as *intrinsic* and *extrinsic motivations.* These authors argues that in order to be effective and to satisfy the full range of their needs, human beings will act on their internal and external environments [71]. Intrinsic motivation is explained as doing something because it is inherently interesting or enjoyable [71, 99]. An individual's choices are made on the basis of his or her own values and desires. However, aspects of the situation in which the behaviour is performed, such as the reward system or the feedback system, may lead the individual to question the true causes of his or her behaviour [100]. If for instance individuals attribute their behaviour to the situational factors, the shift from internal to external causes results in a decrease in intrinsic motivation [71]. Assumptions are made that high levels of pre-reward behaviour imply high intrinsic motivation [101].

In contrast, extrinsic motivation refers to a situation where the reason for doing a task is based on behavioural choices that are determined by control, pressures or rewards [71, 99]. Rewards such as money and job promotion are good example of extrinsic motivation. Similarly, social and emotional incentives such as praise, feedback and attention are also extrinsic motivators since they are bestowed on an individual by another person. However, it is noted that the effectiveness of extrinsic motivators varies depending on a number of other factors such as

self-esteem, locus of control and self-efficacy. For example, for people with high self-esteem, praise might have less effect on behaviour because they would not have the same need for approval that would make the external praise reinforcing. On the other hand, someone who lacks confidence may work diligently for the sole purpose of seeking a small amount of recognition.

Motivation Crowding Theory: In the late sixties, the reinforcing effect of rewards on behaviour was firmly established in the learning theory literature [101]. This was until Deci [99] and Lepper, Greene, and Nisbett [102] investigated a possible exception to this effect, which is whether rewards could have a detrimental effect if they were offered for an activity that the individual enjoyed. Their hypothesis was that rewards might undermine intrinsic motivation [99, 102]. Subsequently, a plethora of studies examined the prevalence of the undermining effect of rewards, a process referred to as "motivation crowding out". This concept was coined in the economic literature to suggest that external interventions via monetary rewards or punishments may undermine, and under different identifiable conditions strengthen intrinsic motivation [103].

For example, physical reinforcement such as money has been shown to have more negative effects on the intrinsic motivation than do verbal reinforcements such as praise. This can lead to extinguishing the intrinsic motivation and creating dependence on extrinsic rewards for continued performance [104]. However, alternative viewpoints suggested that intrinsic motivation may not be so vulnerable to the effects of extrinsic reinforcements and in fact reinforcement such as verbal praise might actually increase intrinsic motivation [105].

Cameron and Pierce [105] have however observed that of particular relevance to the question of crowding out in the health context, the rewards have no undermining or even a positive effect on “dull”, “boring”, “uninteresting” tasks, that is tasks for which initial intrinsic is low. In their counter argument of this, Deci and colleagues [104] maintained that the research field of external rewards on intrinsic motivation has always been defined in terms of reward effect on intrinsic motivation for interesting activities.

The concepts of intrinsic and extrinsic motivations have thus raised controversies, with some questioning that if extrinsic incentives are used to stimulate behaviours that an individual already finds motivating, intrinsic motivation for that behaviour may decrease over time [106]. In such cases, extrinsic motivators may backfire instead of serving as an incentive for the desired behaviour.

2.3.2 Motivation Theories

In their review of theories and empirical evidence of motivation of health workers in developing countries, Dolea and Adams [70] stated that there are two main lines of theories on motivation that focus on individual factors affecting motivation and these are a) the needs theories, and b) the process theories. The *needs theories* argue that people make an effort at work in order to satisfy some needs [70] and that different factors contribute to either encouraging or halting a behaviour within an individual [107]. The most influential needs theories are Maslow’s theory of needs and Hertzberg two-factor theory [70, 107] which are discussed below.

The Needs Theories of Motivation

Maslow's theory proposes a hierarchy of five levels of needs starting from a basic level which is essential for survival through to higher levels related to individual growth and self-fulfilment [70, 108]. These needs are basic physiological needs, safety / security, belongingness, self-esteem, and self-actualisation [108]. According to this theory, once a level of needs have been met, it is no longer motivating as such, individuals strive to meet the next level [70, 108]. Although this theory is essentially about individual's motivation in life, a number of scholars attempted to apply these hierarchy of needs in the work setting [70].

For example, in relation to work, once salaries are considered to be sufficient to assure minimum survival requirements such as food, clothes and housing, employees will move on to secure these needs through a stable job. Once job stability has been achieved, they will move up the needs' pyramid to satisfy the need to be part of a social group, and once this is achieved they will seek self-esteem and recognition from their peers, supervisors and patients [70]. This will ultimately lead to improved self-confidence, self-fulfilment and personal growth through work.

While Maslow's theory is still widely used in the fields of management, marketing, education and the health sector, subsequent research on this theory failed to support his hierarchy of needs [109-111]. For instance, there was evidence that items which were clearly satisfied remained to be considered as important, and the theory ignored the often-observed behaviour of individuals who tolerate low-pay for the promise of future benefits [109, 110]. In addition, there was no agreements amongst scholars about the number or sets of needs required and the hierarchal arrangements of such needs [94]. Another criticism noted is that the theory fails to

take into account the individual's cultural and social differences [112]. In spite of these weaknesses, the hierarchy of needs are still popular in workplace motivation mainly due to the simplicity of their core elements and their perceptive insights into human nature [113].

Hertzberg's two factor-theory [70, 114-116] takes the concept of personnel motivation beyond Maslow's traditional hierarchy on needs by identifying two sets of factors that can influence work motivation and job satisfaction. In doing so, Hertzberg and colleagues used the "critical incident technique" to ask participants to describe a time at their work when they felt exceptionally good or bad about their job [116, 117]. After describing the incident in detail, the participants were then asked to rate the impact of the incident on their job attitude [116, 117]. This theory argues that job satisfaction and dissatisfaction are affected by two factors namely 'motivators' and 'hygiene factors' [114, 115].

'Motivators', also referred to as 'satisfiers', are a group of 'job content' needs which if satisfied, will encourage employees to work harder and this will lead to higher motivation and superior performance [114, 115]. Examples of these needs include achievement, work itself, recognition, responsibility, and advancement [114, 115]. These 'motivators' also contributes to "intrinsic" motivation [70]. Hertzberg also referred to 'hygiene factors' which are a group of 'job context' needs which if not met, cause individuals to become dissatisfied [70, 114, 115]. These needs are organisation policy and administration, supervision, interpersonal relationships, working conditions, salary, and job security [114, 115]. The hygiene factors are considered to be "extrinsic" to the job and their absence is associated with decreased motivation [70].

Although this theory was considered highly controversial as it challenged conventional job satisfaction debates in the 1950s [117], Hertzberg claimed that this theory provided the foundation for numerous other theories and frameworks in human resource development [118]. Some of the strengths of Hertzberg two-factor theory identified in the literature are that it is simple, it leads to clear-cut advocacy of job enrichment as a way to motivate staff, it reinforces managerial values, and it emphasises individuality, growth and centrality of work [70]. However, like any other theory, Hertzberg theory also has limitations. The primary criticism of this theory is that it is method-bound [70]. For instance, available studies that have applied this theory have invariably used the same method of critical incident technique and when a different method was used, the results were contradictory [70]. The theory was also criticised for ignoring the role of individual differences amongst employees [70, 119]. Other critiques noted that the two-factors overlap as sources of satisfaction and dissatisfaction, arguing that a single factor may be a satisfier for one person, but cause job dissatisfaction for another person [117].

Process Theories of Motivation

In their review of theories and empirical evidence of motivation of health workers in developing countries, Dolea and Adams [70] stated that the *process theories* of focuses deeply on the thinking process of individuals in order to understand why employees behave in certain ways and how they determine their choice of behaviours [107]. The most common process theories documented in the literature are expectancy theory, equity theory and goal setting theory [70, 107]. These are discussed in detail below.

Goal-setting theory's primary proposition is that an individual's performance will increase if difficult goals that are fair, specific and attractive are clearly set and defined [92, 94, 120].

These goals may be self-set or accepted from those set by others [94]. The theory further argues that difficult goals are more likely to result in higher performance than easy goals [92, 94, 120]. Satisfaction or dissatisfaction with performance will depend on whether the individuals reached difficult but fair goals [70]. Money, other concrete rewards or participation of individuals in setting the work goals may increase their commitment to achieve the set goals particularly if the goals are made more attractive [70, 94, 120]. Once individuals commit themselves to goals, more effort is exerted to achieve these goals [70, 120]. In addition, the theory asserts that intention to work towards a goal is a major source of job motivation.

In order to continue performing at high levels, employees will require feedback from employers on how they are progressing towards attaining their goals [92, 94, 120]. However, other researchers have demonstrated that not all feedback is effective arguing that self-generated feedback, where the employee is able to monitor his or her own progress, was shown to be more powerful motivator than externally generated feedback [92]. Addition to feedback, another factor found to influence the goal-performance relationship is *self-efficacy* which refers to an individuals' belief of their capabilities of performing a task [92, 120]. The key argument that this theory is making in relation to the latter is that higher self-efficacy may lead to increased confidence in one's ability to succeed in a task while low self-efficacy does the opposite [92, 120]. Similarly, individuals with high self-efficacy appeared to respond better to negative feedback by increasing effort in their work as opposed to those with low self-efficacy who are likely to lessen their effort when given negative feedback [92, 120].

A notable caveat of the goal-setting theory is that in circumstances where two separate goals are set at the same time, exerting too much effort on one may make it challenging to achieve

another [121]. However, prioritisation or finding a balance between goals may assist in dealing with this limitation. Another limitation of this theory is in relation to what is termed "tunnel vision", which in this context refers to when employees focus so intently on their goals to the extent that they would ignore other aspects of their job [122]. On the advantageous side, the strength of setting goals increased individual's awareness of their strengths and weaknesses. Other scholars have however indicated that it would be crucial to understand the way individuals and organisations choose goals and the factors that determine commitment to the goals [120, 123]. The other advantage is that goal-setting theory can be applied not only in work tasks, but also in a number of other settings such as in sports and rehabilitation [122].

Vroom's Expectancy Theory [70, 124] emphasises the existence of a relationship between the effort people put in work and the results they expect to get from that effort. According to this theory, people are motivated by the expectation that their work will be instrumental in receiving a certain valued outcome, regardless of whether their perceptions of the outcome is accurate or not [70]. This theory proposes three interrelated constructs for understanding motivation and these are referred to as "expectancy or effort-performance" linkage, "instrumentality or performance" linkage, and "valence or attractiveness of rewards" linkage [70, 92, 124]. The *expectancy* or *effort-performance linkage* is an individual's perceived belief that exerting a certain amount of effort will result in certain level of performance [70, 92]. The *instrumentality* or *performance linkage* is the extent to which an individual believes that a certain level of performance will lead to achievement of desired outcomes [70, 92]. The *valence* or *attractiveness of rewards linkage* on the other hand refers to a situation when an

individual places significant importance on the potential outcome or rewards that can be achieved on the job; while taking into cognisance individual goals and needs [70, 92].

This theory is based on the assumption that in choosing alternative courses of action, people calculate the costs and benefits of such actions [125, 126] and that individuals perceive outcomes or rewards positively, negatively or neutrally [124]. Positive outcomes or rewards may include aspects such as pay, job security, trust, fringe benefits, and opportunities created for an individual to use their talents or skills [92]. Negative outcomes on the other hand include issues such as job fatigue, boredom, frustration, harsh supervision, or threat of dismissal [92]. Therefore, the critical issue with this theory is that no universal principle exist for explaining each person's motivation [124]. As such, it is a self-interest driven theory because each individual maximises on his or her expected satisfaction of needs.

Critiques of this theory have noted that the constructs of expectancy and valence requires theoretical clarification [127, 128] while the concept of instrumentality was found to be ambiguous and difficult to operationalise [127, 128]. In spite of its limits, this theory has generated substantial interest among scholars over years, with some noting its usefulness and influence in organisational research for understanding occupational preference, job satisfaction and work motivation [127, 129]. In addition, some evidence supported its inference that expectancies cause reaction in behaviour [129].

Adams' Equity Theory [70, 92, 130] predominantly focuses on the issues of justice, fairness and equal treatment of employees compared with others who behave in similar ways. The theory refers to the concept of a *referent,* which is explained as 'the other', 'systems' or

'selves' against which individuals compare themselves to assess equity [92, 130]. In relation to the 'other', individuals compare themselves with other individuals with similar jobs in the same organisation and or professional association. The 'system' includes organisational pay policies, procedures and the administration of the system while the 'self' relates to inputs-outcomes ratios that are unique to the individual and are primarily based on past personal experiences [92, 130]. An individual's choice of *referent* is mainly dependent on the information available to them about the referent including their perceived relevance.

This theory argues that people are motivated when they believe that they are treated fairly or equitably relative to others [70, 130, 131]. The theory also proposes that employees expect a balance between what they get from a job situation (outcomes) in relation to what they put into it (inputs) [70, 92, 131]. Thereafter, they compare their input-outcome ratio to that of relevant others and if an employee perceive his or her ratio to be equal to those of relevant others, a state of equity exist whereby these individuals perceive their situation as fair and just [130, 131]. However, if the ratio is perceived to be unequal, inequity prevails and such individuals perceive themselves as under-rewarded or over-rewarded [130, 131].

When inequities occur, employees may display certain behavioural responses [92]. They may distort either their own or others' inputs or outcomes; they may behave in some way to induce others to change their input or outcomes; they may behave in some way to change their own inputs or outcomes; they may choose a different comparison person; or they may quit their job [92]. Adams [131] also proposes that in circumstances where it is pay that is specifically perceived as inequitable, employees who are under-rewarded or over-rewarded will react in certain ways depending on whether their wages are based on time factors or quantity of

output. Consequent to this, these employees might display lower or higher productivity, improved or reduced quality of output, increased absenteeism, or voluntary resignation [70].

In terms of its strengths, equity theory's behaviour predictions on the effects of under-compensation were confirmed by empirical studies as robust [100, 132]. However, a notable limitation of this theory is that evidence on over-compensation inequity and its effects has been ambiguous than that on under-compensation [133, 134]. Other critiques also noted that the theory fell short in relation to which behavioural option (i.e. lowering inputs, raising outcomes, leaving the situation) is most likely to be observed and in which context [134].

2.3.3 Summary

With regards to motivation theories, this review have demonstrated that theories presented here used a set of concepts and constructs in order to link reasons why people work with the outcomes of their effort to work [70]. In essence, these theories suggest that provided the organisational policies and conditions meet individual's expectations, the desire to put effort at work will be triggered [70]. While most theories on motivation recognises that needs vary from one individual to another, very few theories attempted to address other factors that influence human behaviour at work such as organisational culture, social, cultural, economic and contextual factors [70]. Managers in the health sector are thus faced with the challenge of identifying all these factors in order to specify the desired outcome expected from their employees as well as to propose and implement strategies that link the various motivational sources with the expected outcomes [70].

Dolea and Adams [70] further noted that while theories on motivation and tools for assessing or measuring it have been developed in high-income countries; their applicability in low- and middle-income countries is still limited. In addition, not all of these theories have been supported by empirical evidence, particularly in the health sector. Nonetheless, they are still appealing for managers because of the possibilities that they offer for designing effective workplace strategies. The following section will present empirical evidence on incentives, motivation and retention in the health sector.

2.4 Empirical Evidence on Incentives, Motivation and Retention of Health Workers

2.4.1 Incentives, Motivation and Retention

Initial responses to the shortage of skilled health workers in developing countries focussed on increasing training capacity, but it has become increasingly clear that the issues of incentives, motivation and retention of existing health workers are as important [135]. There is, therefore, some evidence on the incentives that can be used to motivate and retain health workers which shows that both financial and other incentives are important in motivating and retaining health workers [136]. For example, several studies have identified important motivational factors as: better salary [137-140]; a stable job; recognition or appreciation by managers, colleagues and community [138, 141, 142]; training [138, 142]; supportive supervision, performance appraisal and career development [38]. Other major motivational themes identified in the literature include continuing education, hospital infrastructure, resource availability, hospital management and recognition/appreciation [30]. De-motivating factors such as low salaries

[142, 143]; difficult working conditions [142]; lack of essential equipment and delayed promotions [143] are also mentioned in the literature.

In South Africa, the improved working environment, better fringe benefits, a more reasonable workload, improved facilities and resources, better quality education and training in the professional field as well as more accessible education and training facilities have been mentioned as motivational factors [139]. In the study by Penn-Kekana et al [144], inadequate pay, poor promotion, feeling unsupported by management and having bad relationships at work were all associated with lack of organisational commitment. Motivational factors for doctors working in rural public hospitals in South Africa were cited as improved rural hospital accommodation; physical hospital infrastructure and rural referral systems, opportunities for career progression, availability of essential medical equipment and medicines; strengthened rural hospital management and availability of recreational facilities [140]. A study by Gilson et al [145] looking at how trust in the workplace affected health worker motivation and performance in South Africa found that salary was not the main influence affecting motivation of nurses. In this study, lack of trust was identified as de-motivating and was linked to uncaring behaviour towards patients. Nurses who were motivated derived intrinsic motivation from the nature of their work and were often supported by positive relationships with their managers.

A range of methodologies and tools have been used in different low- and middle- income countries (LMICs) to investigate the determinants of health worker motivation. For instance, in Dieleman et al [142], semi-structured interviews and group discussions were used to identify the most important motivating and de-motivating factors for rural health workers in Vietnam. A cross-sectional study using structured interviews was also conducted to identify factors associated with low motivation in Tanzania [146]. In Pakistan, Malik et al [147] used

semi-structured self-administered questionnaires to conclude that serving people, respect and career growth were important motivators for physicians while the de-motivators were largely organisational. A survey of public and private health workers in India concluded that the working environment and skill development opportunities were important motivational determinants in that context [148].

The body of qualitative studies looking at the motivation of health workers in LMICs also highlighted the limitations of financial incentives on motivation and also revealed the importance of non-financial incentives [142, 149-151]. For instance, Vujicic et al [152] analysed the role of wages in health worker migration and concluded that non-financial initiatives may be more effective in reducing migration flows. Studies which used quantitative data for comparisons suggested that certain motivational determinants may vary between health worker cadres. For instance, in Malawi, poor working relationships were more of a problem for clinical officers than enrolled nurses [153] while an increase in salary was significantly more motivating for nurses and midwives than for doctors in Mali [138].

As noted, there was some consistency in the broader motivational factors for health professionals, but there were variations noted in these studies with regard to the categories of health workers that participated, conceptual definitions, study design and methodology as well as country context [30]. The implications of these variations are that it is vital to explore the local context, cadres and the specifics of any intervention.

2.4.2 Job Satisfaction, Organisational Commitment and Intention to Quit

Job satisfaction research has been carried out for decades by several disciplines as many experts believe that job satisfaction trends can affect labour market behaviour and influence

work productivity, work effort, employee absenteeism and staff turnover [154, 155] . Job satisfaction is also considered a good predictor of intentions or decisions of employees to leave the job [156]. Available literature has also shown some linkages between job satisfaction, motivation and retention; suggesting that enhanced motivation leads to improved performance, while increased job satisfaction leads to reduced turnover (greater retention) [63]. A number of scholars further agree that there is evidence of a causal link between satisfaction and organisational commitment [157, 158]. Several researchers have however, concluded that satisfaction leads to commitment [73, 159, 160]. Curry and associates [161] have thus suggested that studies in this field should attempt to investigate both variables (satisfaction and commitment) to avoid erroneous inferences from the findings.

In their study, Hasselhorn et al [162] found a relationship between job satisfaction and the intention to leave amongst nurses; the lower the job satisfaction, the more likely nurses were to leave. Zurn et al [63] also pointed out that facilities that are able to attract and retain staff tend to be those that offer the health workers high levels of satisfaction. It is therefore worthwhile monitoring changes in workforce satisfaction with a view to identifying adverse trends and their possible causes [163]. In the health sector setting, conditions of employment are likely to become varied and so too is job satisfaction.

The scales that are used to measure job satisfaction also vary considerably. A systematic review of numerous instruments used to measure job satisfaction in hospitals concluded that only a few of these instruments have shown high reliability and validity [164]. In assessing internal consistency, construct validity, and responsiveness of these instruments, these researchers concluded that from the 29 instruments analysed, only seven of them were reliable and valid enough to assess job satisfaction in hospital environments. These included: the Job

in General Scale, the Andrew and Withney Job Satisfaction Questionnaire, the Job Satisfaction Survey, the McClosky-/Mueller Satisfaction Scale, the Measure of Job Satisfaction and the Nurse Satisfaction Scale.

2.4.3 The Impact of HRH Interventions on the Motivation and Retention of Health Workers

In general, the most commonly implemented retention strategies comprised financial incentives [29] despite data showing that financial interventions might not be the only or most important factor in the decision of a health worker to stay of leave an organisation [165]. However when confronted with shortages of health workers in rural and remote areas policy makers are inclined to adopt financial incentives as solution to the problem [31]. Yet only a few studies have evaluated the impact of financial incentives and support programmes. These studies demonstrate that the use of financial incentives brought mixed reactions among health workers. For instance, evidence in a recent review suggested that financial incentives had a beneficial but limited effect on recruitment and short-term retention (mainly for the duration of any obligation attached to the payment), but did not necessarily improve longer term retention in the same area [166, 167].

In Cameroon, incentives and allowances were perceived as unequally distributed between health workers [168]. Call or on-duty allowances to compensate hyperinflation in Zimbabwe have also resulted in conflict between health workers due to urban-rural discrepancies [168]. In examining the influence of rural allowances on the retention of health workers in South Africa, Reid [169] found that the allowance only had limited influence on encouraging workers to remain in rural areas and that equally important motivators were career development, job satisfaction and educational opportunities.

Existing evidence on interventions has also focused on educational programmes, with a few on regulatory interventions such as compulsory service or bonding schemes. Strategies incorporating some form of health worker obligation such as visa conditions, restricting area of practice or loan repayment were also reported in earlier studies as having potential of retaining individuals [170, 171]. However, some of these strategies did not seem to have an impact. For example, the Ghana Health Service implemented bonding schemes which required the health professionals to pay back the costs of education including interest should they decide to depart prematurely [172]. The report by the International Organisation on Migration [172] found that due to relatively low tuition amounts, the system failed to retain physicians and pharmacists as the money owed could be earned back quickly when abroad. As a results, there was higher repayment rates in 2007 instead of increased retention of these health workers [172].

The Moroccan government on the other hand, required its graduates to work for seven years in unfavourable areas when paid by the state. However, this intervention had unintended consequences as it drove many of the health professionals to refrain from working for the state [172]. Several studies have thus suggested that causes of retention are likely to be rooted in both personal and work-related factors, implying that strategies must address these multiple causes simultaneously.

There is some evidence that non-financial incentives related to working and housing conditions have greater potential to influence retention [173-175]. In Norway, professional development interventions and primary care internship were found to be effective in retention. Of the 267 medical graduates in the internship programme, almost twice as many medical interns accepted their first fully licenced job in the Finnmark region [175]. A study exploring

the perspectives of health workers and managers on factors influencing working conditions for providing maternal health care services in Tanzania found that difficult working and living environment affected health workers' ability to provide these services [176]. These authors reported problems of bureaucratic and irresponsible administrative system, lack of transparency and fairness in dealing with health workers' financial claims, lack of clear strategic plan for staff career advancement as well as lack of provision for health workers to voice their concerns [176].

In another study, Steinmetz and colleagues investigated the influence of working-time on an employee intention to stay [177]. This study revealed that working-time hours, overtime and a long commuting time decreased the intention to stay with the same employer [177]; thus proposing that when designing wage increase policies, attention to the issues of working-time should be considered as suitable strategies in managing health workforce retention. A recent contingent valuation study in Tanzania analysed how financial (salary top-ups) and non-financial incentives (housing and education) affected nurses willingness to work in remote areas [178]. This study also investigated how the magnitude of the incentives needed to attract health workers varied with the nurses geographic origin and their intrinsic motivation [178]. The findings reported that without any interventions, 19% of the nurses were willing to work in remote areas. With the provision of free housing, this increased by 15% point [178]. Better education on the other hand, increased the share by 28% points. However, for salary top-up to have the same effect, the top-up had to be between 80% and 100% of the base salary [178].

Several methodologies, tools and study designs were adopted to evaluate the effect of retention strategies. Examples of these included a *longitudinal cohort studies* which reported on the effects of multifaceted education programmes [179, 180]. A number of *retrospective*

cohort studies on the effects of a medical education programme [181], a loan repayment scheme [182], and a compulsory service programme [183]. *Before and after studies* have also been carried out to evaluate clinical rural placements [184], compulsory service [185], financial incentives as well as personal and professional support programmes. Several studies used *cross sectional surveys* although they did not report any baseline against which to compare the observed changes and only one study used a *control group* to compare the results of financial incentives programme between rural physicians enrolled in the scheme and those who were not [170].

2.4.4 Limitations of Incentive, Motivation and Retention Studies Reviewed

The majority of existing studies on motivation and retention in LMIC focused on the factors or determinants of health worker motivation and de-motivation [50, 140, 142, 143, 151] rather than the actual implementation of interventions to improve motivation and retention. Another shortcoming of the existing literature is that the motivational determinants of the different cadres of health workers in LMICs have received insufficient attention. Most of the available studies combined analyses of doctors, nurses and or other categories in one study [50, 138, 143, 148, 186-188] while others focused on only one health worker category [144, 147, 153, 189, 190]. A significant limitation in the motivation and retention literature is that only a few studies have examined the influence or effectiveness of the HR interventions on the motivation and retention health workers in LMICs [31] as well as in rural and remote areas [29, 31].

In some instances, published documents on retention interventions lacked essential details such as timeframes for the application of the incentives, the design of the incentives and even

the categories of workers who benefit from the incentives [34]. Another significant gap in the literature is that almost all the interventions that have been evaluated have been targeted at physicians [29, 31], with only few looking at pharmacists, pharmacy and nursing students, and dental surgeons [31]. It is also observed that studies on motivational factors and those investigating the impact of interventions on the motivation and retention of health workers are mainly hospital focused; very few studies have been conducted in primary health care settings.

Although available studies have shown the link between motivation and job satisfaction, Zurn et al. [65] recognises that most of the research on increasing motivation and job satisfaction of health workers has been undertaken in developed countries, where the resources for such activities are available. With regard to organisational commitment, most recent studies in this area have concentrated on the outcome without an understanding of the causes. For instance, research by Meyer and Allen [80] has shown that organisational commitment is a multi-dimensional construct, and ignoring the many possible reasons why individuals become committed to an organisation leads to an incomplete and unclear picture. Using this new conceptualisation of commitment opens the door to new insights and possibilities for research on commitment among nurses and doctors. Again, although there have been a number of studies on job satisfaction among nurses and doctors, few of these studies attempted to connect job satisfaction to organisational commitment. Furthermore, the few studies that have addressed organisational commitment among health workers have also not examined job satisfaction. In particular, few studies in LMIC have examined the influence of incentives (financial and non-financial) on organisational commitment.

2.5 Conceptual Framework for Motivation, Incentives and Retention

This framework, developed from existing literature, draws from the Hertzberg's Theory of Motivation [70, 116] which emphasises the importance of extrinsic and intrinsic factors of motivation (Figure 2). Hertzberg's theory was chosen because it is supported by studies of motivation and its effects in nursing [65]. Furthermore, studies in the health sector that have used Hertzberg theory as an underlying framework seem to be in support of this theory [142, 188]. Because of having both the "job content" and "job context" elements, the Hertzberg theory of motivation is quite relevant for the current study because it considers both financial and non-financial incentives.

In this study, financial incentives are represented by the rural allowance, scarce skills allowance and the occupation specific dispensation (Figure 2). The hospital revitalisation programme is the only non-financial incentive being investigated in this study. This conceptual framework proposes that financial incentives influence extrinsic motivation or hygiene factors of Hertzberg theory while non-financial incentives influences intrinsic motivation or motivators. This framework further depicts that individual (such as age, marital status, length of service) and contextual factors are also important determinants of the motivation, intention to quit and organisational commitment of health workers. It is also noted in this framework that job satisfaction influences the motivation to perform [117], although the actual links and causality chains are reported as complex [70]. However, job dissatisfaction may lead to intention to leave. The framework also suggests that motivation is clearly linked to intention to quit the workplace [70]. Organisational commitment on the other hand, may lead to retention of health workers (Figure 2**)**

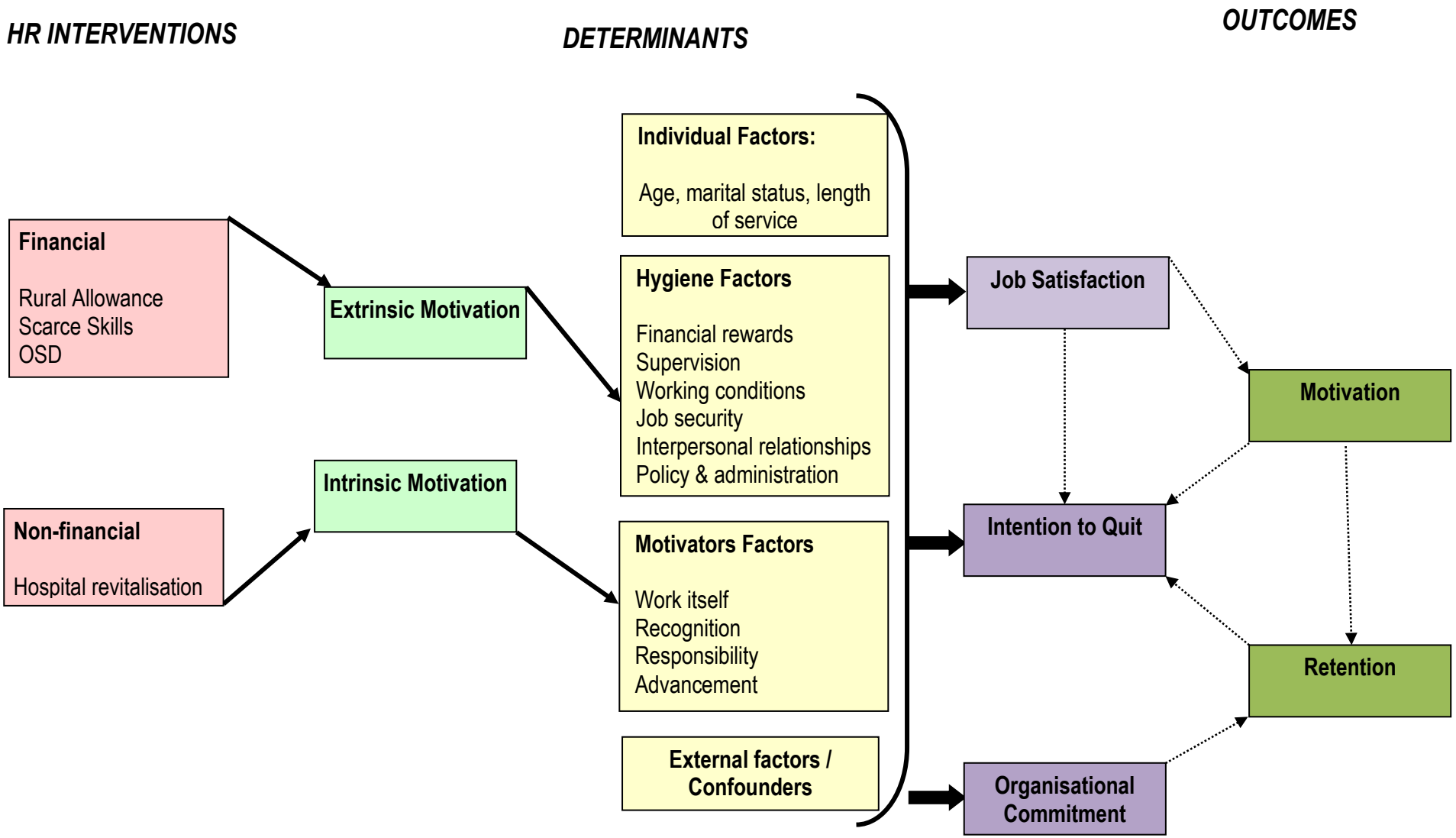

Figure 2: Adapted Hertzberg Two-Factor Theory of Motivation [114, 116]

2.6 Studies on Health Policy Design and Implementation

2.6.1 A Review of Theoretical Approaches on Implementation

A number of theories and frameworks have been developed for the analysis of policies in the health sector [42-45] and used in an attempt to understand the complexities of health policy process [45, 191]. Numerous *implementation theories* have also been proposed in the policy and decision making literature and these have been dominated by a discourse as to whether decision making is *top-down or bottom-up* or a synthesis of the two [192] as well as complexities and challenges facing implementation [193, 194]. Almost three-decades ago, Grindle and Thomas [195] argued that the characteristics of policy that affect its acceptability include its implications for vested interests, the level of public participation it involves, the resources required for implementation, and the length of time needed for its influence. Lipsky [196], on the other hand, described implementation of policy as highly influenced by *street-level bureaucrats* who are front-line staff who can change policies significantly [196]. Related implementation literature in high income countries focused on the gap between policy objectives and the actual implementation [197].

Another widely used framework in health policy research is the *Walt and Gilson framework* [46,47] which has been applied to analyse a number of health issues including mental health, health sector reform, tuberculosis, reproductive health and antenatal syphilis control [47]. This framework is grounded in a political economy perspective, and focused on four related factors (actors, policy content, contextual factors and process) critical to understanding public and health policymaking [198].

The four related factors are represented in Figure 3 and explained in more detail below:

a) Factors of *context* include:
    - Situational factors (the specific conditions of a moment in history that influence on the policy change intended);
    - Structural factors (the relatively unchanged circumstances of the society and the polity such as the structure of the economy and the political system);
    - Cultural factors (the values and commitments of society and groups);
    - Exogenous factors (the events and values outside of any one country or system).

b) Factors of *content* relate to:
    - The specific nature and design of reforms;
    - The interaction between specific policies of interest and between these policies and parallel institutional changes as well as implementation guidelines

c) Factors concerning *actors* are about:
    - Who the actors are as well as their power, interests, values and roles in relation to developing and implementing the reforms of interest.

d) Factors of *process* are concerned with:
    - The way in which policies are identified, formulated and implemented, their timing, the strategies used with each stage of the policy process, for example, building legitimacy, consensus or capacity, as well as the specific mechanisms or bodies established to take forward any of the steps.

Through their model, Hogwood and Gunn [199, 200] makes a distinction between 'non-implementation' and 'unsuccessful implementation' to help identify areas which may constrain policy success. With 'non-implementation', policies are not put into effect as intended because those involved in the implementation are inefficient or because it was not

possible to overcome obstacles despite their best efforts. ‘Unsuccessful implementation’ refers to a situation where the policy is fully implemented but fails to produce the intended outcomes [199, 200].

Hogwood and Gunn [199] proposes 10 preconditions for ‘perfect implementation’ that would need to be satisfied if policy failures were to be addressed (Table 2). However, these authors emphasised that the use of the word ‘perfect’ should not be misinterpreted to mean ‘ideal’; but rather, it is used in this context as an analytical concept. Although the model is idealistic in that it suggests the notion of ‘perfect’ implementation, it is useful to consider the preconditions and key features necessary for the successful policy implementation of complex financial and non-financial incentives.

With regards to the first precondition, the model proposes that there must not be overwhelming *external constraints* [200]. Some obstacles to implementation are outside the control of the administrators and could be political in that the policy may be unacceptable to key interest groups (e.g. trade unions) who have the power to veto them [199, 200]. The second precondition on *adequate time and resources* suggests that policy may be appropriate but may fail because implementation took longer or was more expensive than anticipated [199, 200]. In the third precondition on *combination of resources,* these authors note that implementing agencies often do not have the means to ensure that guidelines and standard are enforced [199, 200]. The other remaining preconditions are self-explanatory.

Table 2: Hogwood and Gunn 10 Preconditions for Implementation

Stage	Description of the practice
Precondition 1: External constraints	▪ Circumstances external to the implementing agency should not impose crippling constraints
Precondition 2: Time and resources	▪ Adequate time and sufficient resources should be made available for the programme
Precondition 3: Resource combination	▪ Ensure that the required combination of resources are available
Precondition 4: Theory based policy	▪ The policy to be implemented should be based upon a valid theory of cause and effect
Precondition 5: Cause / effect relations	▪ The relationship between cause and effect should be direct
Precondition 6: Dependency relationships	▪ The dependency relationships should be kept to a minimum in both number and importance
Precondition 7: Agreements of objectives	▪ There should be understanding and agreement of objectives to be achieved
Precondition 8: Events sequencing	▪ The tasks to be achieved need to be fully specified in a correct sequence
Precondition 9: Communication / coordination	▪ There needs to be perfect communication and coordination
Precondition 10: Total compliance	▪ There must be perfect compliance for those involved with implementing the policy

2.6.2 Empirical Studies on Implementation related to Human Resources for Health Interventions

Health policy analysis is an important area of work because it can identify the unintended consequences of policy decisions as well as the obstacles that undermine policy implementation and thus jeopardise national and global goals for improved health [201]. Early investigations on health policy work noted that the assessment of health policy had mainly focused on technical content and design, disregarding the actors and processes involved in developing and implementing policies as well as paying little attention on the context within which related decisions are made [198].

Rigoli and Dussault [41] have cautioned that the failure of many incentive schemes to achieve their expected results is due to poor design [41]. The problems of inappropriate or poorly designed policies are exacerbated by policy implementation challenges, which in turn may

determine the influence of incentive policies [199, 202]. In most countries for instance, policy makers have limited guidance on how to implement financial incentive strategies so that they can achieve their intended policy objectives. For example, inequities, or perceived inequities in the manner in which incentive strategies are designed and implemented have been documented as a source of demotivation [32]. Increasing attention has thus been paid to understanding the problems of policy implementation in order to identify the key factors contributing to policy failure [43].

In South Africa, several authors have analysed the disjuncture between policies or plans on the one hand, and implementation on the other hand. These have included studies on mental health [203-205], HIV and AIDS [206-209], hospital rationalisation and restructuring [206, 208], municipal health services [210], social inclusion [211], and user fees [212]. A few studies have looked at policies on remuneration or incentives [213-215]. Several problems have been identified. Stack and Hlela [206] and Khosa [208] found that the challenges included hurried policy implementation; limited consultation with the implementing actors; lack of prioritisation, insufficient time and a lack of co-ordination between different government departments [206, 208]. Rispel et al [211] found that inadequate administrative and implementation capacity; insufficient resources; corruption; and lack of involvement of civil servants beset the implementation of various social policies while challenges of varying technical capacity at different government levels influenced the implementation of mental health policy [205].

Although these studies provide important insights into the factors that plague policy implementation, there is a dearth of studies that analyse the implementation of policies on remuneration or financial incentives [213-215]. In light of the global human resource crisis,

analysis of policy implementation of financial incentives is important to guide policy makers, as these are the most commonly used staff retention strategies.

A review of literature analysing health policy processes revealed that there was paucity of research on health policy analysis in low- and middle-income countries [47]. Some of the gaps and weaknesses in the field of health policy analysis that were identified by this review include limited details on research design and methodology and the predominance of single case studies on particular issues. Of the studies that at least provided some methodological details, a combination of in-depth interviews, semi-structured interviews, focus group discussions, document review, media analysis and participant observation were largely used. Only a few studies used quantitative data. A significant gap in the policy analysis literature was that very few studies collected data as part of an evaluation of an intervention.

The absence of explicit conceptual frameworks was also noted as one of the limitations of health policy analysis research [47]. Among those studies that referred to a theory, the theories of Kingdon on agenda setting [216] and Lipsky on street-level bureaucracy [196] were the most commonly used while a vast majority of implementation theories available to policy analysts in LMICs is largely neglected. According to the authors of this review, existing health policy analysis studies often focussed on 'what happened' and failed to answer the question on 'what explains what happened' [47].

Some of the methodological challenges identified by Walt et al. [45] in conducting health policy analysis were that 'policy' can itself be defined in variety of ways and that "the processes of policy making are not necessarily overt or clearly bounded" (p310). Furthermore, on the practical side, there are often numerous hurdles to accessing the many different and

geographically widespread actors, individuals, groups and networks that were involved in the policy process. Additionally, decision making processes are often ambiguous and obtaining relevant documents and papers can be difficult or, on the contrary, where documents are available an excess of information with large volumes of email exchanges can be laborious and problematic to analyse. Participant observation can also be difficult in practice.

Other methodological concerns were related to retrospective versus prospective analysis of the policy process. It was noted that policy evaluation requires a longer timeframe than political pressures often allow. While there is no simple way of knowing when the best time to initiate health policy analysis work is; some scholars proposed that a decade or more is the minimum duration of most policy cycles from problem identification through implementation, to render a reasonable fair evaluation influence [217]. Longer span studies of policy process to identify unintended and unexpected consequences of policy are proposed. But it is recognised that the main challenge with longer-time retrospective studies is tracing the key people involved to interview them as well as the respondents' recall bias. In this regard, multiple complementary sources using both qualitative and quantitative methodologies become particularly fundamental.

2.6.3 Policy Analysis Studies on Human Resources for Health Interventions

Although the World Health Report has described approaches that can be taken to improve the HRH situation at the country level [2], detailed documentation of promising practices is still insufficient. Gilson and Erasmus [218] argued that policies that address the retention of health professionals should also address poor motivation, low productivity, poor health worker behaviour and attitudes towards patients. However, the link between policy development and

personal motivation of health workers is complex and requires recognition of the importance of individual, organisational and societal factors of motivation [65]. According to Buchan and McCaffery [48], the challenges in implementing effective HR policies and practices in health systems in Africa and elsewhere is to develop an understanding of the context in which these policies and practices are to be applied, and to identify the strengths and weaknesses of different realistic options.

Generally, in health sector reform, the reform processes and problems in implementing reforms have been neglected while discussions have mainly focused on its content [198]. Likewise, most of the attention in HRH reform has been given to *content* of HRH plans with less concern for the *process* of change [219]. Several HRH policy analytic frameworks suggest that in addition to the *content*, various aspects of the *process* are critical to the adoption and implementation of HRH policies [198, 219]. For instance, Egger et al. [219] identified four influential components of the policy-making *process* and these were:

a) *Consultation with key stakeholders* – where effort is made to involve and accommodate the interests of all affected stakeholders;
b) *Ownership* by the country determined by national interests and reflecting national priorities rather than being donor-driven to ensure sustainability;
c) *Based on sound data* – whereby information about needs and feasible solutions is used; and
d) *Supported by adequate human and financial resources* – backed by adequate funds and led by capable people.

Drawing on the WHO analytical framework [219], Hamdan and Defever [44] conducted a policy analysis study of the process of formulation and implementation of HRH policies in

Palestine. The methods they used included literature review, synthesis and interpretation of available documents including formal and informal literature, secondary data analysis as well as key informants interviews using semi-structured schedules. The findings of this study were that like other health policies, HRH policy is a complex process but that the effects of the unstable and ambiguous political environment, as well as violent conflict in Palestine, made it even more challenging. In such a conflict and transitional context, the strategy of priority setting and long-term planning is difficult, implying that ad hoc decisions are more prevalent. Other gaps between policy and practice that were identified by Hamdan and Defever [44] include: the structure and the distribution of power among the different stakeholders; and poor communication and coordination.

Pong [220] examined strategies to overcome physician shortages in northern Ontario by exploring policy implementation over a 35 year period. A programme analysis approach was used to document in a chronological manner a broad range of programmes intended to address physician shortages by determining the types of strategies used, changes in the strategies, year of introduction, time frame, complexity of strategies and expected outcomes from 1964 to 2004. In general, this study demonstrated that the first two-and-a-half decades were characterised by the initiation of new programmes at a relatively slow pace, at a rate of one or two at year. Then there were two to four years spanning periods during which no new programme was initiated. However, the programme initiated speed gained momentum after 1995, at times with three to five programmes introduced in a year. The most notable changes over the years were the nature and perceptions regarding physician workforce issues. For instance, in the mid-1960s, the Royal Commission on Health Services considered Canada as having doctor shortages. But, by the late 1980s and early 1990s, the belief was that Canada had an oversupply of physicians and subsequent to this a number of measures were taken to

control physician supply such as instructing Canadian medical schools to curb enrolment. However, by the late 1990s, physician shortage was again considered to be a challenge. This according to Pong [220] may explain the rapid increase of new programmes in the late 1990s and the early 2000s. Although the move to build a new medical school in the north may have been unimaginable in the early 1990s, this decision was most likely made after the realisation that in the long run the north would need to grow its own doctors rather than relying on imports.

By examining the strategies introduced over a 35-year period, Pong's [220] study further demonstrated that strategies introduced more recently tended to be more complex, are more likely to take a longer term perspective, and that they pay more attention to physician retention than just recruitment. An interesting trend according to Pong [220] was that once introduced, most programmes were rarely terminated. Instead, they would rather be modified, enriched, or rolled into new or bigger programmes while some strategies were used repeatedly in programmes with different names but of a similar nature. Pong [220] further suggested that in 1992, there was a realisation that policy and programme development should be more evidence-based and that some strategies introduced were partly influenced by research such as the rural training strategy and the building of a medical school in northern Ontario.

Pong's [220] study only looked at the initiation of HRH strategies but did not investigate the changes following programme introduction. It also appeared to consider all strategies as equally important yet some were clearly more complex and costly than others and they differed greatly in their impact. In conclusion, Pong [220] noted that studies on policy implementation and evaluation usually focus on a single policy strategy over a relatively short period, thus failing to uncover the trajectories of policy implementation. He argued that a

longer-term perspective is needed because policy strategies and implementation may evolve over time in response to changing circumstances.

2.7 Policy Analysis Conceptual Framework

In this study, I draw from a combination of Walt and Gilson [198] triangular framework as well as the Hogwood and Gunn [199] implementation theory to enable me to respond effectively to Objective 1 which intended to describe the process of the design and implementation of the selected HRH interventions being evaluated in this thesis (Figure 3). The Walt and Gilson framework was used to inform the interview guide for key informants, data collection as well as to explain the findings in Chapters 5 to 7. The strength of Walt and Gilson [198] framework is that it was able to identify in more depth the design issues related to the content of the incentive policies, the contextual factors that led to the design of these policies, the process of the design as well as the key actors that were involved, their roles, including those actors that were excluded. However, this framework was limited with regards to exploring the reasons for weaknesses in implementation.

Therefore, Hogwood and Gunn [200] was used to complement the latter. Through its 10 preconditions for "perfect" implementation, Hogwood and Gunn [200] model was useful in Chapter 9 to provide a critical comparative analysis of the design and implementation of the four incentive strategies of interest. Although idealistic, through its concepts of "non-implementation" and "unsuccessful implementation", this model assisted in distinguishing whether policy failures are a result of poorly conceived policies or poorly implemented policies. Simply put, Hogwood and Gunn [199] categorised policy implementation barriers resulting from either *bad execution, bad luck,* or *bad policy. Bad execution* was explained as non-cooperation or ineffectiveness of those implementing policy; *bad luck* as the external

factors intervening to prevent implementation (such as funding withdrawn); and lastly *bad policy* is described as those based on faulty information, poor reasoning and unrealistic assumptions [199].

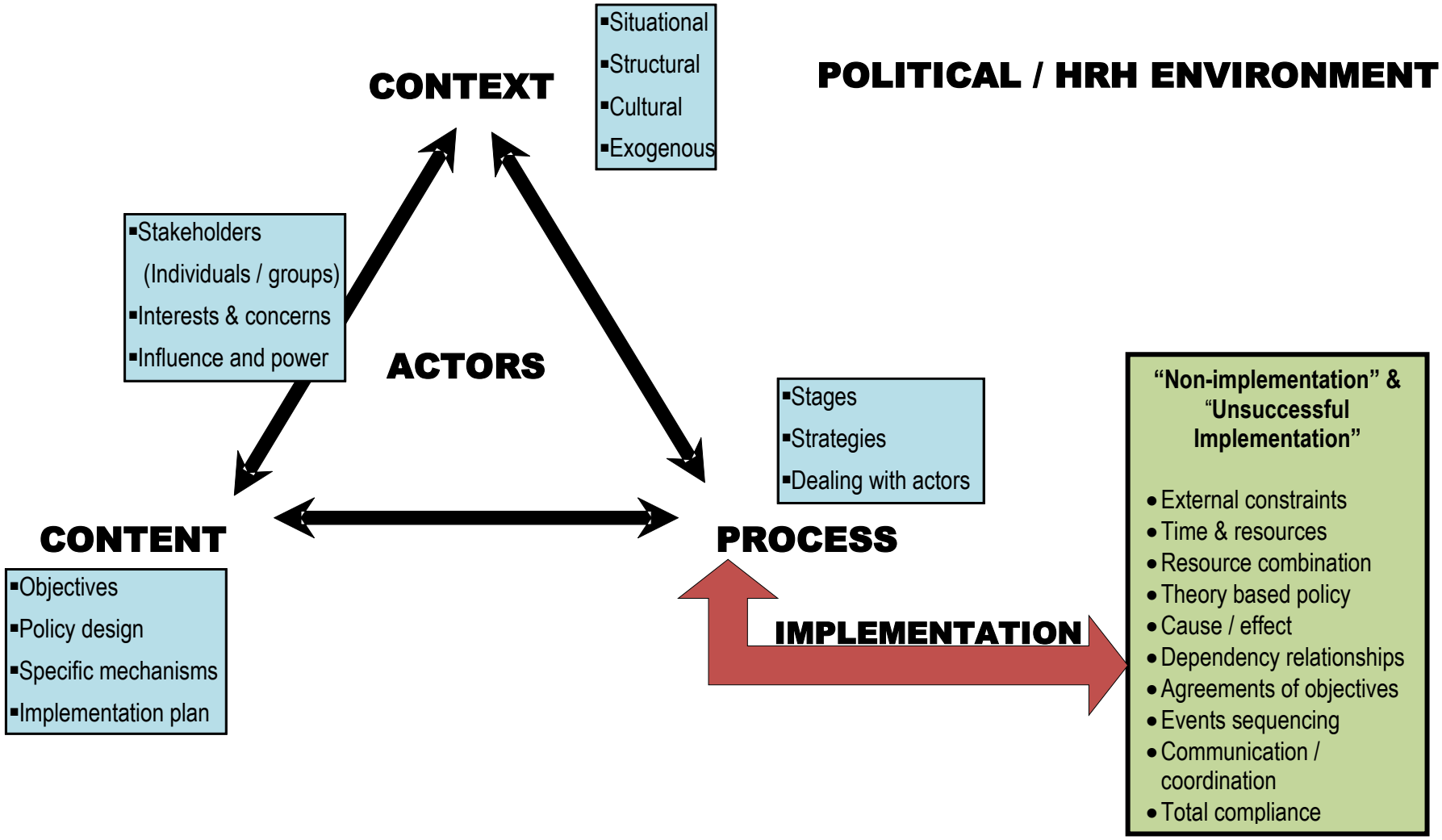

Figure 3: Adapted Policy Analysis Conceptual Framework [198, 200]

2.8 Research Questions

In the context of the HRH crisis and the challenges of retaining health workers in the public health sector and in rural and underserved areas, it becomes important to investigate better ways to motivate and retain the remaining health workforce. Drawing from the existing evidence presented above, financial incentives are still the most commonly used strategies to retain health workers [29-31]. However, evidence of their impact is still inconclusive [29, 31, 33]. Although some studies have noted that failure of incentive strategies to achieve expected results is due to poor design [41], others have reported that the process of the implementation of human resource strategies is less studied in LMIC [44, 45]. There has also been limited policy analysis of HRH interventions in these countries to explain policy outcomes [45, 47]. A recent review have also noted that a number of policy implementation studies in LMIC fail to use theory to strengthen analysis of the findings [221]. Similarly, Dolea and Adams [70] indicated that while theories for assessing motivation have been developed in western countries, their applicability in LMIC is still limited. It is against this backdrop that the current study aimed to investigate the following research questions:

1. What was the process of the design and implementation of the four HRH interventions of interest (rural allowance, scarce skills allowance, occupation-specific dispensation, and the hospital revitalisation programme)?
2. What was the perceived influence of financial (rural allowance, scarce skills allowance, occupation-specific dispensation) and non-financial (hospital revitalisation programme) interventions on the motivation and retention of health workers?
3. Was there any link between the process of formulation and implementation of HRH interventions and their influence on the motivation and retention of health workers?

4. Were there differences in the motivation and retention of health workers in rural and urban as well as in hospital and primary health care settings?

2.9 Conclusion

This chapter started off by discussing existing local and international literature, with an emphasis on motivation theories and the studies investigating incentives and their effectiveness in the motivation and retention of health professionals. The linkages between job satisfaction and motivation and retention are also discussed. This was followed by studies on HRH policy processes and implementation. Theoretical approaches on policy analysis are explained, and lastly the conceptual framework for the current study is then provided. In general, the review suggests that there is still a need to investigate the influence of HRH interventions on the motivation and retention of health workers, particularly in low- and middle- income countries including South Africa. More specific, the review alludes to the gap in information on how to implement incentive strategies in an effective and sustainable manner.

CHAPTER 3: METHODOLOGY

3.1 Introduction

In Chapter 2, the conceptual framework and the theoretical underpinnings guiding this study were discussed. This chapter describes the specific methods that were used to investigate how the process of the design and implementation of incentive strategies may have influenced the motivation and retention of health workers. The chapter commences with discussing the study design, and the study settings and context which are followed by a brief description of the HRH interventions of interest in this study. Thereafter, the research participants, the research instruments, the sampling procedures as well as the data collection strategies are described. Details on the data management and quality control, data analysis and ethical considerations are also presented.

3.2 Study Design

In order to get a richer understanding on how the process of the design and implementation of the incentive strategies influenced the motivation and retention of health workers, an in-depth analysis and description of the events is required. To achieve this, an exploratory multiple-case study design was used to examine how the selected HRH interventions performed in different environments. According to Yin [222] case study methodologies are desirable methods in understanding “how” and “why” a programme have worked or not worked. Mixed methods, comprising both qualitative and quantitative methodologies, were used. The justification for using mixed methods was based on the recognition that the HRH interventions of interest in this study may operate differently in practice from the original intention. Therefore, mixed methods were appropriate for deriving the richness of different data sources for each case study. Social science research has noted that one of the strengths of

qualitative research is its ability to assess processes [223]. Therefore, qualitative research was beneficial in understanding the process of the design and implementation of these interventions and reasons for the implementation successes and failures. In contrast, quantitative research is more useful in evaluating outcomes [224]. Both together contribute an understanding of what happened, how it happend and why.

3.3 Selecting Cases

The concepts of *human resources for health (HRH) interventions, intervention strategies,* or *incentive strategies* will be used interchangeably to refer to the cases for this thesis. Four case studies were selected representing three financial and one non-financial incentive and these are listed in Figure 4.

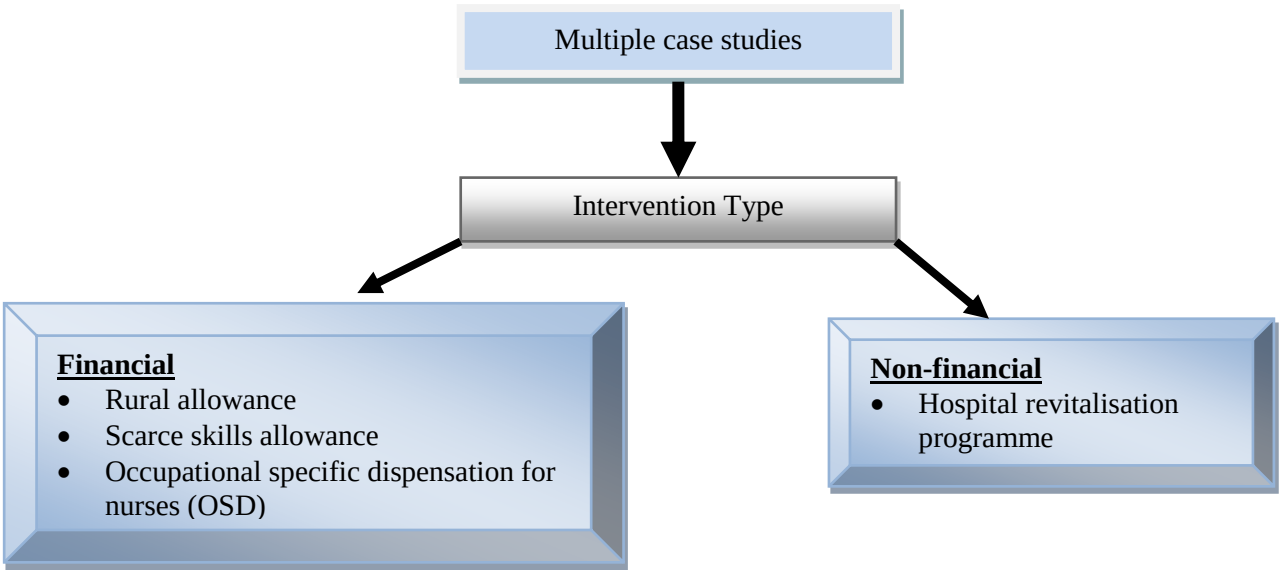

Figure 4: Human Resources for Health (HRH) Interventions

In Chapter 1, it was noted that this PhD is part of a larger multi-country project investigating health worker motivation and retention in South Africa, Tanzania and Malawi. The selection of financial and non-financial incentives of interest in this study were informed by a

systematic review [30] undertaken by the research team which consolidated existing evidence on the impact of financial and non-financial incentives on motivation and retention of health workers in developing countries. At the time the study was conceptualised most of the identifiable HRH interventions in South Africa related to financial incentives. The three financial incentives were chosen because they provided an opportunity to compare and contrast between targeted incentives which were intended to certain cadres of health workers (rural and scarce skills allowances) and non-targeted incentives which benefited all categories of nurses (occupation-specific dispensation). The hospital revitalisation programme was selected as one of very few non-financial HRH strategies identifiable at the time.

The rural and scarce skills allowances as well as hospital revitalisation were longstanding interventions while the OSD was a recent intervention.

3.4 Study Sites

The study was conducted in North West and Gauteng provinces between 2008 and 2010. North West is a predominantly rural province with a population of 3.3 million (6.4 per cent of the total South African population) while Gauteng, the smallest and most populous of all the nine provinces, is an urban province with a population of 11.3 million (22.4 per cent of the total population) [225]. Taking into account the rural-urban inequalities in the country, these provinces were chosen to provide geographical comparisons. With regard to the HRH context, in 2008, the North West province was reported to have critical shortage of doctors and professional nurses (95.2:100,000) as opposed to 143.1:100,000 in Gauteng [9]. Another reason for choosing these provinces was because it was anticipated that there might be some

variations in the interpretation, implementation and influence of the HRH interventions within these provinces.

Table 3 summarises the setting and context within which the case study interventions were studied, as described below:

- The rural allowance was only studied in hospitals, CHCs and clinics in the North West province.
- Hospital revitalisation programme was only explored in hospitals that were revitalised in the North West and Gauteng provinces.
- The scarce skills allowance was studied in hospitals in North West and Gauteng provinces.
- OSD was investigated in both provinces and in clinics, CHCs and hospital settings.

Table 3: The Setting within which Interventions were studied

HRH Intervention	Setting					
	Gauteng			North West		
	Hospital	**CHC**	**Clinics**	**Hospital**	**CHC**	**Clinics**
Rural Allowance				✓	✓	✓
Scarce Skills Allowance	✓			✓		
Occupation Specific Dispensation	✓	✓	✓	✓	✓	✓
Hospital Revitalisation Programme	✓			✓		

A tick (✓) indicates that an intervention was studied in a particular setting.

A total of 10 hospitals (5 in North West out of 30, and 5 in Gauteng out of 29) were selected for the study. Because the hospital revitalisation programme was one of the interventions being investigated in this study, four of the hospitals were purposively chosen because of their participation on the national hospital revitalisation programme and six others were randomly selected. Prior to data collection, provincial health representatives responsible for the

revitalisation in Gauteng and North West provinces were contacted to share and confirm a list of hospitals that have benefitted from the revitalisation programme and are already functional (implying that staff are already located in these revitalised hospitals). During data collection in hospitals between November 2008 and mid-2009, it was found that the lists from both provinces were inaccurate. For instance, although three revitalised hospitals appeared on the Gauteng list as revitalised, in reality only one hospital (Tembisa) in this province was revitalised and it was only certain departments that were revamped, not the entire hospital. In Natalspruit hospital, nothing had happened as yet and Mamelodi hospital had just been completed but staff were still located in the old hospital [226]. In the North West province, only one revitalised hospital appeared in the list, when we got to two other hospitals that did not appear in the list, we found that certain Departments in these hospitals were also revitalised. Due to these unanticipated challenges in data collection, the perceptions around the influence of the hospital revitalisation programme may not be well covered in this thesis.

The community health centres (CHCs) and clinics in the catchment area of the hospitals that participated were also randomly selected from a list obtained from the two provincial departments of health. In total, 55 CHCs and clinics participated in the study in the two provinces, of these 25 were from North West while 30 were Gauteng province facilities. Due to challenges in obtaining approval from the Ventersdorp catchment area, we did not manage to conduct any interviews in clinics and community health centres in this district. A breakdown of the facilities that were selected for the study is shown in Table 4.

Table 4: Characteristics of Facilities that Participated in the Study

Province	Type of Facility				
	Hospitals				CHCs & Clinics
	Name	Hospital	Area	Revitalised	Number around Hospital
North West	Taung	District	Rural	Yes	
	Swaartruggens	District	Rural	Yes	15
	Ganyesa	District	Rural	Yes	
	Job Shimankana Tabane	Provincial	Urban	No	10
	Ventersdorp	District	Urban	No	0
Gauteng	Mamelodi	District	Urban	No	10
	Pretoria West	Provincial	Urban	No	
	Natalspruit	District	Urban	No	
	Germiston	District	Urban	No	20
	Tembisa	Regional	Urban	Yes	

3.5 Study Fieldworkers

Two research assistants were recruited to assist with data collection. One of them, Simangele Kwinda, had a Diploma qualification and the other one, Lebohang Mokgele, had Matric and data collection experience from having had worked at a number of research organisations as a fieldworker. These assistants were trained for three days on:

- The purpose of the study and the planned methodology.
- Conducting in-depth interviews (reading material was also provided to the research assistant for further reference).
- Sampling participants for in-depth interviews and for the survey.
- Question-by-question review of the in-depth interview guide for health workers.
- Role play of conducting in-depth interview with health workers.
- Question-by-question review of the health worker survey.

- Ethical issues of the study including explanation of the information sheet to the respondents as well as completion of the consent forms.
- Steps to ensure data quality and management.

During the data collection phase and with my supervision, Simangele Kwinda helped with the administrative roles such as sending out request letters (which I had prepared) to the sampled hospitals and clinics asking the management of such facilities to grant us permission to conduct research. She also played a critical role of setting-up appointments, organising transport and booking accommodation. In terms of research activities, Simangele Kwinda was primarily involved in administering the health worker questionnaire and assisted with carrying out in-depth interviews with the nurses. She also transcribed the interviews with the key informants, hospital and human resource managers, and health workers from hospitals in Gauteng and North West provinces.

Midway data collection, Simangele Kwinda fell pregnant and was unable to continue assisting with the remaining fieldwork activities. At that time, I was only left with conducting in-depth interviews with the nurses in Gauteng clinics and community health centres. I recruited Lebohang Mokgele to assist with finalisation of the data collection and transcription of these interviews. To ensure consistency across interviews, both Simangele Kwinda and Lebohang Mokgele observed me conducting about five in-depth interviews with the nurses prior to them assisting me with this. Subsequently, I also supervised their first five interviews to ensure that they were capable of obtaining the required information.

3.6 Piloting

All research instruments were pre-tested during a pilot at a district hospital that was not part of the study and which was undergoing revitalisation. In three days at the site, a total of 6 in-depth interviews and 12 questionnaires were completed with the different nursing categories (professional nurse, staff nurse and assistant nurse). Based on the outcome of the pilot, we identified that the survey questionnaire was too long and this was adapted accordingly. In addition, a few questions were rephrased and some sections reorganised in the survey questionnaire.

We also learned that the in-depth interview guide for health workers took about 45 minutes to 1-hour to complete so these were not changed. Furthermore, the pilot experiences suggested that the in-depth interview tools were suited for capturing information on the issues of interest. Based on the experiences of the pilot, we also identified workable solutions for seeking permission from the selected facilities and decided on a time-period of 1-full week for data collection per hospital.

3.7 Study Participants and Data Collection

> *"The details of life that the researcher is unable to see for him- or herself are found by interviewing people who did see it or by finding documents recording it"* [227] (p.29)

This quotation captures the rationale for the methodologies used to investigate the different components of this study. The main components of the study as listed below, summarised in Table 5, and will be discussed in more detail in the sections that follow:

a) Document review of the selected HRH interventions

b) In-depth interviews with key informants

c) In-depth interviews with human resource managers

d) In-depth interviews with hospital managers (CEOs of the hospitals)

e) In-depth interviews with health workers (nurses and doctors)

f) Health worker survey (nurses and doctors)

Recognising that researchers in social situations deal with impressions of their own and those of others, it becomes important for these researchers to seek assurance of what they are seeing or hearing, whether they are not oversimplifying or reading too much into the situation as well as whether the meaning gained by the reader from the interpretations is what they intended to convey [227]. This process of gaining these assurances is referred to as triangulation and it is defined as a "*process of using multiple perceptions to clarify meaning, but is also verifying the repeatability of an observation or interpretation"* [227]. As a way of ensuring rigour, simultaneous methodological triangulation was used in this study whereby both qualitative and quantitative methods were carried out at the same time to complement each other [228].

The primary drivers for using methodological triangulation were because of the need to achieve complementarity and comprehensiveness. Regarding comprehensiveness, the justification was that using combination of methods would address a wider range of questions that one methodology alone would not allow [229]. With regards complementarity, it was believed that this would strengthen the research results and contribute to theory and knowledge development [228].

Table 5: Summary of the Methodology

Research Objectives	Methods	Data Collected
1. To describe the process of policy design and implementation in relation to selected human resource (HR) policies.	▪ Document Review ▪ Media review and analysis ▪ In-depth interviews with key informants	▪ Aims of the policies, policy design/ content (rural and scarce skills allowance, OSD, hospital revitalisation) ▪ How were these policies determined / initiated? (events, context, timing) ▪ Who were the actors / champions in policy formulation & implementation? ▪ What were the steps or key elements in the policy development process? ▪ Implementation constraints / issues? ▪ Perceptions regarding the effectiveness / ineffectiveness of the selected policies on motivation and retention of health workers ▪ Suggestions on how best to improve the implementation of the selected HR interventions
2. To assess perceptions on whether HRH interventions influenced health worker motivation and retention.	▪ In-depth interviews with key informants ▪ In-depth interviews with HR managers ▪ In-depth interviews with hospital managers ▪ In-depth interviews with health workers ▪ Health worker survey	▪ Perceptions of human resources challenges at their hospitals ▪ Insights regarding absenteeism of doctors and nurses ▪ Insights about the HR invention strategies (other than the ones under study) used at the hospital level to motivate and retain health workers ▪ Perceptions about the process of implementation of incentive strategies on the motivation and retention of health workers at hospital level ▪ Perceptions about the effectiveness of the selected strategies on the motivation and retention of health workers ▪ Participants' suggestions on improving the motivation and retention of health workers
3. To determine the relative importance of HRH interventions on health workers' job satisfaction, organisational commitment and intention to leave.	▪ Health worker survey	▪ Job satisfaction using Abridged Job Satisfaction Scale ▪ Organisational Commitment Scale ▪ Intention to Quit Scale ▪ Perceptions about the effectiveness of the selected strategies on the motivation and retention of health workers

To ensure validity, I obtained views of the different respondents (policy makers, key informants, hospital managers, human resources managers and health workers) and relied on more than one research strategy (document review, in-depth interviews and survey). I also kept a field journal to enable me to reflect on my thoughts and experiences during fieldwork. The use of these multiple methods enabled me to gain multiple viewpoints of the phenomena being studied. The same methods of data collection were used for all HRH interventions. I was responsible for the document review and analysis, as well as conducting all in-depth interviews with key informants, hospital managers and HR managers. A trained fieldworker assisted me with conducting in-depth interviews and the survey with health workers.

3.7.1 Document Review of the Selected Human Resources Policies

This phase of the study involved a retrospective review and analysis of the relevant government documents including policy directives, minutes of the meetings and media releases in order to understand the context and content of the HRH interventions of interest in this study. The documents reviewed were from the years 1999-2011. The National Department of Health (NDOH) and the National Department of Public Service and Administration (DPSA) are the key government departments related to the selected HRH policies. Therefore, the websites of these departments were used as the source for the documents and a Google search of other related documents was also conducted. The provincial Department of Health websites (North West and Gauteng) were also searched to extract annual reports for the different years as well as any other relevant documents related to the selected interventions. In addition, media analysis of newspaper articles relevant to the respective incentive strategies of interest in this study was conducted. Table 6 shows a list of documents that were reviewed.

Table 6: List of Policies and Related Documents Reviewed

Case Study	Policy Document	Source
Rural Allowance	1. Revised Non-Pensionable Recruitment Allowance referred to as Rural Allowance	▪ DPSA
	2. More Cash for Health Workers in Rural Areas (2004)	▪ Press Release, HST
	3. Creative Solution Needed: Assistants and Allowances may help Address Staff Shortages (2005)	▪ Press Release, HST
	4. A Draft Rural Health Strategy for South Africa (2006)	▪ Unknown ▪ Newspaper articles
Scarce Skills Allowance	5. Implementation of Scarce Skills Framework	▪ DPSA
	6. Recruitment and Retention Allowances	▪ DPSA
	7. Salary Review for Health Workers	▪ Press Release, HST ▪ Newspaper articles
Occupation Specific Dispensation for Nurses (OSD)	8. Introduction to CORES and the Occupation Specific Dispensation (2003)	▪ DPSA
	9. Bill may send bitter pill to nurses abroad (2006)	▪ Press Release, HST
	10. Nurses Strike Action highlighting Human Resources Crisis within Public Health	▪ Opinion Piece, HST
	11. Implementation of the Occupation Specific Dispensation for the Occupations Professional Nurse, Staff Nurse & Nursing Assistant in the Public Service (2007)	▪ DPSA
	12. Occupation Specific Dispensation - Professional Nurse, Staff Nurse & Nursing Assistant Annexures (2007)	▪ DPSA
	13. Statement by the Minister of Health on Progress in the Implementation of OSD for Nurses	▪ Press Release, DOH
	14. OSD a nightmare for nurses – Nurses have been betrayed	▪ DENOSA
	15. Public Service Co-ordinating Bargaining Council (PSCBC) Resolution No 2 (2009)	▪ PSCBC
	16. All Nurses to Benefit from Agreement with the Unions	▪ Press Release, DOH ▪ Newspaper articles
Hospital Revitalisation Programme	17. Service Delivery Review	▪ DPSA
	18. Revitalisation of Hospitals	▪ National DOH
	19. Hospital Revitalisation (2005)	▪ Unknown ▪ Press Releases ▪ Newspaper articles
Cross Cutting Documents	20. Human Resources Management Annual Report (2001-2002)	▪ DPSA
	21. Recruitment and Employment of Foreign Health Professionals in the Republic of South Africa (2004)	▪ National DOH
	22. A National Human Resources for Health Planning Framework (2006)	▪ National DOH
	23. Strategic Priorities for the National Health System (2004-2009)	▪ National DOH
	24. Human Resources for Health: A Needs and Gaps Analysis of HRH in South Africa (2009)	▪ HEARD

Case Study	Policy Document	Source
	25. Gauteng DOH Annual Performance Plan 2007-2010)	▪ Gauteng DOH
	26. Human Resources for Health South Africa: HRH Strategy for the Health Sector 2012/13 – 2016/17	▪ National DOH
	27. Gauteng DOH Annual Report 2006/07	▪ Gauteng DOH
	28. HR Input for the National Consultative Health Forum	▪ Unknown

A document review was undertaken to uncover how these HRH interventions came about; their intention; the actual content of these policies; the actors that were involved in the development phase of these strategies and where information was available, the processes in the development of these strategies. After identifying all the relevant documents, I systematically read each document line by line to extract relevant dominant and sub-themes aligned to Walt and Gilson [85] policy analysis framework. However, in the case of other documents such as the strategic plans and annual reports, I only read sections that were pertinent to the selected HRH policies under study and not the entire document. These were then coded using Atlas.ti software.

3.7.2 In-depth Interviews with Key Informants

Thirty-five key informants were selected purposively on the basis of their influence or knowledge about the HRH interventions of interest in this study or their involvement in the implementation of these interventions. Table 7 provides a list of the key informants that participated.

Table 7: List of Key Informants

Category	Number
National Government	7
Provincial Government	12
Academics	7
Statutory Body	1
Professional Body	1
Nursing Organisations	4
Nursing Unions	3
Total	**35**

A snowballing sampling approach, during which each key informant was asked to identify others to interview, was used. The selected key informants were interviewed for 1-hour using a semi-structured interview guide (Appendix 1). These face-to-face interviews were all pre-arranged through setting appointments with the relevant participants and interviews were carried out in the offices of the participants at their convenience. These interviews were tape recorded with the permission of the participants and transcribed verbatim. Key informants interviews explored respondents' perceptions of the aims of the relevant incentive strategies, the process of their design, actors involved and perceptions on the effectiveness of these incentive strategies (Table 5).

3.7.3 In-depth Interviews with Hospital Managers (Hospital CEOs)

Using a semi-structured interview guide (Appendix 2), face-to-face in-depth interviews were further conducted with eight hospital managers who were available at their facilities on the week of data collection. These interviews, each about an hour, were carried out at the offices of the respondents and taped-recorded with the permission of the participants. The interview guide focused on similar issues like those covered on the key informants schedule, the only difference was that the questions were directed at experiences at facility level rather than more broadly. In addition, one question asked hospital managers about absenteeism of doctors and nurses at the facilities that participated in the study.

3.7.4 In-depth Interviews with Human Resource (HR) Managers

A total of five face-to-face in-depth interviews were conducted with the facility HR managers who were available at their facilities on the week of data collection using a semi-structured interview guide (Appendix 3). The participants were purposefully selected on the basis of

their knowledge regarding how the selected HRH interventions were implemented in their respective hospitals and the interviews took about 45 minutes to complete. The same issues as with the hospital managers' interview schedule were explored.

3.7.5 In-depth Interviews with Health Workers

A total of 112 one-on-one in-depth interviews were conducted with the different categories of nurses (professional nurse, staff nurse and assistant nurse) as well as with six doctors using a semi-structured interview guide (Appendix 4). A multi-stage sampling strategy was used to select nurses from a weekly duty list. This strategy involved random selection of the different departments (e.g. medical, surgical, psychiatry, theatre etc.) depending on the level of care provided in the study hospitals. This was followed by a random selection of the different categories of nurses to participate in order to maximise variations within the sample. If a selected nurse refused to participate or was unavailable, we replaced them with the same category in the same ward. In several hospitals in Gauteng province, there were a considerable number of agency nurses as well as student nurses and these nurses were excluded. In CHCs and clinics, only nurses that were available on the day of fieldwork were interviewed because on average there were three nurses per clinic. Convenience sampling was used to select doctors for participation. These interviews took approximately 1-hour to complete and they were also recorded. A trained fieldworker assisted with conducting some of these interviews.

3.7.6 Health Worker Survey

A self-administered semi-structured questionnaire (Appendix 5), which was informed by the literature review and the conceptual framework, was used to collect information from nurses

of all categories (professional nurses, staff nurses and assistant nurses) as well as doctors. The questionnaire included:

- General socio-demographic questions;
- Health worker absenteeism
- Feelings about and satisfaction with incentive strategies
- The Abridged Job in General (aJIG) scale;
- The Abridged Job Descriptive Index (aJDI) scale;
- The Intention to Quit Scale;
- The Organisational Commitment Questionnaire; and
- Recommendations on improving motivation and retention.

The Abridged Job in General (aJIG) scale measures job satisfaction and was developed by the Bowling Green University [230]. The aJIG is an 8-item scale and the range of possible scores is from 0 to 24; with a neutral point being 12. Scores well above 12 indicate "satisfaction" with the overall job while scores well below 12 indicate "dissatisfaction". The aJIG scale was chosen to determine its applicability in a middle income context and because it has demonstrated satisfactory levels of reliability and validity [164]. According to Ironson et al [74], the aJIG was the only instrument to provide information on responsiveness.

Another Bowling Green University tool that was used in this study was the 15-item Abridged Job Descriptive Index (aJDI) scale which determined overall job satisfaction by measuring participants' satisfaction with five job elements which are work itself, pay, promotion, colleagues and supervisors [230]. For aJDI, a range of possible scale scores was from 0 to 15, with the neutral point at a score of 7.5. Therefore, scores well above 7.5 (i.e. 10 and above)

indicated “satisfaction” while scores well below 7.5 (i.e. 5 or below) indicated “dissatisfaction” [231].

The 4-item “intention to quit” (ITQ) scale, also from Bowling Green University, measured the participants’ intention to leave their current jobs. The response format for this scale was a 7-point Likert-type scale ranging from 1 for “strongly disagree” and 7 for “strongly agree”. The scoring for this scale was determined by summing up the responses to the four items, leading to a minimum score of 4 and a maximum score of 28. Prior to using all these scales, permission was sought from Bowling Green University.

The survey also included the 15-item Organisational Commitment Questionnaire which measured participants’ commitment to their work environments [78]. This questionnaire had six negatively phrased items and the scoring used a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree” [78]. In order to obtain the overall Organisational Commitment score, the scores of individual items ranging from 1 to 7 were added and divided by 15; with reverse scoring applied appropriately for the negatively worded items [78]. A midpoint of 4 was considered in this scale, with a score of ≤ 4 indicating “lower commitment” while a score of ≥ 4 indicated “greater commitment”. In this study, item 9 was removed from the scale because it yielded negative correlation with the other items.

In determining the sample size required for the survey we focused on the size of the 95% confidence interval for the aJIG scale. Assuming a population mean of 18 and a standard deviation of 5, we calculated that at a sample size of 492 respondents would be required (246 per province) to detect a 5% difference on either side at a power of 80%. Our sampling was proportional to size for the different categories of health workers in each facility. In total, 588

questionnaires were completed, 441 of these were from hospitals while 147 were from community health centres and clinics combined.

The research assistant and I undertook the health worker survey. The questionnaire took 15-30 minutes to complete and was completed in the presence of the research assistant or myself to allow participants to ask questions if they needed to.

3.8 Data Management and Quality Assurance

3.8.1 Qualitative Data

Since tape recorders were used during in-depth interviews, the researchers ensured that all cassettes were labelled correctly after each interview and that cassettes were stored in a safe and secure place prior to being transcribed and translated. The researchers also ensured that all consent forms were signed and stored in a secured place. Transcription was done verbatim by research assistants. For quality assurance of the transcripts, I conducted post-transcription checks by listening to all the tape recordings while reading the printed transcription of each interview to check that the research assistant had correctly captured the responses on the tape recordings. In some instances, quotations used in the findings were edited to improve readability and to retain the confidentiality of the respondents.

3.9 Analytical Questions Explored

Chapter 5 describes the HRH context in the facilities that participated in the study in order to contextualise the findings in the other results chapters. The analysis in Chapter 5 will be done to depict provincial differences (urban versus rural), differences between respondents

(hospital and human resource managers, all categories of nurses and doctors), as well as differences by level of care (hospital versus primary health care, revitalised versus non-revitalised).

For better clarity and coherence, Chapters 6 to 8 reports findings of the incentive strategies of interest in this study and each of these chapters is divided into two sections. The first section of each of these chapters draws from Walt and Gilson policy analysis framework to provide a description of the policy design and implementation processes where issues of context, content, actors and process are discussed as well as a detailed description and analysis of the strengths and failures of these HRH interventions. This section relies on the document analysis and key informants interviews as well as hospital and human resource manager's interviews to understand what happened, why it happened and how activities happened.

The overall argument in this thesis is that the manner in which HRH interventions of interest were designed and implemented might have led to positive and or negative influence of these interventions on the motivation and retention of health workers. In demonstrating this argument, the second section of Chapter 6 to Chapter 8 draws on equity and expectancy motivation theories to explain perceptions on the motivation and retention of health workers. In this section, emphasis will be on whether the HRH interventions achieved their intended purpose or not. Likewise, the analysis will provide provincial differences (urban versus rural), differences between respondents (key informants, hospital and human resource managers, all categories of nurses and doctors), as well as differences by level of care (hospital versus primary health care, revitalised versus non-revitalised).

Available literature has shown some linkages between job satisfaction and motivation and retention. Organisational commitment and intention to leave have also been associated with health workers' retention. In Chapter 9, findings on the job satisfaction, organisational commitment and health workers' intention to leave will be discussed. The aim of Chapter 9 is to quantitatively complement some of the findings in Chapters 6 to 8. The analysis will provide provincial differences (urban versus rural), differences between respondents (all categories of nurses and doctors), as well as differences by level of care (hospital versus primary health care, revitalised versus non-revitalised).

Chapter 10, the final results chapter, will draw from Chapters 5 to Chapter 9 to critically report on the commonalities and differences between the four incentive strategies in relation to the manner in which these strategies were designed and implemented as well as respondents' perceptions on the influence of these strategies on the motivation and retention of health workers. These findings will further be reported in light of the revised integrated framework derived from the analytical thinking of the previous results chapters. Chapter 10 will further set the scene for the major analytical ideas to be discussed in the final chapter, Chapter 11 covering the study discussion, conclusion and recommendation.

3.9.1 Quantitative Data

During data collection phase, thorough tracking of the questionnaires was done to ensure that no questionnaires were lost. The research assistant and I verified that all questions were completed correctly while still in field and in the presence of the respondents. Data capturing was outsourced to a reputable service provider and it was captured using STATA. Cleaning of data was done by myself, with close supervision of the primary

supervisor and it involved the identification of missing data as well as ensuring that skip patterns were adhered to.

3.10 Data Analysis

3.10.1 Qualitative Data Analysis

Data collection and analysis occurred concurrently and since data was first collected at the North West hospitals, analysis begun with this data in 2009. Cleaned and verified transcripts were downloaded to Atlas.ti for coding and identification of themes while themes that came from the document review were electronically recorded in a table following the Walt and Gilson framework. Thematic content analysis [232] of all the transcripts and documents reviewed was then performed using both inductive and deductive approaches. Regarding the document review, I systematically read each document identified line by line in order to extricate relevant dominant and sub-themes aligning with the Walt and Gilson framework [198]. With regard to the transcripts, the process followed was to initially read each transcript line by line to develop meaning and create basic interpretations following the conceptual framework in Chapter 2. Thereafter, a detailed reading of the transcripts was done during which dominant and sub-themes were generated.

During analysis, two researchers, the author of this thesis and another researcher who was involved in the larger project first independently read six transcripts from different groups of participants and then discussed coding discrepancies until agreement was reached in order to ensure consistency and dependability of the data. In conducting thematic analysis, we made an assumption that the number of individuals independently expressing the same idea signified thematic importance rather than the absolute number of times a theme is expressed by one talkative participant [233]. We therefore identified a theme in one transcript, checked

for its presence in other transcripts and noted similarities and dissimilarities in the manner in which each participant expressed each theme. Based on the latter processes, I then developed a comprehensive codebook.

Once coding was completed and themes identified, a written account of the interpretation of the themes was then compiled. Extracts or quotes from interviews are included in the write up of the findings to enable the readers of this thesis to detect the patterns identified in the analysis [234] and to make their own judgements. The interpretation of the findings was validated by sharing them with a team that was involved in the larger project to ensure accuracy. In addition, the preliminary findings were shared during two feedback meetings with representatives from the two provinces that participated in the study, the National Department of Health and the National Department of Public Service and Administration. Some of the representatives that attended these meetings participated in the study; therefore interactions with these participants assisted greatly in clarifying the interpretation of the results. The one meeting took place in Pretoria for an audience of 40 participants mainly from Gauteng Province while another one took place in Mafikeng, North West Province with an audience of 35 participants.

On reflecting on my position in this study, I consider myself as a "relative outsider" [235] for a number of reasons. Both the research assistant and I were not brought up in the areas around the actual sites where data were collected and thus were not familiar with the health workers and other staff in such facilities. I was also not familiar with the key informants interviewed. The advantage of this "relative outsider" position was that the participants were not reluctant to reveal certain information during the interviews because they did not consider us as having close ties to their facilities or departments. The other

advantage of this “relative outsider” status enabled us to establish the kind of interpersonal distance that led to objectivity [236].

3.10.2 Quantitative Data Analysis

Quantitative data were analysed using Stata (Version 10). In analysing the data, the statistical techniques that were employed included descriptive and inferential statistics. The descriptive statistics consisted of frequencies, percentages, measures of central tendency such as mean and median and distribution of data (standard deviations and IQR). Inferential statistics that were conducted included Analysis of Variance (ANOVA) and Multiple Regression analysis. Cronbach’s alpha [237, 238] was used to measure the reliability of the items on the questionnaire scales and the alpha value of 0.70 or higher was generally considered as an acceptable degree of internal consistency.

3.11 Ethical Considerations

This research was approved by the University of the Witwatersrand’s Human Research Ethics Committee (M080729). Permission to conduct the study was further sought from the Gauteng and North West Departments of Health. Once the facilities were identified, permission was also obtained from the hospital managers in the case of hospitals and district managers and sisters-in-charge of CHCs and clinics. At the hospital level, permission to access the wards was further requested from the nursing managers, clinical managers and or ward managers. Consent was further attained from the individual participants themselves. All the participants (key informants, hospital managers, human resources managers, nurses and doctors) were provided with the study information sheet which explained the purpose of the study and the terms of the respondent’s consent.

It was further explained in the information sheet and verbally prior to the interview that participation in the study was voluntary and that participants can withdraw their participation at any stage should they wish to do so without any consequences. Participants were also told that there were no incentives provided and no direct benefits to them. However, the information collected in the study will be used to make recommendations to inform effective design and implementation of the HRH interventions. Information sheets also provided my contact details and those of one of my supervisors.

Permission was also sought from the participants to use a tape recorder during the interview so that no information would be missed. The respondents were assured that the recorded information would be kept anonymous and confidential and that it would not be shared with their managers. It was explained to the participants that the recordings would only be listened to by the researchers from the Centre for Health Policy who were working on the project. It was further explained to the participants that the tapes would then be destroyed two years after publication of the research findings. To ensure anonymity, transcripts of interviews only indicated the category of the participants that participated and not the name of the individuals interviewed.

CHAPTER 4: OVERVIEW OF THE HUMAN RESOURCE CONTEXT AT THE STUDY SITES

4.1 Introduction

This chapter begins with providing a description of the demographic characteristics of the participants in both the qualitative and quantitative components of the study. The chapter will then report the findings of the context of the working environment as viewed by the different categories of respondents across the study sites. Human resource challenges of the hospital managers are also discussed.

4.2 Demographic Characteristics of the Participants

4.2.1 Respondents for the Qualitative Component

In total, 160 in-depth interviews were conducted in the two provinces representing the following respondents: key informants (n=35), hospital managers (n=8), human resource managers (n=5), nurses of all categories (n=112), and doctors (n=6). Of the nurses that participated in the study, a total of 55 were from North West province while 57 were from Gauteng. In addition, 54 of these nurses were from hospitals while 58 were from CHCs and clinics. The majority of these nurses were South Africans, females and married.

4.2.2 Respondents for the Quantitative Component

A total of 588 interviews were conducted with doctors and nurses of all categories (Table 8). 441 of these were from hospitals while 147 were from community health centres and clinics combined. Of these, 354 were from Gauteng while 234 were from North West Provinces. Overall, the respondents were predominantly females (90% in Gauteng and 83% in North West), and professional nurses and this was statistically significant in Gauteng ($p<0.005$) and in the North West ($p<0.05$). This is due to the fact that professional nurses make up a bigger

proportion in clinics and as a result more of them were sampled in clinics than in hospitals. The mean age in Gauteng was slightly higher (41.7 years) than in North West province (39.2 years), with clinic respondents slightly older than the hospital respondent in North West province ($p<0.05$). A largest group of the respondents were married and provinces were similar in their marital status with 46.3% married in Gauteng province and 42.7% in North West province. However, there was a significant difference in North West province, with slightly higher proportions of the respondents married in clinics (45.3%) than in hospitals (41.9%), $p<0.05$.

A large proportion of the respondents, from both provinces and from both hospitals and clinics, had children. The mean length of service for Gauteng participants was 10.4 years and 7.3 years in North West province. Only 20.6% and 19.5% respondents reported changing jobs in the past year in Gauteng and North West provinces respectively. A large proportion of the clinic respondents in North West province were working in rural areas than urban areas and this was significant ($p<0.001$). In addition, 71% of the health workers in North West province were from revitalised facilities as opposed to only 29% in Gauteng province.

Table 8: Demographic Characteristics of Participants

Variables N=588		Gauteng Hospitals (N=265)	 Clinics (N=89)	 P-value		North West Hospitals (N=179)	 Clinics (N=55)	 P-value	
Gender	% Male	11.3%	4.5%	0.059		17.4%	16.7%	0.898	
	% Female	88.7%	95.5%			82.6%	83.3%		
Health worker category	Doctor	9.8%	1.1%			7.8%	1.8%		
	Professional Nurse	36.2%	53.9%	**0.004**		39.7%	61.8%	**0.023**	
	Staff Nurse	26.4%	19.1%			13.9%	7.3%		
	Assistant Nurse	27.6%	25.8%			38.6%	29.1%		
Age	Mean ± SD	41.4yrs	42.5yrs	0.374		38.4yrs	42.1yrs	**0.010**	
Marital status	Single	39.6%	39.3%			47.5%	32.1%		
	Married	47.2%	43.8%		0.674	41.9%	45.3%		**0.034**
	Divorced / Widowed / Separated	13.2%	16.9%			10.6%	22.6%		
Any children	% Yes	87.1%	93.0%	0.135		85.9%	86.5%	0.904	
	% No	12.9%	6.9%			14.1%	13.5%		
Length of service	Mean ± SD	10.4yrs	10.4yrs	0.982		7.1yrs	8.5yrs	0.470	
Changed jobs in past year	% Yes	20.7%	20.5%	0.962		20.3%	16.7%	0.551	
	% No	79.3%	79.6%			79.7%	83.3%		
Facility location	% Gauteng urban	74.9%	25.1%					**0.001**	
	% North West urban					40.2%	9.1%	**0.001**	
	% North West rural					59.8%	90.9%		
Facility status	Revitalised	29.1%	0%			70.9%	0%		
	Non-revitalised	75.4%	100%			24.6%	100%		

4.3 HRH Context at the Study Sites

Several themes were identified that captured the day to day experiences of hospital managers, doctors and nurses in their working environment, including aspects of the health workers' motivation and de-motivation. These are discussed thematically as illustrated in Table 9.

Table 9: Major Themes to Explain the HRH Context

Themes	Sub-themes
Factors of attraction, motivation and retention	▪ Love for nursing ▪ Opportunities for internal migration ▪ Facility closer to home ▪ Love for community ▪ Conducive working hours
De-motivational factors	▪ Shortage of staff and its impact ▪ High disease burden ▪ Recruitment and retention challenges ▪ Inadequate salaries ▪ Limited opportunities for growth ▪ Lack of accommodation ▪ Weak supervision, interpersonal relationships and communication
Other motivational and retention strategies	

4.3.1 Factors of Attraction, Motivation and Retention

When nurses of all categories and doctors were asked about what factors attracted, motivated and retained them in their current facilities, several themes came up. Factors that seemed to attract nurses in particular to the profession included their *love for nursing* and *opportunities for internal migration.* Factors related to attraction to specific facilities were *working closer to home, love for the community;* as well as *conducive working hours.*

Love for Nursing:

When nurses were asked about what attracted them to their profession, a considerable number of the nurses from different health facilities (hospital and primary health care setting) in the two provinces indicated that they were attracted to the profession mainly because of their love for nursing which enabled them to save lives.

> *"Nursing has always been my childhood desire. What attracted me was the ability to save lives. At least as a nurse I am able to do that."* (Professional Nurse 13, North West CHC)

> *"I'm dedicated to being a professional nurse because I like being a nurse."* (Professional Nurse 16, North West Clinic)

This perception of the love for nursing was in sharp contrast to a comment made by one male nurse from a district hospital in Gauteng province who remarked about the perceived decline in the image of nursing, equating it to that of a security guard and taxi driver. As a result, he claimed that he was ashamed to tell his friends that he is a nurse as he wanted to still uphold his social status amongst his peers:

> *"But what I'm trying to say is that people's perceptions about nurses have changed. There used to be this thing back then that when a nurse walks down the street and as a man you are interested in her, you will be told that you are taking chances if you try to pursue her. They had that status but now…have you seen how security guards and taxi drivers are being undermined? I could say we are on that rank now. And as a human being I wouldn't like to be perceived in that manner that's why most of my friends don't know that I'm a nurse."(*Male Assistant Nurse, District Hospital, Gauteng Province)

This nurse further implied that the health department took advantage of nurses because it was easier for them to recruit 'anyone from the streets' to be trained as a nurse. This suggests that people ultimately recruited for enrolment in nursing might not entirely have the love for the profession:

> *"The other thing, our government knows that even if 50% of the nurses in a hospital decide to resign, they could take anyone from the streets and say 'come we'll teach*

> *you nursing'. So they take advantage..."* (Male Assistant Nurse, District Hospital, Gauteng Province)

One policymaker concurred that the image of the nurses in the community was of great concern considering that in recent times, increasing number of patients are complaining about the negative treatment received from nurses. This policymaker added that similarly, the image of the doctors have also deteriorated reflected by negative views held by patients.

> *"If you look at where we come from and where we are now, when you look at the media, the complaints from the community used to be about the nurses. But now, I am sure you are aware that the community also complain about doctors and how they are treating them. And it is a worrying factor you know, because we nurses used to be advocates for patients. And again, right now you also get patients complaining that this doctor treated me this way and that way, which used to be very rare."* (Policy Maker 3, Gauteng Department of Health)

Opportunities for Internal Migration:

Interestingly, a key factor of attraction for nurses was their ability to move around from one facility to the other and from one sector to another which according to them provided an opportunity for change and growth. This was in relation to nurses wanting experience of both the public and private sectors; nurses who worked in a public hospital wanting to experience a primary health care setting or vice versa; nurses who worked in a clinic wanting to experience a community health care centre; or nurses who worked for many years doing the same activities without any challenge wanting change and challenges from the move. These views were expressed by nurses of all categories particularly those currently working in primary health care settings in Gauteng and North West Provinces. Of interest to note was how some nurses viewed clinics to be their preferred work setting rather than hospitals, as clinics were considered by these nurses to be challenging yet providing opportunities to growth. As might be expected, there were some clinics that were regarded as offering better opportunities for growth than others, while a hospital setting was considered by some nurses as strenuous:

> *"I worked at Kalafong [hospital] in 1989 till 1999. At Kalafong [hospital], I was bored because if you worked in a medical ward, you would stay there for more than 10 years without any change. For 10 years, you do the same thing during day duty and night duty. I then saw an advert in the nursing news for a clinic post. I had never worked at a clinic before, but I felt that maybe if I can go to work in one, I can relieve myself from being a hospital slave. When I got here, I felt very happy; I no longer have hospital stress."* (Professional Nurse 1, Gauteng Clinic)

> *"Before coming here, I used to work in Marikana clinic and I used to work within my scope of practice and not learning anything. But since being here at this clinic, I now have challenges in my work because there is not that thing of saying I am working according to my job description. Here, I find that I have learned a lot of things more than what I was doing where I previously worked; now my knowledge has grown."* (Staff Nurse 1, North West CHC)

> *"I worked in the private sector most of my life. I needed some change. I changed from the private sector to the public."* (Assistant Nurse 13, Gauteng Clinic)

Although not a dominant theme, one of the nurses indicated that she was attracted to a primary health care setting because of health reasons. This nurse, who appears to be close to retirement, indicated that she used to work for a private hospital which according to her was physically strenuous thus compromising her health as she had arthritis.

> *"I was working in a private hospital. It was strenuous for my age and health. You are running around the whole day. I have arthritis, as you grow old there are complications. I just prayed to God since I am a born again Christian to say 'Lord please give me a clinic-based job'. I am now settled doing my count down till I go on pension."* (Staff Nurse 4, Gauteng Province Clinic)

In contrast to what some nurses from clinics reported as hospital 'stress', being 'hospital slaves' and limited change in activities at hospitals, one of the professional nurses from a Gauteng hospital highlighted the benefits of being based in an urban hospital which includes exposure to dealing with acute clinical cases as opposed to what rural health workers would experience:

> *"The rural hospitals are not exposed like the city ones because we are exposed to seeing variety of patients; car accidents, gun shots, stabbings so many things.*" (Professional Nurse, Regional Hospital, Gauteng Province)

However, a rural foreign doctor contradicted this indicating that working in a rural facility has its own advantages, such as first-hand experience of working in a resource-scarce environment and learning to find alternatives for dealing with such challenges.

> *"Look, when I applied for the job I didn't really know the place. I just asked the department to just send me in a rural area in South Africa. I just wanted the experience of the rural area. I asked them to send me wherever they can. So they sent me here and I am really happy working in the rural area."* (Medical Officer, District Hospital, North West Province)

A lower cadre nurse, also from a rural facility, reported that she was enticed and motivated by having knowledgeable colleagues; whom she reported as possessing a specialty in primary health care and have thus continuously shared their knowledge and skills unselfishly:

> *"In this clinic, what motivates me is that the sisters [professional nurses] that I am working with have primary health care [qualification]. So what motivates me is the way we work here and I can see that they have more knowledge so in future if I go to school, I can see that there is nothing that will be difficult for me."* (Staff Nurse 1, North West CHC)

A primary health care nurse is a comprehensively trained registered nurse possessing a post basic qualification in community health [17].

Facility being closer to Home:

Nurses of all categories in the two provinces and from hospitals and primary health care setting reported that the main reason that attracted them to their current facilities was that it was closer to their homes.

> *"For me to apply for a job in this facility it was because it was nearer to where I was staying. I didn't have much information about the facility, but I was only looking for something that can be near home."* (Professional Nurse 10, Gauteng CHC)

> *"When I came here it was because it is close to the location where I live, near my home. For the first time in 15 years of working in town, this was an opportunity to work around here."*(Staff Nurse 3, Gauteng Province Clinic)

Love for the Community:

Similarly, a number of nurses of all categories reported having been attracted to the facilities where they worked because of their love for the community. The need to assist poverty-stricken communities where affordability of doctors' fees was a challenge, and rural communities which are often resided by illiterate members, was expressed by these nurses.

> *"I am motivated because when you work in such a place and surrounded by so much poverty, you want to help people who can't afford going to the doctor."* (Professional Nurse 16, North West Clinic)

> *"What brought me here are the challenges that are facing people in the rural areas because most of them they don't know much, so we are here to help and teach them."* (Professional Nurse 20, North West Clinic)

Contrary to these nurses who loved their communities, other nurses have had bad experiences with some members of the community. Amongst these are perceptions that some community members were disrespectful of nurses and other patients; that some community members are uncooperative and accused nurses of dragging their feet and not doing enough to help them; being unsupportive and disrespectful of nurses not originally from rural areas; and that some community members were quick to involve the media to report nurses. This pressure from the community appeared to be causing a lot of strain on some nurses and reflects views by nurses of all categories from the different health facilities in the two provinces as shown in the comments below:

> *"People that come here are uncontrollable. Some [patients] normally go to newspapers to report [nurses]. A nurse once went away for a month, she said she couldn't cope with such patients; it was her first time of seeing such uncontrollable patients. One of the doctors that we have been loaned to come and help us had a situation whereby while she was preparing a patient; others just flocked in. They don't respect other patients.* (Staff Nurse 3, Gauteng Clinic)

> *"The other issue is the community issue, the bad treatment that we get from the community here because we are not born in this area. You find that they call us names*

that are not pleasant and they do not speak to us appropriately." (Professional Nurse, District Hospital, North West)

"The patients fight with us telling us that we are not working, we are busy going up and down and passing them by." (Staff Nurse 1, North West CHC)

According to one of these nurses, in one facility, a doctor was once held hostage. This raises concerns of the safety of health professionals in their working environment.

"The people here once held a doctor hostage. They refused to let the doctor go. So you can see this is an uncooperative community." (Staff Nurse 3, Gauteng Clinic)

Another concern reported by some nurses was that family members often delay seeking care and wait until a patient is critically ill before they act and then expect the nurses to perform a miracle. This was said to be the case particularly for the pensioners. Though said in a colloquial manner, nurses believed that family members keep the sick elderly patients at home so that they can benefit from their pension money. Once they are tired of providing care and spent their pension for their own use, they send these critically ill patients to the hospital to die.

Conducive Working Hours:

A recurrent theme amongst nurses of all categories, especially those from Gauteng province, was that they were attracted to work in a primary health setting because of the conducive working hours; particularly the opportunity of not working night duties and on weekends.

"Actually I wanted to work ordinary hours. I worked odd hours in a hospital; I was working night duty. I wanted to work in a primary health care setting because you don't work abnormal hours; I knock off in the afternoons. I am very happy about it." (Professional Nurse 6, Gauteng Clinic)

"I just don't like working late shifts, like working 7am to 7pm. I love the clinic for not working night duty." (Assistant Nurse 12, Gauteng Clinic)

"Here on Saturdays and Sundays I am at home, I work from 7am to 4pm. That is another reason I prefer to stay here." (Staff Nurse 6, Gauteng Clinic)

A major advantage of working conducive hours as reported by these nurses is that this created opportunities for them to start a family, raise children as well as maximising time spent with family.

"I was from the hospital and at the hospital the shifts were 7am to 7pm. I was planning on having a family and I asked myself who is going to mind my children. Then I decided to rather come here because it was going to be convenient. I would be able to knock off early; and I wouldn't work on weekends." (Professional Nurse 4, Gauteng Clinic)

"I just wanted to work at a clinic because at the time when I qualified I had a small baby who was two months old and I was breast feeding." (Professional Nurse 8, Gauteng Province)

4.3.2 De-motivational Factors

Shortage of Staff and its Impact

A shortage of nurses and medical personnel was a recurring theme amongst almost all groups of respondents in different health facilities in the two provinces. Diverse views expressed regarding staff shortages were in relation to insufficient numbers of health personnel for the needs of the facility as well as inappropriate utilisation of the existing health professionals, especially in a hospital setting where nurses in particular performed non-nursing duties such as porter services. One respondent remarked as follows:

"The biggest challenge that we are experiencing now in the district hospitals is shortage of doctors, the shortage of medical personnel. Yes, it's really our biggest challenge for now, I think we are having four doctors only for this institution which has 290 beds and we cover a population of about 200,000 people." (Medical Officer, District Hospital, North West Province)

One hospital manager in North West Province reported that the problem of shortage of doctors in particular was further complicated by what he referred to as 'power play' whereby existing doctors arrived late to work, took long lunch breaks and threatened to resign when reprimanded about their behaviours:

> *"I think the other issue that we have seen is the fact that clinicians have noted that they are scarce skills in this country. And they always want to draw the management and the employer to a point where we are sort of begging them to provide a service. That kind of a power play is also complicating the situation because I mean a doctor will come here late or they will go for lunch for too long and when you talk to them, they threaten you that they will resign."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

In psychiatry wards, shortage of specialised nurses, especially male nurses, was reported as a hindrance since dealing with psychiatric patients may at times require physical strength to handle these patients:

> *"The challenge that we face is shortage of staff. A unit like this needs man power. Did you see men here? There's shortage, especially males, even at night there must be a male nurse."* (Professional Nurse, Regional Hospital, Gauteng Province)

Shortage of nurses was reported to be most palpable when some health workers were absent or when those available on duty were expected to escort a patient to another facility. The consequences of staff shortage were also mentioned by several respondents. These included increased workload for existing staff, negative health consequences for nurses, inability to take annual or sick leave, inability to study further, working beyond one's scope of practice as well as compromised quality of care. The workload burden in hospitals was most apparent when several services were offered in one ward and fewer health workers were responsible for managing a ward with full bed occupancy. The situation was reported to be equally problematic in primary health centres as illustrated by the following quotations:

> *"The medical ward, antenatal, and paeds [paediatrics] is one unit. They've got ten beds each side. When it is night duty, it's one sister [professional nurse] that is*

working there and two nurses. And they must do all the bed washes, all the bed making; it's a lot of work. And there is no other staff to help them." (Staff Nurse, District Hospital, North West Province)

"Sometimes you will find after twelve hours you did not even cover the job, you will be busy checking the urine, blood glucoses and on the other hand the doctor might be fighting you. But due to the workload, you sometimes forget to do some of the things. Say you are busy with something and then a new admission comes in, sometimes when one is dying, you have to resuscitate just to save the one dying." (Staff Nurse, District Hospital, Gauteng Province)

One young male nurse reported the impact of the workload as contributing to his backache problem:

"And it really strains because you sign in at seven in the morning and knock off at seven in the evening whereas you are only two nurses lifting up the patients. I'm only 22 years of age, but I already have a backache and it's not on. By the time I knock off, I feel the backache. If I had a wife and I get home and I'm tired like this, she would leave me." (Assistant Male Nurse, District Hospital, Gauteng Province)

With regard to working beyond one's scope of practice, professional nurses reported doing duties in the scope of practice of doctors while the lower cadre of nurses performed duties in the scope of practice of professional nurses:

"The workload is too much. Sometimes you end up doing doctors' procedures. When you ask the doctor 'why didn't you perform these procedures because it's your scope'? And he will tell you that: 'you know what, I've got a lot of patients to see, so do it'. They don't do their job; they leave everything on the nurse's shoulder. I don't know whether they are lazy or they do it purposely because they tell themselves that most of the time the patients are with nurses, so the patients mustn't suffer. The nurses must do everything." (Professional Nurse, District Hospital, North West Province)

"For an example here in ward 5, as an Assistant Nurse, you might be left alone to run the ward relying on the assistance of a Professional Nurse who is working in the opposite ward and who also has her own duties that side of which it's a huge risk because if anything is to happen you will be responsible as an Assistant Nurse." (Assistant Nurse, District Hospital, Gauteng Province)

According to other respondents, another consequence of staff shortages and increased workload was that the quality of patient care was in some way compromised:

> *"Sometimes, especially in the afternoon we will have one professional nurse, one staff nurse and maybe three assistant nurses out of 44 patients. Can you really do total nursing care? These patients are very ill!"* (Staff Nurse, Regional Hospital, Gauteng Province)

> *"In this ward we are only three, it's the professional nurse, the staff nurse and me, an assistant nurse. We have 34 patients. In honest facts, we really cannot afford to attend to each patient accordingly in a right way."* (Assistant Nurse, Regional Hospital, Gauteng Province)

One hospital manager admitted that even when they are aware that quality of care is compromised, it is almost impossible to implement quality assurance measures due to huge numbers of patients waiting to be seen and fewer health workers available to deal with the workload:

> *"You are not able to have meetings with them [health workers] to raise issues of concern. So now quality assurance programmes are not easily facilitated because there are a huge number of people waiting for doctors and nurses. Whilst at the same time you know that there are clinical errors that you need to respond to, but you are not able to respond. So it's a risky environment for clinicians knowing that in cases where they did faults, the Health Professional Council is likely to take away their qualifications."* (Hospital Manager 1, Revitalised District Hospital 1, North West)

Interestingly, in addition to shortage of clinical staff, some hospital managers also raised concerns about the competence and skills of the Finance and HR managers at hospital level; stating challenges of having managers that have lengthy experience but lacking professional qualifications for their respective management roles. One hospital manager commented as follows:

> *"And as it is now, I don't have managers with qualifications; I would like a human resource manager with qualifications. The human resource people that are working here are here just because of their experience, he is experienced but with no qualifications. When coming to finance also, I don't have a person with qualifications. I have people working with experience because they have been working for a long period here"* (Hospital Manager 2, District Hospital, GP)

High Disease Burden:

The respondents further stated that these human resource challenges are exacerbated by the complex disease burden, notably the double burden of HIV and TB. There was great concern from the clinic staff specifically that the district management expected them to see an average of 60 patients per day; neglecting to take into cognisance the complexity of the patients that they see as well as the practicality of dealing with certain chronic diseases such as HIV and TB.

> *"You have to do TB or HIV for mother and child and you will be forced to reach a certain target in time. We only have one assistant nurse that does the vital signs and the baby weight. And you'll find that at times, we don't cope and they [District Management] don't take that into consideration that we are dying of the situation that we are working in."* (Professional Nurse 19, North West Clinic)

> *"I mean, I won't be able to see all those 28 patients per day or 30 per day because somebody was doing the counselling and there is someone doing the mother and child transmission of HIV so there would be counselling and doing TB also. And there would be chronically ill patients and the acute ill patients and you must see all of them. At the end, we don't even have the stress management intervention."* (Professional Nurse 20, North West Clinic)

In addition to this, nurses reported that there are many different policies that are constantly being developed or being changed, especially those related to HIV, TB, maternity care and mental health care, which nurses are expected to implement and adhere to. Nurses in primary health care settings were mainly the ones who reported being affected by this:

> *"There are lots of policies out there and although they are good, implementing them is very difficult and unrealistic. Every department will come with its policies and you'll be by yourself expected to perform all those duties. And with the mentally ill patients, there is a new law which states that if you refer to the hospital you must escort the patient. So imagine, you must call the police van if there is no ambulance, and then you must escort the patient and hurry back because there is only one professional nurse for the whole clinic and there are a lot of patients. So you see how strenuous that is."* (Professional Nurse 19, North West Clinic)

Hospital managers, especially those in Gauteng province mentioned that they relied on using nursing agencies as a strategy for dealing with nursing shortage to fill gaps. However, one

hospital manager noted that nursing agencies tended to deploy their off-duty nurses thus denying these nurses adequate resting time. Some respondents commented as follows:

> *"So up to now we don't have enough staff and we are relying on agencies."* (Hospital Manager 2, District Hospital 8, Gauteng Province)

> *"Before we didn't have time to sit, we didn't have time for lunch. It was very hectic and nurses were going out because they were tired. But now it's much much better because people from Khanyisa [the nursing agency name] are assisting us."* (Staff Nurse, Regional Hospital, Gauteng Province)

The other disadvantage with using nursing agencies is that some of the nurses used by these agencies are often not skilled enough and there is no continuity in patient care and no accountability.

An alternative strategy used by hospital managers to fill the gap in human resources was to request the available doctors and nurses to work overtime. Although health workers would gladly agree to working overtime to supplement their income, the main contention was when payment of overtime worked was delayed:

> *"Imagine sleeping during the night at the nurses' home and they call you and ask you to come fill in because the staff on duty escorted patients to another facility. Keeping in mind there are only three staff members during the night and when the two of them go out to escort patients, then there'll be one person left for the whole hospital. And when they call you to work, no one is going to pay those hours back to you."* (Professional Nurse, District Hospital, North West Province)

A strategy used at primary health centres to deal with the challenges of staff shortages included equal sharing of the workload; especially taking into consideration additional responsibilities of nurses as mothers and wives outside of the work environment. One nurse said:

> *"There are four of us, two nursing assistants and two enrolled nurses. Everyone deals with their own people, one person deals with VCT and TB, one deal with ANC and child health and so forth. So far, it's working because by the time you knock off, you still have some energy. When you leave here, you still have responsibilities; you have*

a home, you have kids, maybe you study. Since they introduced this mechanism, the workload is better." (Assistant Nurse 10, Gauteng Clinic)

Recruitment and Retention Challenges:

A number of hospital and human resource managers in rural facilities reported that it was rather challenging to recruit and retain health workers in their hospitals due to several factors such as the lengthy recruitment process, low or inadequate salaries, the remoteness of the area, limited access and availability of social amenities as well as lack of provision of accommodation for staff. One hospital manager reported frustrations related to filling a vacant position mainly due to the lengthy and bureaucratic recruitment processes which neglect to recognise the urgency of filling such positions:

> *"I would have to write a motivation to say I need a doctor to be appointed at hospital X; send it through to my director at hospital services who would look at the motivation and give support to the motivation. If this doctor is employed somewhere, they must serve [termination of employment] notice implying that yet another month is wasted. So it's more like four or five months. And during that period of time, you are losing another doctor because they cannot stand the pressure and they cannot stand the workload. So it's a vicious cycle…"* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

Finances were reported by some hospital and human resource managers as being a hindrance to filling up vacant positions; mainly because of the costs of advertising and inclusion of allowances in the overall salary package:

> *"We can't employ large numbers of professionals because of the budget. So we've got to fill the posts bit by bit."* (Hospital Manager 2, District Hospital 8, Gauteng Province)

> *"There is also challenges of funding currently that we are unable to fill the posts because we don't have funds you know. So unfortunately it is the situation that we have to labour under."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

> *"Okay the first challenge is the compensation budget. Compensation budget is the overall budget for HR; sometimes the budget we get is not enough for the staff establishment given to us. This budget is for the running of the HR Department,*

> *for appointments. When I say appointments, I mean the advertising part of it because we need to have the budget for sending out the adverts. Then we have the budget for salaries and we have to add bonuses, pension, housing subsidy, scarce skills allowance and all these allowances. So when it's not enough, you can't be able to appoint more staff and you can't replace staff that has resigned."* (Human Resource Manager 3, Regional Hospital 10, Gauteng Province)

A National Department of Health policymaker concurred with these challenges that hospital managers face in filling vacant positions but emphasised the importance of managing the process to ensure that only funded posts are filled. This informant remarked as follows:

> *"I think the process of filling up posts is a bit of a challenge. I understand the frustration from some people but on the other hand unless you manage the process, what you might have is what was taking place in the homelands where people would just fill posts regardless of whether there is money or not. At the moment it's a bit of a problem because you have provinces that decentralise and others centralise"* (Policymaker 1, National Government)

For Gauteng province in particular, almost all human resource managers that were interviewed complained about the inefficiency of the Gauteng Shared Services Centre (GSSC), a provincial structure which uses a centralised system to process and capture HR data. Several challenges were noted with this system including contributing to the lengthy periods to fill vacant posts, delays in capturing information, capturing of wrong information as well as lost information:

> *"Some years back, we used to capture HR information in the system ourselves and we knew what is going on. But then sometime in 1999, a new office came into place, the GSSC [Gauteng Shared Services Centre]. It is where most of our documents from HR are provincially processed and captured. So we collect the information from the employees and we send it through to our employment equity unit and then it goes to GSSC for capturing. So you find that that information is not captured and you phone to do follow ups. You send documents twice or thrice in order to be captured; even now our leave system is not up to date because of the processing by GSSC."* (Human Resource Manager 4, Revitalised Regional Hospital, Gauteng Province)

> *"The GSSC [Gauteng Shared Services Centre] is not running smoothly. The late applications are one of the challenges and the process of the paper work, it takes too long; it can be three months or so. We really don't have doctors and on the 18th of*

> *May, it was the closing date for applications. As you can see, we are nearly reaching the 18th June and we still haven't got the applications from GSSC. I must short list and then interview, it's not easy. GSSC captures wrong information, they are late with things, and things get lost. I would say that's the problem."*(Human Resource Manager 2, District Hospital 9, Gauteng Province)

Several respondents, notably those working in rural hospitals stated that recruiting young health professionals and retaining health workers in general in a rural facility is a challenge due to the remoteness of such areas and limited access and availability of social amenities. These respondents commented as follows:

> *"I think with us the challenge is also mainly because of the remoteness of this area. There is a lack of facilities, the schooling and your entertainment facilities you know it's another challenge."* (Health Manager 1, District Hospital, North West Province)

> *"For young people, it might not be so nice because when I came here I already had my family. It's my husband and my kid, those were the things most important to me but young people would look at something else…you know…there's not even real basketball team or a real rugby team or a swimming pool or…err…a place where you can get together… I think it lacks adventure. We don't have a church and we have to travel to get to church, we have to travel to get to the bank, you have to travel to get to everything."* (Medical Officer, District Hospital, North West Province)

> *"Our main problem regarding recruitment is that it is difficult for us to attract scarce skills professionals especially because of the remoteness of this place."*(Human Resource Manager 5, District Hospital 7, North West Province)

Although no doctor agreed to participate in the in-depth interviews in Gauteng province, several foreign doctors that were approached mentioned informally that foreign doctors leave because of immigration problems. It was noted that foreign doctors are given refugee status and that getting a permanent resident status was difficult. These doctors further mentioned that most of the foreign doctors were working illegally in the hospitals. While acknowledging the need for increased number of doctors in the study settings, the ability of some doctors to practice illegally raises great concerns about loopholes in the quality of the recruitment process at these study sites.

Inadequate Salaries:

A key de-motivating factor mentioned by the majority of health workers was inadequate salaries. In both Gauteng and North West provinces, and in hospitals and clinics, all categories of health workers considered their salaries to be too low. To supplement their salaries, doctors reported doing parallel health sector consulting as well as doing locums while nurses admitted engaging in moonlighting either in private hospitals or other public hospitals within and even outside the provinces where they are located. However, doctors reported having fewer opportunities for locum work in rural areas, thus diminishing their willingness to settle in rural facilities.

> *"The ones [doctors] that are in town do part-times and sessions somewhere else. And here, there is no place where they can do such things so they just move on." (*Hospital Manager 3, Revitalised District Hospital 2, North West Province)

With regard to nurses moonlighting, a document review showed that nursing agencies tended to pay higher salaries than the public hospitals. However, in-depth interviews could not confirm if these amounts were the same in the study sites.

> *"A fulltime nurse at [public] hospital earns an hourly rate of R41,05 but agencies charge R46.08 an hour for ward nurse, R50,90 for high-care nurse and R68,99 for nurses with intensive care unit (ICU) experience. A staff nurse earns R28,03 an hour but agencies charge R35,11."* (Benjamin C, Business Day Newspaper, 17 January 2007)

Several human resource managers were further of the view that attracting scarce skills professionals was another recruitment challenge, and this was attributed to low salaries. One commented as follows:

> *"At the moment, the challenge that we face is attracting scarce skills staff, like pharmacists, doctors, professional nurses. For instance, when we had a post for a pharmacist, we interviewed and then the person decided to decline because the salary we offered was too low, so we had to re-advertise. So the challenge is*

attracting and retaining scarce skills staff." (Human Resource 1, District Hospital 5, Gauteng Province)

However, other hospital managers were of the opinion that some health workers were using their hospitals as a stepping stone to acquire training and for reaching higher positions and better salaries elsewhere:

> *"And then the people from outside come, they just come for us to train them and then it's as if they are waiting halfway station and when they get higher posts, then they are gone."* (Hospital Manager 2, District Hospital 8, Gauteng Province)

> *"You will have a new person…you always have a new person to teach and that's a problem for us as managers you know. From time to time, you've got a new person because this one just came to address their financial frustrations and once they've been able to do that they go away."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

Limited Opportunities for Growth:

Another major demotivating factor specifically for nurses was the length of time it took to get the opportunity to upgrade to the next level of nursing; and this was particularly an issue raised by the lower categories of nurses. Some of them reported that it took 20 years before they were considered to further their training to become professional nurses. This concern was mainly raised by hospital nurses in both provinces.

Because of the increased workload, these nurses were even unable to take their annual or sick leave to attend short courses to improve their skills.

> *"You have people who are not able to take their annual leave. And you'll have people who may not be exposed to short courses you know, workshops to sharpen their skills."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

> *"What I have noticed about the staff here is that they are responsible because even if one of them is sick, they force themselves to come to work if they know that someone is away on leave."* (Assistant Nurse 14, Gauteng Clinic)

Lack of Accommodation:

Lack of accommodation for staff in rural facilities, especially for nurses, was also a recurring theme related to recruitment and retention challenges of staff. Other issues included lack of water and sanitation in rural communities.

> *"There are no places to stay, no nurse's homes"* (Staff Nurse, District Hospital, North West Province)

> *"Personally I don't think they are going to be able to address the shortage of nurses for now because there is no one who wants to come to the rural areas; we are not able to get proper accommodation. I rent a room in the village and there is no water and proper sanitation in this village. Who is going to agree to come here and suffer the way I am suffering now?"* (Professional Nurse 20, North West Clinic)

During fieldwork, I also observed that for both hospitals in North West and Gauteng provinces that were providing accommodation for health workers, preference for better and bigger houses was given to doctors as opposed to nurses. Even in the same hospital, nurses were usually accommodated in one-roomed flat-like structures or nursing homes while doctors tended to stay in structured brick houses. In some cases where the hospitals provided accommodation, nurses reported that they were treated like 'teenagers' irrespective of whether they are married or not. For instance, in one hospital in Gauteng province, nurses reported that overnight visitors were not allowed in their accommodation; regardless of whether such a visitor was a spouse or not and that these restrictions had tendencies to cause tensions in family relationships. Nurses in this hospital reported that the gates where the accommodation was located opened at 6h00am and closed at 23h00pm. There were also concerns that the security staff responsible for locking the gates was not always on-site in the event of emergencies.

Weak Supervision, Interpersonal Relationships and Communication:

A substantial number of health workers from different categories of health facility (primary health care and hospitals) referred to the poor management, poor relationships between managers and front-line staff as well as weak communication as key challenges. Other recurring themes amongst respondents from primary health care facilities in particular were lack of support from the district office and unresponsive HR department while hospital health workers raised concerns about lack of agency on the part of institutional hospital and human resource managers.

In terms of limited support from the district office, there was general consensus amongst nurses of all categories in primary health care centres in Gauteng and North West provinces that district managers seldom visits clinics and community health centres and these nurses were concerned that they were hardly supervised. According to these nurses, district managers are mainly interested in getting health statistics and no support whatsoever is offered in reaching the targets for such statistics.

> *"So do you think they support and motivate us, they don't. January to January they [district managers] don't come here, you seldom see one of them coming; we are not supported, we are just neglected. What they want is statistics at the end of the day and continuous workshops, they never come here. Since coming here, I have only seen one manager once. And I have worked here for one year six months. We need their support, we need them down here."*(Professional Nurse 10, North West Clinic)

> *"The painful part is that the top management in the district don't know what is happening down there. You talk, you report, you phone and all they do is to promise and promise. At the end of the day, nothing is done. It's like they don't care. As long as they get their salaries and submit their stats [statistics] every month, they don't care what is actually going on at the ground level. Down here is where all the action is happening."* (Professional Nurse 8, Gauteng Clinic)

Because the district managers rarely visit the clinics and community health centres, they are hardly aware of the daily challenges and needs at these primary health care centres. One nurse commented as follows:

> *"We work under a ceiling that is falling apart meaning that if there can be a big storm, the roof will fall. Even in our nurses' homes, we have insects and they bite us. I used my phone to take a picture of these insects and send it to my district manager; telling him that 'look at the things that bite us here', but still nothing happened."* (Professional Nurse 17, North West Clinic)

There was also a strong perception that district managers are unresponsive to the needs of the clinics; leading to difficulties in the day to day functioning of the clinics without availability of consumables required. One nurse commented as follows:

> *"Yes, right now as I am talking to you, I just do my own thing without consulting people in the sub-district. We do not have a working facility phone; although we have a phone, it does not have airtime. They usually put R700.00 airtime per month but the airtime finished on the 16th up till now the phone is still not loaded. Even if something can happen here, we don't know how we are going to communicate with them [sub-district managers]. Like yesterday I had to call an ambulance using my own phone."* (Professional Nurse 17, North West Clinic)

An overwhelming majority of nurses of all categories from primary health care centres in the two provinces pointed out that the HR department was unresponsive, unsupportive and inaccessible. For instance, a major concern was that the HR department was outside the vicinity of the clinics and community health centres, thus making it difficult for nurses to easily access it; especially taking into consideration that the operational hours of these offices clashed with the nurses working hours.

> *"Our HR is far away, it's in Hillbrow. So you can only go there at specific times, you cannot just show up there. It's quite difficult especially if you are working since our HR doesn't open on weekends. Our office hours here are from 8:00 to 16:00. They also work from 8:00 to 16:00. So if you have a problem, you have to take one day leave whereas what you are going to do there is work related. When you get there, you wait for a long time and they take you from pillar to post. Those are some*

of the challenges that we face with the HR department." (Professional Nurse 8, Gauteng Clinic)

"When you want information from HR, it's a problem most of the time as they are situated very far from here and you have to go there physically. You see, where we're situated the [phone] network is very bad and sometimes the [phone] line cuts while you are still talking to HR, that's why we don't bother with the phone." (Professional Nurse 16, North West Clinic)

Poor communication and consultation between management and staff at institution level came consistently in the interviews with nurses in hospital and primary health care settings in the two provinces. Communication was reported to be rather weak on issues relating to deciding on the weekly duty roaster, and payment of night duty and overtime allowances. With regards to duty rosters, one lower cadre nurse felt that there was lack of consultation from operational managers when compiling duty roasters to ensure that the working times suit nurses:

"You'll find that maybe at times a professional nurse or nursing manager is compiling weekly duty list but you as a junior nurse you are not consulted. She will not ask you which days will be suitable for you to be off work...or if the working days are okay for you. She just writes the days down and then when you try to negotiate with her about the days that are suitable for you she will tell you about the shortage of staff. So you find that this causes job dissatisfaction because you need those days and you won't get them." (Assistant Nurse, District Hospital, North West Province)

It was also the opinion of some nurses that institutional managers were autocratic; offering limited interaction and negotiation with staff. Feelings of fear of victimisation by institutional managers were also noted by some respondents:

"Sometimes it happens that they call you during the night asking you to come and fill in because there is no sister in charge [professional nurse] in the hospital. You will work without any agreement on how they are going to replace the hours that you worked or how are they going to pay you for the hours that you worked. Sometimes you'll just see additional money in your bank account and you don't know where it comes from and when you go and ask them about it they will tell you that 'it's your money so what do you want, you've got the money." (Professional Nurse, District Hospital, North West)

"What they do is just sit there and send us papers. Like now, you are here asking me questions, that's interaction and I'm able to tell you how I feel. But if you are doing an interview, the questions they send to us limits us at the same time how can you give me

two lines to comment whereas I have a lot to say? Give me five pages so that I can write more. So it's either they are not doing their job or they keep those paper as a form of evidence for when so and so comes, they will say 'here's evidence, we are doing our job'. So that's my personal view. It's like in the firms where you are supervised by a Boer; you choose what you have to say because you will get fired" (Male Assistant Nurse, District Hospital, Gauteng Province)

Some respondents felt that they were not appreciated by their managers irrespective of the efforts they made to perform effectively despite challenging working conditions described above. One respondent mentioned that managers were very quick to be judgemental if clinical errors occur but were not appreciative if staff does well.

"And they [managers] will come and ask you why you didn't do one, two and three. And then you tell them that we are only two [nurses] but we have tried to do what we can do. And they will tell you 'no you have to do the entire job and not leave anything behind', never mind how many you are but everything must be done and it must be up to date on a daily basis." (Professional Nurse, District Hospital, North West)

"One mistake you do then they [management] are on your case but when you go all out, there's not even a simple thank you. That 'oh well we've heard you did this and that and thank you', nothing." (Male Assistant Nurse, District Hospital, Gauteng Province)

In one hospital, a human resource manager reported poor communication between the hospital management and the unions, where unions were said to be reporting issues still under discussion with their members prior to an agreement being reached, thus causing confusion amongst staff and exacerbating tensions between HR managers and staff:

"We encounter problems with poor communication by the unions. You will find that from the union's side, if we discuss something that is a proposal between the employer and the unions, the unions report that to their members while it is still in a negotiation phase. Then employees would come directly to HR, and we try to emphasize that it's only the discussion between the union and the employer; we can't give that information because we don't have anything on paper." (Human Resource Manager 4, Revitalised Regional Hospital, Gauteng Province)

4.3.3 Other Motivational and Retention Strategies

In addition to asking health workers about what attracts and motivates them, human resource managers were also asked if at all there were any other current strategies at hospital level to motivate and retain health workers. Apart from the HRH interventions being investigated in this thesis, human resource managers indicated that other strategies that were used included certificates to recognise employees of the year, welcoming parties, celebration of birthdays, availability of rest rooms, short training and provision of study leave.

> *"We had a function where we awarded people 'certificates of employee of the year'."* (Human Resource Manager 1, District Hospital 5, Gauteng Province)

> *"We organise welcoming parties for them. Also, every month we celebrate birthdays for our staff members. Also, it's very few institutions that have tea making machines for their staff members, so we had to make sure that we have that. This year we are planning to have rest rooms for them."*(Human Resource Manager 3, Regional Hospital 10, Gauteng Province)

In addition, the Gauteng Health Department initiative to encourage staff that was reported by human resource managers included the Khanyisa Service Excellence Recognition Awards, which aimed to recognise individuals and groups who have provided excellent service and/or developed projects and systems that significantly improved the provision of quality healthcare and social services in Gauteng province.

> *"For the department, they had those Khanyisa Awards."* (Human Resource Manager 2, District Hospital 9, Gauteng Province)

Health sector-wide initiatives that were mentioned by several respondents from both Gauteng and North West provinces included the Performance Management Development System (PMDS), uniform allowance and housing allowance:

> *"And another thing is the PMDS [performance management development system], which is a department evaluation where they recognise and reward people. PMDS is a system that they use to evaluate employees for a period of twelve months. It's*

between the employee and the immediate supervisor; we use the job description for the whole period to say this is what is expected from you for this year and then on quarterly basis we do reviews." (Human Resource Manager 3, Regional Hospital 10, Gauteng Province)

I know that the nurses get uniform allowance once a year. Previously it was R1 500 but I heard they are going to increase it." (Human Resource Manager 1, District Hospital 5, Gauteng Province)

4.4 Conclusion

This chapter reported on factors of motivation and de-motivation of health workers as well as the human resources challenges that contribute to de-motivation in the facilities that participated in this study. Interestingly, the findings also revealed that nurses in particular, viewed the primary health care setting as less strenuous and as a preferred setting for working towards retirement than the hospital setting. The chapter concluded with highlighting that within the facilities and provinces where the study was conducted, there was a culture of initiating incentives and this was in the form of Khanyisa Service Excellence Recognition Awards in Gauteng province, the health-sector wide Performance Management Development System (PMDS), and the uniform and housing allowances amongst others.

While these initiatives are a positive sign of the efforts to motivate and retain health workers, an interesting finding of this study was that regardless of these initiatives, nurses in particular embraced the opportunity for internal migration from public to private facilities, and from clinics to hospitals and vice versa. According to these nurses, their ability to change facilities provided more opportunities for their clinical growth. The findings are useful in depicting the incentive environment within which the incentive strategies under investigation in this study are implemented. The next chapter will discuss the results of two of these interventions, the rural allowance and scarce skills allowance.

CHAPTER 5: CASE STUDIES ON THE RURAL AND SCARCE SKILLS ALLOWANCES

5.1 Introduction

This chapter begins a series of three Chapters (5, 6 and 7) that forms part of the crux of this thesis, which is to describe the policy development and implementation processes of the incentive strategies under investigation in this study as well as to present findings on the influence of these strategies on the motivation and retention of health workers. In this chapter, and the subsequent ones (Chapter 6 and 7), there are two parts; the first part provides a basis for understanding the key events and processes that led to the development and implementation of the incentive strategies of interest in this study using the Walt and Gilson framework. The second part illustrates how the manner in which the incentive strategies of interest in this study were developed and implemented may or may not have led to the achievement of their intended objectives drawing from the adapted Hertzberg two-factor theory conceptual framework in Chapter 2. This will be done by discussing participant's perceptions on the influence of these incentive strategies on the motivation and retention of health workers in the facilities that participated in the study. The differences between provinces, cadres and setting (hospital and primary health care) will be reflected.

5.2 Description of the Development and Implementation of Rural and Scarce Skills Allowances

Using the Walt and Gilson [198] triangular framework, this section will discuss the emerging findings starting with the context within which the rural and scarce skills allowances were introduced and this will be followed by the description of the actual content of these strategies. The main drivers or actors of the development and implementation of the rural and scarce skills policies will then be discussed, including their roles and influences. The findings

related to the effects of each stage of the policy process will also be discussed where applicable. The results in this section will mainly be based on the document review and the in-depth interviews with key informants, hospital managers and human resources managers.

5.2.1 Contextual Factors

A triangulation of interviews with key informants and a document analysis revealed that in 2004, around the time of the country's third democratic elections, the South African government introduced two targeted financial incentive strategies for health professionals at the same time; a revised rural allowance and a scarce skills allowance. Prior to the introduction of these allowances, an initial rural recruitment allowance was instituted in 1994. A document review revealed that it was later recognised that this recruitment allowance needed to be revised following extensive debates in the Public Service Bargaining Chamber (PSBC) arguing that this allowance was only granted to doctors and dentists and that it had remained at a fixed rate since its inception [169]. These debates then led to the development and implementation of these two separate allowances; the rural allowance and the scarce skills allowance.

The document review also highlighted that in a period leading to the introduction of the rural and scarce skills allowances, the National Department of Health put in place several other strategies and policy initiatives to address the inequities in the distribution of health workers and the mal-distribution between rural and urban settings (Table 10). This Table also summarises some of the contextual influences and broader political and health sector changes within which the rural and scarce skills allowances were developed and implemented.

Table 10: Timeline of the Policy Initiatives and Key Events in the Development of the Rural and Scarce Skills Allowances

Year	Policy Initiatives and Key Events
1996	– Government recruited first group of Cuban doctors to boost staffing in rural areas. Training of medical doctors in Cuba was also initiated.
1998	– Government introduced community service for doctors and for allied health professionals making it mandatory for these health professionals to work in underserved areas for 1–year period.
2004	– South Africa's third democratic elections where Mr Thabo Mbeki was re-elected as president. – Government introduced two targeted financial incentives: ▪ A rural allowance to attract and retain certain health professionals in rural facilities. ▪ A scarce skills allowance to attract and retain certain scarce categories of health professionals in the public health sector. – Government released a policy on the recruitment and employment of foreign health professionals restricting recruitment to persons with verified qualifications and competencies to work in underserved areas. – Government finalised a bilateral agreement with Iran to allow Iranian doctors to work in rural health facilities in South Africa. – Government promulgated the National Health Act No. 61 of 2003 with certificate of need provision for health professionals wishing to establish a private practice to decrease the concentration of health professionals in urban areas. This clause has never been enacted.
2006	– Government appointed a new Deputy Director General for Human Resources. – Activists developed a Draft Rural Health Strategy for South Africa to improve health services in rural areas in the period 2006-2009.
2007	– Government signed an agreement to allow recruitment of Tunisian medical practitioners for temporary employment in rural areas in South Africa.
2008	– Government introduced community service for nurses, making it mandatory for nurses with 4-year diplomas or degrees to work in the public sector and under-served areas for a 1-year period.
2009	– Government appointed a new Minister of Health, Dr Aaron Motswaledi
2010	– World Health Organisation launched a set of recommendations on increasing access of health workers in remote and rural areas through improved retention in South Africa
2010	– Government appointed a new Director General, Ms Precious Matsoso

With regards to the design of the rural allowance, some policymakers who were closely involved during the initial stages of this policy reported that it was introduced to address the HRH crisis in the country at that time. In particular, to address the geographical inequities and imbalances in the distribution of health professionals between urban and rural areas in the public health sector:

> *"My understanding of the rural allowance and the reason for putting it in place was based on a very simple principle on how do we encourage doctors and nurses to work at specific underserved areas."* (Policymaker 2, Department of Public Service and Administration)

> *"It was a huge policy problem that we have enormous inequities in the distribution of doctors in rural areas. The reason for the rural allowance is that health workers tend to drift to cities, so countries put in place incentives like rural allowances to try to send most of the health workers to more remote areas."* (Policymaker 7, National Treasury)

A document analysis of the 2006 Human Resources for Health Strategy noted that scarce skills allowance was designed to ensure that the South African health system possesses an adequate supply of health-related skills from which to draw its human resources in the long term [8]. However, there was agreement amongst some policymakers that the scarce skills allowance was introduced as a temporary strategy intended to retain certain health professionals in the public health sector through increased remuneration; hence it was only implemented in the health sector:

> *"Let me put it this way, when we first thought of the scarce skills allowance, we have always thought of it as an interim measure because our view was that if a skill is scarce today it may not be scarce tomorrow."* (Policymaker 2, Department of Public Service and Administration)

> *"Well, scarce skills [allowance] really was seen as a temporary strategy because at that time we felt that certain professions were being paid too low and thus it was difficult to retain them so we wanted to improve the remuneration of those professionals. It was a question of if you were to pay people more, who are the categories who are most difficult to attract and retain in the public sector."* (Policymaker 7, National Treasury)

Other policymakers believed that in the post-apartheid era, opportunities opened up for doctors and nurses to migrate to other countries in pursuit of higher salaries and that this prompted the government to initiate strategies like rural and scarce skills allowances to keep them in the country. Some commented that:

> *"The argument was that these people have got scarce skills and they are being poached by external forces both nationally and internationally. Our doctors were leaving us and going internationally and our nurses were leaving us going internationally and in the private sector. That was the purpose of the scarce skills...just to try to address that."* (Policymaker 2, Department of Public Service and Administration)

> *"So migration has always been a problem; however I think an increase in migration was brought to the fore by the nursing profession because after 1994 [post democracy], every South African could go anywhere in the world. It was no more the privileges of the white people only. And when nurses started migrating, people started seeing heydays because our health system depends a lot on the nursing profession."* (Policymaker 1, National Department of Health)

In support of the views from the key informants' interviews, during the three years prior to the introduction of the rural and scarce skills allowances, the media headlines often highlighted the human resource crisis in the health sector. For instance, on the 28th April 2000, The Citizen newspaper published an article entitled "hospital staff shortage strain" which reported that staff losses from the public to the private sector as well as to overseas continued to put a strain on the staff who remained. An excerpt from this newspaper is shown below making reference to a comment by Dr Zola Njongwe, who was the Chief Medical Superintended at Pretoria Academic hospital:

> *"Pretoria academic hospital is losing about ten highly qualified nurses a month to the private sector and overseas hospitals."* (The Citizen, Health Systems Trust News, 28 April 2000)

The analysis of the media releases also revealed that this crisis was not only experienced by one province or one hospital, this was a country-wide problem; and the exodus was mainly amongst doctors and nurses. The then Health Minister, Dr Manto Tshabalala-Msimang was quoted in the media sharing figures demonstrating that in 2001:

> *"As many as 3,500 South African health professionals were working in Australia, 2,360 in Canada, 1,600 in New Zealand, 9,000 in the United Kingdom and 7,000 in the United States."* (Cullinan K and Thom A, Health-e News, 18 May 2005)

In July 2002, reporters from The Sunday Tribune newspaper also reported that the ripple effect of the nursing brain drain on the South African health system was that there were fewer nurses to cope with the crisis, more so, the remaining ones were moonlighting to fill the shifts as well as to earn more money. The result of this was in some instances, quality care was compromised and this was the case even at private hospitals.

Instead of the situation improving, it was getting worse. In August 2003, The Pretoria News reported that the Pretoria Academic hospital was the hardest hit by the exodus of nurses in particular, with 550 vacancies reported in late 2003 [239]. Dr Kobie Marais, an Assistant Director at this hospital, was also quoted in this newspaper emphasising the human resource crisis in this hospital; particularly the influence thereof whereby significant amount of money was spend on a monthly basis hiring agency nurses to fill the gap:

> *"The hospital has provision for a total nursing complement of 1,600.This hospital, like many other hospitals in the province was understaffed and people overworked. This year alone, the hospital lost 57 nurses, 22 of whom left for the private sector or hospitals abroad. The hospital pay between R1.8 million and R2 million a month to agencies that supply us with extra contract nurses. Units like maternity, ICU, and theatres, which needed skilled and experienced nurses, were finding it particularly hard to cope."* (Mchunu N, Pretoria News, 22 August 2003)

Again, in 2003, Health Systems Trust compiled vacancy figures in the public health sector which depicted a bleak picture in most of the provinces. For instance, in Mpumalanga, an astonishing 67% of posts were vacant, 41% in the Free State, 33% in the North West, 32% in Gauteng, 28% in the Eastern Cape, 27% in the Northern Cape, 25% in KwaZulu-Natal, 13%

in Limpopo and 14% in the Western Cape [240]. Health-e News Service, also quoted Dr Percy Mahlathi, the then Health Departments Chief Director for Human Resources, stating that rural provinces were mostly affected; with posts advertised in provinces such as the Eastern Cape receiving zero applications because of the difficulty experienced with attracting professionals to such provinces [241]. The Secretary General of the National Education Health and Allied Workers Union (NEHAWU), Mr. Fikile Majola, was also quoted saying part of the reason why people are not going to rural areas is because working conditions are unattractive [241].

Several other reasons were given for this crisis in the health sector. The government's budget cut for training and the reduction of the number of training colleges for nurses at that time were blamed on the crisis [242]. The major reason that was reported for the crisis was the difficulty by government to compete with the higher salaries offered abroad [242]. An extract from the Business Times newspaper at that time illustrated the differences in remuneration overseas compared to South Africa:

> *"A recent advert for a post in the UK offers between R256,000 and R448,000 a year, while Saudi Arabia nurses can earn an annual tax-free salary of R228,000 to R360,000. Compare this with local nurse whose starting salary after four years of training is about R62,400 to R64,800 a year. Thereafter, depending on experience and qualifications, an average nurse working in the ICU department or theatre will earn R84,000 to R96,000 a year."* (Shevel A, Business Times, 2 February 2003)

5.2.2 Policy Content

According to the rural allowance policy, the intention of this incentive strategy was "*to attract and retain health professionals to work full-time in public health services in rural, under-served areas, and other inhospitable areas identified by provincial health departments"* [243]. The scarce skills allowance policy on the other hand, noted that this policy was

intended to attract and retain designated health professional categories working in clinical service delivery of the public health sector on a full-time basis, including those in the management of the function of their specialities [244]. Although community service doctors and interns were eligible for the rural allowance [243], interns were excluded from the scarce skills allowance [244]. The then Minister of Health, Dr Manto Tshabalala-Msimang was quoted as saying that the rural allowance would benefit 33,000 full-time health professionals working in designated areas [245-247]; while the scarce skills allowance was expected to benefit 62,000 full-time health professionals in specified categories regardless of the geographic area in which they work [245]. The Minister also reported that the government allocated R500 million (approximately US$71 million) in 2004, a further R750 million (US$107 million) in 2005 and R1 billion in 2006 for the implementation of the rural and scarce skills allowances [245-247].

Several similarities were identified with the design of the rural allowance and the scarce skills allowance. Firstly, interviews with policymakers and an analysis of the rural and scarce skills allowance policies revealed that not all health professionals were eligible and that the proportionate increase also differed by professional group [243, 244]. For instance, the rural allowance benefitted targeted categories of health professionals working in health facilities designated as rural in the Integrated Sustainable Rural Development Strategy (ISRDS) as well as areas designated by the Public Service Co-ordinating Bargaining Council (PSCBC) based on the previous 'rural recruitment allowance' (Table 11) [243]. The rural allowance policy also listed a total of 13 ISRDS areas and none of these were in the two provinces (Gauteng and North West) where this study was conducted [243]. Additionally, the policy listed 142 PSCBC designated institutions and of these only 16 was from North West province and none from Gauteng province [243]. An additional list of 38 areas proposed by Provincial Heads

was also included in the policy and of these only 3 were from North West province and none from Gauteng province [243].

Table 11: Rural Allowance per Category of Staff by Designated Area

Registered health professionals (categories)	Percentage Increase	
	ISRDS nodes	PSCBC designated rural areas and other inhospitable areas identified by provincial departments of Health
Dental Specialist, Dentist Medical Doctor, Medical Specialist	22%	18%
Dental Technician, Dietician, Nutritionist, Occupational Therapist Pharmacologist, Physiotherapist, Psychologist, Radiographer, Pharmacist, Speech Therapist	17%	12%
Professional Nurses (excluding student professional nurse)	12%	8%

Source: Public Health and Welfare Sector Bargaining Council Resolution No. 2 of 2004.
Professional Nurse generically refers to nurses registered with the SANC and not to rank
Community service workers and interns were included

The ISDRS areas were identified in 2001 by the second democratic government president, Mr Thabo Mbeki as the 13 most disadvantaged rural areas requiring urgent development. Other areas covered by the rural allowance policy were those referred to as 'inhospitable' and these were to be determined by the provincial heads of health depending on the availability of funds within provincial budgets. The rural allowance policy also noted that the percentage increase differed for ISRDS and PSCBC designated and inhospitable areas. Although the difference between these was minimal, the percentage increase was slightly higher in ISRDS areas (Table 11). Of significance to note in Table 11 is the differential allowance increases paid out to the different health worker categories, with doctors receiving the highest allowances of between 18-22 percent of their annual salaries while professional nurses got the lowest of between 8-12 percent.

As with the rural allowance policy, the scarce skills allowance also benefited targeted categories of health professionals considered as possessing scarce skills regardless of the place where they worked (Table 12) [244]. One policymaker made the following remark:

> *"The scarce skills [allowance] is paid to doctors and to certain categories of nurses; these are the professionals that we believe we are having difficulties retaining."* (Policymaker 2, Department of Public Service and Administration)

Table 12: Scarce Skills Allowance per Category

Registered health professionals (designated categories)	Percentages
Medical and Dental Specialist, Dentist, Medical Doctor, Pharmacist Pharmacologist	15%
Dental Technician, Psychologist, Dietician, Nutritionist, Occupational Therapist, Physiotherapist, Radiographer, Speech Therapist	10%
Professional Nurses with qualifications in the following specialities and performing functions as pertaining to the following specialities: – Operating Theatre Technique – Critical Care (intensive care) – Oncology	10%

Source: Public Health and Welfare Sector Bargaining Council Agreement No. 1 of 2004
Professional Nurse generically refers to nurses registered with the SANC and not to rank

Table 12 further illustrates that when scarce skills allowance was first implemented in 2004, only three nursing specialities (operating theatre, intensive care and oncology nurses) qualified for this incentive strategy. Furthermore, professional nurses only qualified for the scarce skills allowance if they were working in wards where they could perform the specified nursing specialities [244], which meant that specialised nurses with the same qualifications but working in other settings were not eligible. The policy documents revealed that the scarce skills allowance was exclusively targeted at hospital level health professionals and excluded professional nurses in the primary health care (PHC) setting who generally did not possess the stipulated nursing specialities. In addition, this policy excluded other critical nursing specialities such as midwifery, psychiatry, paediatric nursing and many others. Although the

2006 National Scarce Skills List of the Department of Labour (DoL) [248] mentioned registered nurses and primary health care nurses as scarce skills, this did not necessarily imply that these nurses would automatically benefit from the scarce skills allowance. The list was mainly intended to emphasis shortages and need within these categories.

An important finding revealed by in-depth interviews across all respondents in this study was that both the rural and scarce skills allowance policies excluded the lower categories of nurses (staff nurses with 2 years of training and assistant nurses with 1-year training). When asked why, one policymaker reasoned that there was no evidence to show that these categories were difficult to recruit:

> *"We looked at the numbers and the inequities, and generally the inequities are in the skilled personnel. There is really no data to indicate that it's difficult to recruit staff nurses to rural areas. The ratios of the staff nurses to population are very similar across the country."* (Policymaker 7, National Treasury)

The other health categories that were excluded by these policies were those in the fields of environmental health, medical technology and emergency care. A policymaker from a provincial health department level raised concerns with regard to the alienation of other health professionals by the scarce skills allowance policy:

> *"Scarce skills allowance had good intentions because it benefited certain categories. But, what it also did was to alienate other professionals thus making it difficult for us to appreciate the good it has done."* (Policymaker 3, Gauteng Department of Health)

Another similarity between these allowances was that both the rural and the scarce skills allowances were awarded retrospectively to July 2003 [243, 244]. As was the case with the rural allowance, differential percentages of the scarce skills allowance were awarded for the

different health worker categories, with 15% being paid to doctors while professional nurses were paid 10% of their annual salaries [244]. Although both the rural and scarce skills allowance policies did not stipulate the actual amount that would be allocated for these allowances, media releases between 2004 and 2006 quoted the Minister of Health, Dr Manto Tshabalala-Msimang claiming that an entry-level medical doctor working in a rural area with an annual salary of R150,000 (US$21,000; $1=R7 at the time) would gain R15,000 (US$2,100) per year [245-247].

Interviews with key informants revealed conflicting views with regard to the evidence base for the reforms. One key informant from National Treasury commented that research was conducted to guide decisions made related to the amounts that were payable and the health professionals that had to benefit from the rural and scarce skills allowances:

> *"We did quite a lot of research from our side [National Treasury]. Not only our research because [department of] health would modify a bit what we did and they have their own ideas…so the three departments [National Department of Health, National Treasury and DPSA] put quite a great input into the process but I think it was fairly researched."* (Policymaker 7, National Treasury)

Another informant from a Professional Association was of the view that the evidence that guided decisions was inadequate because it failed to go deeper into investigating how other countries are paying their health professionals in order to retain them comparable to South Africa.

> *"…whatever you are going to implement should be informed by the findings. I think there wasn't proper research done to say what is it that other countries are paying [to] keep their doctors. And for this policy [rural allowance] to address all the underlying issues, you need to have done thorough research."* (Key Informant 5, Professional Association)

Based on the document analysis and policymaker interviews, the percentages for both the rural and scarce skills allowances and health professional eligibility were supposed to be reviewed on an annual basis to ensure equity. Below is a quotation from a National Government policymaker commenting about the rural allowance policy as well as an extract from the scarce skills allowance policy reflecting this:

> *"When the rural allowance was introduced, the Department of Health was required to conduct an analysis as part of the agreement. It was supposed to be an annual or every third year analysis, I can't remember the specifics. That would then determine if they needed to roll it out further or extend it".* (Policymaker 2, Department of Public Service and Administration)

> *"The determination of percentages of allowances for the different grouping of health professional categories will be subject of annual collective bargaining process with the intention of achieving equity*." [244]

Additionally, both rural and scarce skills policies mentioned that after every three-years from the date of implementation, the agreements would be subject to re-negotiation [243, 244]. These policies also mentioned that termination of payment of both the rural and scarce skills allowances could be instituted subject to certain job transfer or promotion circumstances [243, 244]. For instance, the rural allowance policy noted that if institutions benefitting from this strategy were to be reclassified, payment of the allowance may be reviewed or terminated after giving affected health professionals three months' notice [243]. In addition, the rural allowance was to be reviewed or terminated in the event of a job transfer or promotion that does not qualify for this allowance.

Regarding the scarce skills allowance, the policy mentioned that this incentive could also be reviewed or terminated should the health professional be transferred or promoted to a post not designated as a scarce skill as well as in the event where the designated occupation groups are reclassified. However, during implementation, it appears that this was not as straightforward

as anticipated. It was the belief of some hospital managers in North West province that certain health workers 'abused' the provision of the rural and the scarce skills allowances to secure or 'bargain' for senior positions and higher salary scales. These managers were of the view that some health professionals locate to a rural facility only to benefit from the rural and the scarce skills allowances which would then put them into a certain salary bracket. They would then work for few months in this rural facility and go back to an urban setting to negotiate for a counter offer that would be higher than the salary bracket they are receiving. Some commented as follows:

> *"Scarce skills [allowance] was one of those policies that were supposed to assist but the situation is still the same. People are actually using these things [rural and scarce skills allowances] to actually bargain."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

> *"Staff would go to Vryburg hospital, work there for three to four months, get rural and scarce skills allowance and then they would come back here. Then you are stranded, you want them, the next thing they earn more than everybody."* (Hospital Manager 7, Regional Hospital 6, North West Province)

Another design similarity, apparent from the policymaker interviews and document analysis was that both allowances were awarded by Government as "*non-pensionable fixed percentage linked to the annual salary notch"* [243, 244]. This implied that the percentage amount was not used for the calculation of the pension funds of these health workers. One key informant commented as follows:

> *"The major issue is that both scarce skills and rural allowance are not pensionable"* (Key Informant 5, Professional Association)

Mack Lukhele, the President of the South African Medical Association (SAMA), the largest doctors' organisation in the country, was also quoted in a Health Systems Trust News report

as saying that health professionals were not happy that these allowances were not pensionable:

> *"Health care professionals were unhappy that the allowances were not pensionable."* (Kahn T, Health Systems Trust News, 20 June 2006)

A noteworthy finding from the document analysis was that for both the rural and the scarce skills allowances, the rate has remained fixed. This is interesting considering that one of the arguments presented at the introduction of the rural allowance was that it was meant to replace the earlier 1994 rural recruitment allowance which had remained at a fixed rate since its inception. Yet, since its implementation in 2004, no amendments had been made to the rural allowance rate. The scarce skills allowance, on the other hand, has since 2007 been replaced by the OSD which will be discussed in Chapter 7.

5.2.3 Actors and their Roles

In this section, the key actors that were involved in the design and implementation of the rural and scarce skills allowances are discussed. However, this cannot be understood without giving a brief background of how conditions of service in the public sector are set. In South Africa, public sector conditions of service (issues such as remuneration or working hours) are determined on the basis of central collective bargaining process between the employer (government) and recognised labour representatives (unions or professional associations), in line with provisions of the Labour Relations Act [249]. The Public Sector Coordinating Bargaining Council (PSCBC) is the country's largest bargaining structure and the Department of Public Service and Administration (DPSA) is also very closely involved in the processes as one policymaker stipulated in the quote below:

> *"The allowances are part of the conditions of service. So if the Health Department wants to put an allowance in place, they will have to discuss and debate it and then we work together as DPSA to say what are the implications of this policy across the public service."* (Policymaker 2, Department of Public Service and Administration)

Figure 5 depicts the main actors related to this case study based on the document review and interviews with key informants. The Department of Public Service and Administration (DPSA) played a critical role during the design phase of the rural and scarce skills allowances. According to the DPSA website, the role of one of its seven programmes called the Management of Compensation is *"to develop and implement compensation policies and guidelines for the public sector, to ensure co-ordinated bargaining as well as effective programme management for the establishment of the Single Public Service"* [250]. In relation to the design of the rural and scarce skills allowances, a policymaker from this programme at the DPSA stated that his departments' role was to provide guidance on the technical implications of these allowances, to participate in the negotiation processes and, to communicate the agreement to all relevant departments once a directive has been issued:

> *"We as the DPSA assist in dealing with technical implications, as in how we plan to implement it, what are the cost implications and then we engage in the negotiation processes. Once the bargaining is finished and an agreement is signed, the Minister of Public Service and Administration issues what we call a directive in order to give effect to that agreement. This directive then allows all the Departments to implement the outcome of the agreement, so that's our job, to support them in all that and to then communicate the agreement after its determination to all the Departments. Our own Minister [of DPSA] is the only person who can determine or approve any allowance in the Department of Health."* (Policymaker 2, Department of Public Service and Administration)

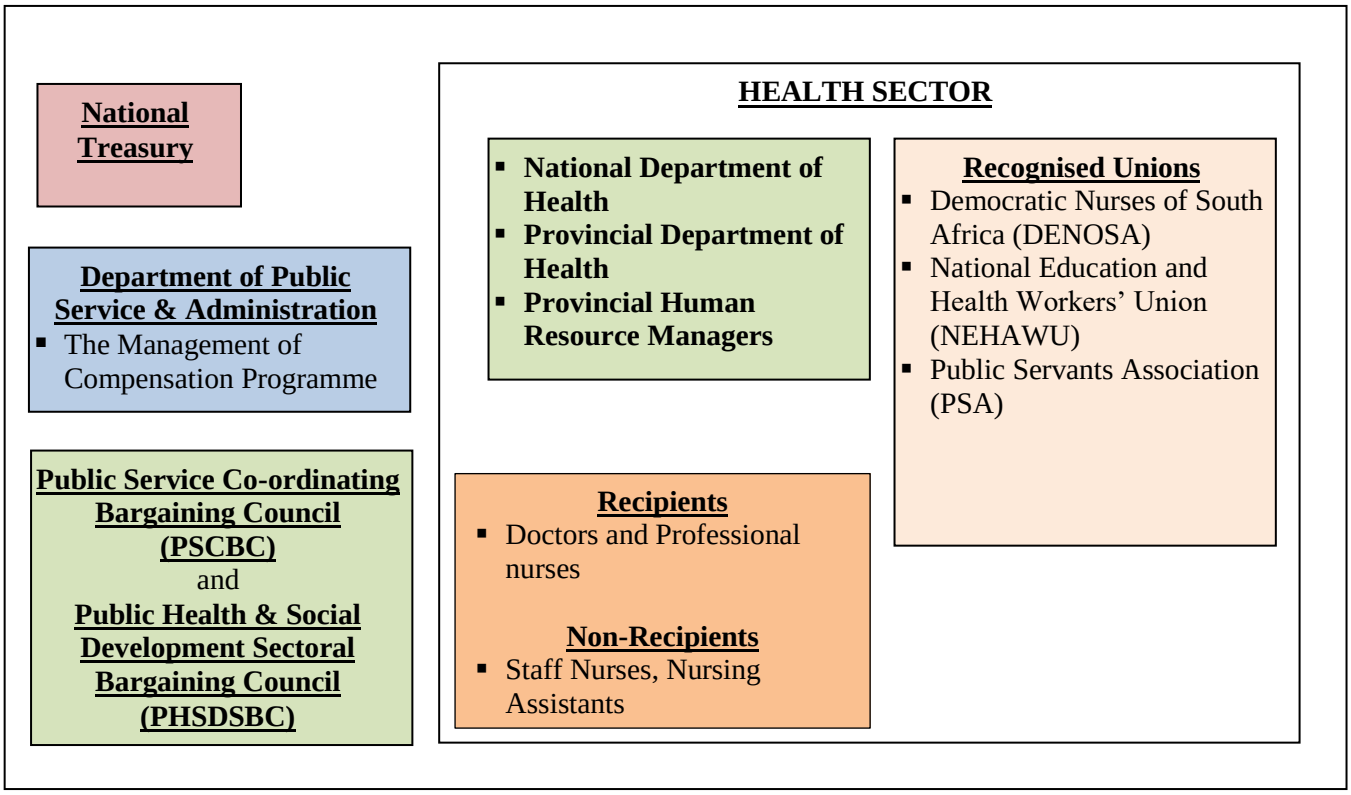

Figure 5: Key Actors Involved in Rural and Scarce Skills Allowances Processes

According to both the rural and scarce skills allowance policies, the Provincial Departments of Health (PDoH) were the key implementing actors [243, 244]. With regards to the rural allowance, part of their role was to identify areas that were considered inhospitable [243]. One policymaker remarked that this decision came after some provinces such as Gauteng and Western Cape were considered urban; as such they were not initially considered to benefit from the rural allowance:

> *"Basically when it [rural allowance] was introduced, there were certain provinces, I think Gauteng and Western Cape being some of them, where initially they felt that we shouldn't even have a rural allowance because we are not rural [provinces]. There were all these debates and the HOD's [Head of the Departments] fought for us saying that there are areas that are rural in these provinces. It was then agreed that we use the concept of 'inhospitable' allowance meaning Orange Farm is not rural but it's inhospitable; people are not attracted there simply because of the way it is."* (Policymaker 3, Gauteng Department of Health)

Key informant interviews revealed that the National Treasury was responsible for securing funds for the implementation of these allowances. These interviews also demonstrated that robust debates happened between the National Treasury and the National Department of Health regarding the decision to determine which categories of health professionals should benefit from both rural and scarce skills allowances. Some from the National Treasury had suggested that even professional nurses should not have been eligible for the rural and scarce skills allowances, but the National Department of Health argued for a compromise to be made.

> *"In some provinces, you find that you have excess of certain categories in a poorer province but it's difficult to keep certain scarce personnel in the poorer provinces. So from our side [National Treasury], it was based on the numbers but typically, Health [Department] was vocal about what they want. In fact, we [National Treasury] argued based on the number that even professional nurses should not have got rural and scarce skills allowances. When we look at physiotherapists for instance, we would say they would have to get these allowances because there is a huge differential in their distribution, but as for professional nurses they are always there. So the Department of Health made a political argument on that."* (Policymaker 7, National Treasury)

The National Treasury and the National Department of Health were also very influential with regard to determining the different percentage amounts for the different categories of health professionals. A policymaker from National Treasury commented as follows when asked about how the percentages were determined for the different categories of health workers:

> *"It was part of the trade-off. We didn't think any nurse should get the allowances for the same reasons that I said that the ratio between a nurse in Gauteng and a nurse in Limpopo was almost similar whereas the ratio of doctors was 50 to 1 or 20 to 1. So we felt that there was no need to give nurses allowances. So the Health Department pushed politically for the nurses to be considered. They said, 'look, we would really like to bring in professional nurses but we would bring them at a lower level'.* (Policymaker 7, National Treasury)

The unions, particularly the Democratic Nursing Organisation of South Africa (DENOSA), also played a critical role in arguing for the nurses' interests during the design stages of the rural and scarce skills allowances. Other unions that participated in the bargaining discussions during the design phase were the National Education and Health Workers' Union (NEHAWU) and the Public Servants Association (PSA). Details of their actual involvement are discussed further in the next section.

5.2.4 Policy Process and Challenges

A number of themes emerged when different groups of participants were asked about the process of the design and implementation of the rural and scarce skills allowances. These themes, which highlight some of the design and implementation challenges, are discussed below:

Contestations between policymakers and unions:

A media release in 2003 reported that during the design phase of the rural and scarce skills allowances, there were contestations between the three labour organisations in the central bargaining chamber and the National Department of Health regarding the exclusion of the lower categories of nurses [251]. According to this newspaper article, the unions objected to only professional nurses being eligible for rural allowance [251]. They therefore argued for other health categories, particularly the lower categories of nurses (staff nurses and assistant nurses), to also benefit from these allowances [251]. At that time, these unions were refusing to sign the agreement, claiming that the government was not consultative when determining the criteria for the health professionals eligible for these allowances [251].

In a desperate attempt to argue for the inclusion of junior nurses, the document review revealed that the Democratic Nursing Organisation of South Africa (DENOSA) proposed to the National Health Department at that time that instead of paying backdated amounts to July 2003, the Department should consider paying from the date of implementation which was March 2004 and rather use the money that would have been saved to include other nursing categories [251]. An excerpt from this newspaper noted that:

> *"The allowances are to be back dated to July 2003, but DENOSA has proposed that they [professional nurses] be paid from the date of implementation, the saving can be used to accommodate all the categories of nurses."* (Petros N, Business Day, 10 December 2003)

The unions were also unhappy with the discrepancies between the amounts offered to doctors and nurses, arguing that the amounts, particularly for rural allowance should be the same for all health professionals in rural areas instead of doctors receiving higher percentages [251]. These contestations resulted in delays in signing the agreement to the extent that it was feared that the R500 million already earmarked by the National Treasury for 2004 may be withdrawn if the agreement was not reached by March 2004. Consequent to this, there was immense pressure to implement these two allowances before the end of the 2003/04 financial year to avoid the possibility of losing the money. A review of the directives from the Provincial Departments of Health to their Directors and Heads of Regions and Institutions highlighted this pressure to implement these allowances as follows:

> *"The allowances came into effect from 1 July 2003 and should be paid without any further delay. The last supplementary salary runs for the 2003/4 tax year will be from 20-22 February 2004. You are therefore requested to ensure that all transactions are captured and approved by PERSAL [Personnel and Salary Information System] by no later than 16 February 2004." [252]*

Therefore, this made it difficult for DENOSA to pursue its proposal further and it ultimately succumbed to pressure and signed the agreement; with the lower categories of nurses not included in the final agreement.

Definition of 'rural' at provincial discretion and interpretation:

The interviews with key informants and hospital managers indicated that there were problems with the implementation of the rural allowance policy. At least four policymakers and all hospital managers from the two provinces reported that the National Department of Health left the decision on what constitutes 'rural areas' at the discretion of provincial health departments. Provincial health departments then designated 'rural areas' without national oversight for consistency within or across provinces, thus leaving room for uncertainty and subjective interpretation of this policy. For awarding rural allowances, the provincial Department of Health also relied on an outdated list of hospitals that excluded a number of rural institutions [253]:

> *"I think rural allowance was most appropriate but it was not necessarily implemented correctly because the declaration of what is rural depended on the provinces. And the problem is that if you leave any policy to individual interpretation, you'll actually have a problem."* (Policymaker 1, National Department of Health)

> *"The designation of an area that is considered rural appears to be vague and is left at the discretion of the local authorities. This has created a lot of problems."* (Key Informant 5, Professional Association)

One hospital manager even reported that for her hospital to be considered for rural allowance, management at the hospital had to write a motivation letter to the Provincial Department of Health arguing that their hospital should be considered because they were struggling with attracting and retaining health workers:

> *"The initial implementation was not good because Hospital [X] was not amongst the hospitals considered for rural allowance, so the nurses in our hospital were not getting it, and it was dearly causing a lot of problems because we could not attract and retain personnel but after we wrote the motivation letter, it was then included."* (Health Manager 9, District Hospital 7, North West Province)

Another hospital manager was of the view that the provincial government should have classified areas based on the distance people travel to access essential services.

> *"I think they should have classified 'rural' in terms of distance, in terms of being far from cities. Although we have the basic services, but they are far and there is a lot travelling that we do here in order to get basic services."* (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

Exclusion of certain nursing specialities to benefit from scarce skills allowance

According to the scarce skills allowance policy, only three nursing specialities (oncology, theatre, and intensive care) were targeted to benefit from this incentive strategy [244]. There was general concern amongst professional nurses in the two provinces that this allowance excluded other nursing specialities. For instance, nursing with a primary health care (PHC) qualification was initially not covered by this policy but ended up benefiting in some facilities after the 2006 Department of Labour National Scarce Skills List specified them as scarce skills. Although this list did not necessarily imply that PHC nurses should benefit from the scarce skills allowance, it contributed to the variation in the implementation and interpretation of the scarce skills allowance as some facilities paid out the scarce skills allowance to PHC nurses while others did not. In addition, midwives at the primary health care setting were regarded by most respondents as an important scarce skill that should have been considered for this incentive but were not. This became even more confusing for some professional nurses when nurses with a PHC qualification were later included as scarce skills but midwives were not. One nurse remarked as follows:

> *"The same thing applies to the midwives that we have here. They don't consider it [midwifery] as a scarce skill and yet the midwives have undergone a one year course for midwifery and the PHC nurses have also done a one year course for PHC. What is the difference? It's worse because a midwife is an independent practitioner who does everything by themselves while a PHC nurse refers patients to the doctors all the time. Where is the scarce skill really according to your observation?"* (Professional Nurse 9, Gauteng Province Community Health Centre)

One key informant commented that during its design stage, it could have been better if the context was considered for determining what constitutes a scarce skill mainly because depending on the context, a scarce skill in one province or facility might not be regarded as such in another setting.

> *"I think there is room for acknowledging that there are certain people that have specialised skills and those people should get scarce skills allowance. But then I don't think scarce skills was adequately defined. You must also remember that scarce skills is context specific where you find that in Gauteng a scarce skill is only a certain skill and if you go to the Northern Cape or Limpopo that scarce skill is completely different. So for me, I think the manner in which scarce skills should have been defined should have been context specific; provincial and field specific."* (Policymaker 6, Statutory Body)

Weak communication and coordination

Considering that both rural and scarce skills allowances excluded certain categories of health workers, one policymaker reported that there was weak communication in relation to the rationale for excluding certain categories of nurses to benefit from rural allowance. This respondent further noted that clear communication was also not provided to the hospital managers by the Provincial Department of Health to enable these managers to provide reliable information to the nurses who were not eligible to benefit from this policy. A professional nurse from a district hospital in North West province concurred with this policymaker:

> *"There was no clear communication to the nursing profession resulting in confusion. I'm not saying that the policy was not clear, I'm saying that the*

> *communication was not done to make people to understand what the rural allowance was for, who qualified for it, what are the implications for implementing it? And even managers within health services also found it difficult to understand [the policy]. As a result, when nurses queried whether they are eligible or not, the responses they got were often not helpful."* (Policymaker 6, Statutory Body)
>
> *"We have tried to question why other nursing staff was not getting it [rural allowance] and we didn't get full explanation. They only told us that only professional nurses qualify for this."* (Professional Nurse, District Hospital, North West)

These views were also expressed in relation to scarce skills allowance. Professional nurses from primary health care settings in the two provinces reported that clarity was not provided on why only certain nursing specialities were eligible to benefit from scarce skills allowance and not others:

> *"We don't know how many years you should have before you get the money for the scarce skills, if you have got the skill."* (Professional Nurse 6, Gauteng Clinic)
>
> *"I still have unanswered questions regarding scarce skills allowance, of which I am trying to get somebody to answer them but nobody is answering."* (Professional Nurse 10, North West Clinic)

However, according to an excerpt from the directive circulated to the Heads of the Provincial Departments of Health and Human Resources Managers on the 29th January 2004, the design of the rural and scarce skills allowances was done in a consultative manner:

> *"It followed a process of extensive consultation with a variety of stakeholders."* [252]

Lack of monitoring and evaluation

One of the key design limitations of the rural and scarce skills allowance policies was that there were no monitoring and evaluation plans with clear indicators to enable policymakers to identify potential implementation challenges timeously. Although both these policies

mentioned that annual reviews would take place [243, 244], this did not happen. Interviews with key informants showed that the Department of Health has not conducted a review nor has it evaluated the effectiveness of these allowances:

> *"I can't say whether rural allowance is effective or not, because we haven't done research. I am not sure whether the allowance brought more doctors and health professionals into those areas and secondly if at all they were retained there".* (Policymaker 2, Department of Public Service and Administration)

> *"I don't think anybody in the department did any study to really ascertain if the scarce skills allowance really made the difference, we didn't do it and I am not aware if any other province did that.*" (Policymaker 3, Gauteng Department of Health)

5.3 Perceptions on the Influence of Rural and Scarce Skills Allowances

In the previous section, the description of the development and implementation processes, including challenges of rural and scarce skills allowances was provided. In this section, I will share key findings on how the successes and failures of the design and implementation of the rural and scarce skills allowances contributed to their impact on the motivation and retention of health professionals. The findings are based on the in-depth interviews with key informants, nurses of all categories, hospital CEOs, human resource managers as well as a survey with nurses and doctors. This will be reported according to six main themes highlighted in Table 13 below:

Table 13: Dominant Themes identified for Rural and Scarce Skills Allowances

1. Rural and scarce skills allowances partially improved recruitment.
2. Scarce skills allowance encouraged nurses to specialise.
3. Rural allowance did not take into account the remoteness of area.
4. Rural and scarce skills allowances not linked to performance.
5. Rural and scarce skills allowances were seen as divisive incentives.
6. Financial incentives ineffective if implemented in isolation.

5.3.1 Rural and Scarce Skills Allowances Partially Improved Recruitment

In general, across the different groups of respondents, both rural and scarce skills allowances were regarded as good policies in principle:

> *"Scarce skills allowance had good intentions because you know, it applies to certain categories."* (Policymaker 3, Gauteng Department of Health)
>
> *"I think rural allowance was the most appropriate policy..."* (Policymaker 1, National Department of Health)
>
> *"Yeah, scarce skills [allowance] is really a good policy. Since the health workers were really underpaid, anything that increases their scales is really a good thing. So scarce skills was really a good thing that they introduced it."* (Professional Nurse 10, Gauteng Province CHC)

In the quantitative survey, nurses of all categories and doctors were asked whether the rural and scarce skills allowances influenced their attraction, motivation and retention. The findings in Table 14 illustrate that only a small proportion of hospital-based health workers receiving the rural and scarce skills allowance thought that the incentives had influenced their attraction, motivation or retention. Clinic health workers concurred that neither allowance had influenced attraction but over 60% of health professionals in clinics agreed that receiving the rural or scarce skills allowance had increased their motivation and retention (Table 14). The difference between hospital and clinic health workers was significantly different for motivation for the rural allowance (X^2 test, p=0.02), and for retention for the scarce skills allowance (X^2 test, p=0.03).

The qualitative findings on the one hand reflected mixed views amongst all groups of the respondents in relation to whether the rural and scarce skills allowances influenced the attraction, motivation and retention of health professionals. For instance, some respondents, particularly the hospital managers, remarked that both the rural and scarce skills allowances had enticed health professionals to the public sector:

"Since our hospital was included as rural and our nurses started getting rural allowance, we were able to attract more nurses and retain them. Rural allowance is partially effective." (Hospital Manager 9, District Hospital 7, North West Province)

Table 14: Perceived Effectiveness of the Rural and Scarce Skills Allowances

Allowance		Hospital			Clinic			
Receiving rural allowance		**Agree (%)**	**Neither (%)**	**Disagree (%)**	**Agree (%)**	**Neither (%)**	**Disagree (%)**	***P-Value**
Yes 11.4% (n=66)	Rural allowance attracted me to come and work for this facility	24.0	6.4	70.0	28.8	0.0	72.2	0.503
	Rural allowance motivates me to do my job better	28.5	6.7	65.0	61.1	5.6	33.3	**0.021**
	Rural allowance encourages me to remain working in this facility	31.1	13.3	55.6	61.1	11.1	27.8	0.080
Receiving scarce skills allowance		**Agree (%)**	**Neither (%)**	**Disagree (%)**	**Agree (%)**	**Neither (%)**	**Disagree (%)**	**P-Value**
Yes 11.1% (n=64)	Scarce skills allowance attracted me to come and work for this facility	20.4	14.3	65.3	30.8	15.4	53.8	0.701
	Scarce skills allowance motivates me to do my job better	38.0	12.0	50.0	61.5	0.0	38.5	0.204
	Scarce skills allowance encourages me to remain working in this facility	30.0	12.0	58.0	69.2	0.0	30.8	**0.027**
Satisfaction with rural and scarce skills allowances		**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**P-Value**
N=66	Satisfaction with rural allowance *(for those getting RA)*	70.6	100.0	71.4	29.4	0.0	28.6	0.449
N=64	Satisfaction with scarce skills allowance *(for those getting SSA)*	70.4	83.3	86.7	29.6	16.7	13.3	0.306

*Chi square test

> *"They [rural and scarce skills allowances] are effective in terms of drawing people there bringing people there, creating the presence of professionals in the facilities."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

Other hospital managers were of the view that scarce skills allowance contributed to the retention of certain specialised nurses:

> *"Our theatre nurses are here, they didn't go away."* (Hospital Manager 2, District Hospital 8, Gauteng Province)

Amongst nurses who were getting rural and scarce skills allowances and who felt that these incentives were effective, it was reported that these allowances boosted their salaries and enabled them to pay their debts. This view was particularly voiced by professional nurses from primary health care settings:

> *"Let's say I'm satisfied with scarce skills [allowance]. I benefit a lot from it because at least I can meet some of my needs."* (Professional Nurse 13, North West CHC)

> *"It [rural allowance] has helped me a lot because with this allowance I am able to pay certain debt; that is why I think it is effective."* (Professional Nurse 20, North West Clinic)

> *"At least the rural allowance boosts our income a bit."* (Professional Nurse 16, North West Clinic)

Another hospital manager, who was a radiographer by profession, reported that when he was still practising as a radiographer, getting the scarce skills allowance used to boost his ego and confidence through knowing that he was earning more than his other colleagues:

> *"It's [scarce skills allowance] effective, I used to get it as a radiographer and it made a huge influence and it also boosted my confidence because you know you are earning more than this one. That's what it has done for me."* (Hospital Manager 7, Regional Hospital 6, North West Province)

In contradiction to these positive responses, other respondents mentioned that both the rural and scarce skills allowances were ineffective. In one study hospital from the North West province, we were told by the Clinical Manager during data collection that eight doctors had resigned in a period of six months. Other respondents commented that:

> *"Rural and scarce skills [allowances] never attracted me here. You can see the effect that people are gone, that means if rural and scarce skills allowance were effective, people would stay here"* (Medical Officer, District Hospital, North West Province)

> *"The rural allowance did not necessarily make nurses to be thousand when they were twelve."* (Hospital Manager 5, Revitalised District Hospital 3, North West Province)

According to some respondents, scarce skills did not serve as an incentive to attract doctors in particular because all doctors received it regardless of where they were located:

> *"If I work in Kimberly I get it [scarce skills], if I work in Cape Town I still get scarce skills. So that would not attract anyone from Cape Town to work at this place."* (Medical Doctor, Regional Hospital, North West)

One hospital manager was of the view that even with the implementation of rural allowance, it is still difficult to attract young health professionals to the rural facilities. This manager further stipulated the difficulties of trying to recruit health professionals to posts in rural areas that were not attractive to them.

> *"Mmh, so now before a person comes here they ask themselves many questions especially the young ones. And the second challenge is to attract them to this area. It's like they don't find this area attractive because it's a rural area. So sometimes you don't get responses to adverts. You advertise but you don't get candidates."* (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

Other respondents commented that in general, financial incentives may be effective in addressing short-term financial needs but that they have limited long-term impact.

"You give people rural allowance but salary excites you for the first three-four months. Once you re-adjust your financial commitments it is no longer enough. And we know the more you earn the more you want and that's basically the challenge, it doesn't make sustainable influence." (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

"You can give people a million [rands] but after a year they will go." (Medical Officer, District Hospital, North West Province)

5.3.2 Scarce Skills Allowance Encouraged Nurses to Specialise

There was consensus amongst hospital managers and different categories of nurses at hospital and primary health care settings that an unintended positive outcome of the implementation of scarce skills allowance was that it encouraged nurses to specialise; even though this was mainly for financial gains. This could have been because this incentive strategy was targeted at only three nursing specialities namely oncology, theatre and intensive care. Two years after its implementation, nurses with a PHC qualification were also included to benefit. Therefore nurses tended to specialise in these fields in order to benefit:

"A lot of people were not interested in doing PHC (primary health care) but now there is a lot of interest." (Professional Nurse 8, Gauteng Clinic)

"We had more people applying for theatre, so you could see that they are going the route of acquiring scarce skills qualifications where they would gain financially." (Hospital Manager 2, District Hospital 8, Gauteng Province)

One nurse even reported that prior to the implementation of scarce skills allowance, admission to specialise in Primary Health Care used to be easy, but that stricter admission requirements have since been applied since the qualification is now in high demand:

"At first you would have to apply to do PHC and there was no way they could not accept you but now they don't admit people like before. They go through their applications and they choose who they want. I don't know which criteria they use. It is no longer like before whereby if you had applied you knew that you are in even if they have not responded. Now they just decline people and choose a few to show

that there is more people applying to go to school." (Professional Nurse 8, Gauteng Clinic)

Although nurses acknowledged that they needed to specialise in order to benefit from the scarce skills allowance, a number of them commented that the number of years it takes before they are released to further their studies was a hindrance. Because of staff shortages, when nurses request to be released for study leave they are in most cases denied such opportunities and several of them mentioned that the waiting can take as long as 10 years before being considered. This view was expressed by nurses of all categories from the two provinces and from hospitals and clinics:

"You find that you want to go to school [to specialise] but they don't want to release you because they think that there will be a gap, who is going to work in your space while you are gone." (Professional Nurse 17, North West Clinic)

"They just told us to go to school but they don't create a chance for us to go. They will tell you to wait for 10 years and when you are getting old, they then send you to school. And I hate that thing about hospitals because they don't want us to go to school." (Staff Nurse, District Hospital 9, Gauteng Province)

"If you could have a look at the students, they are very old and if you ask them for how long they've been working at the hospital you'll be shocked." (Assistant Nurse, Revitalised District Hospital 4, Gauteng Province)

5.3.3 Rural Allowance did not take into Account the Remoteness of the Area

When the rural allowance was implemented, there was differentiation in percentages between the rural nodes. Health professionals located in ISRDS areas got between 12% and 22% while their counterparts in PSCBC rural areas and those areas identified by provinces received between 8% and 18%. Regardless of this, there was a unanimous view amongst hospital managers and all groups of health professionals that participated in this study that the implementation of rural allowance did not take into consideration the remoteness of an area.

> *"The problem with rural allowance is that the rural allowance [amount] that a person gets here [deep rural area] is just the same amount that a person gets in Vryburg [rural town]. So a person doesn't see any difference of why should they stay here whilst they could get what they get here in Vryburg you see? The semi-rural should receive lower percentage than the extreme rural."* (Health Manager 3, Revitalised District Hospital 2, North West Province)

In addition, other respondents were critical that the allowance does not make up for the lack of amenities in deep rural areas as well as the distance a person had to travel to get to town for basic necessities:

> *"I get rural allowance; it's about two thousand rands [per month]. For me to get to town just for a decent meal at a restaurant I have to travel for about 80km. There are no recreational facilities here. So you actually spend that money on transport anyway."* (Medical Specialist, Regional Hospital, North West Province)
>
> *For the rural doctors to get a pizza, he has to travel 70 km a single trip."* (Key Informant 5, Professional Association)

Even some professional nurses who were receiving the rural allowance in a clinic setting complained that this allowance does not take into account the distance that they have to travel to get to work:

> *"Eish it's too little. I thought when they were talking about an allowance they were going to calculate it according to the distance from where you are working. Maybe if it was calculated that way it could be satisfactory but up to so far I'm not happy about it."* (Professional Nurse 16, North West Clinic)

The issue of the distance to get to work was also expressed by some of the junior nurses since all of them were excluded from benefiting from this allowance. One assistant nurse expressed her sadness of not receiving rural allowance as follows:

> *"It's very painful that I'm not getting rural allowance, I travel plus minus 70 kilos [kilometres] and there is no transport to get here. Even though it's the same village, it's very far from where I stay."* (Assistant Nurse 5, North West Clinic)

Although in hindsight it seemed like the higher percentages in ISRDS areas aimed to accommodate the deep remote areas, the interviews with health professionals and hospital managers further demonstrated that the amount was considered too low relative to the benefits that health professionals in urban areas have. For example, some respondents mentioned that unlike rural health professionals, those working in urban areas had better quality of life and that doctors in particular are able to do locums to supplement their salaries.

> *"…the amount that you get in rural allowance you can make up for that. They get the rural allowance however a doctor who is here in Joburg who is also a medical officer can go and do locums. They even make more money from the locums than rural doctors."* (Key Informant 5, Professional Association)

> *"The doctors who are working in the urban areas make more money than the rural allowance. And this low income is not fulfilling for the rural area, at the end of the day, doctors in urban areas can acquire more money and a better quality of life."* (Medical Officer, District Hospital, North West Province)

5.3.4 Discrepancies of Allowances between the Different Health Worker Categories

Considering that nurses' salaries are generally far lower than that of the doctors, some participants expected that the nurses' percentage of the rural and the scarce skills allowances would have been higher than that of the doctors but this was not the case. These participants commented as follows regarding the discrepancy of the percentages between doctors and nurses:

> *"The discrepancy between categories is too big because you will find that nurses get 8% and doctors get 18%. The gap is just too wide."* (Hospital Manager 9, District Hospital 7, North West Province)

> *"If you look at the wage, people cannot live on R5,000. The living wage can't be under R5,000."* (Professional Nurse, North West Clinic)

5.3.5 Rural and Scarce Skills Allowances not Performance-Based

A number of respondents noted that the provision of rural and scarce skills allowances was not linked to performance of health professionals. This view was shared mainly by hospital managers and different categories of health professionals; with one professional nurse from a North West clinic arguing that acquiring a scarce skill does not necessarily translate to improved performance if years of experience are not taken into consideration:

> *"According to me, they must also consider your performance because you might have that scarce skills but you might not be able to perform with that. So I would say they have to consider the years of experience that one has."* (Professional Nurse 10, North West Clinic)

Other participants noted that if rural allowance was effective in motivation, there would be high productivity amongst health workers and improved quality of care.

> *"Hey rural allowance does not motivate staff because if it was motivating them to do more, we would be seeing high productivity of which it doesn't make the difference."* (Hospital Manager 3, District Hospital, North West Province)

> *But they [rural and scarce skills allowance] don't address issues of quality and issues of access."* (Hospital Manager 1, Revitalised District Hospital, North West Province)

5.3.6 Rural and Scarce Skills Allowances seen as Divisive Incentives

Policymakers, hospital managers and health workers (doctors and nurses) at hospital and primary health care settings consistently perceived the rural and scarce skills allowances to be divisive because these allowances excluded the lower categories of nurses. Even those who benefitted from these allowances shared these sentiments:

> *"Doctors and professional nurses are given rural allowance but certain categories of nurses are not given, I think that is totally wrong."* (Medical Officer, District Hospital, North West Province)

> *"The rural allowance has created a lot of confusion so is the scarce skills allowance. I think basically with both the rural allowance and the scarce skill [allowance]…people were very dissatisfied about the manner in which it was implemented also that there are some categories of people that benefited from these allowances, some people did not benefit."* (Policy Maker 6, Statutory Body)

A unanimous view amongst almost all categories of health professionals, especially nurses working in hospital setting, was that both rural and scarce skills allowances failed to take into account that health professionals work as teams. Some remarked as follows:

> *"When a patient arrives, we know what to do before the professional nurses even attend to the patient. And there are instances when we even help them [professional nurses] to give service. So for rural allowance to not even cover us it's not nice."* (Assistant Nurse, District Hospital, North West Province)

> *"I think it's not effective especially for the team. In theatre, they work as a team; you've got your enrolled nurses and everybody there. But only doctors and professional nurses are receiving it."* (Hospital Manager 7, Regional Hospital 6, North West Province)

> *"The same applies to scarce skills allowance, yes it's there but for whom? Who is not specialising? Yes a PHC nurse sees patients but does that PHC nurse attend to all patients alone? No! The scarce skills [allowance] is based on one person, forgetting that others are also doing their part."* (Professional Nurse 9, Gauteng CHC)

The exclusion of the lower cadres of nurses from the rural and scarce skills allowances has had unintended negative consequences. Nurses of all categories, especially those in hospitals, reported that when professional nurses who received the rural or scarce skills allowances requested assistance from the lower nursing cadres, these nurses would refuse indicating that the professional nurses should do the job on their own because they got allowances. In general, the ineligible cadres felt that their exclusion was unfair and this made them feel undervalued and dissatisfied:

> *"The rural allowance is only paid to professional nurses. Enrolled nurses and assistant nurses are not getting rural allowance. This thing causes a lot of conflict*

because sometimes if you work with a registered nurse and she wants you to assist her, you say to her 'do your work, you are getting rural allowance'." (Staff Nurse, District Hospital, North West)

"If a PHC nurse cannot do it and I can except that I don't have a certificate, is it fair? Others end up not wanting to help because how can you come and ask me for help since you are supposed to know it all." (Professional Nurse 9, Gauteng CHC)

Interestingly, the interviews with the lower cadres of nurses showed that some of them had some level of understanding and acceptance of the rationale for being excluded from benefiting from the scarce skills allowance. For instance, some of these nurses in both provinces and in hospital and primary health care setting reported that those who have specialised skills deserved to get the scarce skills allowance:

"We are not trained for those things [specialised qualifications] that they require to get that money, so I don't expect to get it [scarce skills allowance] because I don't have the skills. The rural allowance I think I deserve to get it but the scarce skills allowance I don't have theatre tech [qualification] so I don't deserve to get it." (Staff Nurse, District Hospital, North West Province)

However, other junior nurses felt that they should have been given at least a lower percentage of what the professional nurses were getting from the scarce skills allowance instead of not being recognised at all.

"Let me say when it comes to scarce skills [allowance] at least they should give us half of what the sisters [professional nurses] are getting because we know that they are more educated. Like maybe R200 to show that I am working with a sister that has a speciality. As I have mentioned they have primary health care [qualification] and they teach us also. I'm not denying that we gain knowledge from them but at least if they give us R200 this would mean we work well and we would be happy." (Staff Nurse 1, North West CHC)

5.3.7 Financial Incentives Ineffective if Implemented in Isolation

An overwhelming view amongst most participants (nurses, doctors, hospital managers and policymakers) was that financial incentives alone are insufficient to motivate and retain health

professionals; a range of other factors were also perceived as important. For instance, for those health professionals working in either hospital or primary health care settings who have children, the choice of working in a particular area would vastly depend on whether the area has good schools for children:

> *"The strategy should not only be about money. It is true money helps, but if you have kids that go to school, you won't come here because there are no good schools."* (Medical Officer, District Hospital, North West Province)

> *"As for now, retaining them is so difficult. They usually stay but they eventually go because of schools, we are in a small Afrikaans-speaking town; so their kids couldn't get schools here. So the reason for them not staying is that now they have kids and they have to attend English medium schools. One of the main reasons that make people not to come here especially if they are not South African is that there are no schools with English as a medium. So even if a person has accepted the offer, they would cancel because of the school."* (Hospital Manager 9, District Hospital 7, North West Province)

Other factors that were mentioned by a number of participants included unavailability of accommodation for health professionals in rural areas, safety, limited opportunities for training, lack of support from managers and unavailability of resources. One professional nurse from a community health centre in Gauteng province commented as follows:

> *"Sometimes money alone doesn't make a person happy. Okay, you can go to a rural area just to get the rural allowance if maybe you really need money. But if you are not used to working in a rural area, you will be frustrated because most of the time in rural areas they don't have all the equipment or whatever resources you are supposed to be using, so it can be frustrating work-wise but okay financially."* (Professional Nurse 10, Gauteng Province CHC)

5.4 Conclusion

This chapter has begun to explore some of the complexities of designing and implementing two financial incentive strategies, the rural allowance and scarce skills allowance and how these may have influenced the motivation and retention of health professionals. In general, both rural and scarce skills allowances were regarded as good policies which were partially

successful in enticing health professionals to facilities in the public sector. To a certain extent, these allowances have boosted the salaries of health professionals who received them. The data presented in this chapter also showed that the scarce skills allowance encouraged an increasing number of nurses to specialise in order to gain financially from this allowance.

However, one of the notable aspects of the design of the rural and scarce skills allowances was that these strategies were targeted at certain health professionals, thus excluding other categories from benefiting. This led to these incentive strategies being considered as divisive. The unintended consequence of this was the erosion of team spirit amongst nurses of all categories. This may have implications for the quality of care provided which is critical in light of the continuous media reports related to the poor quality of care in many public sector facilities. Another key design feature for these two allowances was the differentiation in the amounts that were paid out to health professionals; with professional nurses receiving the lowest amounts. This raised issues of equity whereby some respondents argued that professional nurses should have been considered for higher percentages payable because of the wide salary gap between doctors and nurses. Another key implementation feature of these two allowances was weak communication, particularly to those that were excluded from benefiting from these allowances. In addition, because of failure to put in place monitoring and evaluation systems, there were limited opportunities for correcting emerging implementation challenges.

Overall, this chapter highlighted the importance of paying attention to process factors if these financial incentives were to achieve their intended purpose. The next chapter will examine the design and implementation of the OSD and its influence on the motivation and retention of health professionals.

CHAPTER 6: CASE STUDY ON THE OCCUPATION SPECIFIC DISPENSATION (OSD) FOR NURSES

6.1 Description of the Development and Implementation of OSD for Nurses

6.1.1 Contextual Factors

The document analysis and interviews with key informants and policymakers revealed that the introduction of the OSD was in part, a direct response to the exodus of health professionals to developed countries in search for better salaries and working conditions. For instance, research published by Health Systems Trust in 2005 demonstrated that 27% of public sector posts for health professionals, amounting to approximately 46,000 jobs, remained unfilled [247]. Even after almost three years following the implementation of the rural and scarce skills allowances, media releases continued to paint a bleak picture with regard to the human resources for health situation in the country. For example, one news article reported that doctors were leaving the country in large numbers.

> *"Many doctors leave the country after doing community service and there is a sense that not enough is done to encourage them to stay."* (Cullinan K and Thom A, Health-e News, 18 May 2005)

Furthermore, on the 17th January 2007 the Gauteng MEC for Health, Mr Brian Hlongwa, was quoted emphasising the plight of health professionals in Gauteng province as follows:

> *"Johannesburg hospital alone spent more than 19 million in payments for agency nurses in 2005, more than three times what the hospital spent in 2003 because nurses are leaving faster than they were being hired."* (Benjamin C, Business Day Newspaper, 17 January 2007)

The Gauteng MEC continued to report that as nurses left the public hospitals, patient care was compromised in critical units such as intensive care, casualty and theatre. Interestingly, two of these units (intensive care and theatre) are the ones that were targeted and benefitted from

scarce skills allowance in 2004; thus raising concerns about the influence of this allowance in retaining health professionals.

> *"Between 2003 and 2005, more than 218 nurses were hired by the hospital [Johannesburg hospital] and 406 nurses left, leaving Johannesburg hospital short of staff, affecting areas such as intensive care, casualty and theatre."* (Benjamin C, Business Day Newspaper, 17 January 2007)

Therefore, in July 2007, the South African government introduced OSD to attract, motivate and retain health professionals in the public health sector [254]. When key informants were asked about factors that led to the agreement on OSD, they concurred with the document analysis that this strategy came about because of the migration of health professionals as well as the geographical imbalances between urban and rural areas and the mal-distribution between the private and public sectors.

> *"I think people were leaving in such large quantities from our continent that countries needed to do something and that's when it [OSD] happened'.* (Policymaker 8, National Department of Health)

> *"I think it's a lot of things, I don't think it's only one thing. But I think one of the most burning issues was the lack of nurses in the country, there was such a shortage of nurses in our country, in the entire country, private and public sectors."* (KII 8, Gauteng Department of Health)

Prior to the announcement of the OSD by the National Department of Health, nurses made history in June 2007 by participating in a month-long country-wide public sector strike related to dissatisfaction with wages. Recognising the significance and implications of this strike, on the 12th June 2007, a press release from the South African Nursing Council (SANC) pleaded with the nurses to return to work and respect patients' right to care. This appeal from SANC Executive Committee (Exco), as extracted from the document analysis, read as follows:

> *"To the nurses, please return urgently to work to care for our community. To the general public, please protect the safety of nurses and allow them to return to work."* [255]

Media reports at that time implied that this protracted public servant strike led to the development of OSD. However, several key informants disagreed with this. According to these respondents, the strike only accelerated the implementation of the OSD:

> *"The strike came after the OSD was already thought of."* (KII 3, Nursing Union)

> *"I wouldn't say the strike of 2007 specifically led to the OSD agreement; but of course the strike overall assisted."* (KII 18, Nursing Union)

> *"I think it [OSD] was in the pipeline, these other issues just contributed to the urgency."* (KII 8, Gauteng Department of Health)

The document review supported interviews with key informants. On the 6th June 2006, the South African Health Minister, Dr Manto Tshabalala-Msimang was quoted in a media release revealing plans to improve the remuneration of health professionals working in the public sector, which according to her was a neglected issue:

> *"We accept that over the past few years, the remuneration of health workers has lagged behind those of other public sector workers. We are working closely with the Department of Public Service and Administration and National Treasury on developing a revised remuneration structure for health workers. This should be implemented in the next financial year."* [256]

In her statement during the signing of the OSD agreement on the 14th September 2007, the Minister of Health further confirmed that the engagements around the OSD policy had been longstanding:

> *"The signing of this agreement today is a culmination of extensive engagements that has taken place for more than five years."* [257]

It also emerged from the document analysis that following the strike action, there was a collective bargaining process to conclude an agreement on OSD. The Minister of Health speech on the day the OSD agreement was signed confirmed this:

> *"You will recall that after the strike, we met as the Department of Health and organised labour and committed ourselves to earnestly engage in a collective bargaining process to conclude an agreement on the OSD for nurses."* [257]

Nursing was identified as the first occupation category to benefit from the OSD. When the key informants were asked about the reasons for prioritising nursing, there was consensus amongst them that the public health sector was losing nurses more than any other health category because of international migration of health professionals. There was also consideration that the previous incentive strategies, rural and scarce skills allowances, had favoured doctors more than nurses as one policymaker commented as follows:

> *"Now it [implementation of OSD] started with nursing, the reason why it started in nursing was because that's the biggest single category of health professionals. Our health services rely on nursing. And we were very clear that unless we start with nursing, there'll be serious problems because the dispensation of scarce skills and rural allowance favoured doctors. We said if we do that again, we are going to have a problem."* (Policymaker 1, National Department of Health)

In terms of the political and economic circumstances of the country at that time, the design and implementation of the OSD coincided with the 2007/2008 global economic crisis although South Africa officially entered recession in May 2009 [258]. Again, the country underwent frequent changes with regard to the leadership at the health department; for instance the position of the Minister of Health was held by three different people between late 2008 and early 2009. However, these political changes in leadership did not have any substantial influence on the implementation of the OSD.

6.1.2 Policy Content

The three primary official OSD documents from which this section will draw were:

a. The PSCBC Resolution 1 of 2007 which outlines the broader OSD policy for all public sectors;
b. PHSDSBC Resolution 3 of 2007 which was specifically recognised as the OSD policy for nurses; and
c. 2007 DPSA Directive on the Implementation of OSD for Nurses.

According to the PSCBC Resolution 1 of 2007, *"the intention of the OSD was to improve the ability of the public service to attract and retain skilled professionals and other specialists by providing differentiated remuneration dispensation for the vast number of occupations in the public service"* [259]. Table 15 shows the specific objectives of the OSD as extracted from Resolution 1 of 2007 and Resolution 3 of 2007 policy documents.

Table 15: Objectives of the Occupation Specific Dispensation

▪ To improve the public service's ability to attract and retain skilled employees ▪ To cater for unique needs of the different occupations ▪ To provide adequate and clear salary progression and career pathing opportunities based on competencies, experience and performance ▪ To recognise relevant experience on appointment from outside the public health sector ▪ To consolidate benefits and allowances into salary ▪ To provide for the replacement of the Scarce Skills Framework with a revised salary structure

Source: PSCBC Resolution 1 of 2007 and PHSDSBC Resolution 3 of 2007

A review of the OSD policy documents further revealed that:

- The OSD benefits would be based on the relevant experience and duties that the beneficiaries (nurses) were performing as of 30th June 2007.

- The OSD was to be implemented over a three to five year period with effect from 1 July 2007.
- The OSD was intended to provide adequate salary progression for employees who chose to remain in clinical care instead of moving to management or specialist positions.
- Employees on salaries already higher than the new salary scales were to retain their existing salaries.
- The Rural Allowance was not affected by the implementation of the OSD; the employer (the Department of Health) would still continue paying this allowance until re-negotiation in the PHSDSBC.

PHSDSBC Resolution 3 of 2007 recognised Registered Nurses (Professional Nurses), Staff Nurses (Enrolled Nurses) and Nursing Assistants (Enrolled Nursing Assistants) as defined in section 30 and 31 of the Nursing Act as categories who should benefit from the OSD [254]. The OSD policy further clarified that for them to benefit, these nurses were expected to maintain registration with the SANC as well as to submit proof of certificates and registration of such certificates with SANC [254, 260]. Nurses were also expected to produce service records proving their length of service as nurses in the public sector, and to submit these by the 30th March 2008 [254, 260].

A press release by the National Department of Health on the 15th January 2008 revealed that OSD was to benefit 100,000 nurses employed by the government before March 2008 [261]. The Minister of Health, Dr Manto Tshabalala-Msimang was quoted saying:

> *"The implementation of this agreement [OSD] is an enormous task as there are about 100,000 nurses employed in the public sector and for each of these employees, a separate translation transaction has to be effected."* [261]

Subsequent to signing the Resolution on OSD for nurses, the Minister of Health also announced that nurses were going to receive salary increments of between 20% and 80% [257, 261]. At the signing of a collective agreement on OSD, the Minister of Health was quoted as saying:

> *"I am very excited to announce to our nurses that as a result of the agreement [on OSD] we have signed today, the entry level salaries for Staff Nurses will increase by 20%. The entry level salaries for Nursing Assistants and Professional Nurses in general nursing will both increase by 24%. Certain professional nurses serving in speciality areas could subject to appointment requirements receive up to 88% increases at production levels depending on their current salary positions."* [257]

Table 16 depicts how the entry level salaries of the different categories of nurses were expected to be affected by the implementation of the OSD [257].

Table 16: Nurses Salary Adjustment in Line with OSD

Current Job Title	Starting Salary Before 7.5% Adjustment	Starting Salary After 7.5% Adjustment (Pre-OSD)	OSD Starting Salary	Percentage Improvement
Professional Nurse (Specialty)	R79,407	R85,362	R160,470	88%
Professional Nurse (General)	R79,407	R85,362	R106,086	24%
Staff Nurse	R54,222	R58,290	R70,140	20%
Assistant Nurse	R40,227	R43,245	R53,757	24%

Source: Press Release by the Department of Health, 14 September 2007

Of importance to note from the OSD policy and press releases by the Department of Health was the fact that these OSD salary adjustments were in addition to the 7.5% general salary adjustment reached based on inflation following the negotiations at the end of the public service strike in June 2007 and that these increases were to be paid retrospectively with effect

from 1 July 2007 [254, 257, 261]. The huge salary increases in the speciality area in particular were primarily attributed to the incorporation of the scarce skills allowance into these nurses' salaries (Table 16).

The OSD policy for nurses also stated that the Department of Health, as the employer, was to ensure that funds were set aside to implement the approved revised salary structures per identified occupation [254]. The OSD policy and the DPSA directive further noted that for the 2007/08 financial year, the funds for the implementation of the OSD for nurses would be allocated in the provincial budgets [254, 260]. According to the Minister of Health, an amount of approximately R1,458 billion was allocated by the National Treasury for the OSD for nurses in 2007 [257, 261].

In the OSD policy, several key concepts are listed as critical in understanding differentiation in the remuneration of nurses and these included 'grade progression', 'grade level', 'pay progression', 'post promotion', 'post level', 'performance', 'competencies', and 'experiential competency' [254, 259, 260]. Although Annexure A of the OSD document for professional nurses provides definitions for some of these concepts, these definitions are broad and open to interpretation [262]. For instance, 'competency' is defined as "*the specific knowledge, skills, judgement and personal attributes required for a health professional to practice safely and ethically in a designated role and setting"* (p2) [262]. This definition was too vague considering that every health professional is expected to have the "required skills and knowledge" and to "practice safely and ethically".

The DPSA directive, clause 7.7 detailed that "*grade progression is not an automatic salary increase but it is a forward-looking plan to systematically increase salaries after pre-determined periods based on specific criteria such as sustained above average performance,*

qualifications and experience for at least 4 annual performance cycles" [260]. Although employees expected to benefit as part of grade progression (Appendix 4) indicated this was only for achieving *above average performance.* There was however also no clear measurable and systematic indicators to determine the criteria for *above average performance* in the OSD policy.

With regard to career path, the OSD policy recognised specified post-basic clinical qualifications as listed in Regulation 212 of the South African Nursing Council. This list is shown in Table 17. A notable element from Table 17Table 17**Error! Reference source not found.** is that in terms of midwifery and psychiatry, only the advanced one-year post-basic courses were recognised as specialities. With regard to the primary health care stream, a further one-year post basic over and above the R425 qualification (diploma or degree in nursing) was required for recognition purposes. The OSD incentive does also not cover professional nurses and staff nurses who are still students.

Table 17: Nursing Speciality Fields in R212

▪ Child Nursing Science ▪ Community Nursing Science ▪ Gerontological Nursing Science ▪ Medical and Surgical Nursing Science ▪ Advanced Midwifery and Neonatal Nursing Science ▪ Advanced Psychiatric Nursing Science ▪ Paediatric Nursing Science	▪ Advanced Paediatric and Neonatal Nursing Science ▪ Intensive Nursing Science ▪ Oncology Nursing Science ▪ Operating Theatre Nursing Science ▪ Ophthalmic Nursing Science ▪ Orthopaedic Nursing Science

Source: Annexure A – OSD Professional Nurses Policy

6.1.3 Actors and their Roles

Figure 6 illustrates the key actors that were mentioned by key informants in relation to the OSD policy processes. This figure demonstrates that the important actors from the health

sector included the National and Provincial Departments of Health as well as the Nursing Unions. Almost all key informants agreed that overall leadership in the development of the OSD policy was shared between the National Department of Health and the DPSA. The Bargaining Council, on the one hand, played a coordination role and managed stakeholders involved during the OSD negotiations while the National Treasury, on the other hand, played a key role of allocating funds to implement this policy.

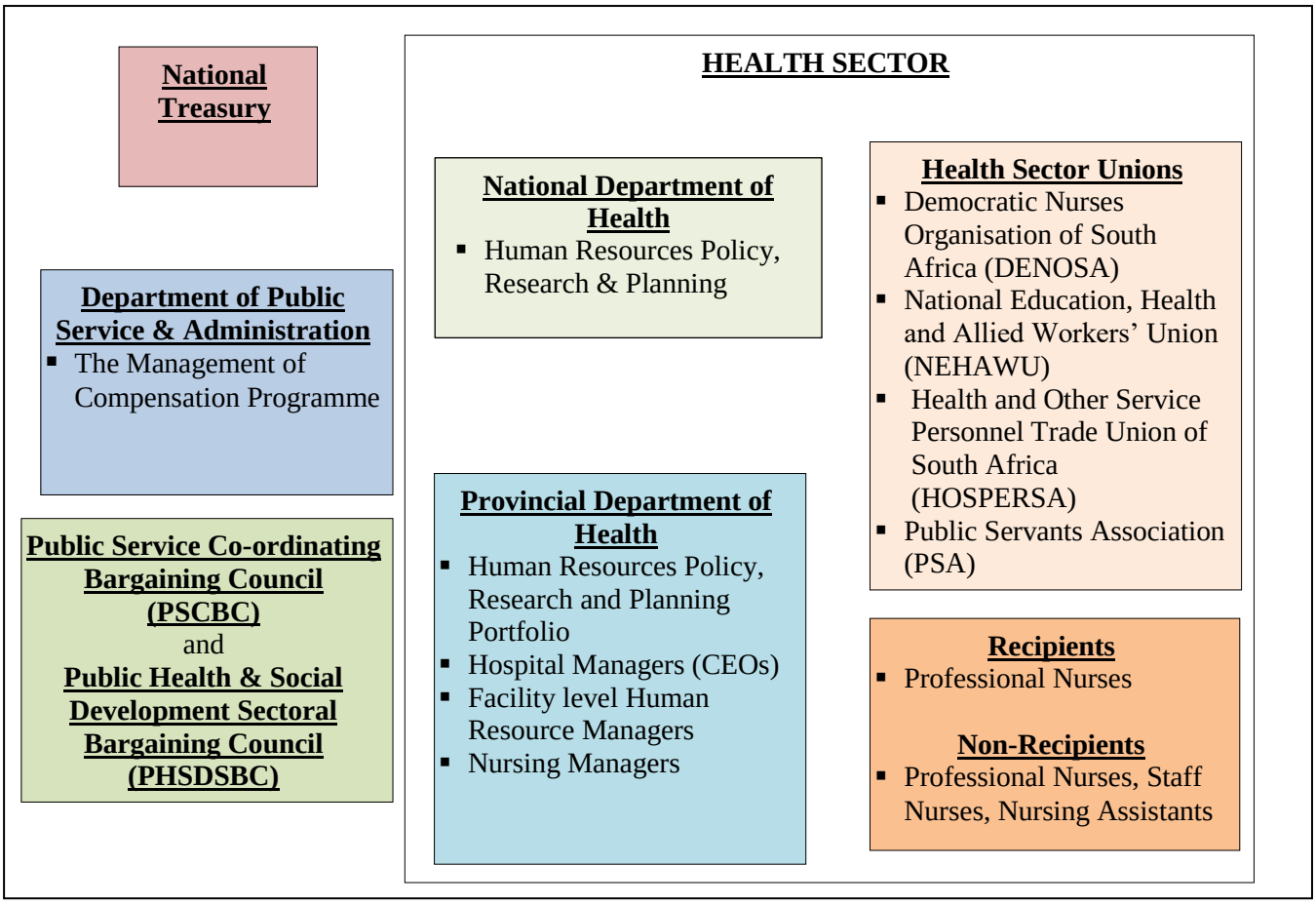

Figure 6: Key Actors Involved in the OSD Processes

Some key informants commented as follows:

> *"It was the National Department of Health that drove the process primarily; and obviously DPSA got involved in formalising it. I think both drove the development of the policy very much. I think the money was determined by the Financial Committees and the National Treasury."* (KII 8, Gauteng Department of Health)

> *"The Bargaining Council played a central role because the coordination took place there and the stakeholders were all managed there. Each stakeholder had to come and defend its own mandate and also there were bilaterals between the department and the various stakeholders."* (KII 20, Nursing Union)

A unanimous view amongst key informants representing organised labour was that the nursing unions were very instrumental in protecting nurses' interests during the OSD negotiations. Aside from the reasoning that nurses were prioritised because of the recognition that they are the backbone of the health system, intense lobbying by organised labour, particularly by the Democratic Nurses Organisation of South Africa (DENOSA), contributed to nursing being identified as the first occupation category to benefit from the OSD. One key informant commented that:

> *"Well, DENOSA was in the forefront of the OSD, in fact we were just about the only union that wanted the OSD since its inception. Remember DENOSA raised the issue of the OSD through the general review of the nursing salaries; it has been DENOSA's call since its inception"* (KII 20, Nursing Union)

> *"They [DENOSA] have been sitting in the Bargaining Council, so they played a role in trying to get the OSD out there.* (KII 27, Nursing Manager)

However, the main area of contention was in relation to the prioritisation of nurses over other health professionals during the design of the OSD policy, especially among the labour organisations in the central bargaining chamber. DENOSA was criticised for promoting elitism in the sense that OSD was not being given to all public sector employees at the same

time, possibly causing divisions amongst public servants as illustrated by the following quotes:

> *"At that time, government said I have got X amount of money to improve the salaries of health professionals, but it is not enough to improve the salaries of everybody. Now all of us as health professionals had to say 'start with us' so it was so difficult. So when we thought that we had convinced the government to start with the nurses, when it went to the Bargaining Chamber with other trade unions, we were seen as people that were promoting elitism. We were asked 'why only nurses, what about cleaners?"* (KII 18, Nursing Union)

> *"Other unions used to say, 'no the OSD is promoting elitism, it is dividing workers.' So there were opponents within and outside of the trade union movement. People felt that this was an elitist thing, it was dividing the public servants in the sense that we are not giving it to everybody, we wanted to single out a particular category of public servant and not paying the cleaner or whatever other professional."* (KII 20, Nursing Union)

The provincial Department of Health, particularly the Human Resource Policy, Research and Planning division, played a critical role during the design of the OSD. Interviews with nurses, hospital managers and human resource managers revealed that at hospital level, the CEOs, Human Resources Managers and Nursing Managers were primarily responsible for the implementation of the OSD. Other personnel that played a role according to interviews with hospital and human resource managers included district managers, administration officers and human resources clerks. Interviews with hospital managers also demonstrated that in at least three hospitals in Gauteng province, task teams were established to assist with the implementation of the OSD.

Interviews with key informants further revealed that there was discernible tension with regard to the involvement of some professionals without a nursing background during the development and implementation of the OSD as these 'non-nursing' professionals were considered to be less knowledgeable about the complexities of nursing specialities, principles and issues:

"You know it was difficult because most of the people involved and working on the OSD were non-nursing professional people. So it was difficult sometimes to explain to a non-nursing person certain [nursing] principles." (KII 8, Gauteng Department of Health)

6.1.4 Policy Process and Challenges

A review of the OSD policy and interviews with key informants, hospital managers and human resource managers demonstrated that the implementation of the OSD was undertaken in two phases. Phase 1 involved a salary adjustment to include the 7.5% general increase based on inflation following the strike as well as an increase to the entry level salaries of all categories of nurses; by 20% for staff nurses, 24% for assistant nurses and professional nurses in general nursing, and 88% for professional nurses with specialties. Phase 2, on the other hand, involved a salary adjustment based on the number of years of relevant experience of nurses in the various categories. Media releases and interviews with key informants also revealed that the OSD implementation required a complex series of events. The Minister of Health was quoted on the 14th December 2008 in her statement on the progress made in the implementation of the OSD referring to the complexity of implementing this incentive strategy, bearing in mind that 100,000 nurses of all categories were expected to benefit from this strategy:

"The implementation of this agreement [OSD] is an enormous task…For each of the employees; a separate translation transaction has to be approved. Most provinces also had to adjust their nursing organisational structure to allow for the transition from the old dispensation to the OSD."

The implementation of the OSD was decentralised, meaning that the responsibility for implementation, including funding was delegated from national to provincial health departments and from the province down to the district, sub-district and facility levels. It was positive to note that almost all facilities in both Gauteng and North West provinces reported

using the OSD policy, better known as Resolution 3 of 2007, as a resource for implementation. Figure 7 summarises the process of OSD implementation at institution level as described by hospital manager and human resource managers in North West and Gauteng provinces. An important element that seemed to have worked well in the implementation of the OSD at institution level was the establishment of task teams. Hospital managers who reported that a task team had been established in their facilities mentioned that they had fewer implementation challenges. This was because these task teams met regularly and created an opportunity for implementers to bounce ideas with task team members to ensure that there was some level of uniformity in understanding of the OSD policy.

> *"One of the reasons for the success of the OSD process was the formation of the task teams prior to implementation."* (Assistant Nursing Manager, Central Hospital, Gauteng Province)

> *"For us it was a bit better because we formulated a committee locally so that whatever we do go through the committee for them to audit things and to make sure it's correct. We consulted them if there were misunderstandings or questions of clarity."* (Hospital Manager 4, District Hospital, Gauteng Province)

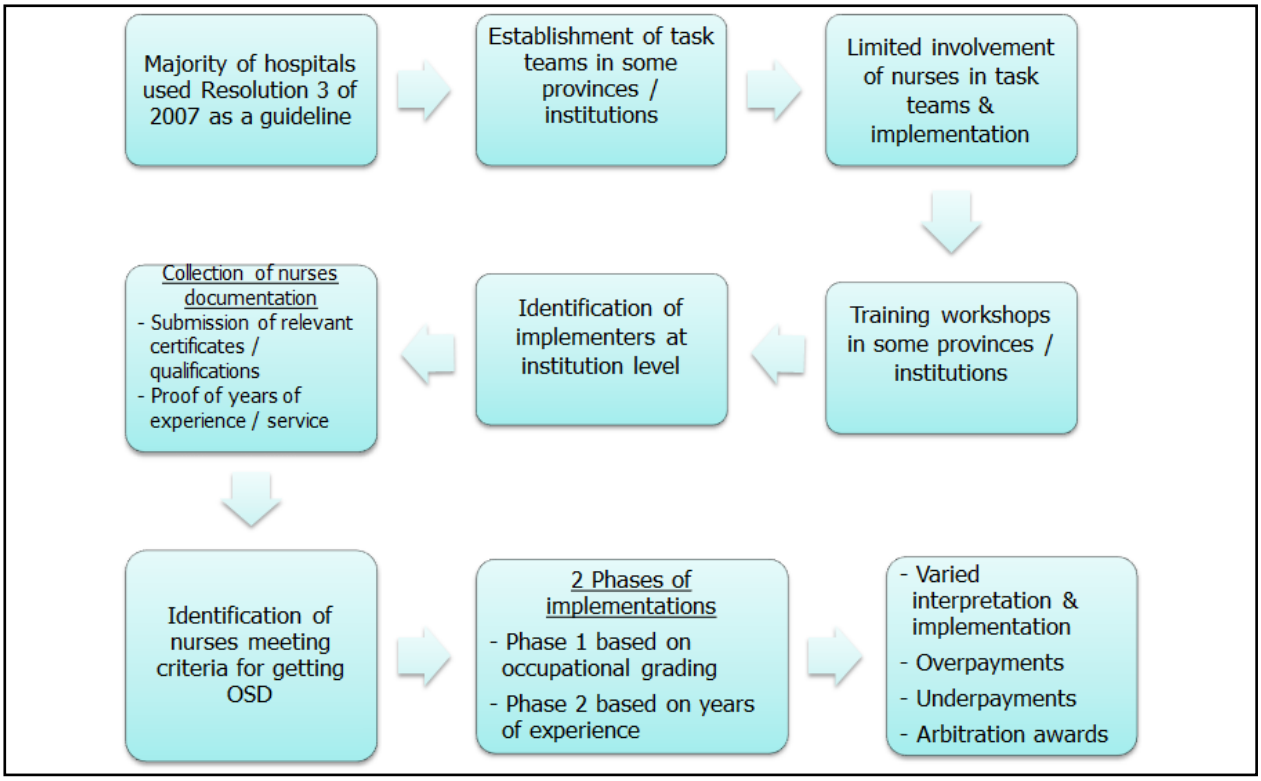

Figure 7: Process of OSD Implementation at Institution Level

As with rural and scarce skills allowances, the design and implementation of the OSD was not without challenges. These are explained in detail according to several themes below:

Rushed implementation of the OSD

As mentioned in the section on contextual factors, the protracted strike accelerated the implementation of the OSD; however, this influenced the ability of the government to plan adequately. There was thus consensus amongst hospital managers in both Gauteng and North West provinces that the OSD was implemented in a rushed and pressured manner.

> *"I think the way OSD was implemented, it was in a rush, there were deadlines to say on a certain date implementation must start. It was putting a lot of people under pressure. I think it would have been done smarter if it was done at a natural pace and everybody has been comfortable with the implementation* (Hospital Manager 4, District Hospital, Gauteng Province)

In addition, insufficient time was allocated for the training of the implementers at institution level, there was no reference made in the OSD policy as to who would be trained on OSD implementation or the length of the training, so this aspect was neglected. Interviews with key informants suggested that OSD implementation was also dependent indirectly on other agencies such as the South African Nursing Council (SANC), as nurses were required to submit proof of their registration and specialised qualifications with the SANC. An informant from a nursing union blamed the SANC for failure to record the relevant nursing qualifications.

> *"I must say SANC nearly failed the [nurses] on OSD; there are things in SANC that we must correct, around the registration of certain courses, accreditation of courses and so forth because we have a large chunk of nurses who were left out of the OSD because they are not regarded as speciality."* (KII 20, Nursing Union)

On the other hand, SANC shifted the blame on the nurses for their tardiness in registering their qualifications and only doing so when these were required as part of the OSD implementation. Nurses were also required to produce their length of service record. However, in planning for OSD implementation, consideration was not taken that in general, nurses move around and that in some instances, a single nurse might have worked in a number of provinces; thus requiring additional time to collate proof of length of service from different provinces.

Lack of recognition of the complexities of nursing specialties

In the formulation of the OSD policy, the policymakers did not take into account the complexities of the various nursing specialities. One respondent remarked as follows:

> *"Nursing is a complicated profession, there are different specialities. So nursing OSD is not as straight forward as any OSD. I think there were grey areas in the implementation of OSD or no clarity"* (KII 27, Nursing Manager)

This policy design weakness led to inconsistencies and challenges during implementation. A general concern by several key informants and nurses of all categories, particularly those working in hospital settings, was in relation to Regulation R212 which was used to determine nursing specialties. According to these respondents, this regulation was not a comprehensive list of the overall nursing specialities; it thus excluded a number of existing nursing specialities. One nursing manager commented that using Regulation R212 was in a way a strategy by the National Health Department to minimise the number of specialties that was supposed to benefit from OSD because the Department of Health was initially not aware that there are so many nursing specialties:

> *"Another interesting thing about specialities is that by the time the National Health tried to get a list of what are specialities, they [National Health] couldn't believe that there can be so many specialities. And then they started to think about how can they limit or put more boundaries to what specialities are. They then went to the Nursing Council and the Nursing Council gave them what I would call the petty Regulation 212 because Regulation 212 is not comprehensive of what specialities are in nursing and they just used R212. So if you are not on 212 specialities, then you are out*." (KII 27, Nursing Manager)

The OSD policy also lacked clarity on how nurses with more than one speciality were to be rewarded. Furthermore, a "grandfather" clause was introduced that allowed nurses who worked in a speciality area, but without the formal qualification, to benefit from OSD. On the other hand, those with the formal qualification, but not working in the specialised area could not benefit. This resulted in unhappiness among those nurses and movement of some nurses out of managerial positions back to their specialised area or work where OSD was paid. One hospital manager said:

> *"Another area which was not very clear was the grandfather clause for the maternity section. You know, we are sitting on a time bomb with the midwives that are working in the maternity ward that don't have advanced midwifery. They also want to be recognised because they are working in maternity ward. They are unhappy and now and then they threaten to request themselves out of maternity*

ward, they want to go to general wards." (Health Manager 4, District Hospital, Gauteng)

A review of a report by the Public Servants Association (PSA), one of the unions, showed that another challenge related to specialities was that due to internal rotation policies, particularly in hospitals, nursing staff in specialities were requested to rotate to non-speciality areas whilst they were paid according to their field of speciality. However, non-speciality nursing staff who were rotated to fields of speciality did not receive additional remuneration associated with the specialities, whilst they performed the duties of specialised nursing [263]. A letter by the Principal Specialist and Head of one Gauteng hospital to the SANC chairperson noted some of the concerns related to specialities:

"Fewer registered nurses are choosing to work in medical wards following the implementation of the OSD. This is because medical nurses do not qualify for OSD as there is no recognised post-basic qualification in medical nursing. Consequently, there are fewer registered nurses in medical wards and care of medical inpatients is severely compromised." (Principal Specialist and Head, Regional Hospital, Gauteng Province)

Varied interpretation and implementation of the OSD

A dominant view across all groups of respondents and across different health facilities was that the OSD policy was interpreted differently. Key informants, hospital managers and nurses of all categories pointed out that in both study provinces, implementation varied across health facilities at the same level, and also between primary health care facilities and hospitals.

"There have been lot of provincial variations; the problem with the OSD is that one province interpreted it like this and another province interpreted it like that in spite of the fact that there have been national guidelines." (Policymaker 8, National Department of Health)

"As I have mentioned, it [OSD] was implemented differently for the clinics and hospitals. The amounts at clinics are higher than the ones at the hospitals." (Professional Nurse, District Hospital, North West Province)

Inadvertently, OSD contributed to further 'imbalances' in the distribution of nurses between hospital and primary health care facilities as well as between provinces. Professional nurses particularly those in hospitals, tended to move from certain crucial departments such as casualty where they were needed most to other wards that were recognised as specialities such as theatre or intensive care in order to benefit from the OSD. Others reported considering moving to other provinces where their specialities were recognised for higher OSD benefits:

"Somewhere in North West [Province], I heard OSD is being paid to psychiatry nurses; we'll all be moving to North West so that we can get the money." (Professional Nurse, Regional Hospital, Gauteng Province)

Weak communication and coordination

Prior to and during the implementation of the OSD, nurses received information from the media and their labour organisations. It appears from interviews with nurses and key informants that there were many mixed messages sent out to nurses. For example, at the time when the OSD was announced in the media, it was promoted more as a general nurses' salary increase, neglecting an emphasis on the key underpinnings which are stipulated in the policy such as 'career path', 'pay and grade progression', 'competencies' and 'performance'. This resulted in disappointment and unrealistic expectations among nurses:

"In the news, it was said that nurses will get a lot of money". (Nursing Assistant, Regional Hospital, Gauteng Province)

"Unfortunately in the eyes of the nurses, it [OSD] was more about the salary increment. Nurses look at their salary and say 'no, but this thing [OSD] did not benefit me'. (KII 2, Nursing Union)

Communication and coordination between the National Department of Health and provinces was also inadequate, and it was not clear what support was given to provinces during implementation or how the provinces in turn supported the districts and hospitals. It was also not clear whether and how coordination happened between the SANC and the provinces or health facilities. In addition, nowhere in the OSD policy were the general responsibilities of multiple implementation partners explicitly stated (e.g. provincial level, hospital and human resource managers) as well as the steps required for effective implementation. One hospital manager commented as follows:

> *"Provinces did as they wish, that's why a nurse in here can be paid differently from a nurse in Eastern Cape or a nurse in Limpopo province. For me, the current system does not work because provinces are independent entities; national [government] usually can say here is a guideline and provinces can decide on how they implement it."* (Hospital Manager 7, Provincial Hospital, North West Province)

In terms of the sequencing of events, the announcement on the OSD was made by the Minister of Health, Dr. Manto Tshabalala-Msimang prior to ensuring that sufficient resources were in place, such as the required financial and human resources. For instance, financial resources were not made available immediately for individual hospital managers. This on its own created a lot of confusion and dismay amongst nurses and hospital managers. One hospital manager said:

> *The people who planned it [OSD] are wrong because you can't plan to give people money whilst you don't have that money at hand. In our case, we had to pay the nurses even though we didn't budget for OSD. It was said that the budget for OSD will come from the province, but it never came at that time.* (Hospital Manager 9, District Hospital, North West Province)

In the design of the OSD policy, frontline nurses and hospital managers were not involved; this was an unfortunate exclusion considering that hospital management are the ones that face

the brunt of any unintended consequences of policy implementation. Some nurses commented as follows:

> *"I think in the decision making, they must involve us because you find that they do things at higher level yet it's not going to suit us at the grassroots level."* (Professional Nurse 17, Central Hospital, Gauteng Province)

> *"Nurses who are hands on were never consulted before [OSD] implementation"* (Professional Nurse 24, North West CHC)

6.2 Perceptions of the Influence of the OSD on Motivation and Retention

This section seeks to report on whether the manner in which OSD was implemented had any influence on the motivation and retention of nurses. This will be done by reporting on three key themes shown in Table 18**Error! Reference source not found.** below:

Table 18: Dominant Themes identified for the OSD

1. Partial effectiveness of the OSD on the motivation and retention of nurses
2. OSD seen as a divisive incentives
3. Inequities in the OSD implementation

6.2.1 Partial Effectiveness of the OSD on the Motivation and Retention of Nurses

Regardless of the implementation challenges mentioned above, there was general agreement amongst respondents, especially the key informants, that the OSD was a good policy which was informed by the human resource problems in the public health sector illustrated by the following comments:

> *"Well, in theory it [OSD] was a brilliant idea and it should have gone a long way to solve some of the problems."* (KII 7, Gauteng Department of Health)

> *"The OSD was a good idea, what we need to do now is to look beyond the monetary aspects of OSD and look at the career path issues."* (Policymaker 8, National Department of Health)

However, there were ambivalent feelings across respondents with regards to whether the OSD achieved what it was intended to achieve or not. Key informants and hospital managers in particular, reported that the OSD attracted nurses from overseas back into the country and from the private to the public health sector:

> *"I have realised that when I was in PE, just before I came here, the introduction of the OSD attracted a lot nurses from the private sector…when I came here in 2008 February, we employed about 160 nurses from the private sector."* (KII 10, Eastern Cape Department of Health)

> *"…turnover was high…there was a time when we were really struggling to recruit nurses, but I must say the OSD made a huge difference because we are able to recruit people from private sector and we also got two nurses from overseas."* (Hospital Manager 4, District Hospital, Gauteng Province)

However, these findings were in sharp contrast with the survey results which found that the OSD only attracted 18.7% and 27.8% of the nurses to hospitals and clinics respectively (Table 19). The results from the survey also showed that the OSD was partially effective in motivation, with half of the participants from hospitals and 62.5% from clinics reporting that it motivated them (Table 19). In addition, more respondents from clinics mentioned that OSD was effective in their retention than hospital respondents and this difference was statistically significant (X^2 test, p=0.02). Half of the clinic respondents who got the OSD also reported that they were satisfied with the OSD compared to only 31.9% of hospital respondents, however this difference was not significant (X^2 test, p=0.074).

From the in-depth interviews with the nurses, those that reported being motivated by the OSD mentioned reasons related to the fact that this incentive boosted their salaries, thus enabling them to better manage their financial commitments as illustrated in the quotations below:

> *"Yes, it motivates me because I used to be unhappy at work thinking of the people that I owe money, thinking they would send me to jail or something. Now I am able to focus on my work."* (Assistant Nurse, District Hospital, North West Province)

> *"It [OSD] boosted our salaries. Yes, I'm happy but it's not something to discuss with others that did not get it."* (Professional Nurse, District Hospital, Gauteng Province)

A hospital manager from North West province added that OSD also enabled the nurses to afford some material things that they had always desired.

> *"In a way, it [OSD] has made them [nurses] happy because they have been able to attain the things they wanted like cars and other stuff. So in a way, it has boosted up their morale… to a certain extent."* (Hospital Manager 3, District Hospital, North West Province)

Table 19: Perceived Influence of the OSD on Attraction, Motivation and Retention

Allowance		Hospital			Clinic			
Receiving OSD		**Agree (%)**	**Neither (%)**	**Disagree (%)**	**Agree (%)**	**Neither (%)**	**Disagree (%)**	**P-value**
Yes 30.4 % (n=176)	OSD attracted me to come and work for this facility	20.0	9.0	71.1	27.8	12.9	59.3	0.264
	OSD motivates me to do my job better	49.6	7.9	42.5	62.5	10.7	26.8	0.138
	OSD encourages me to remain working in this facility	39.0	7.1	53.9	46.4	17.9	35.7	**0.023**
Satisfaction with OSD		**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**P-value**
n=167	Satisfaction with OSD amount *(for those getting OSD)*	31.9	6.2	61.9	50.0	5.6	44.4	0.074

Due to its emphasis on nursing speciality, there was general agreement amongst key informants that the introduction of the OSD did in fact encourage nurses to improve their qualification as well as to specialise.

> *"We have now also seen more and more nurses improving their education by going on to specialise because they know immediately after specialising, they would then get into the higher notches and so forth."* (KII 20, Nursing Union)

However several nurses, especially staff nurses and assistant nurses working in a hospital setting, expressed dissatisfaction with the limited opportunities available to them for further training. These nurses reported that there was no uniform criterion for identifying candidates to do bridging courses to enable them to become professional nurses; different hospitals applied different selection criterion leading to inequities and lack of transparency towards those competing to do further training.

6.2.2 OSD was seen as a Divisive Incentive Strategy

Because it was interpreted differently between and within provinces and institutions, as with rural and scarce skills allowances, OSD was seen as a divisive incentive strategy. The unions were particularly blamed by some key informants for this division amongst nurses, arguing that the unions failed to grapple with the realities that nurses on the ground are facing.

> *"The unions have actually divided nurses without even knowing because that OSD is selective, it's meant for certain people. Now, how do you decide that this nurse is providing better nursing care than the other in such a way that this one should be recognised and the other not? So, the unions themselves did not grapple with this issue of OSD in a way that it should have been. I don't know how informed are nurse leaders in the unions in relation to the real nursing issues."* (KII 17, Nursing Academic)

> *"They [DENOSA] have been sitting in the Bargaining Council, so they played a role in trying to get the OSD out there. But what was interesting to me was that when it*

> *was implemented, it was as if DENOSA was on the side of the provinces who wanted to pay nurses less."* (KII 27, Nursing Manager)

This problem of OSD being perceived as a divisive strategy was due to several reasons. As a result of sub-optimal human resource information system, there was an undercount of the total number of nurses in the public health sector by 10,000 individuals. Although this was a policy design problem, it had ramifications during implementation and raised concern amongst some key informants about the management of this incentive strategy. Hence, the implementation of the OSD proved to be more expensive than previously planned, illustrated by these comments from key informants:

> *"And then our information system became a challenge for the country. It became clear that the government doesn't know how many nurses they actually have. I remember they were even roughly quoting figures saying they had whatever X number of nurses in the public sector; only to find that they under-budgeted with 10,000 nurses. So you see, those for me are the issues that are very interesting and it goes back to say how are we managing?"* (KII 18, Nursing Union)

> *"It [OSD] went a bit crazy because of the numbers; we couldn't get the accurate number of the nurses."* (Policymaker 2, Department of Public Service and Administration)

Some respondents were of the opinion that OSD was not based on research evidence; pointing out that if formative research had been conducted to shape this policy, problems of under-budgeting and under-count of nurses in the public sector could have been avoided:

> *"I think before they could implement it [OSD], they were supposed to do thorough research and correct calculation."* (Hospital Manager 9, District Hospital, North West Province)

6.2.3 Inequities in the OSD Implementation

An overwhelming majority of the nurses of all categories from different health facilities in the two provinces reported inequities in the implementation of the OSD whereby nurses of the same category with the same qualifications were rewarded differently. In some cases, nurses working as managers were earning salaries lower than the nurses that they were managing. This led to disgruntlement and dissatisfaction among nurses:

> *"My colleague and I came here on the same date, month and year and we were here from school. We qualified on the same date and we arrived here on the same date. But when it comes to OSD, we didn't get the same amount."* (Professional Nurse, District Hospital, North West Province)

> *"We experienced problems of people not being happy with their OSD. We have a person in theatre who is an operational manager, she's very unhappy because people who are her juniors are actually earning more than she is earning because they were translated as specialised professionals and they are earning a lot*." (Hospital Manager 4, District Hospital, Gauteng Province)

Due to the challenges from the varied interpretation and implementation of the OSD, as well as the lack of clarity on nursing specialities, other nurses reported being incorrectly over-rewarded and later expected to repay the monies; this was particularly the case in some hospitals. This caused great tension between hospital management and nurses; especially because nurses were not given the liberty to determine the amount they could afford to repay considering their other financial commitments:

> *"They give you money and after that they call you to say they have given you money that you did not qualify for. That is heart-breaking because I am now expected to pay back the money. Worst of all, I don't choose the amount I can afford to pay and the period for paying it back."* (Staff Nurse, District Hospital, Gauteng Province)

It is nurses like these who felt that OSD has had limited if no influence on their motivation and retention as shown by these comments below:

"Oh no… no ways. OSD is not effective in retaining me here. More especially the way things are." (Assistant Nurse, District Hospital, Gauteng Province)

"Overall nurses are leaving everywhere in the hospital, especially after the implementation of OSD, people are leaving." (Professional Nurse, Regional Hospital, Gauteng Province)

The findings further showed that OSD favoured professional nurses more than the lower cadre of nurses; resulting in limited effort exerted by the lower nursing categories in individual performance as well as negative effect on team effort. This perception was shared by all categories of nurses, especially those in hospital setting:

"When OSD was introduced, the junior nurses were not considered and in nursing, the senior nurses cannot do the work alone without the junior ones. We are not happy with the way it was done" (Professional Nurse, Regional Hospital, North West)

"In reality, the wards are maintained by enrolled nurses. The sisters [professional nurses] mostly do paper work, but we are the one's doing most of the things like bathing the patients, giving medicine and so on; although they [professional nurses] help" (Staff Nurse, District Hospital, Gauteng Province)

"If you know that someone in your ward got it [OSD] and that somebody request your assistance, you would say 'no, you do it yourself, you got the money and I didn't" (Assistant Nurse, Provincial Hospital, Gauteng Province)

6.3 Conclusion

As with rural and scarce skills allowances, OSD was also regarded as a good policy that increased the recruitment, motivation and retention of nurses to a certain extent and has encouraged nurses to specialise. However, this chapter reinforces the findings in Chapter 6 of the importance of better planning and management of the implementation process of the financial incentive strategy to ensure consistency in implementation for the strategy to achieve its intended purpose. The chapter demonstrated that OSD implementation was decentralised and implementation involved a complex series of events which required careful

planning, management and coordination to ensure consistency and avoid other unintended consequences. In Chapter 8, the final case study focuses on the implementation processes of a non-financial incentive, the hospital revitalisation programme, as well as the perceived influence of this strategy on the motivation and retention of health workers.

CHAPTER 7: HOSPITAL REVITALISATION CASE STUDY

7.1 Description of the Development and Implementation of the Hospital Revitalisation Programme

7.1.1 Contextual Factors

When the democratic government took power in 1994, the main focus was on improving access to health care for all the people in the country. With primary health care as a central pillar of the new health system, there have been efforts to build and upgrade clinics and hospitals around the country. A document review and analysis revealed that in 1996, the NDoH conducted a national hospital infrastructure audit which included 434 hospitals [264]. The findings of this audit showed that a third of facilities needed complete replacement or major repairs [265].

In response to these findings, a decision was taken by the NDoH to embark on what was initially termed the Hospital Rehabilitation and Reconstruction (HRR) programme [266]. According to the Director of the Hospital Revitalisation Programme, this programme was initially intended to address the infrastructure backlog caused by the apartheid regime [266]. However, it was soon recognised by the NDoH that improvements in infrastructure would not necessarily lead to service delivery improvement; this therefore informed the decision to initiate a new programme referred to as Hospital Revitalisation Programme (HRP) which would not only address infrastructure but also health technology and/or equipment, organisational development and management, and quality assurance [267, 268]. The HRP was then launched in the 2003/04 financial year and was initiated as a multi-pronged and long term strategy anticipated to take approximately 20 years to complete [266, 267, 269]. Revitalisation was also intended to ensure that communities have better access to services.

In March 2007, the then Gauteng Premier, Mbhazima Shilowa, was quoted in his speech at the opening of the Pretoria Academic hospital reflecting on how this programme came about:

> *"As we improve the health infrastructure, we realised that in most cases, this did not translate into improved service delivery. Therefore, a more comprehensive programme, called the revitalisation programme was developed to address the many factors affecting the delivery of quality health care. Over and above infrastructural improvement, we said health equipment must be of good quality and always available. There should be improvement in human resources and the management of the hospital. The programme also addresses the issues of quality information management as critical in improving efficiency."* (Mbhazima Shilowa, Gauteng Department of Health, Press Release, 2 March 2007)

7.1.2 Policy Content

A document review of the Department of Health 2000/01 annual report and the Revitalisation Project Unit highlighted five core and interrelated components of the hospital revitalisation programme which are health infrastructure; health technology; organisational development and management; quality assurance; and monitoring and evaluation [267, 268]. The Directorate for the Revitalisation Projects, located within the National Department of Health, noted that the health infrastructure component involved "*the process of briefing, design, development of master plan, cash flow projection, tender, construction, handover, maintenance and design evaluation"* [267]. The health technology on the other hand focused on *"auditing and purchasing of equipment based on service packages, development of sustainable systems for health technology planning and general management and maintenance of technologies"* [267]. With regard to the organisational and management component, the aim was to strengthen institutional and operational efficiency of public hospitals by improving the management systems, structures and processes [267]. The quality assurance component involved the modification of hospital systems in order to improve the quality of services that are required including improvement and sustainability of quality of

services provided in the public hospitals [267]. Finally, the monitoring and evaluation component was aimed at producing consistent information to enable the NDoH to determine the accomplishments within the context of the implementation of the projects as well as to ensure accountability [267].

Hospital revitalisation is also listed as one of the themes of the Ten-Point Plan Strategic Framework for the period of 2004-2009 [265]. Within the 10-point plan, the revitalisation of hospital services includes: *"updating the National Planning Framework, improving the condition of hospitals, improving the condition of equipment, decentralisation of hospital management and rationalisation of highly specialised services"* [265]. Both policymakers and hospital managers seemed to be in agreement with the document review with regard to the intention of hospital revitalisation:

> *"Revitalisation was intended at improving services and structural capacity in order for the system to proactively be responsive to issues we have."* (Hospital Manager 5, Revitalised Hospital 3, North West Province)

> *"What revitalisation was trying to do was to say as we improve the working conditions of health professionals, we must also look at putting the right equipment in place, new X-ray machines and whatever else is required so that people should feel that the environment is welcoming."* (Policymaker 1, National Department of Health)

In total, 242 hospitals nationally were said to benefit from this programme. Media releases in 2004 quoted the Department of Health HRP project director, Lucky Mandla Chawane stating that a budget estimate of R649-million was put forward for 2002/3 financial year; R717-million for 2003/4; about R911-million for 2004/5, and R1,027-billion for 2005/6 [269]. The expected cost allocated for North West province was R418-million to complete 39 projects and 20 hospitals, while Gauteng province was allocated R598-million for completion of 352 projects and 31 hospitals.

7.1.3 Policy Actors and their Roles

The document review and analysis revealed that the hospital revitalisation programme was located within the Health Service Delivery cluster of the National Department of Health and that multiple stakeholders played a critical role in the initiation and implementation of this programme. The National Department of Health and Social Development, which is a partnership between the health department and social development, was responsible for administering the process as well as ensuring that the planned revitalisation adheres to its quality framework. The Provincial Departments of Health on the other hand were responsible for producing business cases for the hospitals that they wish to include under the programme to NDoH, which then presents it to Treasury. The other key player was the National Treasury which was responsible for providing funds to the hospitals to implement the programme. The primary implementer of the hospital revitalisation programme was the Department of Public Works.

The document analysis further showed that when hospital revitalisation was introduced, a number of Committees and Task Teams with variety of roles were set up. Firstly, in 1996, the National Hospital Co-ordinating Committee (NHCC) was established to drive the process of hospital revitalisation [264]. This committee had representation from the National Department of Health as well as from each province. It thus encouraged extensive provincial participation and was managed by the Hospital Services Chief Directorate [270].

In addition to this, the Directorate for the Revitalisation Project at the national level mentioned on their website that the Project Management Forum (PMF), comprising of ‘specialised’ persons from provinces and the National Department of Health was also established [267]. The specialised units that were represented in this forum included health

technology, hospital management, health facilities planning and commissioning, quality of care and project management [267]. According to the Revitalisation Project Unit, the PMF was to be the first point of call providing expertise required by any implementing province and the overall role of this forum was noted as follows:

> *"The main function of the PMF is to mobilise NDoH and provincial Departments of Health (PDoH) directorates and clusters, and to review technical aspects of annual work plans. It will also be responsible for advising on technical issues affecting implementation."* (The Revitalisation Projects Unit, National Department of Health)

The Revitalisation Unit further stated that the PMF was expected to meet on a quarterly basis and hosted on a rotational basis by provinces [267]. Other committees that were established included the Parliament Health Committee; the National Health Council; the Quality Assurance Management Team; and the National Peer Review Team. In some hospitals, public-private partnerships (PPP) were established to fund the programme.

7.1.4 Policy Process and Challenges

In terms of the strategies that were put in place to support the implementation of the hospital revitalisation project, an analysis of the documents reviewed showed that a draft National Planning Framework was developed in mid-1998 to guide the development of hospital services. The Project Implementation Manual (PIM) was also developed in 1999 and this was followed by the development of the 1999-2004 Health Sector Strategic Framework (HSSF).

The Hospital Revitalisation Grant was set aside for the implementation of HRP [267, 268]. In a presentation made at the 29th Seminar of the Public Health Group of the International Union of Architects, Geoff Abbott and colleagues, who were part of a team of Architects working on the Hospital Revitalisation Programme, indicated that the Hospital Revitalisation Grant was a

national targeted capital funding project to provinces for hospital development and or redevelopment to improve quality of care [271]. They further stated that the disbursement process of this grant was supported by legislation; implying that there were formal processes of approval for this grant [271]. The website of the Department of Health's Revitalisation Project Unit also noted that the purpose of the Hospital Revitalisation Grant was two-fold:

> *"To provide funding to enable provinces to plan, manage, modernise, rationalise, and transform the infrastructure, health technology, monitoring and evaluation of hospitals in line with national policy objectives."*
>
> *"To transform hospital management and improve quality of care in line with national policy."* (The Revitalisation Project Unit, Department of Health)

Media releases at the time when hospital revitalisation was initiated revealed that the pilot phase of this programme happened during the 2001/02 period during which only one hospital per province was initially expected to benefit [269]. As of 2002/3 financial year, the programme was expected to accommodate two to three hospitals per province per year [269]. In order for hospitals to benefit from the hospital revitalisation programme, the National Department of Health quarterly report and the Revitalisation Project Unit clearly stipulated the process shown in Figure 8 [226, 267].

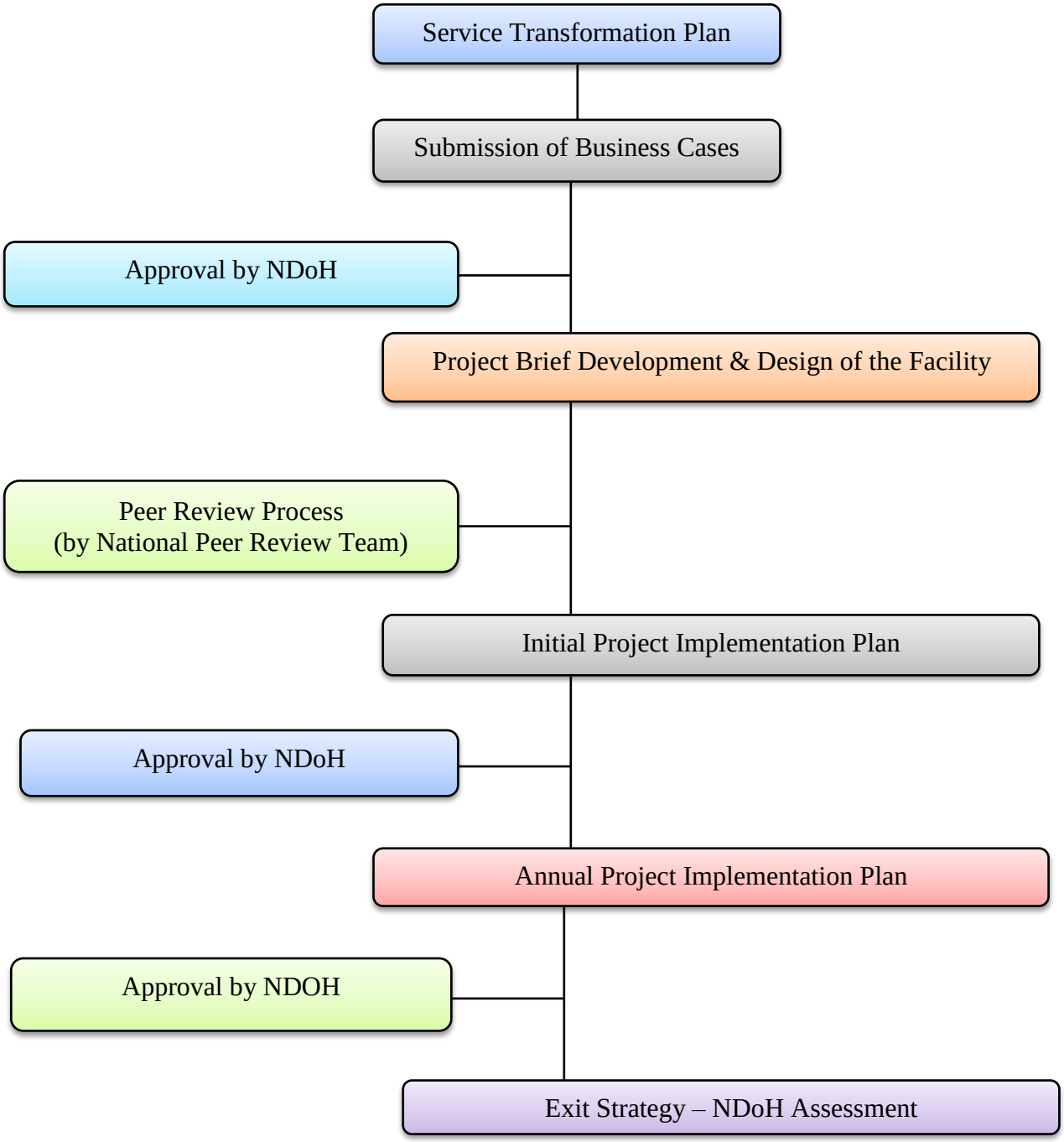

Figure 8: Hospital Revitalisation Planning Process
Source: The Revitalisation Project Unit, National Department of Health

The document analysis further established that one of the critical phases of the hospital revitalisation programme was for the Provincial Departments of Health to submit Business

Cases and Project Implementation Plans (PIP) to the National Department of Health [226]. The Business Cases had to address two important issues: the first was the strategic context indicating the current and proposed situation regarding health service delivery in the province, the priorities of revitalising facilities in the province based on service as well as financial issues; the second part of the Business Case dealt with the specifics of the facilities such as the size, level of care, capital and operational costs, duration and expected outcomes [226]. In the quarterly report, the National Department of Health highlighted several limitations with the Business Cases that were submitted for the 2004/2005 financial year and these included lack of standardisation of the Business Cases even though a format had been provided; no formal approval processes were followed; and insufficient assessment of Business Cases because of lack of capacity within the Revitalisation Unit due to drastic staff shortages [226].

In addressing the above limitations, the National Department of Health Hospital Revitalisation Unit conducted workshops to explain the standard format, assisted provinces in drafting Business Cases, created formal methods of appraisal as well as requested provinces to redraft Business Cases of projects [226]. This Unit further actively made efforts to create posts for two specialists which were the Deputy Director for Infrastructure and Deputy Director for Health Technology, and were in the process of creating a post for the third Deputy Director for Organisational Development and Quality Assurance [226].

The 2005 quarterly report on hospital revitalisation further illustrated that with regard to the Project Implementation Plans (PIPs), none of the plans were formally appraised and approved and that the PIP's did not conform to the standards as set out in the Project Implementation Manual [226]. Although the Project Implementation Plans were expected to be submitted on an annual basis, it was also found that Gauteng province did not submit PIPs in 2004 [226]. In

addressing these challenges, the Revitalisation Unit appraised all the PIP's received; however, this resulted in one month's transfer of funds being withheld as none of the provinces complied with the deadlines given. The quality and depth of the information submitted was also reported to be weak [226]. The 2005 quarterly report further stated that the provinces were then expected to resubmit the PIP's and these were later approved based on detailed appraisals and suggestions made by the Revitalisation Unit.

In an attempt to improve the smooth implementation of the hospital revitalisation programme, the document analysis revealed that the National Department of Health Revitalisation Projects Unit further conducted a telephonic survey with provincial health officials with the intention of identifying problems experienced with the provincial Department of Public Works [226]. The findings of this survey showed that across all provinces, Public Works lacked technical capacity to implement the hospital revitalisation programme and that there were delays in the awarding of tenders and or procurement [226]. Other significant challenges identified were the continued under-expenditure by the provinces, lack of personnel to manage the components of the hospital revitalisation programme, poor quality of data available to the National Department of Health, and the monitoring and evaluation of projects [226]. With regard to reporting, it was found that the information received from the provincial treasuries did not always accurately reflect the progress on site due to slow capturing of payments as well as late payments [226].

When looking at the findings of the Revitalisation Projects Unit survey with particular attention to the problems at the two provinces that participated in this study, it was found that in North West province, the problems faced were that the procurement process, tender board as well as appointment of contractors were done by the Department of Public Works and that most of the contractors started six months late [226]. The main problem in the Gauteng

province was the tender processes which led to unnecessary delays in the appointment of contractors [226]. The other implementation problem in Gauteng was that the provincial Department of Public Works appointed inexperienced contractors who were incapable of handling projects with huge budgets [226]. As a result, for the 2008 and 2009 financial year, the Auditor-General reported an under spending of R35 million on the hospital revitalisation programme in Gauteng province alone; including weaknesses in the awarding of contracts, the management of assets and adherence to procurement protocols [272]. One key informant confirmed these challenges by commenting as follows:

> *"The challenge is that revitalisation is taking a long time. There are major delays. The fact that the revitalisation programme tries to balance the inclusion of BEE [Black Empowerment Enterprise] companies is a little bit of a challenge because sometimes they are stuck with people that are incapacitated."* (Policymaker 3, Gauteng Department of Health)

This informant further commented on issues of poor management of the revitalisation projects as well as the management of the tendering processes; which according to her were due to corruption:

> *"In some instances, there are allegations of corruption. I think the management of the projects is also very poor. In particular, the management of all these small companies that they sub-contract is a huge problem. I really do believe that they [contractors] need to be trained before they undertake such huge responsibilities."* (Policymaker 3, Gauteng Department of Health)

Although a review of the 2005 Department of Health quarterly report indicated that Mamelodi hospital, one of the hospitals in the revitalisation programme, was due for completion at the end of July 2007 [226], this was not the case in reality. According to the 2005 quarterly report, the delay in Mamelodi hospital was due to the disappearance of the initial contractor and that a new contractor had to be appointed [226]. Similarly, the report also stated that the Business Case for Natalspruit hospital was already completed in 2005 but by 2009 when data was collected for this study construction had not yet begun.

While monitoring and evaluation was an integral part of the hospital revitalisation programme, it was interesting to note in the document analysis the contradictory reports between the Department of Health and the National Treasury of what had been achieved by what time period and at what cost. For example, the 1999 Intergovernmental Fiscal Review by National Treasury reported on some of these inconsistencies as follows:

> *There were also contradictions that were noted with regard to the budget reported by the different health department documents."* (National Treasury, Intergovernmental Fiscal Review, 1999)

These contradictions reflected limited communication and coordination between these two departments. A reason provided by the National Treasury for the inconsistencies with the expenditure on infrastructure in particular was due to the failure of provinces to apply uniform classification for infrastructure. For instance, except for the Health and Education departments, the other departments that played a critical role in infrastructure development were Public Works, Transport and Housing. As a result, some provinces combined functions of these departments while other provinces separated the functions:

> *It is difficult to assess how much provinces are spending on infrastructure, and to separate expenditure on new infrastructure from maintenance spending. Provinces do not apply a uniform classification for infrastructure, making it difficult to analyse provincial trends. In some provinces, construction and maintenance within the social services is recorded in the vote of public works, while in others it is allocated to the relevant department. Reforms to budget formats will improve this analysis in future.* (National Treasury, Provincial Budgets and Expenditure Review, 2003/04 – 2009/10)

Notwithstanding the challenges mentioned above, there had been successes with regard to the hospital revitalisation programme. With regards to health infrastructure, nationally, from 1999 to 2010, at least a total of 120 hospitals had been repaired, upgraded or built. In the two

provinces where the current study was conducted, a total of six hospitals had been revitalised between 2004 and 2010 as shown in Table 20 below.

Table 20: Completed Revitalised Hospitals in Gauteng and North West Provinces 2004-2010

Financial Year	Hospital Name	
	North West	Gauteng
2004/05	– Swartruggens	
2005/06		
2006/07		– Steve Biko Academic
2007/08		– Tembisa
2008/09	– Vryberg	
2009/10	– Moses Kotane	– Mamelodi

On the 10th June 2005, Mr Howard Yawa, the North West Member of Executive Council (MEC) for Public Works, officially handed over the newly built Swartruggens Hospital in the North West Province to the MEC for Health at Borolelo Township [225]. A press release issued by the Department of Public Works at that time referred to this hospital as the 'state of the art hospital', and as the first nationally to be completed under the government's hospital revitalisation programme [225].

It was further stated in the press release that R39 million was spent in this 30 bed hospital to construct four private wards with en-suite facilities for more affluent patients with medical aid as well as to build 10 houses for staff [225]. The press release further noted that:

> *"The hospital is fitted with an electronic patients monitoring and intercom system to enable patients to call for attention and receive the highest level of service at a public hospital."* [225]

In Gauteng province, the Steve Biko Academic Hospital (formerly known as Pretoria Academic Hospital) was the first facility to be completed under the revitalisation programme [273]. In total, R1.2 billion was invested in the construction of this hospital, R700 million of this was spent in physical infrastructure while R500 million was used to purchase the latest technology [273]. In his speech at the opening of the Steve Biko Academic hospital Mbhazima Shilowa, the former Gauteng Premier, was quoted as saying:

> *"After we have done all the work, a sceptic might still ask the question: 'so what has changed if patients still wait in long queues to see a doctor, if they continue to feel that they are not receiving proper and adequate care, and if they continue to die in stretchers waiting to be attended to.' A sceptic will be led to conclude that our efforts are like pouring old wine in new bottles."* (Mbhazima Shilowa, Gauteng Department of Health, Press Release, 2 March 2007)

One of the key informants in Gauteng province who was interviewed for this study appeared to be optimistic about the potential influence of the revitalisation of hospitals on staff motivation as shown in the comment below:

> *"I think any environment that is beautiful, that is clean, that is attractive makes the staff to be proud, it motivates them. It makes them to want to work there."* (Policy Maker 3, Gauteng Department of Health)

In relation to the component of organisational development and management, which was intended to develop the skills of hospital managers and management systems, some successes were also noted. During the 2000/1 financial year, an amount of R24-million was spent on appointing chief financial officers or senior support staff in the bigger hospitals. Furthermore, a document review revealed that financial control in various provincial health departments had improved to the point that overspending on budget allocations had been eliminated or greatly reduced and this was attributed to better financial management in hospitals where the bulk of spending occurred. In the 2007/08 financial year, the Department of Health planned to

ensure that at least 50% of hospital managers enrolled in a formal hospital management-training programme. However, in 2009, the Democratic Alliance former spokesperson, Mike Waters was quoted in Mail and Guardian newspaper calling for a survey of the qualifications and experience of all hospital executives and other managers, implying that many hospital managers still lack technical abilities [274]. One key informant confirmed the latter by commenting as follows:

> *"You get people who are teachers who have never even been principals in the school, running hospitals today. They have no clue what they are talking about. We don't even know what qualifications they have that made them to get the job. Now you get doctors saying 'what do I speak to the teacher about medicine'. We are not saying 'have doctors as CEO's', we are saying 'have people who are qualified' and even if it means people having MBA, put them there; they should know what they are talking about. "* (Key Informant 5, Professional Association)

7.2 Perceptions on the Influence of Hospital Revitalisation Programme

Three main themes emerged when health professionals were asked about their perceptions with regards to the influence of the hospital revitalisation programme (HRP) on their recruitment, motivation and retention. These are listed in Table 21**Error! Reference source not found.**. This research covers only four revitalised hospitals because of the delays in the implementation of this initiative during the research project, as noted above.

Table 21: Dominant Themes identified under Findings on HRP

1. Mixed perceptions about the influence of HRP on motivation and retention
2. Weak leadership and management of hospitals
3. Hospital revitalisation alone is not an adequate strategy

Table 22: Perceived Influence of the Hospital Revitalisation Programme

Incentive		Hospital		
Those working in revitalised facilities		**Agree (%)**	**Neither (%)**	**Disagree (%)**
N=103	Hospital revitalisation attracted me to come and work for this facility	19.0	10.7	70.4
	Hospital revitalisation motivates me to do my job better	28.5	11.0	60.0
	Hospital revitalisation encourages me to remain working in this facility	29.0	10.1	61.2

7.2.1 Mixed Perceptions about the Influence of the Hospital Revitalisation Programme

The findings of the survey demonstrated that hospital revitalisation as the only non-financial incentive in this study was considered to have had limited impact on the recruitment (17.5%), motivation (25.5%) and retention (22.7%) of health personnel (Table 22).

However, in-depth interviews with health professionals reflected divergent views amongst respondents with regards to the influence of the hospital revitalisation programme. Those respondents that commented positively about this programme, specifically highlighted the improvements in physical infrastructure, advanced technology and equipment.

> *"So seeing that this hospital looks good I said wow… is this a government hospital…you know. So the same environment attracted me because I was working in the private sector before."* (Professional Nurse, Revitalised District Hospital, North West Province)

> *"Err …one would take a look and say wow nice. So when I came here, things were so much nicer, you find that there is new advanced technology. So it was very attractive and encouraging knowing that I am going to work in this place. I was happy when I saw the structure and all the things in this place are attractive."* (Assistant Nurse, Revitalised District Hospital, North West Province)

The view about the availability of advanced equipment and technology was also shared by some hospital managers:

> *"In general the revitalisation has been effective. You see, after the revitalisation, we have something like oxygen reticulation. So in a critical area like casualty where we should resuscitate a person, they are able to get oxygen immediately on the wall."* (Hospital Manager 5, Revitalised District Hospital, North West Province)

Other hospital managers were of the view that the improved infrastructure of the hospitals has to a certain extent retained health professionals, even if it was on a short term basis.

> *"When people get here, the first thing they look at is the space or place that they are going to work at. And they actually say, 'I want to work at this place even if it's for a year because I like the appearance'. But they end up sometimes staying for two to three years."* (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

> *"The revitalisation was not intentionally intended at retention of staff, but it has contributed to retention."* (Hospital Manager 5, Revitalised District Hospital 2, North West Province)

In the context of the prevalence of HIV and AIDS and TB in the country, one health manager commented that the refurbishment of the hospital infrastructure through the hospital revitalisation programme was effective in integrating these services.

> *"And the other people that are very happy about this revitalisation are the wellness clinic and TB team. So we are trying to integrate TB and antiretroviral treatment."* (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

As shown in Table 23, the staff survey asked participants about their overall satisfaction with a number of components of their working environment. 54.1% of those in revitalised hospitals reported being satisfied with the physical infrastructure of their hospitals compared to only 33.7% of those from non-revitalised hospitals, and this difference was statistically significant (X^2 test, p=0.001). Lower levels of satisfaction were reported for the availability of essential drugs, but again the rates for revitalised hospitals were significantly higher than those from

non-revitalised hospitals (X^2 test, p=0.04). 36.1% of staff from revitalised hospitals were satisfied with equipment and technology compared to 28.4% from non-revitalised hospitals, but this difference was not statistically significant (Table 23). Interestingly, satisfaction with staff accommodation, schools for their children, and other entertainment in the area were lower among revitalised hospital staff, although the difference for staff accommodation was not statistically significant between the two groups.

Table 23: Overall Satisfaction with Working Environment

		Revitalised Hospital			Non-Revitalised Hospital			
Satisfaction with overall working environment		**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**Satisfied (%)**	**Neither (%)**	**Dissatisfied (%)**	**P-value**
N=428	Satisfaction with physical appearance of the hospital	54.1	8.2	37.7	33.7	8.2	58.2	**0.001**
	Satisfaction with availability of essential medicine / drugs	47.6	8.2	44.2	37.3	5.4	57.4	**0.039**
	Satisfaction with equipment and technology of the hospital	36.1	3.4	60.5	28.4	3.9	67.7	0.267
	Satisfaction with staff accommodation	20.6	3.7	75.7	22.1	6.8	71.1	0.489
	Satisfaction with education for children around the area	22.2	4.6	67.3	35.7	14.1	50.3	**0.005**
	Satisfaction with entertainment in the area	14.7	6.9	78.5	25.8	12.6	61.6	**0.009**

However, doctors in particular reported that improvements of the physical structure alone are unlikely to attract new health professionals to rural areas especially those who are already working in big cities. Their argument was that the improved infrastructure of the hospitals is more likely to be appreciated by health professionals that are already working in such facilities because they are more aware of the situation prior to the revitalisation and the efforts that had been made to improve their working conditions through revitalisation. Improvements in hospital infrastructure were also considered to be ineffective in retaining health professionals:

> *"No, I think the way the hospital looks is not going to attract anyone new when they have the opportunity to be near the big towns. They would rather work in old hospitals and be near towns than to come to this hospital. Nonetheless, we are going to enjoy this new place." (*Medical Doctor, Revitalised District Hospital 2, North West Province).

> *"Okay structurally, yes we have a good structure, nice bathrooms, nice air conditioners and so forth. These are good for the patients, the patients are comfortable and the offices are also good; but this cannot retain people here. Yes, little comfort is okay but it may not be the reason that I am staying in the hospital."* (Medical Doctor, Revitalised District Hospital 3, North West Province)

In one particular hospital, although the renovations happened, only certain sections of the hospital were revamped. The administration building where management personnel are located as well as the outpatient department were improved but no refurbishments were carried out in the hospital wards. The majority of the nurses in this hospital were not impressed with this and commented that this was ineffective for their motivation as reflected by the following remarks:

> "No, hospital renovations have not motivated me. *They have only increased the size of their offices and the OPD and the pharmacy.* They have air cons [air conditioners] in their offices, but what about the wards?" (Assistant Nurse, Regional Hospital 4, Gauteng Province)

> *"Yes the hospital is looking very nice, but when we are talking about the hospital, we are talking about the patients. There is comfort up there in the management offices but down here in the wards it's a problem. They are comfortable, we are not. It seems like there's two different hospitals, one hospital that side and the other hospital this side."* (Professional Nurse, Revitalised Regional Hospital 4, Gauteng Province)

Other health professionals also felt that even though their revitalised hospitals looked attractive, in some instances the new infrastructure was not the most appropriate for their clinical needs, for example in the unavailability of isolation rooms for patients with communicable diseases. Some nurses commented that:

> *"…the structure doesn't meet the standard of care. We are working in days whereby there are a lot of communicable diseases and the structure of this hospital does not accommodate that, we don't have isolation rooms. You have seen our paeds [paediatric ward], it only has six beds and when somebody comes with a communicable disease what are you going to do?" (*Professional Nurse, District Hospital, North West Province)

> *"I think hospital revitalisation doesn't make any influence because the hospital is small; the building and the wards are not adequate."* (Assistant Nurse, Revitalised District Hospital, North West Province)

Consistent with the survey findings which found generally low levels of satisfaction with equipment and technology (Table 23), the results from in-depth interviews indicated persistent deficiencies in the availability of key equipment:

> *"There is lack of equipment in wards and shortage of linen for patients."* (Assistant Nurse, Revitalised Regional Hospital 4, Gauteng Province)

> *"You find that people are frustrated about the unavailability of equipment such as equipment for critical areas like ICU and theatre. I would say 70% or so of the people are frustrated because they really want this equipment and it doesn't come so as a doctor or nurse you go to places where there is equipment. I think those are the most frustrating things because you may be a specialist but without equipment it's a challenge."* (Hospital Manager 8, Revitalised Regional Hospital 4, Gauteng Province)

However, in some instances, although equipment may be available, there were challenges of space where the equipment could be placed and utilised:

> *"We do have the equipment but which we currently do not use because of space issues."* (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

An interesting view related to equipment was also voiced by another hospital manager from a district hospital in North West province who was particularly concerned that even though equipment was provided at their hospital, there were no mechanisms in place to ensure that the equipment was maintained, or strategies to keep up with advancements in technology:

> *"And the other challenge is the issue of equipment, remember technology advances rapidly. So there is no strategy in place at hospital level to actually be able to go along with the development within this area of equipment management. For example we may invest in an X-ray, two years down the line that X-ray is dysfunctional. You want to maintain it but it becomes too costly to do that. When you look at the recent models compared to what you have, yours is much more costly to maintain than buying a new model."* (Hospital Manager 1, Revitalised District Hospital 1, North West Province)

One doctor from North West hospital seemed frustrated that there was limited coordination with regards to the equipment that the hospital requests. In his view, although the hospital orders a particular item of equipment through the National Department of Health, sometimes what gets delivered is completely different:

> *"I think there is a bit of a problem with equipment. Sometimes you make a list of the equipment you want, the next thing you receive stuff that you didn't order. Let me give you an example, you may want an ultra sound machine for the hospital because the one you have is broken. Because it is more than R5,000, we cannot buy it through the hospital budget but have to order it through central office [National Department of Health]. And when your request comes, you receive a bed for theatre or an anaesthetic machine rather than what you initially ordered."* (Medical Doctor, Revitalised District Hospital 3, District Hospital)

7.2.2 Weak Leadership and Management of Hospitals

The hospital revitalisation programme was primarily focused on the physical infrastructure, and less attention was put on the management component. As such, the qualitative findings showed that in general, the majority of the health professionals in revitalised hospitals, especially nurses of all categories, had negative perceptions about leadership and management in their hospitals. These respondents raised concerns about authoritative managers who lack the ability to engage with staff problems:

> *"Management should adopt the democratic leadership style and stop oppressing their subordinates."* (Professional Nurse, Revitalised District Hospital 1, North West Province)

> *"Managers should walk around and see what staff is doing and hear about their problems."* (Operational Manager, Revitalised District Hospital 2, North West Province)

> *"Our nurses are resigning every month but management is doing nothing about it."* (Assistant Nurse, Revitalised Regional Hospital 4, Gauteng Province)

Poor relations with regards to issues around communication and consultation with staff were also raised by some nurses as a point of concern as reflected in the quote below:

> *"Management lacks the right way to consult and properly communicate issues with staff. We need regular management and personnel meetings, at least once a month to discuss staff dissatisfaction, strengths and weakness in order to work towards improving quality of care."* (Professional Nurse, Revitalised District Hospital 1, North West Province)

In addition, there was a unanimous view amongst all categories of nurses in revitalised hospitals that personnel in management positions lacked the capacity to deal with staff respectfully.

> *"Management needs to be trained on how to manage and treat staff with respect irrespective of their rank. We must work as a team and not to oppress the ones that are inferior to them."* (Staff Nurse, Revitalised District Hospital 1, North West Province)

> *"When you make a mistake, management insults you in front of patients."* (Assistant Nurse, Revitalised Regional Hospital 4, Gauteng Province)
>
> *"We deserve respect from management; our managers do not communicate with staff in a professional manner."* (Professional Nurse, Revitalised Regional Hospital 4, Gauteng Province)

Management was also criticised for being ignorant of fair labour practices; particularly in relation to offering fair opportunities for staff training. It was also the view of some respondents that labour and the human resources departments were in some cases, unresponsive to grievances of the health professionals:

> *"Management needs to practice fair labour practices in terms of enabling fair opportunities for staff training and workshop attendance. They must also be open and transparent."* (Professional Nurse, Revitalised District Hospital 1, North West Province)
>
> *"…and the labour department do not assist us with our grievances."* (Professional Nurse, Revitalised Regional Hospital 4, Gauteng Province)
>
> *"HR [human resource department] should also do their job properly and take staff problems seriously."* (Staff Nurse, Revitalised District Hospital 1, North West Province)

Although not a dominant theme, one professional nurse insinuated that female managers were more problematic than their male counterparts.

> *"The majority of women holding better [management] positions seem to be a problem; if only there can be better interaction between staff and management."* (Professional Nurse, Revitalised District Hospital 2, North West Province)

7.2.3 Hospital Revitalisation alone is not an Adequate Strategy

Some health professionals were of the opinion that in addition to improved infrastructure, other factors are important such as addressing issues of accommodation, safety, salaries, equipment and drugs. These opinions were expressed across all respondents and from both the Gauteng and North West provinces.

"Sometimes a person says that I want to stay here but seeing that you don't have accommodation for me, I won't be able to stay in the village because of the security of my car, there are no garages in the villages, there is no water and there are no essentials, so I can't unless you are going to assist me to look for accommodation. They rent but there is no safe accommodation where their cars can be safe or whatever assets they have because sometimes they are robbed in the village." (Hospital Manager 3, Revitalised District Hospital 2, North West Province)

"I love my job, but I cannot sit back just because I love the environment, no…I would still go. I am here for the money to support my family." (Staff Nurse, Revitalised Regional Hospital 4, Gauteng Province)

"The renovation is okay but we don't have equipment and drugs; it's only the building that has changed" (Staff Nurse, Revitalised District Hospital 3, North West Province).

The lower categories of nurses in North West province were particularly more concerned about the human resource aspects as the hospitals were being renovated:

"Yes it [hospital revitalisation] *motivates me at the same time it doesn't motivate me because I am asking myself why are they not increasing staff because as much as we need beautiful wards, we also need more staff."* (Staff Nurse, Revitalised District Hospital 1, North West Province)

*What I am asking myself is that as they are extending the hospital, are they going to have more staff" (*Assistant Nurse, Revitalised District Hospital, North West Province).

7.3 Conclusion

This chapter started off with describing the policymaking and implementation processes of the hospital revitalisation programme (HRP) and then critically analysed some of the successes and challenges of this intervention. Thereafter, the perceptions on the influence of HRP on the motivation and retention of health workers were also discussed under three main themes. The following chapter will present further quantitative findings on the job satisfaction, organisational commitment and intention to quit of health workers.

CHAPTER 8: JOB SATISFACTION, INTENTION TO QUIT AND ORGANISATIONAL COMMITMENT

8.1 Introduction

In Chapters 5 to 7, the results of the successes and the failures of the design and implementation processes of the incentive strategies investigated in this study, as well as their perceived influence on the motivation and retention of health workers were presented. In this chapter, I investigate the job satisfaction, intention to quit and organisational commitment of these health workers in order to assess how the interventions may have affected these elements. This chapter will start of by reporting the results of the consistency of the survey tools used and this will be followed by the findings on the Abridged Job in General (aJIG) and Abridged Job Descriptive Index (aJDI) for hospitals and clinics. Thereafter, the findings on health workers' Intention to Quit (ITQ) and Organisational Commitment (OC) will be presented. The impact of the interventions on health workers' satisfaction, intention to quit and organisational commitment will then be discussed. The chapter will end with reporting on the predictors of job satisfaction, intention to quit and organisational commitment while adjusting for other confounders.

8.2 Consistency of Survey Tools

As noted in the Chapter 3 on Methodology, the aJIG was used to measure overall satisfaction in the different categories of health workers working in hospitals and clinics in Gauteng and North West provinces. The aJDI was used to determine satisfaction with work itself, pay, promotion, supervision and colleagues. The Organisational Commitment Questionnaire (OCQ) measured health workers' loyalty to remain working at their respective facilities while the Intention to Quit scale measured the participants' intention to leave their current facilities.

Cronbach's Alpha was used to evaluate the internal reliability and consistency of the survey instruments as shown in Table 24. This table illustrates that the coefficients of all the scales are reasonably high, for both hospital and clinic respondents, suggesting that the aJIG, aJDI, OC and ITQ scales are reliable and consistent.

Table 24: Consistency of Survey Tools

Test Scale	Cronbach's Alpha		
	Hospitals	**Clinics**	**Combined**
aJIG	0.81	0.75	0.80
aJDI-Work	0.71	0.75	0.73
aJDI-Pay	0.62	0.71	0.65
aJDI-Promotion	0.73	0.72	0.73
aJDI-Supervisor	0.78	0.81	0.79
aJDI-Colleagues	0.79	0.85	0.81
Organisational Commitment	0.84	0.86	0.85
Intention to Quit	0.81	0.79	0.80

Previous research on the aJIG scale found an alpha of 0.85 or more [275]. In this study, the 8-items on the aJIG scale had a mean reliability coefficient of 0.81 for hospitals and 0.75 for clinics. The results also indicate that each of the aJDI subscales also had adequate mean reliability scores. The lowest Cronbach's alpha was found for the "Satisfaction with Present Pay" subscale with scores of 0.62 in hospitals and 0.71 in clinics.

For the 15-item Organisational Commitment scale, detailed item analysis showed a problem with item number 9 which read as follows: "It would take very little change in my present circumstances to cause me to leave this organisation (facility)". This was a complexly worded and reverse scored item which respondents possibly did not understand clearly. The correlation for this item with others in the scale was -0.12 for hospitals and -0.06 for clinics so

it was excluded from the final scale. The Cronbach's alpha for the remaining 14 items was 0.84 for hospitals and 0.86 for clinics (Table 24). Previous research on the Organisational Commitment scale found coefficient alphas range from 0.82 to 0.93 with a median of 0.90 [78]. The Intention to Quit scale had a strong total mean reliability coefficient for both hospitals and clinics ($\propto$=0.81 and 0.79 respectively).

8.3 Overall Job Satisfaction of Survey Respondents

In order to determine whether doctors and nurses that participated in this study were satisfied with their overall jobs or with certain aspects of their jobs (work, pay, promotion, supervisor, co-workers), we assessed whether they were above or below the neutral point on each of the aJDI and aJIG scales. According to Balzer and colleagues [230], there is no real neutral point on these scales; however they propose some guidelines to establish ranges between satisfaction, neutrality and dissatisfaction. The range of possible scores on the 8-item aJIG scale was from 0 to 24 while possible scale scores for aJDI were from 0 to 15. Therefore, using guidelines by Balzer and colleagues [230], in this study, a 'neutral' range of 9.78 to 14.22 was established for the aJIG scale while 7.33 to 10.67 'neutral' range was established for the aJDI scales [276]. For both of these scales, scores above the neutral range indicated 'satisfaction' while scores below the neutral range indicated 'dissatisfaction' [276].

Table 25 shows the job satisfaction results for the 422 respondents from hospitals. Overall, the aJIG scale resulted in a mean score of 15.0 (SD=6.9) indicating that these respondents were generally satisfied with their overall job. One-way ANOVA revealed a significant difference for health worker category in hospitals (p=0.045). However, no significant differences were observed for gender (p=0.761), marital status (p=0.930), province (p=0.353) and location (p=0.869).

For the aJDI scale, the results demonstrated that the participants were generally dissatisfied with pay and promotion; with the mean scores of 3.8 (SD=3.6) and 6.1 (SD=4.6) respectively. There were no significant differences between groups with regards to the promotion subscale. However, Table 25 shows that with regard to the pay subscale, there were significant differences for health worker category (p=0.045). Significant differences were also observed for province (p=0.001), with Gauteng respondents reporting lower satisfaction with pay (*M* = 3.3, *SD* = 0.34) than North West respondents (M = 4.6, *SD* = 3.8). The pay subscale in hospitals also reflected significant differences between locations (p=0.02).

With regards to the work subscale, the overall mean score fell within the neutral range and it was 8.9 (SD=4.5). There was significant gender differences (p=0.032). Although both males and females satisfaction levels with their work fell within the neutral range, males had a slightly higher mean score of 10.1 (SD=4.5) than females with a mean score of 8.7 (SD=4.5). The overall mean score for satisfaction with supervision for hospital respondents also fell within the neutral range (*M* = 8.7, *SD* = 4.9) and there were no significant differences between groups. Table 25 also demonstrates that hospital respondents were most satisfied with their co-workers (*M* = 10.9, *SD* = 4.4) with no significant differences observed between sub-groups.

Table 25: Summary Statistics of Responses to the Scales of aJIG and aJDI (Hospitals)

Category		aJIG		aJDI-Work		aJDI-Pay		aJDI-Promotion		aJDI- Supervision		aJDI-Co-workers	
		Mean (SD)	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**
Overall		**15.0 (6.9)**	**-**	**8.9 (4.5)**	**-**	**3.8 (3.6)**	**-**	**6.1 (4.6)**	**-**	**8.7 (4.9)**		**10.9 (4.4)**	**-**
Gender	Male	14.7 (7.7)	0.761	10.1 (4.5)	**0.032**	3.6 (3.5)	0.679	5.4 (4.9)	0.230	8.8 (5.2)	0.887	10.8 (4.6)	0.878
	Female	14.9 (6.8)		8.7 (4.5)		3.9 (3.6)		6.2 (4.5)		8.7 (4.9)		10.9 (4.4)	
Marital status	Single	15.0 (6.8)	0.930	9.0 (4.5)	0.327	4.1 (3.7)	0.332	5.7 (4.7)	0.329	8.5 (4.9)	0.750	10.7 (4.7)	0.575
	Married	14.9 (7.2)		9.1 (4.6)		3.6 (3.5)		6.4 (4.5)		8.9 (4.9)		11.2 (4.2)	
	Divorced/ Separated/ Widowed	14.6 (6.4)		8.1 (4.3)		3.7 (3.6)		6.3 (4.4)		8.8 (5.4)		10.7 (4.4)	
Health worker category	Doctor	14.2 (7.7)	**0.045**	10.7 (4.3)	0.056	3.2 (3.3)	**0.046**	5.0 (4.6)	0.111	8.3 (5.4)	0.077	10.8 (4.4)	0.062
	Professional Nurse	13.9 (7.5)		9.1 (4.8)		3.9 (3.9)		6.7 (4.9)		8.2 (5.1)		10.2 (4.6)	
	Staff Nurse	15.2 (6.3)		8.5 (4.1)		3.2 (2.7)		5.6 (4.3)		9.9 (4.8)		11.5 (4.4)	
	Assistant Nurse	16.2 (6.2)		8.6 (4.4)		4.4 (3.7)		6.1 (4.4)		8.7 (4.7)		11.4 (4.1)	
Province	Gauteng	15.2 (6.5)	0.353	9.1 (4.5)	0.558	3.3 (3.4)	**0.001**	6.1 (4.5)	0.823	9.0 (5.0)	0.169	11.0 (4.4)	0.514
	North West	14.6 (7.5)		8.8 (4.6)		4.6 (3.8)		6.2 (4.7)		8.3 (4.8)		10.7 (4.5)	
Location	Gauteng urban	15.2 (6.5)	0.065	9.1 (4.5)	0.842	3.3 (3.4)	**0.002**	6.1 (4.5)	0.773	9.0 (5.0)	0.277	11.0 (4.4)	0.722
	North West urban	13.2 (7.9)		8.8 (4.5)		4.4 (3.5)		5.9 (4.6)		8.7 (4.7)		10.5 (4.2)	
	North West rural	15.5 (7.1)		8.8 (4.7)		4.7 (4.1)		6.4 (4.8)		8.1 (4.9)		10.9 (4.6)	

Table 26 below provides the results of the aJIG and aJDI scales for the 136 respondents that participated from clinics. According to this table, clinic health professionals reported high overall job satisfaction with a total mean score of 16.3 (SD=5.9); no significant differences were noted between groups.

Regarding the aJDI scales, as with the hospital participants, clinic respondents were least satisfied with pay with a mean score of 4.5 (SD=4.3) and there were significant differences with regard to province and location (p=0.001 for both). Gauteng health professionals were significantly more dissatisfied with pay with a mean score of 3.3 (SD=3.5) than their North West counterparts with a mean of 6.1 (SD=4.9). The overall mean score for the promotion subscale in clinics fell within the neutral range (M = 7.6, SD = 4.4); however, there were significant differences between provinces (p=0.048) and by location (p=0.024). The one-way ANOVA revealed that Gauteng health professionals were significantly more dissatisfied with promotion (p=0.045) with a mean score of 6.9 (SD=3.8) while the North West health professionals fell within the neutral range with a mean score of 8.5 (SD=5.0).

The results in Table 26 also illustrate that the overall mean score for satisfaction with supervision fell within the neutral range (M = 8.8, SD = 5.0). There were no significant differences between groups. Health professionals in clinics were also moderately satisfied with their work but there were no between groups significant differences. As with the hospital respondents, clinic health professionals were also satisfied with their co-workers, with the overall mean score of 11.2 (SD=4.7). North West health professionals were significantly more satisfied with their co-workers with a mean score of 12.3 (SD=3.5) while Gauteng health professionals fell within the neutral range with a mean score of 10.5 (SD=5.3 (p=0.032).

Table 26: Summary Statistics of Responses to the Scales of aJIG and aJDI (Clinics)

Category		aJIG		aJDI-Work		aJDI-Pay		aJDI-Promotion		aJDI- Supervision		aJDI-Co-workers	
		Mean (SD)	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**	**Mean (SD)**	**P-Value**
Overall		**16.3 (5.9)**	**-**	**10.9 (4.2)**	**-**	**4.5 (4.3)**	**-**	**7.6 (4.4)**	**-**	**8.8 (5.0)**	**-**	**11.2 (4.7)**	**-**
Gender	Male	15.5 (6.6)	0.612	10.6 (4.9)	0.816	3.8 (5.1)	0.581	9.3 (5.4)	0.138	11.3 (4.9)	0.061	12.1 (4.6)	0.480
	Female	16.3 (5.9)		10.9 (4.2)		4.5 (4.2)		7.4 (4.3)		8.6 (4.9)		11.1 (4.7)	
Marital status	Single	15.5 (6.2)	0.255	10.1 (4.1)	0.203	4.2 (3.9)	0.822	7.1 (4.2)	0.636	8.9 (5.0)	0.940	10.7 (4.9)	0.615
	Married	16.2 (6.1)		11.5 (4.2)		4.7 (4.9)		7.9 (4.5)		8.7 (5.1)		11.6 (4.9)	
	Divorced/ Separated/ widowed	17.9 (4.8)		10.6 (4.4)		4.4 (3.5)		7.8 (4.6)		9.1 (5.1)		11.2 (4.1)	
Health worker category	Doctor	17.0 (0.0)	0.898	13.0 (2.8)	0.911	7.0 (4.2)	0.291	11.0 (1.4)	0.731	12.0 (4.2)	0.265	13.0 (0.0)	0.938
	Professional Nurse	15.9 (6.4)		10.8 (4.4)		4.7 (4.1)		7.5 (4.7)		8.8 (5.3)		11.0 (4.6)	
	Staff Nurse	16.7 (4.7)		11.0 (4.3)		2.8 (3.8)		7.4 (3.7)		7.1 (5.2)		11.2 (5.1)	
	Assistant Nurse	16.7 (5.6)		10.8 (4.0)		4.7 (4.8)		7.7 (4.3)		9.6 (4.1)		11.5 (4.9)	
Province	Gauteng	15.9 (5.8)	0.391	10.7 (4.2)	0.572	3.3 (3.5)	**0.001**	6.9 (3.8)	**0.048**	8.2 (5.2)	0.064	10.5 (5.3)	**0.032**
	North West	16.8 (6.1)		11.1 (4.2)		6.1 (4.9)		8.5 (5.0)		9.8 (4.6)		12. 3 (3.5)	
Location	Gauteng urban	15.9 (5.8)	0.673	10.7 (4.2)	0.760	3.4 (3.4)	**0.001**	6.9 (3.8)	**0.024**	8.2 (5.2)	0.179	10.5 (5.3	0.095
	North West urban	17.4 (4.4)		12.0 (4.6)		6.8 (5.4)		5.0 (4.8)		9.6 (6.1)		13.0 (2.4	
	North West rural	16.7 (6.3)		11.0 (4.2)		6.1 (4.9)		8.9 (5.0)		9.8 (4.5)		12.2 (3.6)	

8.4 Intention to Quit and Organisational Commitment of Survey Respondents

The scoring for the ITQ was determined by summing up the responses to the four items, leading to a minimum score of 4 and a maximum score of 28. Following the scoring guidelines used in the aJIG and aJDI, a score of 14 was regarded as the neutral point, implying that scores above 14 indicated “high intention to leave” while a score below 14 indicated “low intention to leave”.

Table 27 shows the results of the intention to quit and organisational commitment of 444 hospital respondents and 144 clinic respondents. In general, health professionals in hospitals reported a high intention to quit, with an overall mean score of 15.2 (SD=6.9) while clinic health professionals reported a lower intention to quit with a mean score of 12.9 (SD=6.4). The findings suggest that there was a significant difference between genders amongst clinic respondents. For instance, the results of the ANOVA test demonstrated that males in clinics had significantly high intention to quit with a mean score of 16.4 (SD=7.8) comparable to their female counterparts with a mean score of 12.6 (SD=6.2) (p=0.042). No significant differences were noted between groups in hospitals for intention to quit.

Table 27: Summary Statistics of Responses to the Intention to Quit (ITQ) and Organisational Commitment (OC) Scales

Category		HOSPITALS				CLINICS			
		ITQ		OC		ITQ		OC	
		Mean (SD)	P-Value	Mean (SD)	P-value	Mean (SD)	P-Value	Mean (SD)	P-value
Overall		**15.2 (6.9)**	**-**	**4.2 (0.9)**	**-**	**12.9 (6.4)**	**-**	**4.3 (1.1)**	**-**
Gender	Male	16.2 (7.1)	0.215	4.0 (0.9)	0.113	16.4 (7.8)	**0.042**	4.5 (0.6)	0.661
	Female	15.0 (6.9)		4.3 (0.9)		12.6 (6.2)		4.4 (1.1)	
Marital status	Single	15.6 (7.3)	0.186	4.1 (0.9)	0.257	14.4 (6.4)	0.095	4.3 (1.1)	0.567
	Married	15.2 (6.4)		4.3 (0.9)		11.8 (6.4)		4.3 (1.0)	
	Divorced/ Separated/ Widowed	13.6 (7.1)		4.3 (0.9)		12.2 (5.7)		4.6 (1.1)	
Health worker category	Doctor	16.1 (7.5)	0.510	3.9 (0.8)	**0.027**	0.8 (4.2)	0.683	4.6 (0.2)	0.527
	Professional Nurse	16.1 (7.2)		4.2 (0.8)		13.1 (6.8)		4.3 (1.1)	
	Staff Nurse	14.9 (6.8)		4.4 (1.0)		13.5 (7.1)		4.7 (0.6)	
	Assistant Nurse	13.9 (6.4)		4.2 (1.1)		12.5 (5.3)		4.3 (1.3)	
Province	Gauteng	14.8 (6.9)	0.228	4.3 (0.9)	0.125	12.9 (6.2)	0.967	4.2 (1.1)	**0.015**
	North West	15.7 (6.9)		4.1 (0.9)		12.9 (6.8)		4.6 (1.1)	
Location	Gauteng urban	14.8 (6.9)	0.354	4.3 (0.9)	0.078	12.9 (6.2)	0.999	4.2 (1.1)	**0.041**
	North West urban	16.2 (7.2)		3.9 (0.9)		13.0 (6.0)		4.3 (1.1)	
	North West rural	15.3 (6.8)		4.2 (1.0)		12.1 (6.9)		4.7 (1.2)	

Contrary to the earlier finding in Table 8 indicating that only a small proportion of the hospital health professionals in Gauteng (20.7%) and North West (20.3%) changed jobs in the past year, the results of the intention to quit of hospital respondents was above the neutral point for both provinces. For instance, hospital health professionals in Gauteng reported a mean score of 14.8 (SD=6.9) while their North West counterparts had a high intention to leave with a mean score of 15.7 (SD=6.9); however this difference was not statistically significant (p=0.228). Similarly, when looking at clinic respondents, lower percentages in Gauteng (20.5%) and North West provinces (16.7%) reported changing jobs in the past year. This finding is consistent with the ITQ results which found that clinic health professionals in both provinces had a lower score for intention to quit with a mean score of 12.9 (SD=6.2) in Gauteng and mean score of 12.9 (SD=6.8) in North West province (p=0.967).

As demonstrated in Table 27, the results of the 14-item Organisational Commitment (OC) scale were slightly above the midpoint, indicating moderate levels of commitment with mean score of 4.2 (SD=0.9) for hospitals and 4.3 (1.1) for clinics. Findings from the ANOVA test revealed that there were significant differences for health worker category in hospitals (p=0.027) and no significant differences were reported for other groups. In clinics, there were significant differences for province (p=0.015) and location (p=0.041). Health professionals from North West province reported a slightly higher commitment with a mean score of 4.6 (SD=1.1) than their Gauteng counterparts with a mean score of 4.2 (SD=1.1).

8.5 The Impact of Study Interventions on Overall Job Satisfaction and aJDI-Pay

Table 28 shows the results of the impact of the study interventions on the overall job satisfaction (aJIG) and satisfaction with pay (aJDI). In this table, two-sample t-tests revealed

that respondents who benefitted from the interventions investigated in this study did not have significantly higher overall job satisfaction in either hospitals or clinic.

However, the rural allowance, scarce skills allowance and OSD all increased satisfaction with pay for both hospital and clinic respondents. However, the differences were only statistically significant for the rural allowance ($t=3.3$, $p=0.001$) and for OSD ($t=2.8$, $p=0.005$) among health professionals in hospitals.

Table 28: The Impact of Interventions on Overall Job Satisfaction and Satisfaction with Pay

Predictor Variable		HOSPITALS						CLINICS					
		aJIG			aJDI-Pay			aJIG			aJDI-Pay		
		Mean	Std. Err.	P-value	Mean	Std. Err.	P-value	Mean	Std. Err.	P-value	Mean	Std. Err.	P-value
Rural Allowance	Yes	14.6	1.099	0.689	5.5	0.631	**0.001**	15.4	1.744	0.658	5.6	1.109	0.202
	No	15.0	0.357		3.7	0.182		16.1	0.541		4.2	0.376	
Scarce Skills Allowance	Yes	14.7	1.034	0.715	4.4	0.619	0.295	16.5	1.756	0.739	5.5	0.985	0.386
	No	15.0	0.360		3.8	0.185		15.9	0.545		4.3	0.352	
OSD	Yes	15.3	0.623	0.567	4.7	0.364	**0.005**	16.1	0.870	0.925	5.2	0.587	0.076
	No	14.9	0.406		3.6	0.201		15.9	0.647		3.9	0.445	
Facility Status	Revitalised	15.7	0.597	0.161	4.5	0.355	0.209						
	Non-revitalised	14.7	0.413		3.6	0.208							

8.6 The Impact of Interventions on Intention to Quit and Organisational Commitment

Table 29 reports on the impact of interventions on the intention to quit and organisational commitment of health professionals. In hospitals, rural allowance (t=-0.1, p=0.967) and scarce skills allowance (t=-0.2, p=0.840) increased the respondent's intention to quit, although the differences were not statistically significant. However, the occupation specific dispensation significantly decreased the intention to quit of hospital health professionals (t=-2.2, $p<0.05$). In clinics, all the financial incentive strategies decreased the respondents' intention to quit; however, there were no significant differences. Table 29 also illustrates that all interventions under investigation in this study moderately increased the organisational commitment of hospital and clinic respondents.

Table 29: The Impact of Interventions on Intention to Quit and Organisational Commitment

Predictor Variable		HOSPITALS						CLINICS					
		Intention to Quit (ITQ)			Organisational Comm. (OC)			Intention to Quit (ITQ)			Organisational Comm. (OC)		
		Mean	Std. Err.	P-value	Mean	Std. Err.	P-value	Mean	Std. Err.	P-value	Mean	Std. Err.	P-value
Rural Allowance	Yes	15.1	1.097	0.967	4.2	0.115	0.673	13.1	1.793	0.988	4.8	0.135	0.068
	No	15.2	0.354		4.2	0.049		13.1	0.566		4.3	0.099	
Scarce Skills Allowance	Yes	15.0	1.074	0.840	4.2	0.103	0.539	13.1	1.627	0.993	4.9	0.221	0.054
	No	15.2	0.355		4.2	0.049		13.1	0.575		4.3	0.094	
OSD	Yes	13.9	0.607	**0.016**	4.3	0.073	0.078	12.6	0.896	0.492	4.5	0.089	0.199
	No	15.7	0.401		4.1	0.056		13.4	0.679		4.2	0.132	
Facility Status	Revitalised	14.7	0.589	0.307	4.3	0.086	0.121						
	Non-revitalised	15.2	0.411		4.2	0.053							

8.7 Multiple Regression Analysis of the aJIG and Pay Subscale

The results of the multiple regression analysis to determine the factors influencing the respondents' overall job satisfaction and satisfaction with pay for respondents in hospitals and in clinics are reported separately in Table 30. The analysis focused on whether health professionals who received allowances or benefitted from the hospital revitalisation programme were more satisfied than those who did not while adjusting for other confounding factors such as gender, marital status, age, health worker category and province. Although the model was statistically significant for overall job satisfaction in hospitals ($p<0.05$), it only explained 5.9% of the total variation in job satisfaction. Similarly, the model was statistically significant for satisfaction with pay in hospital ($p<0.001$) explaining 10.1% of the total variation.

The regression results illustrate that receiving allowances did not significantly improve the overall job satisfaction of respondents in both clinics and hospitals. The revitalisation of hospitals also did not significantly increase health professionals overall job satisfaction. Gender, marital status, health worker category and province were also insignificant determinants of the overall job satisfaction in both hospitals and clinics. However, this study found that age was a positive significant predictor of overall job satisfaction in hospitals ($p=0.045$); implying that the older health professionals had significantly higher job satisfaction than their younger counterparts.

Table 30: Multiple Regression Analysis for aJIG and aJDI-Pay

Variable		HOSPITAL						CLINICS					
		aJIG			aJDI-Pay			aJIG			aJDI-Pay		
		Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value
Rural Allowance	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	-1.227	1.394	0.379	-1.635	0.706	**0.021**	1.318	2.008	0.513	0.116	1.330	0.931
Scarce skills	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	-0.646	1.624	0.691	-2.259	0.821	**0.006**	-1.527	1.978	0.442	-1.073	1.316	0.416
OSD	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	-0.505	0.845	0.551	-0.928	0.433	**0.033**	-1.732	1.324	0.193	-1.296	0.871	0.139
Facility status	Revitalised	-	-	-	-	-	-	-	-	-	-	-	-
	Non-revitalised	-0.834	0.881	0.345	0.026	0.454	0.954	-	-	-	-	-	-
Gender	Male	-	-	-	-	-	-	-	-	-	-	-	-
	Female	0.045	1.168	0.969	0.387	0.597	0.517	0.198	1.976	0.920	1.202	1.314	0.362
Marital status	Single	-	-	-	-	-	-	-	-	-	-	-	-
	Married	-0.337	0.787	0.669	-0.247	0.401	0.538	0.938	1.359	0.492	0.094	0.904	0.917
	Divorced/ Separated/	-1.077	1.176	0.360	-0.381	0.608	0.532	3.559	1.791	0.049	-0.416	1.191	0.728
Age		0.083	0.041	**0.045**	0.021	0.360	0.360	-0.091	0.071	0.202	0.041	0.047	0.382
Health worker category	Doctor	-	-	-	-	-	-	-	-	-	-	-	-
	Profession Nurse	-0.468	1.963	0.812	1.681	0.974	0.085	-1.536	6.512	0.814	-2.362	3.081	0.445
	Staff Nurse	1.115	2.068	0.590	1.734	1.029	0.093	0.946	6.724	0.888	-2.696	3.218	0.404
	Assistant Nurse	3.174	2.048	0.122	2.657	1.016	**0.007**	0.533	6.602	0.936	-1.393	3.124	0.656
Province	Gauteng	-	-	-	-	-	-	-	-	-	-	-	-
	North West	-1.565	0.863	0.071	-0.877	0.440	0.047	0.487	1.298	0.708	2.358	0.854	**0.007**

aJIG Hospitals: n=374, F=1.91, $p<0.05$, $R^2=0.059$;
aJDI-Pay Hospital: n=377, F=3.41, $p<0.001$, $R^2=0.101$;
aJIG Clinics: n=134, F=0.74, $p=0.699$, $R^2=0.063$
aJDI-Pay Clinics: n=135, F=1.57, $p=0.117$, $R^2=0.123$

In relation to satisfaction with pay, Table 30 also demonstrates that all the three financial incentives strategies significantly increased health professionals' satisfaction with pay in hospitals. For instance, satisfaction with pay was higher for hospital health professionals who received rural allowance (p=0.021), scarce skills allowance (p=0.006) and OSD (p=0.033). However, these allowances did not significantly increase satisfaction with pay for health professionals from clinics and health centres. This study also found that assistant nurses in hospitals were significantly satisfied with pay than doctors (p=0.007). In addition, differences between provinces were noted, with North West health professionals in clinics and health centres significantly satisfied with pay than their Gauteng counterparts (p=0.007). However, no significant association was found between satisfaction with pay and gender, marital status, and age for either hospital or clinics health professionals.

8.8 Multiple Regression Analysis of the Intention to Quit and Organisational Commitment

In Table 31, the key findings of a multiple regression analysis determining the factors influencing the respondents' intention to quit their current jobs and their commitment to remain in their current facilities are reported. The model for the intention to leave the current job was statistically significant in hospitals ($p<0.001$) but it only explained 10.9% of the total variation. Likewise, the model was statistically significant for organisational commitment in both hospitals ($p<0.005$) and clinics ($p<0.05$) explaining 10.1% and 16.3% of the total variation respectively. However, the model for intention to quit was not significant in clinics (p=0.537).

Table 31: Multiple Regression Analysis for Intention to Quit and Organisational Commitment

Variable		HOSPITAL						CLINICS					
		Intention to Quit (ITQ)			Organisation Com (OC)			Intention to Quit (ITQ)			Organisation Com (OC)		
		Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value	Coeff.	Std. Err.	P-Value
Rural Allowance	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	2.135	1.329	0.109	-0118	0.179	0.510	0.634	2.035	0.756	-0.125	0.314	0.690
Scarce skills	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	0.449	1.551	0.772	-0.229	0.209	0.275	-0.076	2.014	0.970	-0.488	0.311	0.119
OSD	No	-	-	-	-	-	-	-	-	-	-	-	-
	Yes	1.824	0.809	**0.025**	-0.153	0.109	0.163	1.673	1.346	0.216	-0.274	0.204	0.181
Facility status	Revitalised	-	-	-	-	-	-	-	-	-	-	-	-
	Non-revitalised	0.422	0.841	0.617	-0.182	0.113	0.109	-	-	-	-	-	-
Gender	Male	-	-	-	-	-	-	-	-	-	-	-	-
	Female	-1.104	1.103	0.317	0.074	0.148	0.616	-3.056	2.009	0.131	-0.124	0.310	0.689
Marital status	Single	-	-	-	-	-	-	-	-	-	-	-	-
	Married	0612	0.751	0.416	0.064	0.101	0.525	-1.586	1.376	0.251	0.125	0.207	0.547
	Divorced/ Separated/	-0.169	1.123	0.880	-0.037	0.152	0.807	-1.842	1.787	0.305	0.081	0.274	0.767
Age		-0.164	0.039	**0.001**	0.011	0.005	**0.037**	-0.011	0.072	0.885	0.209	0.011	0.055
Health worker category	Doctor	-	-	-	-	-	-	-	-	-	-	-	-
	Profession Nurse	1.765	1.833	0.336	0.035	0.248	0.190	6.545	4.709	0.167	-0.332	0.729	0.650
	Staff Nurse	0.236	1.934	0.903	0.586	0.261	**0.025**	5.249	4.913	0.287	0.296	0.759	0.697
	Assistant Nurse	-2.423	1.904	0.204	0.598	0.257	**0.020**	4.184	4.780	0.383	-0.036		0.961
Province	Gauteng	-	-	-	-	-	-	-	-	-	-	-	-
	North West	1.266	0.817	0.122	-0.213	0.110	0.054	0.465	1.308	0.723	0.555	0.200	**0.006**

ITQ Hospitals: n=391, F=3.85, $p<0.001$, $R^2=0.109$;
OC Hospital: n=395, F=2.56, $p<0.005$, $R^2=0.074$;

ITQ Clinics: n=130, F=0.91, $p=0.537$, $R^2=0.074$
OC Clinics: n=141, F=2.28, $p<0.05$, $R^2=0.163$

The results in Table 31 above indicate that receiving the rural or scare skills allowance did not have a significant impact on intention to leave or organisational commitment in either hospitals or clinics. However, after adjusting for other factors, OSD appeared to increase the intention to quit of hospital respondents who received it (p=0.025) compared to those who did not.

With regard to other predictors, the analysis did indicate that increasing age was significantly associated with increasing organisational commitment (p=0.037) and lower intention to leave (p=0.001) among health professionals in hospitals. There were significant differences in the organisation commitment of different staff categories from hospitals, and North West health professionals from clinics had higher organisational commitment than those from Gauteng (p=0.006). However, gender and marital status did not seem to be significant predictors of organisational commitment or intention to leave in either hospitals or clinics.

8.9 Conclusion

In this Chapter, the quantitative analysis of the survey findings on job satisfaction, organisational commitment and intention to leave were presented. These findings highlighted that in general, health workers were satisfied with their job in general, aspects of their work and with their co-workers, but they were less satisfied with pay, promotion and supervision. I attempted to investigate the impact of the study interventions on the respondents overall job satisfaction, satisfaction with pay, intention to quit and organisational commitment. The chapter showed that health workers receiving allowances were significantly more satisfied with pay than those who were not getting allowances. However, receiving allowances did not significantly improve the overall job satisfaction or decrease the health workers' intention to quit. The final results chapter that follows will provide a comparative analysis of the design

and implementation of the interventions as well as their influence on the motivation and retention health workers.

CHAPTER 9: COMPARATIVE ANALYSIS OF THE DESIGN, IMPLEMENTATION AND INFLUENCE OF THE HRH INTERVENTIONS ON THE MOTIVATION AND RETENTION OF HEALTH PROFESSIONALS

9.1 Introduction

This chapter draws from the previous five results chapters (Chapters 4 to 8) to provide a critical analysis of the commonalities and differences with regard to the design and implementation processes of the four incentives strategies under investigation in this study. The overall commonalities and differences in relation to the influence of these strategies on the motivation and retention of health professionals will also be discussed and qualitative and quantitative findings will be contrasted. The findings will be organised according to three main broad sections: a) the design and implementation processes of the incentive strategies; b) comparative analysis of the influence of incentive strategies on the motivation and retention of health workers and c) a revised integrated conceptual framework. Within each section, key thematic areas are discussed.

9.2 The Design and Implementation Processes of the Incentive Strategies

In Chapters 5 to 7, the Walt and Gilson framework was used to demonstrate the complex interactions between the policy contents, processes and contextual factors related to the design and implementation of the four interventions of interest in this research as well as mapping out the key actors and their roles. While this framework was useful particularly in conceptualising and organising thinking around the key policy design and implementation features, it is limited with regards to explaining why implementation weaknesses happened.

For this reason, in this section, the latter framework will be complemented with Hogwood and Gunn [199, 200] who took implementation analysis further by identifying 10 preconditions necessary for '*perfect implementation'*. Although these 10 preconditions are not realistically attainable, they are still helpful in challenging us to think more systematically about the reasons for implementation failures and about approaches to improving the implementation processes [277]. Therefore, this section will provide comprehensive cross-cutting findings discussing the extent to which the implementation of the four interventions of interest in this research met the Hogwood and Gunn's preconditions. A detailed explanation of each precondition is provided in the sections to follow.

9.2.1 Precondition 1: Circumstances External to the Implementing Agency should not Impose Crippling Constraints

Hogwood and Gunn [199] assert that external obstacles *"may be political in that either policy or the measures needed to achieve it are unacceptable to interests (such as party activists, trade unions or in some societies the military) which have the power to veto them"* (p199). The findings show that a key external constraint that was threatening the implementation of the three financial incentives of interest in this study was varying forms of contestations (Table 32). For instance, with regards to the rural and scarce skills allowances, contestations were between the nursing labour unions and the national Department of Health. Firstly, the unions objected to the National Department of Health unilateral decision of determining the criteria for selecting the health professionals that were targeted to benefit from the rural and scarce skills allowances.

Table 32: Brief Summary of Hogwood and Gunn's [199, 200] Implementation Model

	Rural Allowance	Scarce Skills Allowance	OSD	Hospital Revitalisation
External constraints	▪ Contestations between labour unions & NDOH regarding exclusion of junior nurses. ▪ Unions initially refused to sign – arguing lack of government consultation in determining beneficiaries and disparities in amounts for doctors and nurses. ▪ Unions succumbed to pressure – R500 million was at stake of being withdrawn by the National Treasury.		▪ Contestations within and outside the unions over prioritisation of nurses as the first category to benefit from OSD.	
	▪ International migration of doctors and nurses.		▪ Timing coincided with the global economic crisis.	
Adequate time & resources	▪ Delayed implementation because of contestations.		▪ Rushed implementation: widespread public sector strike accelerated implementation.	▪ Delayed implementation due to inefficiencies in tendering and procurement.
	▪ Retrospective payment of incentives, led to an increase in taxation			
			▪ Suboptimal human resource information system. ▪ Insufficient financial resources: due to undercount of 10,000 nurses	▪ Under-expenditure: due to limited technical capacity
Required combination of resources	▪ Policies and frameworks available.			
	▪ Substantial committed financial resources allocated by the National Treasury to implement these interventions (implying political will). But:			
			▪ Financial resources not immediately available at hospital level ▪ No additional resources for career path activities	▪ Insufficient personnel to manage the different components
			▪ Lack of technical capacity of implementers.	

	Rural Allowance	Scarce Skills Allowance	OSD	Hospital Revitalisation
Policy based on valid theory of cause & effect	▪ Interventions were based on theories explaining individual's behavioural responses to financial and non-financial incentives: – With regards to financial incentives, it was anticipated that an increase in salary would improve recruitment, motivation and retention. – In relation to hospital revitalisation, it was thought that an improvement in the working conditions would improve recruitment, motivation and retention.			
	▪ Limited use of evidence to guide policy formulation.			▪ Informed by findings of the national hospital infrastructure audit and pilot.
Clear cause & effect relationship	▪ Rural allowance would entice health workers to rural and underserved areas.	▪ Scarce skills allowance would attract & retain critical or specialised skills in the public sector.	▪ OSD would provide clear career paths & salary progression of nurses to discourage them from searching for new opportunities outside nursing.	▪ Improved working conditions would attract and retain staff.
Dependency relationships to be minimal	▪ Accurate list of rural hospitals, clinics and community health centres.		▪ Depended on nurses submitting proof of Nursing Council qualifications. ▪ Accurate register of specialised nurses from Nursing Council.	▪ Submission of Business Cases. ▪ Submission of Project Implementation Plans (PIP).
			▪ Available and accurate human resource information system.	
			▪ Proof of length of service record – no computerised system	
			▪ Adequate management capacity of implementers.	
	▪ Implementation decentralised across all the four incentive strategies.			
	▪ Availability of financial resources.			

	Rural Allowance	Scarce Skills Allowance	OSD	Hospital Revitalisation
Agreement of Objectives	▪ Disagreement because lower category of nurses were excluded. ▪ Disagreement because of the discrepancy in the amount given to doctors and nurses. ▪ Disagreement because it favoured professional nurses than junior nurses.	▪ Agreement that those with critical skills should be incentivised. ▪ But disagreement that only three nursing specialities benefited.	▪ Disagreement because it was perceived to favour professional nurses than lower categories of nurses.	▪ Consensus that improved working conditions was essential to attract health professionals into the public sector.
	▪ Financial incentives not linked to performance.			
Sequencing of events			▪ Limited clarification of roles.	
	▪ Inadequate time for planning.			
	▪ No project implementation plans detailing the sequence of implementation activities.			▪ Project Implementation Plan (PIP) available - but did not conform to standards set out in Project Implementation Manual
Communication & coordination	▪ Suboptimal communication strategy: ▪ With rural allowance, it resulted in observed disagreements & misunderstandings esp. to those excluded. ▪ With OSD, it created a high degree of anticipation which led to great disappointments and dissatisfaction when expectations were not met.			
	▪ Weak coordination & oversight from national government.			
Total compliance	▪ Poor implementation "fidelity": the interventions were not implemented as prescribed by the policies.			
	▪ "Rural" definition left at the discretion of provinces.		▪ Complexity of nursing specialities	
	▪ Variations and interpretation of policy within and between provinces.		▪ Variations and interpretation of policy within and between provinces.	▪ Multipronged strategy with too much to cover in a new democratic government still finding its feet into leadership.
			▪ Complex series of events. ▪ The enormity of implementation was not taken into consideration.	
	▪ No systems for monitoring, supervision and evaluation.			

Secondly, the nursing union in particular, was dissatisfied with the exclusion of the junior categories of nurses from benefiting specifically from rural allowance. Lastly, the unions were unhappy with the low percentage offered to professional nurses comparable to doctors especially in relation to the rural allowance (12% for professional nurses as opposed to 22% for doctors). As such, these unions were initially refusing to sign the agreement until their concerns were addressed. However, the unions ultimately had to succumb to pressure to sign the agreement because failure to do so would have resulted in the National Treasury withholding the R500 million funds already earmarked for payment of these incentives (Table 32).

Table 32 also illustrates that regarding the OSD, contestations were among the recognised labour unions in the central bargaining chamber and this was in relation to the prioritisation of nurses as the first health provider category to benefit from the OSD over other health professionals. Outside the unions, the results showed that the National Department of Health initially faced resistance from the National Treasury which was pushing for the prioritisation of doctors basing their argument on the costs because there are more nurses than doctors (Table 32). However, the National Department of Health held the decision-making power over which health category should be prioritised first in the OSD implementation and stuck to their choice of the nursing profession.

Another external constraint at the time when the rural and scarce skills allowances were introduced was the international migration of doctors and nurses from South Africa to abroad (Table 32); it was then at its highest peak and outside the control of policymakers. With regards to the OSD policy, the timing of its implementation coincided with the global

economic crises. Although this did not affect implementation in any way, its direct or indirect effects on the health professionals were beyond the control of the key policymakers.

9.2.2 Precondition 2: Adequate Time and Sufficient Resources should be made available to the Programme

While the implementation of the OSD was rushed as a result of the protracted public sector strike in 2007, the implementation of the rural allowance, scarce skills allowance and hospital revitalisation was delayed for different reasons. The delay with regards to the rural and scarce skills allowances was because of the contestations that led to the last minute signing of the agreement (Table 32). In relation to the hospital revitalisation program, the delay was due to inefficiencies in the tendering and procurement processes. Another common feature of the financial incentives was that pay-outs for all three of them was made retrospectively (Table 32), leading to an increase in taxation and lower nett amounts ultimately received by the health professionals.

In terms of the adequacy of resources, the findings showed that there was over-expenditure with the OSD implementation while there were problems of under-expenditure in relation to the hospital revitalisation programme (Table 32). For example, although around ZAR1,5 billion was allocated for the implementation of the OSD for the 2007 financial year, this amount proved to be insufficient for several reasons. Firstly, a sub-optimal human resource information system resulted in an under-count of the total number of nurses in the public health sector by 10,000 individuals (Table 32). Although this was a policy design problem, it had ramifications during implementation. As a result, the implementation of the OSD proved to be more expensive than previously planned.

With regards to the hospital revitalisation programme, the results revealed that there was under-expenditure (Table 32). For instance, the document review showed that for the 2008/09 financial year, the Auditor-General reported an under-spending of R35-million in Gauteng province alone. One of the reasons mentioned for this challenge was that the Department of Public Works in Gauteng appointed contractors who lacked capacity to deal with huge budgets.

9.2.3 Precondition 3: The Required Combination of Resources should be Available

Table 32 also illustrates that across all the interventions (financial and non-financial), policy guidelines and frameworks were developed by the national Department of Public Service and Administration (DPSA) in collaboration with the National Department of Health. This may be interpreted as an indication of some level of leadership. Encouragingly, across all the four incentive strategies under investigation in this study, substantial financial resources were allocated by the National Treasury for their implementation; suggesting political will and commitment to addressing the health human resource challenges in the country (Table 32).

However, with regards to the OSD implementation, financial resources were not immediately made available at hospital level, resulting in problems for individual hospital managers. For instance, the announcement on the OSD was made by the then Minister of Health, Dr. Manto Tshabalala-Msimang prior to ensuring that sufficient financial resources were in place for immediate implementation. In addition, although it was clear from the OSD policy and interviews with policymakers that the OSD intended to create career paths and career progression for nurses within the health system, the funds allocated were only for remuneration; no additional resources were made available for career path activities and for managing career progression (Table 32).

The technical capacity of the implementers was also raised by the respondents with regards to the implementation of the OSD and the hospital revitalisation programme (Table 32). Specific to the OSD policy, its implementation was the responsibility of the Human Resource divisions of the provincial health department who were unfamiliar with nursing training and specialities. This challenge was exacerbated by the unavailability of uniform instructions and inadequate training to support these managers.

Similarly, regarding the hospital revitalisation programme, this research found that the Department of Public Works, which was leading implementation, lacked technical capacity to implement the programme and they lacked personnel to manage the different components of the hospital revitalisation (Table 32). This led to poor management of the revitalisation programme, weaknesses in the awarding of contracts and lack of adherence to procurement protocols.

9.2.4 Precondition 4: The Policy to be implemented should be based on a Valid Theory of Cause and Effect

In essence, there was a unanimous view amongst respondents that all the four incentive strategies were in theory good interventions that were based on the theories explaining individual's behavioural responses to financial and non-financial incentives (Table 32). For example, several scientific studies as demonstrated in the literature review chapter have established a causal link between the use of financial and non-financial incentives to improve the recruitment, motivation and retention of health professionals. In addition, all the four incentive strategies were responding to the contextual, historic, political, and socio-economic challenges related to the times when they were introduced.

The results also showed that across all the three financial incentive strategies, limited evidence was used to inform the design of these strategies. However, the design of the hospital revitalisation programme was informed by the findings of the national hospital infrastructure audit as well as a pilot in one hospital across the nine provinces in the country during the early years of its implementation. In spite of this, it appears that the policymakers neglected to use the lessons learnt from piloting to avoid ongoing implementation challenges.

9.2.5 Precondition 5: The Relationship between Cause and Effect should be Direct and there should be few if any Intervening Links

When looking at the implementation of the interventions being investigated, it seems reasonable to argue that the causal chain for all these interventions was direct. For instance, with regard to all the financial incentives, there was an expectation from the policymakers that an increase in salary would improve the recruitment, motivation and retention of health workers (Table 32). Likewise, policymakers anticipated that improvements in the working conditions of health workers and management of hospitals through the hospital revitalisation programme would increase their recruitment and retention in the public sector (Table 32). The results also showed that across all the incentive strategies, some form of evidence informed the design to a certain extent regardless of whether this evidence was considered sufficient or not by the respondents in this study.

9.2.6 Precondition 6: The Dependency Relationships should be Minimal

Minimal dependency relationships imply that there should be a single implementing agency or if other agencies are involved, that the dependency relationships are minimal both in number and importance [200]. The Provincial Department of Health (PDoH) had the primary responsibility to ensure that the incentive strategies under study were implemented. Because

implementation was decentralised for all the four strategies, there was high dependency relationships (Table 32). The results showed that except for the scarce skills allowance, implementation across the other three incentive strategies was dependent on one or several agencies. For example, the "perfect implementation" of the rural allowance depended on the availability and accurate list of rural facilities to ensure that no facilities were excluded from benefiting from this incentive strategy. Similarly, the "smooth" implementation of the OSD relied on the availability and accurate list of nursing specialities and accurate human resources for health information system (Table 32).

In addition, the first step to enable nurses to benefit from the OSD was depended on them submitting proof of their qualifications obtainable from the South African Nursing Council (SANC) (Table 32). The complexity of this task was taken for granted by the policymakers because SANC did not have the staffing capacity to deal with high volumes of requests from nurses across the country. Nurses were also required to produce their length of service record which was not readily available through a computerised system (Table 32). They had to physically acquire this information from health institutions where they previously worked and in some instances, these were outside the provinces where they were presently located.

Regarding the hospital revitalisation programme, a document analysis established that one of the critical phases of this incentive strategy was for the Provincial Departments of Health to submit Business Cases and Project Implementation Plans (PIP) to the National Department of Health [226]. However, a number of the Business Cases that were submitted often lacked standardisation even though a format was provided. This led to provinces being required to redraft and resubmit these Business Cases with the support of the National Department of Health Hospital Revitalisation Unit. In addition, the Project Implementation Plans (PIPs) did

not conform to the standards as set out in the Project Implementation Manual. The quality and depth of the information submitted was also reported to be weak. All these in part contributed to the delays in implementation.

Finally, all the four incentive strategies were government-funded, thus there was no dependency relationship with external donors in terms of financial resources (Table 32). However, this meant that the National Treasury was the most powerful agent as the decision to fund all these interventions rested within this office in order for implementation to be realised.

9.2.7 Precondition 7: Agreement of Objectives

According to Hogwood and Gunn [199], under this precondition, a complete understanding of, and agreement on, the objectives to be achieved should carry on throughout the implementation process. The findings revealed that there were ambivalent views in relation to the agreement of objectives across all the financial incentives under investigation in this study (Table 32). For example, regarding the rural allowance, while its primary intention of enticing health workers to rural and underserved areas was acceptable amongst respondents, there were disagreements about the exclusion of the lower cadres of nurses and the discrepancies in the amounts between doctors and nurses (Table 32). In addition, both the rural allowance and the OSD were perceived to have favoured professional nurses more than the lower categories of nurses during implementation. With regards to the scarce skills allowance, there was disagreement about the exclusion of other nursing specialities, especially midwifery, from benefiting from this incentive strategy. These gaps in the policy design phase resulted in implementation failures. A common feature across all the financial incentives was that they were not linked to performance (Table 32).

9.2.8 Precondition 8: The Tasks should be fully specified in Correct Sequence

According to Hogwood and Gunn [199], an important element of sequencing is that the role of each stakeholder involved in the implementation process should be made explicit. Hogwood and Gunn [199] have also acknowledged that although room for discretion and improvisation is allowed during implementation, permitting too much room may lead to confusion and uncertainty. This study found that the roles of the different stakeholders were rarely clarified particularly in the case of the OSD and the hospital revitalisation programme (Table 32). For instance, with regards to the implementation of the OSD, it was left to the human resource managers to define their role, liaise with the hospital or provincial managers, and to fulfil these undefined roles to the best of their abilities. In the case of the hospital revitalisation programme, the results of this study found that although the Department of Public Works was the primary implementer, multiple stakeholders participating in multiple task teams and committees also played a critical role in the initiation and implementation processes of this programme. While on paper it seemed like the roles of each stakeholder is clear, in reality it was challenging to manage all these multiple teams working on the different elements of the revitalisation. This was in part because the Department of Public Works itself lacked technical capacity, thus making it challenging to manage others.

The results further demonstrated that there was inadequate time for planning the implementation of all the financial incentives of interest (Table 32). Planning for the rural and scarce skills allowances was affected by the delay in signing the agreement, which led to pressure to spend the money allocated for implementation within a specific financial year period. Regarding the OSD, the month-long protracted public servants strike influenced the ability of government to plan adequately.

In addition, except for the hospital revitalisation programme, all three financial incentive strategies did not have an implementation plan detailing the sequence of the implementation activities to ensure "perfect implementation". With regards to the hospital revitalisation programme, it was expected that the Project Implementation Plans (PIP) should conform to the standards set out in the Project Implementation Manual. However, in most instances, this was not found to be the case; the quality, standard and depth of the PIPs submitted by the provincial Department of Health to the National Department of Health were reported to be weak. Specific to the OSD, not all provinces implemented at the same time. The challenge with this was that nurses in the different provinces started sharing information with each other about the inconsistencies in the benefits received among the different provinces and institutions.

9.2.9 Precondition 9: There should be Perfect Communication and Coordination

Across all the incentive strategies, weak communication was mentioned as a key challenge (Table 32). In relation to the three financial incentives, participants reported that communication weaknesses were from the policymaker's side. This was expressed in reference to the exclusion of certain categories of health professionals from benefiting from these interventions. The provincial Department of Health was also blamed for their inability to clearly communicate with hospital managers messages that would enable them to provide reliable information to the nurses that were considered ineligible to benefit from the rural and scarce skills allowances. Even though these incentives were considered to be clear, minimal thought was given to what the implications of these incentives would be for those that were ineligible. At the same time, hospital managers also poorly communicated with the HR managers that were responsible for the implementation of the OSD at hospital level who in turn poorly communicated with the nurses that did not benefit.

Additionally, the introduction of all the three financial incentives was announced in the media by the then Minister of Health. In the absence of a clear communication strategy (Table 32), there were many mixed messages sent out, particularly to the nurses who mostly received information from the media and or their labour organisations. This proved to be problematic particularly in the case of the OSD where the media, in their interpretation of the Minister of Health announcements, emphasised the remuneration component of the OSD and neglecting other fundamental principles which are stipulated in the policy as 'career pathing', 'pay and grade progression', 'speciality', 'competencies' and 'performance'.

Problems of weak coordination were highlighted across all four incentive strategies, but more especially in relation to the OSD and the hospital revitalisation programme (Table 32). For example, with regards to the implementation of the OSD, coordination between the National Department of Health and provinces were reported to be inadequate by several respondents; and it was not clear what support was given to provinces during implementation or how the provinces in turn supported the districts, hospitals and clinics. It was also unclear whether and how coordination happened between the National Department of Health, SANC, the provinces and health facilities. Regarding the hospital revitalisation programme, communication and coordination weaknesses were mainly due to the multiplicity of stakeholders that were involved in the implementation process and this was reflected by the contradictory reports on fundamental issues such as what has been achieved at what time and at what costs between the Department of Health, Department of Public Works and the National Treasury.

9.2.10 Precondition 10: Those in Authority can Demand and Obtain Total Compliance

Overall, the findings demonstrated that across all the four incentive strategies of interest in this study, there was poor implementation fidelity; the interventions were not implemented as prescribed by the policies (Table 32). As a result of weak communication and coordination between the different levels of government, there was varied interpretation and implementation of the rural allowance and the OSD. With regards to the rural allowance, the variations were primarily caused by lack of uniformity in the definition of "rural". The provincial health departments were given full autonomy to designate 'rural areas' without oversight from the National Department of Health, thus creating room for subjective policy interpretation and implementation (Table 32).

In relation to the OSD, lack of consensus about nursing specialities contributed to the varied interpretations of the policy during implementation. The interviews with key informants suggested that the policymakers did not take into account that there were more nursing specialities than they had ever anticipated; leading to a number of specialities unintentionally excluded from benefiting from the OSD. In addition to this, the OSD policy lacked clarity on how nurses with more than one speciality were to be rewarded. Furthermore, clarity was also limited on the grandfather clause, which was introduced to allow nurses who worked in a speciality area, but without the formal qualification to benefit from the OSD. On the other hand, those with the formal qualification, but not working in the specialised area did not benefit. All these variations and interpretations led to the inability of the rural allowance and the OSD to achieve "total compliance".

Specific to the OSD, when "total compliance" was not fully achieved during implementation, accountability was also diffused, and no-one took responsibility for the weaknesses in

implementation. Instead, it became a vicious cycle of blaming: the National Department of Health blamed the provinces, the provinces blamed the hospital management, the hospital management blamed the unions, and the unions blamed the SANC - that ironically does not have a mandate for any implementation or participation in financial incentives.

The findings also demonstrated that policymakers underestimated the enormity and the complexity of implementing both the OSD policy and the hospital revitalisation programme (Table 32). Regarding the hospital revitalisation programme, because of its multi-pronged nature, there were imbalances with regards to effectively dealing with all its elements during implementation. As a result, significant attention was focused on infrastructure improvement, and neglecting the other components which included health technology and equipment, and improvement of the management of the hospitals. This clearly indicates that while the intensions were good, too much was expected too soon for a new democratic government which was still finding its feet into leadership.

The findings of this study further demonstrated that once implemented, there were also no monitoring, supervision and evaluation systems put in place across all the four incentive strategies (Table 32); thus making it impossible for policymakers and implementers to identify potential implementation challenges in a timely manner. Although both the rural and scarce skills allowance policies mentioned that annual reviews would take place [243, 244], this did not happened. The Department of Health has neither conducted a review nor has it evaluated the effectiveness of these allowances since their inception.

9.2.11 Summary of the Findings Using Hogwood and Gunn Implementation Model

This study found that across all the four interventions under investigation, only few of the Hogwood and Gunn's preconditions were met namely that the policies were based upon a valid theory and that the relationship between cause and effect was direct (Table 32). However, the results showed that a number of implementation preconditions were not met and this led to sub-optimal implementation of the four interventions. The specific weaknesses included inadequate time, insufficient combination of resources, high dependency relationships, suboptimal communication and coordination, and inadequate compliance (Table 32).

9.3 Comparative Analysis of the Influence of Incentive Strategies on the Motivation and Retention of Health Workers

This section will discuss the commonalities and differences between the influence of incentive strategies on the motivation and retention of health workers based on the findings from Chapters 4 to 7. The section will also draw from the findings in Chapter 8 reporting on the attitudinal responses to incentive strategies such as job satisfaction, intention to quit and organisational commitment. In these Chapters, the findings were reported to depict the conceptual framework in Figure 2 on Hertzberg two-factor theory highlighting intrinsic and extrinsic job attributes that motivated health workers. However, during analysis of data and theme identification, it became clear that Hertzberg theory was not sufficient to explain some of the key themes that were emerging out of the study related to health workers' expectancies and perceptions of inequities.

Although these additional themes were reported in the findings without necessarily locating them into any theoretical approach, in this section, Hertzberg theory will be integrated with Expectancy and Equity theories to provide an improved cross-cutting analysis and interpretation of health workers' behaviour in relation to financial and non-financial incentives of interest in this study. The findings will thus be divided into two thematic areas which are: a) the effects of financial and non-financial incentive strategies; and b) the effects of targeted and non-targeted incentive strategies.

9.3.1 The Effects of Financial and Non-Financial Incentive Strategies

In the survey, health workers in hospitals and clinics were asked whether the incentive strategies influenced their attraction, motivation and retention. Figure 9 illustrates percentages of those agreeing that the incentive strategies improved their attraction, motivation and retention. Interestingly, all the three financial incentives appeared to have had reasonably high impact in clinics than in hospitals. For example, scarce skills allowance was reported to have the most impact on retention in clinics (69%) followed by rural allowance (61%) and OSD (46%) than in hospitals (Figure 9). However, these findings were in contrast with the results of the multiple regression analysis measuring the impact of financial and non-financial incentives on the respondents' intention to quit their current jobs and their commitment to remain in their current facilities. After adjusting for other factors (gender, marital status, age, health worker category, and province), the results illustrated that receiving the rural or scarce skills allowance did not have a significant impact on intention to leave or organisational commitment in either clinics or hospitals. Instead, the OSD appeared to increase the intention to quit of hospital respondents who received it ($p<0.05$) compared to those who did not. Possibly this was due to the manner in which it was implemented and tended to benefit professional nurses more than other categories of nurses.

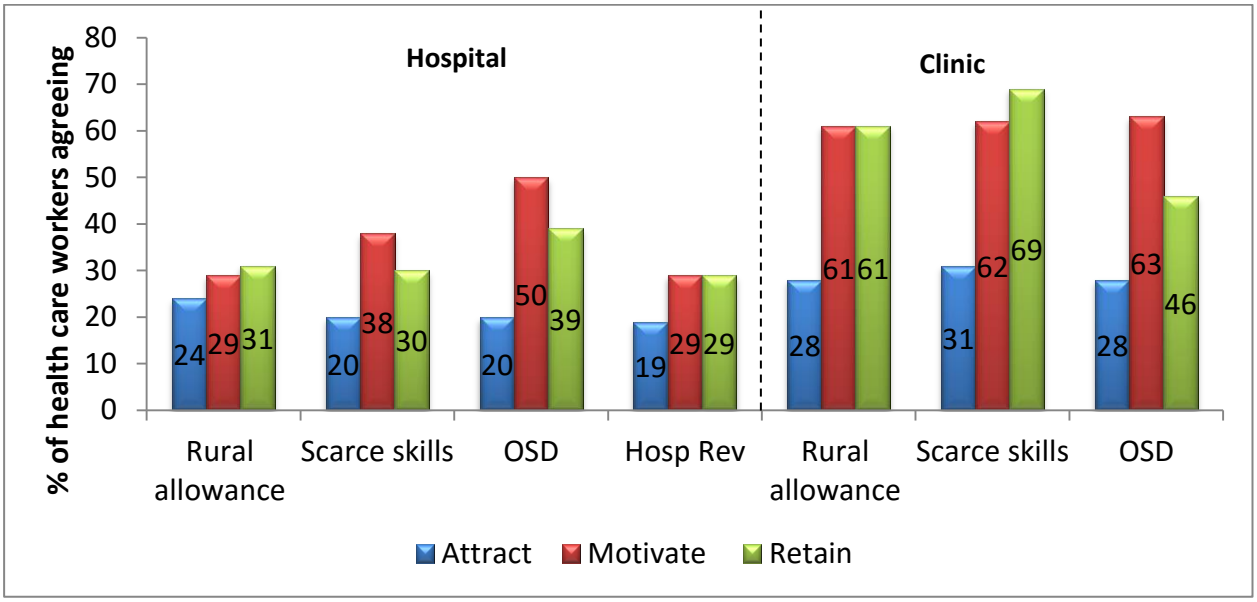

Figure 9: Perceived Influence of Incentive Strategies in Hospitals and Clinics

Figure 9 also shows that the OSD was the most motivating incentive for health workers in both clinics (63%) and hospital (50%) settings. However, all incentive strategies had low effect on attraction in both clinic and hospital settings, with scarce skills allowance slightly better effective as it attracted 31% of the respondents (Figure 9). This finding is supported by the results of the qualitative interviews which reported that financial incentives were partially effective in enticing health workers. The impact of hospital revitalisation, the only non-financial incentive, was rather moderate of all the interventions.

The qualitative findings further showed that financial incentives boosted the salaries of health professionals that benefited from them and this was consistent with the quantitative results. For instance, the multiple regression analysis measuring the impact of financial incentives on satisfaction with pay and overall job satisfaction showed that people who received allowances

were significantly more satisfied with their pay than those who did not. The results showed that satisfaction with pay was higher for hospital than clinic health professionals who received the rural allowance ($p<0.05$), the scarce skills allowance ($p<0.05$) and the OSD ($p<0.05$).

In terms of provincial differences, North West health professionals in clinics were significantly satisfied with pay than their Gauteng counterparts. This might possibly be because Gauteng health professionals were not benefitting from the rural allowance as it is an urban province. However, all three financial incentives did not increase health workers' overall job satisfaction in hospitals and clinics. This finding is in support of Hertzberg theory that salary, as a hygiene factor does not produce job satisfaction. Instead, this study found that age was a positive significant predictor of overall job satisfaction in hospital; suggesting that the older health professionals had significantly higher satisfaction than their younger counterparts.

While the respondents were generally satisfied with pay, the results of the qualitative component showed that financial incentives had only a temporary effect. These results indicated that after a short period of time, health professionals' expectations adjusted and they got used to the amounts received. This was confirmed by the observation that although the OSD for nurses was implemented in 2008, in 2010, nurses were again on strike protesting for more money. The results of the qualitative component further showed that health professionals that qualified for the financial incentive strategies developed the desire to gain more and some resorted to 'abusing' the provision of allowances by continuously 'bargaining' for higher salaries and senior positions. This, according to hospital managers was done by

moving from one facility to the other, staying there for a short space of time and then moving on to another one with the intention of continuously negotiating for better salaries.

The qualitative results further demonstrated that because all the financial incentives were implemented retrospectively, the financial gains were eroded by the unexpected high taxation. Therefore several respondents perceived the amounts to be low and not keeping pace with the cost of living. This as a result undermined the morale of the health professionals that benefited from these incentives, especially in the case of the OSD which was implemented during the global economic crisis. The participants were also unhappy with the rural and scarce skills allowances because they were non-pensionable.

According to Hertzberg theory [114, 116], "work itself" involves employees' perception of whether the work is too difficult or challenging, too easy, boring or interesting. The results based on the job satisfaction scale found that health professionals in clinics were moderately satisfied with their work and that in hospitals, males' satisfaction levels with their work was slightly higher than females. However, the qualitative results showed that the respondents were dissatisfied with the working conditions such as staff shortages, lack of equipment, increased workload, challenging lifestyle in rural areas amongst others. These findings concur with Hertzberg theory that "work itself" served as a motivator while "working conditions" served as a dissatisfier.

Hertzberg treated "interpersonal relations" as a hygiene factor and explained it as interactions and relationships that takes place within the working environment between supervisors, peers,

and subordinates [114, 116]. In this study, supervision and relationship with co-workers were found to be determinants of job satisfaction and dissatisfaction. For example, the survey results illustrated that supervision and relationship with co-workers were positive determinants of job satisfaction amongst hospital and clinic respondents. In contrast, the findings of the qualitative component reported serious weaknesses in supervision and poor relationship between managers and frontline staff at both hospitals and clinics and these were considered by respondents as dissatisfiers. These were in the form of poor communication; sub-optimal supervision of clinic staff; lack of consultation when compiling duty roasters; and limited interaction and negotiation on issues affecting staff. These issues mainly affected nurses than doctors.

Hertzberg [114, 116] believed that the provision of motivators such as recognition and advancement would generate job satisfaction and higher productivity while their absence would lead to no satisfaction rather than job dissatisfaction. This study found that recognition and advancement were contributors of job dissatisfaction which refuted Hertzberg claim that these intrinsic job factors are satisfiers. For instance, the qualitative results showed that nurses of all categories, felt unappreciated by their managers. With regards to advancement, the quantitative findings reported that health professionals in hospitals and clinics were generally dissatisfied with promotion opportunities and that Gauteng health professionals were significantly more dissatisfied with promotion ($p<0.05$). This finding was supported by the qualitative results which found that a large number of the lower cadre of nurses were highly de-motivated and dissatisfied because of limited opportunities available to them for growth. However, the majority of them reported that they grabbed every opportunity for internal

migration between public and private sectors and between hospital and clinic settings to compensate for their professional growth.

The findings of this study also suggest that overlapping financial interventions, which are implemented almost at the same time, may dilute the impact of such interventions. For instance, the rural and scarce skills allowances were implemented in 2004, and three years later the OSD was introduced. This did not make provision for consolidation of what was currently in existence and expanding on it beyond monetary benefit; thus suggesting possible multiple incentive effects.

In general, the findings reported in Chapters 6 to 8 consistently demonstrated that financial incentives were considered insufficient if implemented alone. Taking rural allowance as an example, health professionals felt that even when this allowance was provided, the issues related to lack of amenities, schools for children, and lack of resources amongst others would not make them to move to deeply remote areas; this is worrying considering that these are underserved areas affected by problems of access to health workers.

9.3.2 The Effects of Targeted and Non-Targeted Incentive Strategies

The results in Chapter 5 have shown that the rural and scarce skills allowances were targeted interventions because they were intended to benefit specific categories of health professionals. The OSD was categorised as a non-targeted financial incentive because in theory, it was intended to benefit all categories of nurses although during implementation it was reported that it benefited professional nurses more than the lower cadres (Chapter 6). Likewise, the

hospital revitalisation was also considered a non-targeted intervention because it was intended to benefit all the health professionals in the revitalised facilities (Chapter 7).

Interestingly, the qualitative findings found that both the scarce skills allowance and the OSD had unintentional positive benefits for professional nurses in particular. Since both of these interventions had strong emphasis on nursing specialities, the majority of the respondents reported that the implementation of these interventions encouraged professional nurses to specialise. However, this was a "double-edged sword" especially in hospitals because once specialised, the unintentional consequences were that these professional nurses opted to move from units where they are needed the most to units where their specialities would be recognised and rewarded.

A key finding in this study is that because of the weaknesses in their design and implementation, all the financial incentive strategies excluded the junior cadre of nurses and other nursing specialities that should have benefitted. Drawing from expectancy theory [124], employees exert effort in their work with the expectation that this will lead to certain level of performance (expectancy), and that if they perform at a certain level this will lead to attractive organisational rewards (instrumentality). While taking individual goals and needs into cognisance, employees further place significant importance on the potential outcome or rewards that can be achieved on the job (valence) [124].

The qualitative findings found that none of these incentive strategies was linked to performance. Although the OSD policy made reference to performance, the criteria for determining the above average performance, which would potentially lead to increased

rewards, was vague. It was also unclear how these criteria will be operationalised. Nonetheless, health workers in this study reported that despite working under strenuous conditions mentioned earlier, they always exerted effort into their work. For instance, due to problems of staff shortages, the results of this study found that junior categories of nurses worked beyond their scope of practice while some professional nurses indicated that there are instances where they performed some of the duties of the doctors.

This, according to the respondents, implied that on a number of occasions, nurses, especially the lower cadre of nurses, provided care beyond their scope of practice because of shortages. As they did this, they reported that they risked facing legal consequences and disciplinary action should adverse events happen while working outside their scope of practice. Therefore, from a perspective of expectancy theory, these nurses would still expect that their efforts should lead to organisational rewards considering that all the incentive strategies were not performance based.

With reference to the OSD, although this strategy was intended to deal with grade progression opportunities, career pathing, pay progression and recognition of appropriate experience, communication weaknesses during its implementation led to more emphasis being placed primarily on the remuneration structure and neglecting other components. This raised high expectations amongst nurses of all categories that their efforts were finally being recognised and that they will be rewarded accordingly. When their expectations were not met, this led to feelings of demotivation and dissatisfaction.

Through the lens of expectancy theory, this study also found that the implementation of the incentive strategies did not maximise on increasing the motivation of the lower category of

nurses by creating opportunities for continuous learning as a non-financial reward. Instead, the lower category of nurses reported that in many instances, it took approximately 15 years before they were considered for further learning. Some even reported that they were approaching retirement yet they were still waiting to be considered to further their training. Addition to this, they also indicated that there was no transparency about how individuals were considered for further training. At times, those that had been waiting for years for their turn to come were overlooked and preference was given to the young and newer cadres. This according to the lower cadre of nurses was perceived as unfair and caused lasting grievances.

When asked about the reasons for the delay in being considered for further training, staff shortages was mentioned as a major reason. This reflects failure of the system to capitalise on training because if more of these nurses became professional nurses, they would have created spaces for new entrants to enter the system. The longer term goal of this would have been to address problems of staff shortages. In addition, this might have created room for other components of the OSD such as career progression to be achieved. This study found that the lower category of nurses highly valued the opportunities for growth; therefore in this instance, it appears like the attractiveness of the rewards did not consider their individual needs and goals. Instead, the outcomes (rewards) were viewed as negative because they led to feelings of frustration and disgruntlement.

Equity theory [130, 131] denotes that employees compare the effort they put in their work (inputs) with the rewards they receive (outcomes) with those of their fellow workers. Perceptions of inequity arise when they view the ratio of inputs and outcomes as unequal to those of the "comparison other" [130]. Using the equity theory lens, this study found that across all the financial incentive strategies, there was differentiation in the amounts that were

paid to the different categories of health workers, thus leading to perceptions of inequities among health professionals. For example, with regards to the rural allowance, doctors were paid allowances of 18-22 percent of their annual salaries; professional nurses were only paid 8-12 percent while the junior cadre of nurses were excluded from benefiting.

There were thus contradictory views amongst respondents regarding whether uniform incentives should have been considered as opposed to differential financial incentives. One view was that uniform incentives would have assisted to avoid potential pay inequities and remove perceptions that certain professional group was more prestigious than others. An alternative view was that differential incentives were preferable options because they incentivised exclusive expertise and experience, thus increasing the motivation and satisfaction of the health workers.

In addition, because of variations in the interpretation and implementation of the incentive strategies, both targeted and non-targeted strategies were considered to be divisive. This caused a lot of disgruntlement amongst some nursing specialities and the lower category of nurses. In dealing with these inequities, the lower cadre of nurses, who were mostly affected, reported that they responded by reducing their work effort, by withholding assistance to the referent (professional nurses), and by withdrawing from work obligations beyond their scope of practice. By withholding assistance, these junior cadres reported that when professional nurses needed their assistance, they would tell them to do the job on their own because they benefited from the rewards. In borrowing from Frey and Jegen's motivation crowding-out theory [103], this study found that targeted financial incentives crowded-out intrinsic motivation as they hugely undermined team effort and unintentionally eroded professional ethos.

This study also found that because of inconsistencies in the interpretation and implementation of targeted and non-targeted financial strategies, further perceived inequities happened in relation to the OSD whereby some nurses were under-rewarded while others were incorrectly over-rewarded. Those that were under-rewarded indicated that when comparing their rewards to their co-workers, with comparable qualifications and work experience, they perceived their situations as unfair. In all cases of inequities, which mainly affected the lower cadre of nurses, they resorted to distorting their inputs. Without having a qualification as professional nurses, it was pointless for these junior nurses to respond by quitting their jobs because if they were to move to a similar job in another facility, they would still be faced with the same issues. The lower cadre of nurses also had to weigh the number of years they had been working in the same facility because this increased their chances of being considered for continuous learning.

Contrary to equity theory's predictions that those that were over-rewarded would produce more inputs, this study found that the over-rewarded instead lowered their inputs because they were accidentally over-rewarded due to the implementation failures. As such, out of excitement, these nurses had already used the monies paid out to them and were then under immense stress and pressure because they were expected to repay it. What made the situation even more frustrating for them was that they were expected to reimburse the monies without being given options to decide on the amount they could afford to pay back on a monthly basis until they settle what they owed the government. Their reaction to this was anger and they blamed the health system for this failure in implementation which costed them greatly emotionally and financially. This led to a lot of dissatisfaction and high levels of de-motivation. However, after the unions intervened, the nurses were no longer expected to repay back the monies; but at that point the impact of the OSD incentive had already diminished

amongst these nurses. In general, this study found that not many respondents reported being equitably rewarded.

9.3.3 Summary of the Findings on Comparative Analysis of the Influence of Incentive Strategies

Notwithstanding some of the positive impact of the allowances, the results of this study have demonstrated that across all the three financial incentive strategies, there were several unintended consequences mainly cause by implementation design and weaknesses. The findings further demonstrated that targeted incentives can be double-edged swords. They produced both losers and winners; suggesting that incentives aimed at one professional group will have an impact on the other groups as well as on the entire health system. Contrary to Hertzberg theory, this study found that motivation and hygiene factors impacted both satisfaction and dissatisfaction. However, the use of financial incentives may to a certain extent crowd-out intrinsic motivation. The study further found that hospital revitalisation, the only non-financial incentive strategy, had limited impact.

Interestingly, although the junior cadre of nurses were excluded from benefiting from the two targeted financial incentives (rural and scarce skills allowances), the results of the multiple regression analysis showed that assistant nurses in hospitals were significantly satisfied with pay than doctors ($p<0.05$).

This in essence, implies that the reverse side of targeted incentives is that what was initially intended as an incentive for specialty has then become a disincentive. The other downside of targeted financial incentives found in this study was that they caused disgruntlement if other

factors are not taken into consideration when decisions on which health professionals should benefit are made. For example, contextual factors such as staff shortages were reported as hindering opportunities of the junior nursing categories from being released off their duties to further their studies to become professional nurses so that they could also benefit from these targeted incentives.

9.4 A Revised Integrated Conceptual Framework

In section 9.2, an integrative analysis of the process of the design and implementation of the four incentive strategies of interest in this study was presented using Hogwood and Gunn theory [199, 200]. On the positive side, policies or some form of framework related to all the four incentive strategies were developed and fully implemented for the three financial incentive strategies. The hospital revitalisation was implemented to a certain degree. These policies were also considered to be good and attempting to address the contextual factors related to the human resource challenges for which they were targeted. However, the results highlighted some process-related weaknesses. With regards to the design, hospital revitalisation appeared to be the only strategy in which there was agreement of objectives. There were disagreement of objectives for both the rural allowance and the OSD because the junior cadre of nurses were excluded from benefitting.

The scarce skills allowance had however mixed reactions in relation to agreement of objectives. While on the one hand it was acceptable that those that have specialised needed to be incentivised, there was disagreement that other nursing specialities (that should have been considered) were excluded from benefiting from this incentive strategy. Across all the three financial incentives, there were also concerns about lack of transparency in the criteria that

was used to decide on which category was to benefit and the differences in the percentages of the allowances. In addition, there were weaknesses in the management of perceptions that doctors were favoured more than nurses and that professional nurses were favoured more than the junior category of nurses. Another design weakness was that all the financial incentive strategies were not linked to performance.

Regarding the implementation weaknesses, this study found that policies were available to guide the implementation and that substantial financial resources were allocated to implement the incentive strategies thus suggesting strong political will. However, there were problems of inadequate time allocated for planning, sub-optimal human resource information systems, lack of technical capacity, high dependency relationships, unavailability of an implementation plan, no communication strategy, poor coordination as well as lack of monitoring and evaluation systems.

Section 9.3 discussed the cross-cutting results of the influence of the incentive strategies on the motivation and retention of health workers drawing from a combination of three motivation theories namely Hertzberg two-factor theory, expectancy and equity theories. The results demonstrated that motivation factors that needed to be satisfied to improve health workers satisfaction included work itself, opportunities for continuous learning, opportunities for promotion and recognition. However, there were some hygiene factors that needed to be prevented to avoid dissatisfaction and these were suboptimal supervision, lack of resources, inadequate staff, poor working conditions and weak interpersonal relationships.

The findings also found that there were perceptions of inequities in relation to how financial rewards benefitted some and not others. There were also problems of under-rewarding others

while some were over-rewarded. The response to these inequities were in the form of reducing work effort, withholding assistance to the referent (in this case professional nurses), and withdrawing from work obligations beyond their scope of practice. It was also found that employees worked under difficult conditions but still exerted effort in their work with the expectation that the effort would lead to organisational rewards. However, they felt that the organisational rewards were not sufficiently attractive to satisfy their values and individual goals. This ultimately led to feelings of low motivation and dissatisfaction. In terms of individual factors, age was found to decrease intention to quit and the doctors were the least satisfied with their pay.

Based on the findings presented above, in Figure 10, I propose an integrated framework combining motivation theories and policy analysis frameworks to improve understanding on how the process of the design and implementation of incentive strategies influence the motivation and retention of health workers. I propose that this integrated framework can assist the designers and implementers of incentive strategies to take cognisance of the complexity of human behaviour in relation to their response to financial and non-financial incentive strategies in the health sector. The numbering within the boxes in the framework is for visual purposes, they do not necessarily reflect the order or the flow of the framework.

In this framework (Figure 10), I draw from three motivation theories (expectancy[124], equity [130] and Hertzberg theory [114]) and two policy analysis frameworks (Walt and Gilson [198] and Hogwood and Gunn [199]). I propose starting with the expectancy theory [124] (reflected by boxes 1-4) because it suggests that motivation is a dynamic process aligning connections between expected behaviours, rewards and individual goals. Box 1 suggests that individuals increase effort in their work anticipating that this effort will lead into increased

performance (Box 2). However, I am proposing that for performance to be achieved, a number of Hertzberg hygiene factors (box 5) needs to first be addressed. These include having the right skills and experience to do the job; relevant training; good interpersonal relationships to facilitate team effort; availability of resources (e.g. equipment and adequate staff); improved working conditions (e.g. reduced workload); and supportive supervision.

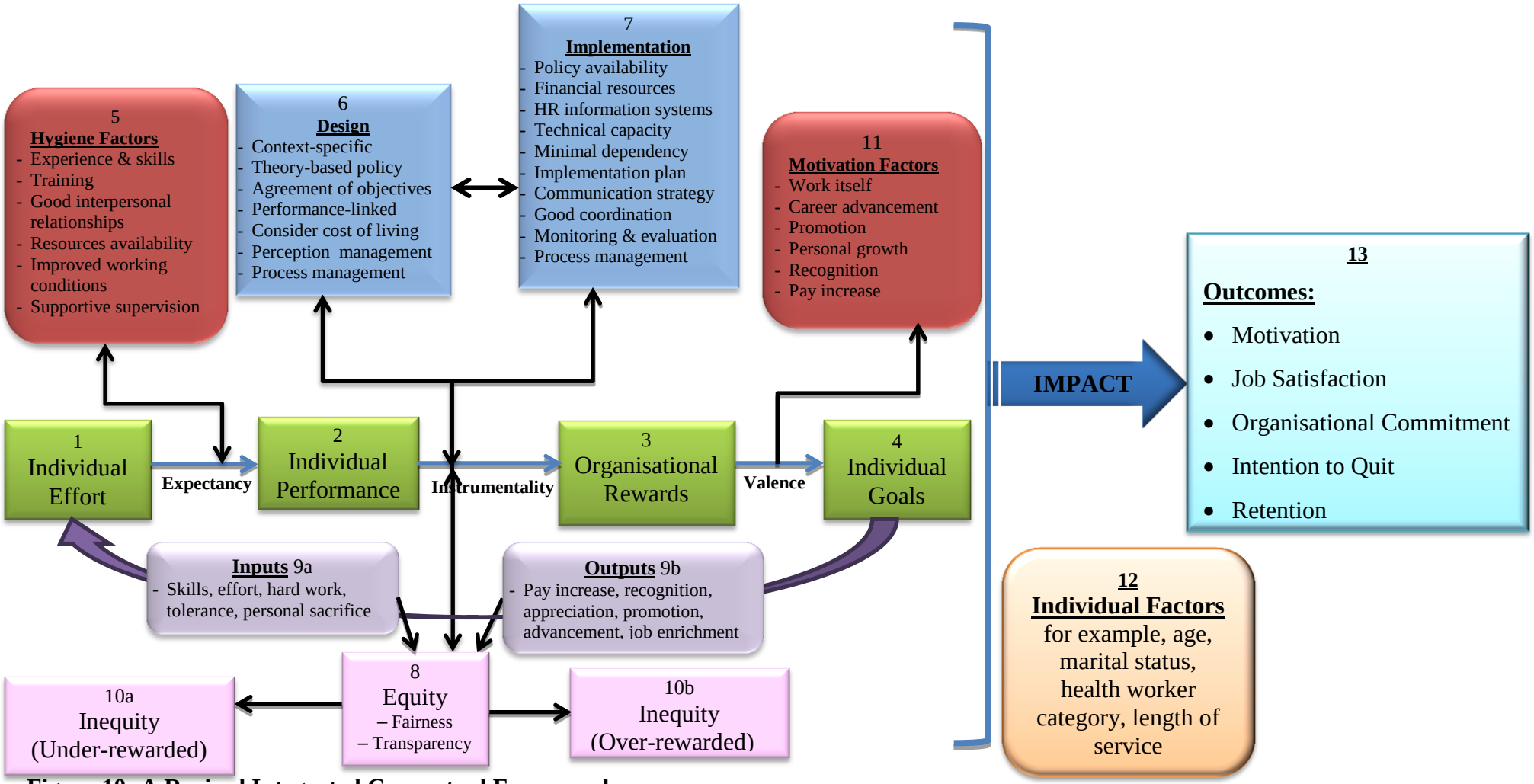

Figure 10: A Revised Integrated Conceptual Framework

Going back to expectancy theory, the linkage between performance (Box 2) and organisational rewards (Box 3) is termed instrumentality by Vroom [124] and argues that employees belief that increased performance will lead to organisational rewards. I propose that this linkage is affected by a number of factors. Firstly, it depends on the process of the design (Box 6) and implementation (Box 7) of the organisational rewards. In terms of the design, drawing from Walt and Gilson and Hogwood and Gunn, it might be useful if policymakers do their utmost best to develop context-specific interventions that would address the problems in specific settings (e.g. hospital, clinic, rural and urban). It would also be ideal if the interventions are theory drive and performance based. In addition, care should also be taken to manage perception (such as those of fairness or unfairness) because they can get out of hand and management of the process is also essential (e.g. transparency related to who gets what rewards).

Regarding implementation (Box 7), a key factor drawing from Hogwood and Gunn is to ensure that combinations of resources are available prior to implementation. These includes availability of policies to guide implementation; financial resource; accurate human resource information system; technical capacity; implementation plan; communication strategy and monitoring and evaluation systems. In addition, caution must be taken to minimise relationships, to improve coordination and to manage the process such as ensuring timely implementation.

The linkage between performance (Box 2) and organisational rewards (Box 3) also brings together expectancy theory and equity theory (Box 8). Equity theory contributes a crucial additional perspective of comparison with ‘referent’ other, it argues that people form perceptions about what constitutes a fair ration of inputs (Box 9a) and outputs (Box 9b) by

comparing their own situation with others. Therefore, careful consideration should be taken to address issues of inequities to avoid under-rewarding (Box 10a) some and over-rewarding (Box 10b) others.

The final linkage in expectancy theory on organisational rewards (Box 3) and individual goals (Box 4) is about the importance that individuals places upon the expected outcomes or rewards. In Figure 10, I'm proposing that the probability that successful performance will lead to certain outcomes depends on Hertzberg motivation factors (Box 12) which are ensuring that the work is challenging and stimulating; creating career advancement and promotion opportunities; personal growth; and pay increase. Finally, I'm suggesting that individual factors should always be taken into consideration to allow for individuality between people. I believe that if all these factors are addressed, the outcome would be improved motivation, increased job satisfaction, improved organisational commitment, reduced intention to quit and improved retention.

This integrated framework is useful in conceptualising the importance of process issues in the design and implementation of incentive strategies for health workers. It is also contributing to establish new knowledge on the relationship between policy analysis and motivation theories; to the best of my knowledge this has not yet been investigated. Available integrated theories that I could find have either showed relationships between a combination of selected motivation theories only [92, 120, 278-280] or policy analysis frameworks [281-284] in isolation. Only two studies that I could identify integrated theories beyond motivation theories and policy analysis; one study integrated motivation theories, structural theories and systems theories [285] while another one showed relationships between policy streams theory and the anthropology of development [282]. In addition, only limited number of these studies focused

in the health sector [281, 283, 284] and only one that I could find focused on HRH, specifically on nursing [281].

9.5 Conclusion

Using an integrated model comprising of policy analysis and motivation frameworks, this chapter identified cross-cutting implementation successes and weaknesses across both financial and non-financial incentives. For example, common implementation challenges across all the four incentive strategies were poor communication and weaknesses in policy monitoring and evaluation systems. This chapter also demonstrated the complexity of implementing financial incentives and made an argument that the success of these incentives depends heavily on the manner and process of implementation. An important lesson deriving from this chapter is that better planning and management of the implementation process is critical if incentive strategies in this study were to achieve their intended purpose. With these current implementation problems, this chapter illustrated that all the four incentive strategies had limited impact mainly due to poor design and implementation.

CHAPTER 10: DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

10.1 Introduction

This chapter will critically discuss the key findings reported in Chapters 4 to 9 with reference to the wider literature on incentives, motivation and implementation of health policy in South Africa and other low- and middle-income countries. Drawing from the different perspectives by respondents, the chapter will commence with a section summarising the key findings which integrates the core argument of this thesis on how the process of the design and implementation of financial and non-financial incentives influenced the motivation and retention of health workers in the public health sector in Gauteng and North West provinces. I will then reflect on the key strengths and limitations of this study, conceptually and methodologically; as well as the contribution of this study to existing knowledge. The chapter will end with discussing the recommendations of the study and ideas for future research in this area of work.

10.2 Summary of the Results

Using an exploratory multiple-case study design, this study sought to provide evidence on whether the process of the design and implementation of the four HRH interventions of interest in this study affected the motivation and retention of doctors and nurses in two provinces in South Africa. A case study design was used because it allowed for complex unfolding of events [286] through a combination of qualitative and quantitative methodologies including a document review, in-depth interviews with different groups of participants, and a health worker survey.

The study drew from policy analysis and motivation theories to highlight how the process of the design and implementation of financial and non-financial incentives influenced the motivation and retention of health workers. The implementation of these incentives strategies and their influence on the motivation and retention of health workers was also explored in different settings namely hospitals and primary health care (clinics and community health centres), urban and rural as well as revitalised and non-revitalised hospitals.

Three broad themes emerge from the findings namely: a) the complexities of implementing financial and non-financial incentives, b) perceived influence of financial and non-financial incentives on the motivation and retention of health workers, and c) a proposed integrated conceptual framework combining policy analysis and motivation theories.

10.2.1 The Complexities of Implementing Financial and Non-Financial Incentives

In agreement with available evidence [198, 283, 287, 288], this study confirmed the importance of contextual factors in the design and implementation processes of interventions to motivate and retain health workers. The analysis of context in this study was investigated at the national health sector level and local or facility level and the findings indicated that the incentive environment cannot be fully understood without considering the contextual factors. For instance, the findings demonstrated that the meso-level factors such as migration, maldistribution of health workers and shortage of scarce skills have had some influence in the design of the financial incentive strategies of interest in this study. Araujo and Maciel [289] best summarised this by noting that policies are expected to interact with the context in which they are developed and also produce some effect in it.

In terms of the actors, the finding that central level policymakers were the key actors driving the overall policy design processes across all the four incentive strategies of interest, suggests a top-down approach. From a top-down perspective, the discretion of lower-level officials and departments are not given prominence yet they are crucial for implementation success [194, 290]. This was reflected in the rural allowance and the OSD processes where lack of involvement and consultation with managers at facility level (who would be directly responsible for implementation) and limited representation of health workers during the design phase led to marked variations in the interpretation and implementation of these incentive strategies. As noted by Brinkerhoff [291], the implementation process is as political and technical as is complex and highly interactive. In the case of the incentive strategies of interest in this study, perhaps an interactive approach proposed by Grindle and Thomas [195] may have afforded an interactive and on-going process of decision making between policy elites and frontline implementers.

The findings also support a view that actors' interests, positions and power can influence policy processes to a great extent [198, 283, 292]. In this study, the results presented in Chapters 5 to 7 illustrated that the power of the different actors during the design stages varied across the four incentive strategies of interest. For instance, although the nursing unions advocated for the interests of the lower category of nurses during the design of the rural and scarce allowances, they ultimately succumbed to pressure. Instead, the National Treasury, through its power to control the government budget, was the most influential actor in the decision to exclude the junior nursing cadres from benefiting from rural allowance arguing that this cadre is not difficult to retain. This is akin to Thomas and Gilson [293] who noted that "the Treasury was the most powerful government Ministry" (p283). Interestingly, during the design of the OSD, the nursing unions emerged as strong and visible actors

instrumental in the decision to prioritise nurses as the first health professional group to benefit from this incentive strategy.

The present study also demonstrated that the main external constraints which resulted in lack of agreement of objectives during the design process of the financial incentive strategies was contestations regarding the exclusion of other categories in relation to the rural and scarce skills allowances and the prioritisation of nurses with regards to the OSD. However, these external constraints did not lead to 'non-implementation', a concept coined by Hogwood and Gunn [199] to refer to failure to implement policies because those tasked with implementation are uncooperative and/or inefficient, or because of obstacles beyond their control which are impossible to overcome despite their best efforts. As some authors rightly pointed out, resistance by some actors should be anticipated [212, 294].

A notable finding of this study is that policy documents, directives and or frameworks for all the four incentive strategies of interest were developed and made available to the implementers. Existing evidence have noted that the dissemination of policy documents before the implementation stage has been commonly adopted in developing countries [198, 289]. In line with preconditions 4 and 5 of Hogwood and Gunn [200], this study found that the policies for all the four incentive strategies were based on valid theories of cause and effect and that the relationship between cause and effect was direct. As demonstrated by the qualitative findings with different groups of respondents in this study, the latter implies that all the four incentive strategies of interest were in principle, regarded as good policies with acceptable objectives for incentivising health workers.

The results of this study also showed that except for the hospital revitalisation programme which was initiated following a nation-wide hospital infrastructure audit, evidence which guided the design of the three financial incentives was considered inadequate. Several researchers have recommended that the development of any policy reform should involve an initial situation analysis aimed at highlighting the problem faced, its scope and importance [199, 283, 294-296]. Hewison [297] also noted that the development and adoption of untested policies should be informed by the best available evidence and that policymakers should invest in generating such rigorous evidence. This thinking is supported by Behague and colleagues [298] who urge policymakers to refrain from politically motivated approaches of policy development to those based on scientific facts.

In the case of financial incentives of interest, this study agrees with Dolea et al [31] that the evidence that could have been useful in assisting policymakers to develop better informed financial incentives strategies was on the factors influencing health workers' location choices. There has however recently been a conceptual shift from evidence-based policymaking to what is termed implementation science, which is explained in the literature as an examination of methods intended to improve the translation of research findings into routine practices [299]. To date, current studies in implementation science has been debating about standardisation in the application and quality of measures of the implementation science constructs [300] as well as frameworks for advancing this field [299, 301].

The findings also demonstrated that all the financial incentive strategies were fully implemented at the time when the study was conducted while hospital revitalisation programme, the only non-financial incentive, was implemented to a certain degree. This is

contrary to existing evidence noting a disjuncture between health policy development and actual implementation in South Africa [208, 302, 303].

The implementation of all the four incentive strategies of interest was decentralised. As McIntyre and Klugman [304] noted, the two forms of decentralisation that impacted on the health sector in South Africa are devolution and deconcentration. Since South Africa gained independence in 1994, and in terms of its rights-based Constitution, health became a concurrent function (or joint responsibility) of the national and provincial governments [305]. With the adoption of decentralisation, the national government delegated the responsibility for implementation, including funding to the provincial health departments and the province delegated down to district, sub-district and hospital levels [42, 304].

Consistent with existing policy implementation studies, this decentralisation resulted in insufficient coordination among different stakeholders [208, 305] and variations in the interpretation and implementation of the rural allowance and the OSD [42, 53, 306, 307]. In the absence of coordinated efforts, decisions made at a higher level may not reach the lower level as originally intended [308]. The findings also illustrated that fragmentation of responsibilities among the different stakeholders resulted in one tier of government blaming failure in implementation on another and this was reported by other studies [42, 309]. Lack of role clarity among national, provincial and local government was noted in other studies as one of the constraints for achieving a fully functional district health system [310, 311].

Hogwood and Gunn [200] recommends that during the implementation process, there is a need for the role of each stakeholder involved to be made explicit in order to avoid these challenges with coordination. Some authors have proposed the establishment of a

coordination unit with sufficient decision rights, expertise, legitimacy and opportunity to meet regularly as a crucial asset for championing implementation [283, 312]. Others have suggested that the tasks of this coordination unit could include building consensus among stakeholders [283], adapting and revising the strategies used to maintain its direction towards its objectives [294] and to act as a conduit between various stakeholders [296].

The results of this study also demonstrated that across all the four incentive strategies in this study, communication between the different levels of the health departments was sub-optimal. This finding is consistent with several existing policy implementation studies [53, 206, 208, 313]. Thomas and Gilson [314] noted the scarcity of knowledge on how to manage the processes of engaging all stakeholders in reform process. While acknowledging that the implementation of effective communication strategies are difficult in most organisations [315], particularly timely communication [316], the importance of improved communication in any change affecting health workers cannot be underestimated. Limited investment in communication processes when bringing about change may result in a wider gap between the purpose of the message and an understanding of the message by the recipients [317]. As Jeppsson has rightly observed, policy implementation in a decentralised system is complex and must be understood in a misdirected translation process [318].

According to Hogwood and Gunn [200], precondition 6 proposes that if other implementing agencies are involved, dependency relationships should be minimal in number and importance. Except for the scarce skills allowance, the present study found that the dependency relationship was high for the other three incentive strategies, making it challenging to achieve success (Table 32). The results also demonstrated that securing a combination of resources required in the implementation of the OSD and the hospital

revitalisation programme was a key challenge. Primary to this with regards to the OSD was sub-optimal human resource information systems (HRIS) which resulted in an under-count of the total number of nurses in the public sector by 10,000 individuals. Consequent to this, the implementation of the OSD proved to be more expensive than previously planned.

This finding resonate with other existing evidence noting that current information systems are fragmented and unable to inform health workforce planning and training [319]. Some of the challenges noted in the literature for poor HRIS include weaknesses in the institutional capacity to collect and use these data for HRH decision-making [320], having multiple parallel information systems, and inconsistent data which makes it difficult to standardise definitions for data elements collected [320, 321]. Riley [322] thus emphasises the importance of strengthening HRIS as a critical element for evidence-based human resource policy and practice.

The present study also found that the implementation of the OSD and the hospital revitalisation programme involved complex series of events and that the enormity of their implementation was not considered by policymakers. However, as was found in other studies [283, 319], lack of technical capacity of implementers was reported to be a challenge in the implementation of these strategies. Technical leadership is thus proposed by some researchers as crucial at the different levels of management [283]. As rightly pointed out by Hogwood and Gunn [199], lack of technical leadership creates room for the possibility of a reform to be tailored to the implementers' own preference, sometimes at the expense of the targeted beneficiaries.

A notable finding of this study is that except for the hospital revitalisation programme, implementation plans were not developed for the three financial incentive strategies of interest. The findings also illustrated that tasks required to ascertain successful implementation of the four incentive strategies were not clearly identified in a sequential manner and that the responsibilities for them were not clearly assigned to relevant actors. This was in contrast to precondition 8 of Hogwood and Gunn [199, 200] which proposes that tasks should be specified in an appropriate sequence. However, the sequencing of the tasks during the implementation phase was less supported by some studies [283, 295]. Nonetheless, there is consensus among a number of authors that for any reform to succeed, there is a need to plan the implementation carefully in a series of logical steps [199, 200, 296, 323] and that implementation plans should include a clear outline of roles and responsibilities of different levels of government [324].

Encouragingly, the results showed that significant amounts of money were set aside by the National Treasury for the implementation of the four incentive strategies, suggesting strong political will to address the HRH crisis affecting the country. This finding is supported by other researchers [283, 325] who reported the importance of high-level political commitment in the development and implementation of policy reforms in low- and middle-income countries. However, the results indicated that all the three financial incentives were not linked to performance. A number of countries have adopted performance-related-pay (PRP) for government employees [326, 327]. There are ongoing debates in the literature about the effects of these provider payment mechanisms on the motivation and performance of public sector employees [328, 329].

Although mixed results have been reported about their impact [327, 328, 330], some researchers have found that PRP have the potential of increasing health worker motivation at facility level [330, 331]. However, their long-term effects, scalability and effects across varied context still requires further investigation [330]. Other researchers have recommended a need for a balance between the involvement of health workers in deciding how their performance should be measured as well as the inputs from managers and policymakers in ensuring that expectations are realistic and that indicators selected fit its intended purpose [329].

The results of the present study further found that there were no set targets and clearly defined measurable outputs for determining the impact of these incentive strategies such as the number of people expected to be attracted by the rural allowance in rural and underserved areas, or the number of scarce skills expected to be attracted in the public sector. Hercot and colleagues [283] recommended that an assessment of the link between the policy change and the intended results with measurable outputs is required if sound evaluation is to be achieved. The findings also reported that the government neglected to develop clear indicators for monitoring potential implementation challenges and for evaluating the impact of these strategies; thus losing out on the prospects for learning from setbacks in implementation as opportunities for revisions, redesign and self-correction [283, 319, 332]. Monitoring and evaluation of the reform across levels can also ensure that implementers on the ground have access to feedback loops to inform them on their performance and the overall progress of the reform [283]. Witter et al [333] added that process and outcome results are also crucial to overcome implementation problems. Overall, this study found that less investment was made by policymakers and implementers on the process issues during the design and implementation of the four incentive strategies of interest.

10.2.2 Perceived Influence of the Financial and Non-Financial Incentives on the Motivation and Retention of Health Workers

In general, this study found that all four incentive strategies were partially effective in the motivation and retention of nurses and doctors. A notable effect of the three financial incentive strategies derived from the qualitative data in this study was that they boosted salaries of the health workers. The results of the multiple regression analysis from the health worker survey supports this finding by demonstrating that health workers who received allowances (rural allowance, scarce skills allowance, and the OSD) were significantly more satisfied with their pay than those who did not. This contradicts results by Ramoo et al [334] which reported on Malaysian nurses in their study being dissatisfied with pay, thus creating room for a debate among managers designing incentive strategies about how much is enough, for how long, and how sustainable it will be?

Enrolled nursing assistants in the present study appeared to be significantly satisfied with pay than were other categories of health workers (e.g. professional nurses and doctors). The reason for this might be based on an explanation by Sutherland et al [335] that a cash payment may represent significant income for people with low incomes but that it might be ineffective for relatively well-paid workforce. Similarly, health workers from North West province were significantly satisfied with pay than were their Gauteng counterparts. This could be because North West is a rural province and that the cost of living in Gauteng province, which is urban, is higher. This finding is interesting considering that existing evidence have noted that health workers in urban health facilities usually earned higher salaries than their counterparts in rural health facilities [336, 337].

Even though some of the respondents who received allowances reported satisfaction with pay, the present study found that financial incentives could only improve the motivation and retention of health workers in the short-term. This finding is consistent with previous reviews on retention strategies [29, 35, 167]. Simply put, after a certain time period, health workers' expectations adjusted then they began a vicious cycle of complaining that the amount was too low and continued asking for additional increases in their salaries. This pattern was observed across all the three financial incentives of interest in the present study.

For instance, rural and scarce skills allowances were implemented in 2004; in 2007, health workers participated in a major public sector strike that led to the introduction and the implementation of the OSD in 2008. However, in 2010, nurses were on strike again demanding additional increases in their salaries. This culture of health workers wanting more even after recent increases in their salaries is consistent with findings from studies in Tanzania and Ghana [338, 339]. Therefore, when policymakers use financial incentives to improve the motivation and retention of health workers, an important question to ask may potentially be how much money is enough and for how long will it be considered enough?

Another important finding of the present study related to the latter was that overlapping financial interventions may undermine their individual impact. In this instance, rural and scarce skills allowances were implemented at the same time and three years down the line the OSD was implemented. None of these interventions were properly evaluated, thus making it challenging to directly attribute impact to one intervention. This finding is consistent with Sutherland et al's [335] review which reported that multifaceted interventions makes it impossible to isolate the impact of incentives from other factors; especially in instances where

no evaluation was conducted and monitoring and evaluation is weak as is the case in the present study.

Interestingly, both the scarce skills allowance and the OSD had unintended positive benefits for professional nurses; the majority of them reported that these incentives encouraged them to specialise. However, these nurses mainly specialised in specialities that enabled them to benefit from these allowances, resulting in large numbers of nurses possessing similar specialities while neglecting other crucial specialities that were not considered to benefit from these interventions such as the trauma speciality that is critical for the casualty department. This is not surprising considering that prior to the implementation of the OSD, speciality professional nurses starting salary was reported to be R79,407 and post-OSD an 88% increase was anticipated leading to an estimated amount of R160,470 [340].

Because of the need to benefit from the scarce skills allowance and the OSD, the present study also found that there was internal migration of professional nurses from units where they were needed the most to specialised units that benefited from these strategies, as well as from hospitals to clinics and or community health centres and vice versa depending on which they perceived to be paying higher salaries. The negative effects of these internal flows of health workers included increased workload and an additional strain put on the remaining health workforce [336, 341]. As a consequent of health workers' movement, data from South Africa illustrated that the doctor to population ratio was as low as 55 per 100,000 by 2010 whilst the nurse to population ratio had increased from 107 in 2003 to 383 per 100,000 in 2010 [342, 343].

In addition, although recent studies in South Africa reported that the implementation of the OSD contributed significantly to reducing the disparity between the salaries of health workers in South Africa and overseas countries [26, 344], health workers in the present study, especially nurses, were of the view that their salaries were not in accordance with the volume of the workload that they were expected to deal with on a daily basis considering problems of staff shortages at their respective facilities. This finding is supported by Prytherch et al's [338] multi-country study which reported that maternal and neonatal providers in Tanzania and Ghana considered their salary levels to be low and not matching the responsibilities and volume of work. This reinforces the importance of taking into cognisance issues of context if financial incentives are to achieve their intended purpose.

Likewise, both doctors and professional nurses in the present study felt that the rural allowance amount had to be quite significant for it to make any meaningful difference to the recruitment, motivation and retention of health workers in rural health facilities and that it should be allocated to all health workers working in rural settings. As noted by Sutherland et al [335], the size of the incentive may determine its potential impact. These authors argued that if the psychological and economic costs are relatively large, it might be essential for policymakers to consider introducing strong financial incentives in order to bring about the desired outcomes [335]. However, it may be difficult to determine how large the incentive should be to accomplish change [345], especially considering that there is little guidance in the available literature to assist policymakers on how to determine the size of the incentive that could yield major effects in retaining the health workforce in the public sector particularly doctors in rural areas. For instance, before considering employment in a rural setting, a doctor may first assess the potential impact of losing out on locums, comprises due to lack of amenities and good schools for their children. For nurses in particular, another

critical element for making them feel welcomed in rural settings was community appreciation and support and if the community is more receptive of those nurses not originating from such settings.

The present study has however also found that getting allowances did not significantly improve the overall job satisfaction or even decrease health workers intention to quit. A number of studies have reported an association between low job satisfaction with greater intention to leave [346-348]. Chan et al [349] and Coomber and Barriball [350] noted that triggers of job satisfaction and intention to leave are complex and influenced not only by organisational factors such as work environment, organisational culture, work demands and social support, but also by individual factors including burnout, and demographic factors.

Similarly, this study also found that age decreased the intention to leave of health workers in hospitals; with the older health workers being less likely to quit their jobs than the younger ones. Results by Blaauw et al [351] comparing the job satisfaction and intention to leave of different categories of health workers in Tanzania, Malawi and South Africa support the latter finding. These findings are not surprising considering that other existing studies have also noted that the health system is run by the ageing nursing health workforce. The reasoning for this suggests that older health workers have fewer options to leave and are preparing for retirement.

As noted in the previous section on the process-related factors, this study further found that across all the three financial incentive strategies (rural allowance, scarce skills allowance and the OSD), there was a problem of awarding payments retrospectively. It is thus reasonable to conclude that during the lag-time from when the announcements were made by policymakers

about the signing of the agreements of these financial incentives strategies to the actual pay-outs to health workers, expectations were raised amongst health workers by the idea of the anticipated amounts of money to be gained.

Drawing from the expectancy theory [92], this study argues that the idea of anticipated monies may have acted as an incentive for health workers in this study to exert individual effort into their work which could have led to improved performance. This was reflected by findings in Chapter 5 which demonstrated that regardless of the human resource challenges such as staff shortages and increased workload, health workers in this study perceived themselves to be diligent considering the circumstances under which they work. This finding is consistent with Vohs et al [352] study which revealed that participants exposed to money displayed an increased desire to take on more work and showed greater persistence in difficult tasks.

There are also long standing debates in the literature about the effects of money on human behaviour [352-354]. On the one hand, there is a view that the idea of money, even without possession, may lead to significant changes in personal performance, interpersonal relations and helping behaviour [352] while on the other hand others argued that money is not the sole driving force of human behaviour change [354]. The findings in this study appear to concur with both debates particularly in relation to the implementation of the OSD. There was a group of nurses who indicated that after the lag-time from the announcement of the OSD, when the monies were ultimately paid out, the amounts received did not meet their expectations. This led to disgruntlement, low morale and reduced effort into their work.

However, almost all the respondents were of the view that financial incentives are inadequate if implemented on their own. A considerable number of studies have supported this finding [30, 39, 165]; suggesting that human behaviour is influenced by complex and diverse factors including social amenities, schools for children, safety, and accommodation amongst others. Other researchers argued that no matter how well retention strategies are designed and implemented, health workers will always move, often as a result of other reasons beyond any workforce retention strategy [29]. Therefore, policymakers should recognise that if other factors are not taken into consideration, a single strategy is unlikely to improve the motivation and retention of health workers.

A noteworthy result of the present study is that both targeted (rural and scarce skills allowances) and non-targeted (the OSD) financial incentives excluded other cadres of health workers from benefiting, leading to unintended consequences of these incentives. As a result, all three financial incentives were reported to be divisive, thus eroding team spirit between doctors and nurses, and between professional nurses and the lower cadre of nurses. With reference to the expectancy theory [92], and in relation to the rural allowance and the OSD, this was reflected by the junior cadre of nurses lessening effort exerted in their duties because they believed that their efforts did not lead to attractive organisational rewards. This has implications for the quality of care provided. In essence, this study found that both targeted and non-targeted financial incentives caused great dissatisfaction and demotivation particularly amongst nurses of all categories.

The respondents in the present study also differed in relation to their preferences of uniform financial incentives (same percentage increase for all) as opposed to differential incentives (different percentage increase for the different cadres). On the one hand, some respondents

were of the view that uniform incentives do not discriminate against the different health categories and that they reduce problems of inequities. On the other hand, those in favour of differential incentives argued that these strategies incentivise expertise and experience, thus considered them as increasing the motivation to acquire more skills.

Notably, the findings of this study demonstrated that there were inequities in the implementation of the OSD in particular; whereby nurses with the same qualifications and experience working in the same facility were rewarded differently. The results of the health worker survey further showed that nurses who received the OSD had higher intention to quit than those who did not; suggesting that perceived inequities related to how the OSD was rewarded led to reduced motivation and dissatisfaction. This finding is supported by equity theory which argues that if individuals perceive the rewards they receive from their efforts to be inequitable to those of others, individual effort and performance may be negatively affected [92].

This study also found that both rural and scarce skills allowances were not linked to performance while an attempt was made to link the OSD to performance. However, the criterion mentioned in the OSD policy for determining the above average performance, which would potentially lead to increased rewards, was vague. Evidence on performance-based incentives is still inconclusive particularly on their long-term effects [330], with some authors cautioning the uncertainty of the rewards to effort made [330] while others raised concerns that about the likelihood of health workers focusing more attention on incentivised activities and neglecting non-incentivised activities [355, 356].

The organisational commitment of the older health workers was also higher than that of their younger counterparts. Although this is good for skills transfer purposes, it is also worrying considering that the health system needs a new generation of health workers particularly for the successful ongoing implementation of the national health insurance (NHI). Overall, this study found that there was overlapping implementation of the three financial incentives, with the OSD introduced few years after the implementation of the rural and scarce skills allowances; without an evaluation of the latter. This undermined the impact of each of these financial incentives.

Not surprisingly, the hospital revitalisation programme, the only non-financial incentive in this study, seemed to yield the least effect. This was possibly because its intended purpose was not necessarily to improve the motivation and retention of health workers, but rather to improve the working conditions and management of hospitals. This finding is in contrast with existing studies which reported that non-financial incentives related to working conditions had greater potential to influence retention [173, 174]. The hospital revitalisation programme was included in this study as a non-financial incentive because it was difficult to identify any national non-financial incentives in the public health sector. Available evidence elsewhere showed that non-financial incentives such as job autonomy, good clinical supervision, providing opportunities for professional growth and promotional opportunities were positively associated with job satisfaction and retention [39]. Perhaps South Africa can consider implementing more non-financial incentives that have been tested to be effective elsewhere in similar contexts.

In general, this study provided additional perspectives to strengthen the available literature on incentives, motivation and implementation of financial and non-financial incentives by

proposing an integrated framework converging policy analysis and motivation theories. Important conclusions that can be drawn from this thesis using this proposed conceptual thinking are that the influence of financial and non-financial incentives on the motivation and retention of health workers should be understood in the context of the process of their design and implementation, and the interrelationships between health worker individual needs, their expectancies, their perceptions of equity as well as their intrinsic and extrinsic drivers. Originally, this study intended to understand the process of the design and implementation of financial and non-financial incentives and their influence on the motivation and retention of health workers. It was by no means intended to propose a conceptual framework for thinking about incentives, motivation and implementation. However, deeper analysis of data led to the proposed integrated framework.

Although this integrated framework has attempted to establish relationships between known theories, it is still speculative because the connection between the policy analysis and motivation theories has not been empirically established in existing literature. Westbrook [285] have critiqued that no single theory is adequate on its own. However, studies that have made some effort to develop integrated theories have either showed relationships between a combination of selected motivation theories only [92, 278] or policy analysis frameworks [281] in isolation. Only two studies that I could identify integrated theories beyond motivation theories and policy analysis; one study integrated motivation theories, structural theories and systems theories [285] while another one showed relationships between policy streams theory and the anthropology of development [282].

10.2.3 Summary of the Key Messages

The data presented in this thesis has demonstrated that as opposed to the assumption that financial incentives are easy solutions to addressing problems of health workforce motivation and retention, their implementation is complex. Despite the popularity of financial incentives, this study found that the impact of their admirable intentions can be reduced because of process and implementation weaknesses. The process issues related to decentralisation that are raised in this thesis and are likely to affect the design and implementation of financial and non-financial incentive strategies are weak coordination, lack of uniformity, sub-optimal communication, lack of training of implementers, and weak monitoring and information systems. In order to avoid loss of morale and staff grievances, careful planning and management of the process of the implementation of financial incentives in particular, is essential. These conclusions are of general relevance to public health broadly, as well as to literature on incentives, motivation and implementation.

10.3 Strengths and Limitations of the Study

One of the key strengths of this study is the utilisation of a mixed-methods approach which allowed for the integration of qualitative and quantitative methodologies to provide a better understanding of how the process of the design and implementation of the four incentive strategies of interest influenced the motivation and retention of health workers. The justification for using mixed methods was for "significance enhancement", a terminology conceptualised by Collins et al [357] involving the use of qualitative and quantitative methods to maximise the interpretation of the findings. However, in terms of the sequencing of the qualitative methodological approaches, in retrospect, I should have conducted an in-depth document review prior to the interviews to enable me to better clarify issues that were

confusing instead of doing it concurrently as I did. It is also worth acknowledging that the reliance on newspaper articles as part of the document review might have contributed to bias, particularly because this depended on the journalists' political affiliations, their integrity as well as commitment to ethical reporting.

The study also fills a gap in the existing literature by providing a critical analysis of the implementation of the financial and non-financial incentives in different settings by exploring the views of those formulating policies, those responsible for policy implementation as well as the beneficiaries of the policy interventions. However, we recognise the potential bias as these accounts were influenced by the respondents' state of mind at the time of the interview. In addition, the sample was more biased to nurses than doctors since I struggled to achieve satisfactory participation of doctors due to their shortages in the hospitals that participated in this study.

Erasmus et al [221] noted that a number of policy implementation studies in LMIC fail to use theory to strengthen analysis of the findings. To address this gap, this study offers an integrated conceptual framework combining policy analysis and motivation theories to assist us in thinking further about how the manner in which the financial and non-financial incentive strategies influenced the motivation and retention of health workers. The usefulness of this integrated framework is that each individual framework on its own has limitations, however, when combined they complement each other to provide a comprehensive understanding of the research question.

The main limitation of the current study is that all the selected interventions had already been implemented prior to the commencement of data collection for this study. As such, there was no baseline data to determine and compare the impact before and after the implementation of these incentive strategies. In addition, all the four incentive strategies had only been implemented for a relatively short period at the time when data was collected for this study, especially the OSD. This implies that caution should be taken when considering these results as they might be reflecting frustrations caused by implementation teething problems. However, this study is still useful as it provides valuable information on the participants' perceptions of their current levels of motivation as well as their perceptions regarding the influence of the incentive strategies on their motivation and retention.

Another limitation is that the study only measured respondents' perceptions about the effects of the four incentive strategies of interest. The quantitative effects such as those determining trends in vacancy rates, turnover rates and retention rates since the implementation of the incentive strategies was not measured. This is mainly because of the sub-optimal human resource information system in the health sector. This data could have been useful to determine the impact of these interventions over time.

Although when this study was designed we struggled to identify a national non-financial incentive strategy to include for investigation, the inclusion of the hospital revitalisation programme seemed sub-optimal primarily because its targets were different from those of the three financial incentives. In addition, some of the revitalised hospitals that were included in this study were still fairly new, thus making it difficult to directly attribute the motivation and retention of health workers to its implementation alone.

Another notable caveat in this study is that emphasis was more on breadth (the four incentive strategies) than depth. For example, in relation to the hospital revitalisation programme, the questions asked to key informants were very broad, neglecting to separate according to the three elements of hospital revitalisation programme (physical infrastructure, technology and management). As a result, evidence gathered is focused on physical infrastructure rather than other components. Furthermore, because the study was retrospective, assessing the design and implementation after the fact was a bit challenging for all the four incentive strategies, making it difficult to determine the changing relative actor status and their positions on particular issues. This exploration could have added more value to the role and power of actors over time. However, the data presented in this study is still valuable as it represents the views of those closely involved.

Although variations between provinces and between the levels of care are mentioned where applicable, the differences in the motivation and retention of health workers between rural and urban areas and between hospital and clinics are at times diluted across all the chapters. This is in part because of the nature of the incentive strategies of interest in this study. For example, as shown in Table 3, the OSD is the only incentive strategy that allowed for comparison across rural and urban and between hospital and clinic settings. The other three remaining incentive strategies were either applicable in rural areas (rural allowance) or hospital setting (scarce skills allowance and the hospital revitalisation programme). Nonetheless, the data presented is still helpful in depicting perceptions related to how these context-specific incentive strategies are viewed by both recipients and non-recipients.

10.4 Contribution of this Thesis

It has been shown in the policy analysis literature that even when policies are generally good, their impact is likely to remain minimal if economic and social realities are not sufficiently taken into consideration; their success depends heavily on how their design and implementation process is conducted [358]. At the same time, motivation theories have provided understanding on a wide range of topics including group and individual behaviour, job design and goal setting [70, 92]. Several scholars have thus argued that the continued segregation of motivational theories is detrimental to scientific progress [280]. In her study on nursing turnover, Parasuraman [359] acknowledged that over the years there has been a growing research interest investigating the linkages among diverse motivational theories. Robbins and Coulter [92] asserted that employers can have a better understanding of how to motivate people if motivation theories are integrated especially because many underlying aspects of these theories are complementary.

However, in the existing literature, the relationship between policy analysis and motivation theories has not been well established in improving knowledge on health worker incentives, motivation and retention. Given this background, the main contribution of this study is the development of an integrated conceptual framework combining motivation theories and policy analysis framework which might be useful to further ongoing debates about the effects of financial and non-financial incentive strategies on health worker motivation and retention. Through this framework, the study have illustrated that complementary motivation theories and policy analysis frameworks may be useful in understanding how the implementation processes of incentive strategies may lead to unintended consequences which may dilute their impact on the motivation and retention on health workers. A second contribution of the study is to the still limited scholarly research on the actual implementation of the “real world” HRH

interventions. The contribution to this strand lies in identifying reasons for failure of incentive strategies using Hogwood and Gunn 10 preconditions for "successful" implementation and these are inadequate time for implementation, inadequate combination of resources, high dependency relationships, weak coordination, and sub-optimal communication.

Another contribution is to shed light on the literature on financial and non-financial incentives even though hospital revitalisation was not a strong non-financial strategy. The results show that a non-monetary incentive in the form of infrastructure improvement had less effect on the motivation and retention of health workers that participated in this study. However other non-financial factors were noted as important to the respondents of this study such as career advancement, personal growth, and recognition amongst others. As required by expectancy theory, understanding how policymakers can take full advantage of non-monetary incentive options seems imperative in this period of budgetary constraints which makes it impossible to offer bonuses that are large enough to be effective. Drawing from equity theory, our data shows that targeted financial incentives contribute to feelings of inequities leading withdrawal of effort in one's work. These findings suggest caution in using targeted financial incentives as they may lead to negative unintended consequences. However, this has been disputed by other studies which propose that targeted incentives may increase motivation.

This information is particularly critical in cognisance of the major health system reforms currently underway in the country of which their success would depend heavily on the skilled and motivated health workforce. Improved knowledge on the management of the implementation process and consideration of the implementation context could strengthen

understanding that could lead to good policies achieving their intended outcomes; and in the longer term result in improved service delivery.

Methodologically, this research used a multiple-case study design which allowed for complex unfolding of events [222] to provide an in-depth understanding of how the process of the design and implementation of financial and non-financial incentives influenced the motivation and retention of health workers. The focus on the four interventions of interest in this study and on variety of settings provided diversity and rich comparative analysis of the cases across contexts.

Some researchers have noted that in qualitative research, appropriateness is ascertained by how well the sample can represent the phenomena of interest [228]. In this study, interviews were conducted with purposively selected key informants, hospital managers and human resource managers on the basis of their influence or knowledge of the incentive strategies of interest. Therefore, these respondents could articulate their experiences of the design and implementation of these strategies. Similarly, interviews were conducted with nurses and doctors because they were the beneficiaries of the incentive strategies. As such, they were able to share their views on how these incentive strategies influenced their motivation and retention.

10.5 Recommendations

Three major recommendations can be drawn based on the findings of this study. First, training of the implementers of the hospital revitalisation programme needs to be strengthened. This is because this intervention is an ongoing multi-pronged long-term strategy anticipated to complete around 2024 according to the evidence presented in Chapter 8; but weaknesses

related to technical capacity has been highlighted as one of the major cause of the delay of its implementation. In cognisance that a significant amount of funds are allocated annually for the implementation of the hospital revitalisation programme, and that this strategy involves complex series of events, this challenge needs to be urgently addressed as it affects several other elements such as the tendering and procurement processes. Therefore, lessons learned from the implementation of the hospital revitalisation programme to date could be taken as an opportunity for revision, redesign and self-correction [332]. Considering the long-term financial implications of this incentive strategy, government should consider prolonging training of implementers and incorporating lessons learned from implementation to date into training to ensure that important aspects that have potential to cause unintended consequences are sufficiently covered.

Secondly, there is a need to develop and strengthen monitoring and evaluation systems. This could assist to determine whether the same skills are still important to continue investing on.
Thirdly, in order to create opportunities for clear career paths for nurses, provision should be made for study leave and funds should be made available for nurses to further their studies through creating opportunities for hiring replacement staff for the duration of their studies. Revisions of OSD policy should address this.

10.6 Scope for Future Research

Based on the findings of this study, five potential studies could be investigated by future research. First, in this thesis, we found that the implementation of the OSD involved complex administrative processes but that some of the key actors in its implementation included hospital CEOs, human resource managers, human resource clerks and administrative managers who in some instances had insufficient skills to deal with the complex nature of this

incentive strategy. Similarly, the findings showed that delays in the implementation of the hospital revitalisation programme were due to incompetent implementers who lacked the technical skills required to manage this programme. Future studies could conduct an in-depth analysis of the competencies and roles of implementers of financial and non-financial incentive strategies. This should take into consideration the recent reforms aimed at strengthening management capacity at hospital level through interventions including the introduction of targeted management training, review of job descriptions and competencies of chief executive officers of all public hospitals, readvertising of all CEOs positions as well as ensuring that individuals in these positions are suitably remunerated

Existing evidence have demonstrated that retention strategies combining financial and non-financial incentives are likely to be more effective than only increasing remuneration. In this study, hospital revitalisation programme, the only non-financial incentive strategy, yielded a minimal effect. This was potentially due to the fact that its primary intent was not to motivate and retain health workers but rather to improve the working conditions. There is a need to more studies to conduct a more comprehensive mapping of existing non-financial strategies in the health sector as we as to evaluate their impact on the motivation and retention of health workers.

Another conclusion that can drawn from this thesis is that significant amounts of monies were spent in the implementation of all the four incentive strategies, yet it is still uncertain whether these amounts matches the outputs. A question of relevance for policymakers is that do the costs of financial incentives override the cost of non-financial incentives? Therefore, other researchers could conduct a costing study to ascertain the sustainability of financial and non-

financial incentives as well as to determine whether the money invested in these strategies matches the outputs.

Although my study proposes an integrated model to assist with understanding how the process of the design and implementation of incentive strategies influenced the motivation and retention of health workers, this model is still speculative. Locke and Latham [120] argue that in order for every connection of the theoretical models to be recognised, they must be supported by empirical research. Therefore, future research could test this integrated framework to assess its applicability in other settings as well as to identify the strengths of the various relationships and connections identified in this study. Furthermore, the use of Walt and Gilson [198] framework in identifying the actors responsible for formulating policies and implementation was limiting. Future studies could complement this framework by conducting in-depth stakeholder analysis to enable improved mapping of those involved in the design and implementation of financial and non-financial incentive strategies.

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APPENDICES

Appendix 1: Key Informants Interview Guide

MOTIVATION AND RETENTION OF HEALTH CARE WORKERS IN SOUTH AFRICA

INTERVIEW GUIDE FOR KEY INFORMANTS

Biographical details of person being interviewed:

Job title; Institution; Department

Recruitment, motivation and **retention**:

1. What are the most important human resource problems or challenges in the country?
2. What do you think are the **reasons** for some health professionals to leave the country or the public sector?
    a. What do you think is keeping other health care professionals in their job?

Human resource interventions:

Rural Allowance

1. Can you tell me about the rationale for **initiating** this policy / intervention?
    - Explore steps or key elements in the formulation of this policy / intervention
    - Probe what was the situation before the implementation of this intervention
    - Explore the rationale for the targeted cadres?
2. How was this policy implemented?
    - Explore measures taken by the department to support implementation of this intervention in the provinces?
3. Can u tell me about the **implementation** of this intervention:
   Probe:
    - What were the ***successes*** and ***challenges*** in implementation?
4. Which actors or bodies were involved in the formulation of this policy / intervention?
   Probe:
    - Actors involved in formulation and implementation
5. In what way would you say that **rural allowance** was effective in **attracting, *motivating*** and ***retaining*** doctors and nurses in particular?
6. What do you think could be done to improve the implementation of the **rural allowance**?

Scarce skills

7. Can you tell me about the rationale for **initiating** this policy / intervention?
    - Explore steps or key elements in the formulation of this policy / intervention
    - Probe what was the situation before the implementation of this intervention
    - Explore the rationale for the targeted cadres?
8. How was this policy implemented?
    - Explore measures taken by the department to support implementation of this intervention in the provinces?
9. Can u tell me about the **implementation** of this intervention:
   Probe:
    - What were the ***successes*** and ***challenges*** in implementation?
10. Which actors or bodies were involved in the formulation of this policy / intervention?
    Probe:
    - Actors involved in formulation and implementation
11. In what way would you say that **scarce skills allowance** was effective in **attracting, *motivating*** and ***retaining*** doctors and nurses in particular?
12. What do you think could be done to improve the implementation of the **scarce skills allowance**?

OSD for Nurses

13. Can you tell me about the rationale for **initiating** this policy / intervention?
    - Explore steps or key elements in the formulation of this policy / intervention
    - Explore which bodies were involved in the formulation of this policy / intervention?
    - Explore the rationale for the targeted cadres?
    - Explore whether OSD is replacing scarce skills allowance
14. How was this policy implemented?
    - Explore measures taken by the department to support implementation of this intervention in the provinces?
15. Can u tell me about the **implementation** of this intervention:
    Probe:
    - What were the ***successes*** and ***challenges*** in implementation?
16. Which actors or bodies were involved in the formulation of this policy / intervention?
    Probe:
    - Actors involved in formulation and implementation
17. In what way would you say that **OSD** was effective in **attracting, *motivating*** and ***retaining*** doctors and nurses in particular?
18. What do you think could be done to improve the implementation of the **scarce skills allowance**?

Closure

19. Are there any other interventions or strategies in place or planned by your department to improve the attraction, motivation and retention of doctors and nurses?

Appendix 2: Hospital Manager / CEO Interview Guide

MOTIVATION AND RETENTION OF HEALTH CARE WORKERS IN SOUTH AFRICA

INTERVIEW GUIDE FOR HOSPITAL MANAGERS

Human resource challenges:

1. What are the most important human resource problems or challenges facing your facility?
2. What mechanisms do you use in your facility to ***recruit*** staff? - **TO BE CONFIRMED WITH HR MANAGER**
   a. Probe, how long does it take on average to fill up vacant posts?
   b. Probe for ***challenges*** faced in filling up vacant positions.

Absenteeism of staff:

3. To what extent would you say that absenteeism of staff is a problem in your facility? - **TO BE CONFIRMED WITH HR MANAGER**
   a. Probe for ***differences in the level of absence*** between ***nurses*** *and* ***doctors***.
   b. Probe for ***reasons*** stated by staff for absenteeism?
   c. What is the ***impact*** of absenteeism on other staff?
   d. How do you deal with absenteeism of staff in your facility?

Human resource interventions:

4. Could you tell me about any strategies / interventions that you are aware of that are used to attract and retain health care professionals in the public sector and in the country.
   a. Probe for ***rural allowance***, ***scarce skills allowance***, ***OSD*** and ***hospital revitalisation*** programme).
   b. Probe also for strategies or intervention they use to ***motivate*** and ***retain*** staff in their facility?

5. Can you please tell me more about **Rural Allowance**:
   - Probe what was the intention of this intervention?
   - How was this intervention implemented in your facility?
   - Reaction of ***nurses*** and ***doctors*** to this intervention.
   - What were the ***successes*** and ***challenges***

   a. Since the implementation of this intervention, have you seen any changes in the number and type of health care professionals you ***attract*** and ***retain*** in your facility?
      - Probe why do they say so.

- Probe what was the situation before the implementation of this intervention.

b. In what way would you say this intervention was effective in your facility?
   - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** health care professionals in the facility?
   - Probe why was it ***effective / ineffective****?*

c. What do you think ***could have been*** done to strengthen the implementation of this policy in your facility?

d. What do you think could be done, in going forward to strengthen the implementation of this policy?

6. Let us now discuss **Scarce Skills Allowance**?
   - What was the intention of this intervention?
   - How was this intervention implemented in your facility?
   - Reaction of ***nurses*** and ***doctors*** to this intervention.
   - What were the ***successes*** and ***challenges***

a. Since the implementation of this intervention, have you seen any changes in the number and type of health care professionals you ***attract*** and ***retain*** in your facility?
   - Probe why do they say so.
   - Probe what was the situation before the implementation of this intervention.

b. In what way would you say this intervention was effective in your facility?
   - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** health care professionals in the facility?
   - Probe why was it ***effective / ineffective****?*

c. What do you think ***could have been*** done to strengthen the implementation of this policy in your facility?

d. What do you think could be done, in going forward to strengthen the implementation of this policy?

7. Please tell me about the **Occupation Specific Dispensation of Nurses**?
   - What was the intention of this intervention?
   - How was this intervention implemented in your facility?
   - Reaction of ***nurses*** towards this intervention.
   - What were the ***successes*** and ***challenges***

a. Since the implementation of this intervention, have you seen any changes in the number and type of health care professionals you ***attract*** and ***retain*** in your facility?
   - Probe why do they say so.
   - Probe what was the situation before the implementation of this intervention.

b. In what way would you say this intervention was effective in your facility?
   - Probe for its effectiveness in attracting, motivating and retaining health care professionals in the facility?
   - Probe why was it ***effective / ineffective****?*

c. What do you think ***could have been*** done to strengthen the implementation of this policy in your facility?

d. What do you think could be done, in going forward to strengthen the implementation of this policy?

8. What about **hospital revitalisation programme**: ***(ONLY ASK IN REVITALISED HOSPITALS)***
    - Probe what was the intention of this intervention?
    - How was this intervention implemented in your facility?
    - What were the ***successes*** and ***challenges***
    - Reaction of ***nurses*** and ***doctors*** to this intervention.

    b. Since your hospital has been revitalised, have you seen any changes in the number and type of health care professionals you ***attract*** and ***retain*** in your facility?
    - Probe why do they say so.
    - Probe what was the situation before the revitalisation.

    c. In what way would you say this intervention was effective in your facility?
    - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** health care professionals in the facility?
    - Probe why was it ***effective / ineffective****?*

    d. What do you think ***could have been*** done to strengthen the implementation of this policy in your facility?

    e. What do you think could be done, in going forward to strengthen the implementation of this policy?

9. What else do you think should be done to motivate and retain the remaining health care professional in your facility and in your province?

Appendix 3: Human Resource Manager Interview Guide

MOTIVATION AND RETENTION OF HEALTH CARE WORKERS

IN SOUTH AFRICA

INTERVIEW GUIDE FOR HUMAN RESOURCE MANAGERS

Human resource challenges:

1. What are the most important human resource problems or challenges facing your facility?
2. What mechanisms do you use in your facility to recruit staff?
3. How long does it take on average to fill up vacant posts?
4. What are the challenges faced in filling up vacant positions.

Absenteeism of staff:

5. To what extent would you say that absenteeism of staff is a problem in your facility?
6. Does absenteeism differ between nurses and doctors?
7. What are the main reasons mentioned by staff for being absent?
8. How do you deal with absenteeism of staff in your facility?

Human resource interventions:

9. What strategies or interventions do you use in your facility to motivate and retain staff?
10. How was OSD implemented in your facility?
11. What were the challenges of implementing OSD in your facility?
12. What do you think could be done to improve implementation of OSD?
13. How was scarce skills implemented in your facility?
14. What were the challenges of implementing scarce skills?
15. What do you think could be done to improve the implementation of scarce skills?

Appendix 4: Health Workers Interview Guide

MOTIVATION AND RETENTION OF HEALTH CARE WORKERS

IN SOUTH AFRICA

INTERVIEW GUIDE FOR HEALTH WORKERS

Recruitment, Motivation and Retention

1. What are the most important human resource problems or challenges facing your facility?
   a. Probe for ***staff shortage***, ***workload***, ***staff morale***, ***staff retention***
   b. Explore the ***impact*** of these challenges at the facility
2. When you started working at this facility, what actually attracted you about this job?
   a. Probe whether the same factors are still attractive
   b. Probe why
3. Thinking about your current situation, to what extent would you say you are **motivated** to do your job?
   - Probe why
4. Would you consider leaving this facility in the near future?
   - Probe why

Absenteeism of staff

5. To what extent would you say that absenteeism of staff is a problem in this facility?
   a. Probe for ***differences in the level of absence*** between ***nurses*** *and* ***doctors***.
   b. Probe for ***reasons*** for absenteeism?
   c. Probe for the ***impact*** of absenteeism for other staff?

Human Resource Interventions

6. Could you tell me about any strategies / interventions that you are aware of that are used to attract and retain health care professionals in the public sector and in the country (*Probe for* ***rural allowance***, ***scarce skills allowance***, ***OSD*** and ***hospital revitalisation programme***).

7. Can you please tell me more about **Rural Allowance**:
   a. How do you feel about this intervention?
      - Probe whether respondent is receiving this allowance or not.

- Probe for reactions towards this intervention.

b. Since the implementation of this intervention, have you seen any changes in your level of motivation? Why do they say so?
   - Probe whether this intervention contributed to keeping them in this facility.
   - Probe what was the situation before the implementation of this intervention.

c. In what way would you say this intervention was effective?
   - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** you in this facility?
   - Probe why do they say it was ***effective / ineffective****?*

d. What do you think ***could have been*** done to strengthen the implementation of this intervention in your facility?

e. What do you think could be done, in going forward to strengthen the implementation of this intervention?

8. Let us now discuss **Scarce Skills Allowance**?

a. How do you feel about this intervention?
   - Probe whether respondent is receiving this allowance or not.
   - Probe for reactions towards this intervention.

b. Since the implementation of this intervention, have you seen any changes in your level of motivation? Why do they say so?
   - Probe whether this intervention contributed to keeping them in this facility.
   - Probe what was the situation before the implementation of this intervention.

c. In what way would you say this intervention was effective?
   - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** you in this facility?
   - Probe why do they say it was ***effective / ineffective****?*

d. What do you think ***could have been*** done to strengthen the implementation of this intervention in your facility?

e. What do you think could be done, in going forward to strengthen the implementation of this intervention?

9. Please tell me about the **Occupation Specific Dispensation of Nurses (OSD)**?

a. How do you feel about this intervention?
   - Probe whether respondent is receiving this allowance or not.
   - Probe for reactions towards this intervention.

b. Since the implementation of this intervention, have you seen any changes in your level of motivation? Why do they say so?
   - Probe whether this intervention contributed to keeping them in this facility.
   - Probe what was the situation before the implementation of this intervention.

c. In what way would you say this intervention was effective?
   - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** you in this facility?
   - Probe why do they say it was ***effective / ineffective****?*

d. What do you think ***could have been*** done to strengthen the implementation of this intervention in your facility?

e. What do you think could be done, in going forward to strengthen the implementation of this intervention?

10. What about **hospital revitalisation programme**: ***(ONLY ASK IN REVITALISED HOSPITALS)***
    a. How do you feel about this intervention?
        - Probe for reactions towards this intervention.
    b. Since the implementation of this intervention, have you seen any changes in your level of motivation? Why do you say so?
        - Probe whether this intervention contributed to keeping them in this facility.
        - Probe what was the situation before the implementation of this intervention.
    c. In what way would you say this intervention was effective?
        - Probe for its effectiveness in ***attracting, motivating*** and ***retaining*** you in this facility?
        - Probe why do they say it was ***effective / ineffective****?*
    d. What do you think ***could have been*** done to strengthen the implementation of this intervention in your facility?
    e. What do you think could be done, in going forward to strengthen the implementation of this intervention?

11. What else do you think should be done to motivate and retain the remaining health care professional in your facility and in your province?

Appendix 5: Health Worker Survey

MOTIVATION AND RETENTION OF HEALTH CARE WORKERS IN SOUTH AFRICA

QUESTIONNAIRE FOR HEALTH WORKER SURVEY

STATEMENT OF CONSENT

"I have been given an information sheet and I understand the objective of the study. I further understand that my responses will be kept confidential and that it is up to me whether or not I want to complete this questionnaire. It has been explained to me that even if I choose not to complete the questionnaire, I should still return it to the researchers completed at the bottom so that they can be able to identify the refusals. My refusal to participate will in no way affect me."

I voluntarily agree to complete the questionnaire: Yes No

Date:_____ Signature:_____

FOR OFFICE USE ONLY

Facility Code:			
Province:	**GP** = Gauteng **NW** = North West		
Urban / Rural:	**U** = Urban **R** = Rural		
District:	1 = Bophirima 2 = Bojanala 3 = Central District 4 = Southern District		
Name of Sub-district:			
Facility Status:	1 = Revitalised 2 = Non-revitalised		
Type of facility:	**DH =** District Hospital **RH =** Regional Hospital **NCH =** National Central Hospital **CHC** = Community Health Centre **C =** Clinic		
Ward Name	1 = TB / ARV / STEPDOWN 2 = Psychiatry 3 = Paediatric 4 = Surgical 5 = Medical 6 = High care / Burns 7 = Gynaecologist 8 = Maternity 9 = Outpatient (OPD) 10 = Theatre 11 = Other (specify): _____		
Respondent code:			
Start Time:		**Finish Time:**	
Date:			

SECTION 1:

May I ask some questions that provide a descriptive profile of yourself? Please CIRCLE your responses.		
1.1	Race (**Indicate by marking a circle against the appropriate)**	1 = African/Black 2 = Coloured 3 = Indian/Asian 4 = White 5= Other (Specify): _____
1.2	Nationality	
1.3	Gender	1 = Male 2 = Female
1.4	How old are you?	In years: _____
1.5	Describe your marital status?	1 = Single 2 = Married 3 = Divorced 4 = Separated 5 = Other Specify)_____
1.6	Do you have any children?	1 = Yes 2 = No
1.7	Cadre of health worker	1 = Specialist 2 = General practitioner 3 = Professional nurse 4 = Enrolled nurse 5 = Nursing assistant 6 = Chief Prof. nurse 7 = Senior Prof. nurse 8=Other (Specify) _____
1.8	Where did you train?	University/College: _____ Country: _____
1.9	How long have you been working in this facility?	Number of years: _____ Months: _____
1.10	Is this your first job since being trained as a health professional?	1 = Yes 2 = No
1.11	Did you change jobs in the past year?	1 = Yes 2 = No

SECTION 2:

1. Think of the work you do at present. How well does each of the following words or phrases **describe your work**? **CIRCLE**. **DO NOT LEAVE ANY SPACE BLANK.**

1 for "Yes" if it describes your work
2 for "No" if it does not describe it
3 for "?" if you cannot decide

	Yes	**No**	**?**
Satisfying	1	2	3
Gives sense of accomplishment	1	2	3
Challenging	1	2	3
Dull	1	2	3
Uninteresting	1	2	3

2. Think of the pay you get now. How well does each of the following words or phrases **describe your present pay**? **CIRCLE**. **DO NOT LEAVE ANY SPACE BLANK**.

	Yes	**No**	**?**
Income adequate for normal expenses	1	2	3
Fair	1	2	3
Insecure	1	2	3
Well paid	1	2	3
Underpaid	1	2	3

3. Think of the opportunities for promotion that you have now. How well does each of the following words or phrases **describe your opportunities for promotion**? **CIRCLE. DO NOT LEAVE ANY SPACE BLANK.**

	Yes	**No**	**?**
Good opportunities for promotion	1	2	3
Promotion on ability	1	2	3
Dead-end job	1	2	3
Good chance for promotion	1	2	3
Unfair promotion policy	1	2	3

4. Think of your supervisor and the kind of supervision that you get on your job. How well does each of the following words or phrases **describe your supervision**? **CIRCLE. DO NOT LEAVE ANY SPACE BLANK.**

	Yes	**No**	**?**
Praises good work	1	2	3
Tactful	1	2	3
Up-to-date	1	2	3
Annoying	1	2	3
Bad	1	2	3

5. Think of the majority of people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases **describe these people**? **CIRCLE. DO NOT LEAVE ANY SPACE BLANK.**

	Yes	**No**	**?**
Boring	1	2	3
Helpful	1	2	3
Responsible	1	2	3
Intelligent	1	2	3
Lazy	1	2	3

6. Think of your **job in general**. All in all, what is it like most of the time? For each of the following words or phrases, **CIRCLE**: **DO NOT LEAVE ANY SPACE BLANK.**

	Yes	**No**	**?**
Good	1	2	3
Undesirable	1	2	3
Better than most	1	2	3
Disagreeable	1	2	3
Makes me content	1	2	3
Excellent	1	2	3
Enjoyable	1	2	3
Poor	1	2	3

SECTION 3:

7. Listed below are a series of statements that represent possible feelings that individuals might have about the facility for which
they work. With respect to your own feelings about working in this particular facility, please indicate the degree of your agreement
or disagreement with each statement by checking one of the **SEVEN** alternatives below each statement. Please **CIRCLE** the most appropriate response. **DO NOT LEAVE ANY SPACE BLANK.**

	Statement	**Strongly Disagree**	**Disagree**	**Disagree slightly**	**Neither disagree nor agree**	**Agree slightly**	**Agree**	**Strongly agree**
1	I am willing to put in a great deal of effort beyond that normally expected in order to help this facility to be successful.	1	2	3	4	5	6	7
2	I talk about this facility to my friends as a great facility to work for.	1	2	3	4	5	6	7
3	I feel very little loyalty to this facility.	1	2	3	4	5	6	7
4	I would accept almost any type of job assignment in order to keep working for this facility.	1	2	3	4	5	6	7
5	I find that my values and this facility's values are very similar.	1	2	3	4	5	6	7
6	I am proud to tell others that I am part of this facility.	1	2	3	4	5	6	7
7	I could just as well be working for a different facility as long as the type of work was similar.	1	2	3	4	5	6	7
8	This facility really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
9	It would take very little change in my present circumstances to cause me to leave this facility.	1	2	3	4	5	6	7
10	I am extremely glad that I chose this facility to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7
11	There's not too much to be gained by sticking with this facility indefinitely.	1	2	3	4	5	6	7

12	Often, I find it difficult to agree with this facility's policy on important matters relating to its employees.	1	2	3	4	5	6	7
13	I really care about the fate of this facility.	1	2	3	4	5	6	7
14	For me this is the best of all possible facilities for which to work.	1	2	3	4	5	6	7
15	Deciding to work for this facility was a definite mistake on my part.	1	2	3	4	5	6	7

SECTION 4:

8. Please respond to the following questions about your current job with your current facility. Please indicate how much you **agree** or **disagree** with the following statements by using a **CIRCLE** in all the questions. **DO NOT LEAVE ANY SPACE BLANK.**

	Statement	**Strongly Disagree**	**Disagree**	**Disagree slightly**	**Neither disagree nor agree**	**Agree slightly**	**Agree**	**Strongly agree**
1	I intend to leave this facility before too long	1	2	3	4	5	6	7
2	I do not intend to leave my present employer	1	2	3	4	5	6	7
3	I intend to quit working for this facility immediately	1	2	3	4	5	6	7
4	I expect to leave this facility soon	1	2	3	4	5	6	7

9. How would you rate your chances of leaving your current employer within these timeframe? ("Voluntarily" refers to leaving of your own free will because you choose to, not because you are forced to. Being fired is NOT voluntary quitting). Please **CIRCLE** the most appropriate response. **DO NOT LEAVE ANY SPACE BLANK.**

	Statement	**Strongly Disagree**	**Disagree**	**Disagree slightly**	**Neither disagree nor agree**	**Agree slightly**	**Agree**	**Strongly agree**
1	I will voluntarily quit my job in the next three months	1	2	3	4	5	6	7

2	I will voluntarily quit my job in the next six months	1	2	3	4	5	6	7
3	I will voluntarily quit my job in the next year	1	2	3	4	5	6	7
4	I will voluntarily quit my job in the next two years	1	2	3	4	5	6	7

10. If you decide to quit your current job, where would you switch to? Please mark **X** in the appropriate box. **DO NOT LEAVE ANY SPACE BLANK.**

	Yes	**No**
In the health sector in South Africa		
In the health sector out of the country		
Out of the health sector		
Other (please specify):		

11. Have you been absent / away from work in the **past ONE month**? ***IF NO, SKIP TO SECTION 5***

Yes No

12. How many days have you been absent / away from work due to the following reasons **in the last ONE month**? Please indicate the number in the box as per the reason stipulated.

	Total number of days absent due to the following reasons in the Last ONE month
Sick leave	
Compassionate / family responsibility	
Study leave	
Maternity leave	
Paternity leave	
Other (please specify):	

SECTION 5:

13. Do you get any the following allowances? Please mark **X** in the appropriate box. **DO NOT LEAVE ANY SPACE BLANK.** ***IF "NO / DON'T KNOW" SKIP TO Q 16***

	Yes	**No**	**Don't Know**
Rural allowance			
Scarce skills allowance			
Occupational specific dispensation (OSD) for nurses / doctors			

14. If you get to any of the above allowances, could you please indicate your level of satisfaction in relation to the following? Only **CIRCLE** according to the allowance that you receive.

	Statement	**Very dissatisfied**	**Dissatisfied**	**Slightly dissatisfied**	**Neither satisfied nor dissatisfied**	**Slightly satisfied**	**Satisfied**	**Very satisfied**
1	How do you feel about ***rural allowance***	1	2	3	4	5	6	7
2	How do you feel about ***scarce skills allowance***	1	2	3	4	5	6	7
3	How do you feel about ***OSD***	1	2	3	4	5	6	7

15. Thinking about the allowance(s) you are receiving, please indicate how much you **agree** or **disagree** with the following statements by marking with a **CIRCLE** on the most appropriate response. Please **only** mark for the allowance (s) you receive. **ONLY** to be answered by those who are getting any of the allowances mentioned. ***THEN SKIP TO Q 17.***

	Statement	**Strongly Disagree**	**Disagree**	**Disagree slightly**	**Neither disagree nor agree**	**Agree slightly**	**Agree**	**Strongly agree**
1	The provision of ***rural allowance*** attracted me to come and work for this facility	1	2	3	4	5	6	7
2	The provision of ***rural allowance*** motivates me to do my job better	1	2	3	4	5	6	7
3	The provision of ***rural allowance*** encourages me to remain working in this facility	1	2	3	4	5	6	7

	Statement	Strongly Disagree	Disagree	Disagree slightly	Neither disagree nor agree	Agree slightly	Agree	Strongly agree
4	The provision of ***scarce skills allowance*** attracted me to come and work for this facility	1	2	3	4	5	6	7
5	The provision of ***scarce skills allowance*** motivates me to do my job better	1	2	3	4	5	6	7
6	The provision of ***scarce skills allowance*** encourages me to remain working in this facility	1	2	3	4	5	6	7
7	The provision of ***OSD*** attracted me to come and work for this facility	1	2	3	4	5	6	7
8	The provision of ***OSD*** motivates me to do my job better	1	2	3	4	5	6	7
9	The provision of ***OSD*** encourages me to remain working in this facility	1	2	3	4	5	6	7

16. If you are **NOT** getting any of the allowance (s) mentioned above, how do you feel about not getting any of these allowances? **CIRCLE** the most appropriate response. ***THEN GO TO SECTION 6***

	Statement	Very dissatisfied	Dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Satisfied	Very satisfied
1	How do you feel about ***not getting*** rural allowance	1	2	3	4	5	6	7
2	How do you feel about ***not getting*** scarce skills allowance	1	2	3	4	5	6	7
3	How do you feel about ***not getting*** OSD	1	2	3	4	5	6	7

SECTION 6:

17. Could you please indicate your level of satisfaction in relation to the following? **CIRCLE** the most appropriate response. Please **DO NOT LEAVE ANY SPACE BLANK**.

	Statement	Very dissatisfied	Dis-satisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Satisfied	Very satisfied	Not Applicable
1	How do you feel about the physical appearance of your facility	1	2	3	4	5	6	7	8
2	How do you feel about equipment and technology in your facility	1	2	3	4	5	6	7	8

3	How do you feel about availability of essential medicines / drugs in your facility	1	2	3	4	5	6	7	8
4	How do you feel about accommodation provided for staff in your facility	1	2	3	4	5	6	7	8
5	How do you feel about education for your children in this area	1	2	3	4	5	6	7	8
6	How do you feel about entertainment in this area	1	2	3	4	5	6	7	8

18. Please indicate your **agreement** or **disagreement** with each of the following statements about your working environment. Please **CIRCLE** the most appropriate response. Please **DO NOT LEAVE ANY SPACE BLANK**.

	Statement	**Strongly Disagree**	**Disagree**	**Disagree slightly**	**Neither disagree nor agree**	**Agree slightly**	**Agree**	**Strongly agree**	**Not Applicable**
1	It is because of the renovation / revitalisation of this facility that I was attracted to work here	1	2	3	4	5	6	7	8
2	I am motivated to do my job better because of the renovation or revitalisation of this facility	1	2	3	4	5	6	7	8
3	The renovation / revitalisation encourages me to remain working for this facility	1	2	3	4	5	6	7	8

SECTION 7:

19. What do you think could be done to motivate and retain health care professionals in this facility?

Appendix 6: Ethics Approval from the University of the Witwatersrand Ethics Committee

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Ditlopo

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER M080729**
PROJECT	An Evaluation of the Impact of Human Resource Interventions on Recruitment, Motivation and Retention of Health Care Workers in South Africa
INVESTIGATORS	Ms P Ditlopo
DEPARTMENT	Centre for Health Policy
DATE CONSIDERED	08.07.25
DECISION OF THE COMMITTEE*	Approved subject to to stressing the importance of keeping all sources well and truly confidential

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 08.07.28 **CHAIRPERSON** .....
(Professor P E Cleaton Jones)

*Guidelines for written 'informed consent' attached where applicable

cc: Supervisor : Prof D Blaauw

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix 7: Requirements for Above Average Performance for Grade Progression

Job Title	Above Average Grade Progression/Post Promotion Requirements
Professional Nurse Grade 1 (General Nursing)	▪ A combination of 5 years actual service and or appropriate / recognisable post-registration General Nursing experience ▪ At least 4 years of this period must be actual service as Professional Nurse Grade 1 (General Nursing)
Professional Nurse Grade 2 (General Nursing)	▪ A combination of 15 years actual service and or appropriate / recognisable post-registration experience in General Nursing ▪ At least 4 years of this period must be actual service as Professional Nurse Grade 2 (General Nursing)
Operational Manager Nursing (General Unit) Grade 1	▪ 5 years actual service as Operational Manager: Nursing (General Unit) Grade 1
Professional Nurse Grade 1 (Speciality Unit)	▪ A combination of 9 years actual service and or appropriate / recognisable post-registration experience in General Nursing ▪ At least 5 years of this period must be appropriate / recognisable experience in the specialty after obtaining the relevant 1-year post-basic qualification required for the relevant specialty ▪ At least 4 years of this period must be actual service as Professional Nurse Grade 1 (Specialty Nursing)
Clinical Nurse Practitioner Grade 1 (Primary Health Care)	▪ A combination of 9 years actual service and or appropriate / recognisable post-registration experience in General Nursing ▪ At least 5 years of this period must be appropriate / recognisable experience in PHC after obtaining the relevant 1-year post-basic qualification required for the relevant specialty ▪ At least 4 years of this period must be actual service as Clinical Nurse Practitioner Grade 1 (Primary Health Care)
Staff Nurse Grade 1	▪ A combination of 5 years actual service and or appropriate / recognisable post-registration experience ▪ At least 4 years of this period must be actual service as Staff Nurse Grade 1

Job Title	Above Average Grade Progression/Post Promotion Requirements
Staff Nurse Grade 2	▪ A combination of 15 years actual service and or appropriate / recognisable post-registration experience ▪ At least 4 years of this period must be actual service as Staff Nurse Grade 2
Nursing Assistant Grade 1	▪ 5 years actual service as Nursing Assistant Grade 1 OR ▪ A combination of 5 years actual service and or appropriate / recognisable post-registration experience ▪ At least 4 years of this period must be actual service as Nursing Assistant Grade 1
Nursing Assistant Grade 2	▪ A combination of 15 years actual service and or appropriate / recognisable post-registration experience ▪ At least 4 years of this period must be actual service as Nursing Assistant Grade 2

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