UNIVERSITY OF KWAZULU-NATAL

Implementation of health management systems in Department of Health primary health care facilities in uMkhanyakude District, KwaZulu-Natal

ZAMANGUNI FORTUNATE KUBHEKA

Student No. 971143341

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Supervisor: Professor Mosa Moshabela

Co-supervisor: Professor Brian McArthur

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Candidate Declaration

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ZAMANGUNI FORTUNATE KUBHEKA

Student No. 971143341

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Abstract and Key Words

South Africa, as in many other countries, has had challenges attaining health outcomes, and has attributed this to weak health systems. Management strengthening has been prioritised as a critical entry point and core element towards strengthening the health system. Poor management of primary health care facilities has been identified as a major challenge to improving quality of health services. The study aimed to examine the role played by Operational Managers (OMs) on the implementation of health management systems at primary health care facilities in the uMkhanyakude Health District in the Province of KwaZulu-Natal. The World Health Organisation's conceptual frameworks for health systems performance systems, General Systems theory and Contingency theory were used as lenses to support the study. This study was exploratory in nature, and conducted through qualitative research methodology wherein OMs and primary health care Supervisors/Managers as the line managers of OMs in 56 primary health care facilities in the KZN DoH, uMkhanyakude Health District were purposively selected and interviewed through semi-structured in-depth interviews. The findings included that most management decisions, including planning, budget planning, workforce planning, supply chain and financial management, are centralised and controlled at the sub-district level, hence OMs play an insignificant role. OMs are not involved in planning, budgeting, and management of expenditure, management of supply chain or maintenance. The inadequate support and mentorship, lack of management training, ineffective centralised management systems, shortage of staff and too many programmes make it impossible for OMs to successfully implement their management functions, leading to a weak health system. It is recommended that the inputs and suggestions of OMs must be sought or they must be partially involved in critical decision-making as they are responsible for management of operations at this level. A systemic thinking approach when formulating management strengthening interventions will ensure that the focus is on resolving challenges across all management components and will strengthen the entire health system.

Key Words: *Clinics; Department of Health; Facility managers; healthcare facilities; Health management systems; Health system; Implementation of management functions; Management functions; Management strengthening; Management systems; Operational managers; Primary healthcare; Primary Management; Provincial Department of Health; Strengthening interventions; Sub-district; uMkhanyakude district; KZN Department of Health.*

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Acronyms and Abbreviations

AHRI	Africa Health Research Institute
AIDS	Acquired Immunodeficiency Syndrome
AN	Auxiliary Nurse
BMI	Body Mass Index
CCGs	Community Care Givers
CCMDD	Central Chronic Medicine Dispensing Distribution
CEO	Chief Executive Officer
CNP	Clinical Nurse Practitioner
DHER	District Health Expenditure Review
DHMT	District Health Management Team
DHS	District Health System
DHP	District Health Plan
DMT	District Management Team
DoH	Department of Health
EMRS	Emergency Medical Radio Services
EMS	Emergency Medical Services
EN	Enrolled Nurse
ENA	Enrolled Nursing Assistant
EPMDS	Employee Performance Management and Development System
EPWP	Expanded Public Works Programme
FIO	Finance Information Officer
FM	Finance Manager
GA	General Orderly
HIV	Human Immunodeficiency Virus
HR	Human Resources

HST	Health Systems Trust
ICRM	Ideal Clinic Realisation and Maintenance
IPC	Infection Prevention & Control
IT	Information Technology
IUCD	Intra-uterine Contraceptive Device
KZN	KwaZulu-Natal
MAtCH	Maternal, Adolescence and Child Health
MCWH	Maternal Child and Women's Health
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
NA	Nutritional Advisor
NCS	National Core Standards
NGO	Non-Government Organisations
NHI	National Health Insurance
NPO	Non-Profit Organisation
NSI	Non-stock Items
OM	Operational Manager
OSS	Operation Sukuma Sakhe
Pap smear	Papanicolaou smear
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary Health Care
PPSD	Provincial Pharmaceutical Supply Depot
PHCIS	Primary Health Care Information System
QIP	Quality Improvement Plan
SA	South Africa
SCM	Supply Chain Management

SDGs	Sustainable Development Goals
SOPs	Standard Operating Procedures
SSO	Support Service Officer
TB	Tuberculosis
TIER	Three Interlinked Electronic Register
UCDP	University Capacity Development Programmes
UKZN	University of KwaZulu-Natal
UNICEF	United Nations Children's Fund
UK	United Kingdom
US/USA	United States of America
WHO	World Health Organisation
WISN	Workload Indicators of Staffing Needs

Chapter 1: Introduction and General Overview of the Study

1.1. INTRODUCTION

Many countries have had challenges attaining health outcomes and have attributed this to weak health systems. These challenges are worse in developing countries, especially in Africa (Travis et al., 2004); (Hafner & Shiffman, 2013); (Mutale et al., 2013b); (Reich & Takemi, 2009); (Agarwal et al., 2017). The study conducted by Ratcliffe et al., (2019) in five lower- to middle-income countries (Argentina, Ghana, Rwanda, Senegal, and Tanzania) found that weak Primary Health Care (PHC), especially in low- to middle-income countries, would not bring us anywhere near to attaining universal health reportage. This is because these countries are still neglected in terms of funding. Hence, they continue to show poor performance and inadequate results at the PHC level (Ratcliffe et al., 2019). There is a necessity therefore to conduct more research to be able to generate evidence-based and applicable data and information which can be used to precisely measure and identify reasons for poor performance, which can also be used to inform and drive the formulation of policies and setting of priorities (Ratcliffe et al., 2019).

Similarly, the Department of Health in South Africa failed to meet some of the health-related United Nations (UN) Millennium Development Goals (MDGs) by the deadline of 2015 (Travis et al., 2004); (Chotchoungchatchai et al., 2020). These goals were the reduction in child mortality, an improvement in maternal health, and the combating of HIV/AIDS (Travis et al., 2004). The non-attainment of these goals has also been largely attributed to weak and ineffective health management systems, which need to be strengthened (Reich & Takemi, 2009; Hafner & Shiffman, 2013; Mutale et al., 2013b). Contemporary research findings have revealed that the weak health system and its quality failures have contributed greatly to an increased death rate and the prevention of communities from accessing health care (Hirschhorn et al., 2019). These deaths have even surpassed the collective total of deaths which are due to the burden of HIV, malaria, and tuberculosis (Hirschhorn et al., 2019).

The agreement on Negotiated Service Delivery (2010–2014) which was signed between the South African President and his Minister of Health, prioritised health management strengthening as a core element of health systems (Gilson & Daire, 2011). In this agreement, the delegation of managerial responsibilities and functions, as well as the development of a competency framework to assess current managerial performance and development of managerial training were identified as crucial activities to be undertaken for strengthening management systems at the operational level of care (Gilson & Daire, 2011). However, there is little evidence on effective management strengthening strategies for district, sub-district, and PHC level managers (Sherr et al., 2013).

Previous research recognised management to be a critical entry-point in strengthening health systems, attaining MDGs and improving health outcomes (Gilson & Daire, 2011). In South Africa, the poor management of primary health care (PHC) services has been identified as a major challenge to improving the quality of health services. This is despite the publication of clear policy guidelines in the form of a National Supervisory Manual (Padarath & English, 2011). Research has also shown that some sub-districts and hospitals do not regard support of PHC as part of their responsibility. The fragmentation of PHC service delivery and poor coordination between many district hospitals and PHC facilities remains a major challenge as it leads to non-accountability (Pandarath et al., 2016). The new UN Sustainable Development Goals (SDGs), as well as the PHC reform programme in South Africa, both mandate the Department of Health to strengthen its frontline management systems for the effective delivery of health care in communities (Hirschhorn et al., 2019). It is therefore necessary to examine what compelled the frontline management systems to be strengthened and to determine what make them weak.

Hence, this present study is focused on examining the implementation of health management systems at the PHC level to see how they can be strengthened. This was achieved by examining how operational managers (OMs) have been involved in the implementation of health management systems, what challenges they have faced, and what they have been doing to improvise and mitigate around these challenges. The perspectives of the OMs, and those of their supervisors, are especially important because they are the main custodians for the implementation of health management systems at the PHC level. Health management systems refer to the overall components of the complex health system (these components are management systems within primary health care environment in the Department of Health). They are referred to as health management systems because the aim of effective management at Department of Health is to ensure that health programmes that are provided yield desirable health outcomes and improved health status of the patients who come to the PHC facilities. The management components are derived from WHO conceptual framework of the health system.

Furthermore, the frontline implementation of health services occurs at this level of care, and yet PHC has received little attention historically, such that the importance of management systems has been undermined. Management systems are very important because the provision of efficient and quality health services is dependent on efficient, effective, and functional management systems at all levels. It also requires competent managers and leaders.

1.2. CONTEXT

The United States (US) President's Emergency Plan for AIDS Relief (PEPFAR) has through its programme of fast-tracking, accelerated progress towards reducing the impact of the HIV/AIDS

epidemic in more than fifty countries around the world. With South Africa included, it has proposed the implementation of stronger, more effective management systems, and systems analysis approaches to be able to better understand institutional players, processes, and resources (Padian et al., 2011). Indeed, the release of the *Capacity building and strengthening framework, Version. 2.0*. document by PEPFAR in 2012, further suggested that there was a substantial need to build locally appropriate systems of management for patient care, health finance, health workforce, physical assets and equipment, information, and other aspects of effective health services (PEPFAR, 2012a).

The Global Monitoring Report on universal health coverage advocated for more investments to be put towards ensuring stronger primary health care (World Health Organisation, 2019). Since the health care system in South Africa is rooted in the model of primary health care, it comes as no surprise that as in other countries, South Africa has also taken an initiative and bold steps towards strengthening primary health care. Primary health care can be defined as the first level of contact that individuals, families, and communities have with the health care system (Keleher, 2001). This incorporates services or programmes like personal care with health promotion, prevention of illness, community development, and includes: the interconnecting principles of equity, access, empowerment, community self-determination and inter-sectoral collaboration. Primary health care also encompasses an understanding of the social, economic, cultural, and political determinants of health (Keleher, 2001). Primary health care facilities are situated within communities, and operate as entrances for service provision (Uwiwama et al., 2012). They are intended to be easily accessible to the communities they serve (Uwiwama et al., 2012), and are established as centres for delivery of prevention and health promotional services.

The National Department of Health in South Africa, together with all its provincial and district offices, is focusing on strengthening both service delivery and health management systems at all levels of the health care system (Dhlomo et al., 2014). This initiative is intended to improve health outcomes and to achieve the UN's Millennium Development Goals (MDGs), which has now transitioned towards Sustainable Development Goals (SDGs). The structure of the South African Department of Health is organised according to National, Provincial, District offices, Sub-District offices, and PHC facilities (Dhlomo et al., 2014). The District Health System is the driving force in delivering comprehensive PHC services. This is because, with the decentralisation of management structures from the National and Provincial to the District level, District Health Management Teams (DHMT) and local management at PHC facilities are now responsible for the management of the health system in the district and at the PHC level (Padarath & English, 2011; Le Roux, 2015). The concept of District Health Systems was established during the launch of the NHI Green paper. It was first developed as part of the 1997 White Paper reforms, and implemented fully with the National Health Act of 2003. The principles

underpinning the District Health Systems model include: access to services; local accountability; community participation; and decentralisation of management functions (Pandarath et al., 2016).

The need to re-engineer the way health facilities are internally organised was identified to be key to achieve better productivity and responsiveness by correcting/removing inefficiencies in management (Ruff et al., 2011). Thereafter, the South African Department of Health committed to adopt and improve PHC, as this was perceived to be a precursor for the planned implementation of the National Health Insurance (NHI) health financing system, and in-line with the principles of the 1979 Alma-Ata Conference (Ruff et al., 2011; Le Roux, 2015). Consequently, the PHC improvement approach is achieved through the concept of PHC re-engineering (Le Roux, 2015). Primary Health Care (PHC) re-engineering entails the restructuring of systems and the redrawing of district boundaries to be in-line with municipal boundaries, the provincialisation of health care facilities, the reformation of referral pathways, and the building of new primary health facilities (clinics and community health care centres), the appointment of nurses and training them as PHC practitioners, as well as the appointment of community-based health workers, and the establishment of district management teams (Le Roux, 2015).

1.3. PROBLEM STATEMENT

Current evidence has shown that there have been bold changes in South Africa and globally, which indicate a focus away from disease-specific interventions, to that of management strengthening interventions (Reich & Takemi, 2009; Hafner & Shiffman, 2013). Operations research is being recommended and praised for improving efficiency and operational aspects of health systems (Padian et al., 2011), where it is seen as a viable vehicle towards informing the formulation of relevant and proven strategies at the PHC facility level. But in South Africa, not much research has been conducted to investigate the perspectives and role that is played by health managers at all levels of health care.

Even though there is some funding and agreements between South African government and international, national development agencies, and other partner organisations on the need for health systems strengthening, so far there are no evidence-informed strategies on what should be adopted and implemented to strengthen health management systems (Swanson et al., 2012; Reich & Takemi, 2009). The strengthening of management at the PHC facility level is crucial within our primary health care system because this is where implementation should take place (Gilson et al., 2014). In South Africa, health care services are accessed through PHC facilities as a first point of entry. These facilities which act as mini-hospitals are situated right within local communities. Thereafter, patients' referrals are made to sub-district facilities which are in essence bigger hospitals if PHC facilities are not able to assist due to variety of reasons. That is why, according to Rais and Viana (2010), there is a growing interest and

need for conducting operations research to solve operational issues and challenges at PHC level (Rais & Viana, 2010).

Ineffective and weak health management systems in PHC facilities lead to inadequate service delivery, and thereby result in poor health outcomes (Gilson et al., 2014; Ratcliffe et al., 2019). Operational managers (OMs) in their role of managing the implementation of the PHC system (including all key components) have been found to be main contributors towards achieving poor health outcomes (Gilson et al., 2014). As local OMs, they are expected to manage the implementation of the health systems at the PHC facility level. When they fail to execute their functions and duties effectively, they inadvertently act as barriers to the successful implementation of management strengthening interventions for PHC in South Africa (Gilson et al., 2014).

Currently, there is little evidence to support effective strategies and interventions that should be adopted to strengthen management systems at the PHC facility level (Gilson & Daire, 2011). Hence, there is a need to explore experiences of frontline managers at the PHC facility level, to generate the evidence necessary to inform the formulation of management strengthening intervention strategies for OMs. A study conducted in the North West, which was intended to establish how local front-line managers can be supported to strengthen PHC, demonstrated that staff working at the PHC level act as a barrier to centrally-led initiatives to strengthen PHC. It is therefore important to establish why PHC level staff are found to be a barrier to the implementation of such strengthening interventions (Schneider et al., 2014).

In a study conducted by Uwiwama et al. (2012) in KwaZulu-Natal, which sought to identify the views of OMs and community care workers on health systems barriers in the implementation of collaborative TB/HIV and mother-to-child transmission of HIV programmes, the researchers found that the barriers to effective health systems included: management; planning; inadequate financing; human resources capacity, and power issues. The study also indicated that there was a lack of leadership and political will, as well as insufficient consultation on policy implementation (Uwiwama et al., 2012).

Chan (2007) has identified that the provision of efficient and quality services delivery is driven by efficient and effective management systems at all levels. Establishing the perspectives of OMs in terms of their role on implementation of health management systems in Department of Health (DoH) primary health care facilities is thus required to understand the challenges and enablers of success, as this will inform the formulation of effective strategies to strengthen management systems at this level.

1.4. RESEARCH AIM

The purpose of this study is to investigate how OMs have been implementing health management systems in PHC facilities in the KZN DoH, uMkhanyakude Health District. The study investigates how OMs have been executing their management functions across all the components which they are responsible to manage at PHC level. The unit of analysis is the OM who manages these functions.

Since OMs are placed at the forefront of PHC facilities as managers of health systems components, they were considered the best suited to be participants in this study. It is their responsibility to manage health systems and implement strengthening interventions that can improve health outcomes at the PHC level. Chief executive officers from all five sub-districts in the KZN DoH, uMkhanyakude Health District were also found suitable to participate in the study because they are responsible for supervising and overseeing work done by the OMs. Knowing the perspectives of these two groups of people in terms of how OMs have been involved in the implementation of health management systems, will help better understand the challenges, enablers for success, strengths, and weaknesses of PHC operational management, and suggest evidence-based strategies for improving and strengthening health management systems. Furthermore, a framework on strengthening the roles and functions of OMs at the PHC level can be developed.

1.5. RESEARCH QUESTIONS

1.5.1. Key research question

In line with the research aim, this study was based on the following key research question:

> **How have operational managers been implementing health management systems in Department of Health primary health care facilities?**

The central aim of this study is therefore to evaluate the role that has been played by OMs on the implementation (i.e., leading, managing, and executing) of health management systems at the PHC level of operation.

1.5.2. Research sub-questions

The research sub-questions that guided this study were as follows:

i. How have OMs been involved in governance in PHC facilities in the KZN DoH, uMkhanyakude Health District?

ii. How have OMs been involved in management of workforce, finances, information, service delivery, and medical supplies in PHC facilities in the KZN DoH, uMkhanyakude Health District?
iii. What barriers/challenges have OMs faced when implementing the six components/building blocks of the health system?
iv. How have OMs managed to successfully implement the six components/building blocks of the health system?
v. What strategies and interventions do OMs need to implement to better execute their duties?

1.6. STUDY FOCUS

Research has shown that PHC is faced with a range of complex issues and challenges. As a result, PHC research is crucial to help determine how to manage and mitigate these challenges, both locally and globally. This necessitates the development of stronger health management systems (Oliver-Baxter et al., 2017). This study will examine the perspectives of OMs on the role they play in executing their management duties, as well as the challenges they face and how they improvise to get the work done, and thereby provide a clear understanding on which interventions and enablers of success should be implemented and developed to strengthen management systems at the PHC level.

1.7. MOTIVATION FOR THE STUDY

The failure by the Department of Health to meet the UN's MDGs, as well as the constant inefficiencies by PHC facilities to improve health outcomes, are evidence enough that more studies are needed to identify what causes health systems failures, despite large health investments and funding (Reich & Takemi, 2009). Since OMs have been found to be the ones who hinder the implementation of strengthening interventions and strategies, there is a need to identify the key reasons and contributors to these barriers, as well as possible solutions and enablers of success to the problem (Schneider et al., 2014). The decentralisation of management responsibilities and decision making from district to sub-district, including PHC, requires managers at these levels to be supported and capacitated so that they can carry out their duties successfully. Having established that OMs are a barrier to implementation, and that there is a need to strengthen health management systems at the PHC level, there is a significant need for evidence-based findings which can be used to apprise the formulation of relevant and effective strategies to strengthen the role of OMs at the PHC facility level (Gilson & Daire, 2011).

The Global Conference on Primary Health Care held in Astana, Kazakhstan, 25–26 October 2018, signed and endorsed a declaration which reiterated the need for the universal health community to commit to strengthening PHC. The role that PHC plays in worldwide health coverage cannot continue

to be ignored, as it is becomes ever more significant—particularly during this time of the worldwide Covid-19 pandemic. It is essential therefore to conduct research investigating the role that OMs at the PHC facility level can play in strengthening health management systems (Ratcliffe et al., 2019; Chotchoungchatchai et al., 2020).

1.8. STUDY OBJECTIVES

The main objective of this study is to investigate how OMs have implemented health management systems in PHC facilities in the KZN DoH, uMkhanyakude Health District.

The goal of the study is to propose strengthening the framework for OMs to improve health management systems and its functions at the PHC level, to produce an effective health system and improve health outcomes.

The five research objectives of the study were as follows:

Objective #1: To investigate the role of OMs in governing the PHC facilities in the KZN DoH, uMkhanyakude Health District.

Objective #2: To investigate the role of OMs in the management of the workforce, finances, information, and medical supplies in PHC facilities in the KZN DoH, uMkhanyakude Health District.

Objective #3: To investigate the role of OMs on the management of service delivery in PHC facilities in the KZN DoH, uMkhanyakude Health District.

Objective #4: To identify the barriers and challenges faced by OMs when implementing health management systems at PHC facilities.

Objective #5: To identify enablers of success when OMs implement health management systems at PHC facilities.

1.9. STUDY SIGNIFICANCE

As an entry point to the health system and implementation of public healthcare services, PHC operational managers are highly significant in strengthening the health system. Overhauling and reinforcing weak health systems can be achieved through strengthening health management systems at the PHC facility level. Operational managers were appropriate to provide their daily lived experiences on their involvement and the role they play in the implementation of health management systems. The things they did to improvise and alleviate the burden of the challenges they face daily when executing their management functions were used as benchmarks to propose possible solutions and strategies that can be adopted to strengthen health management systems at the PHC facility level.

This research was done to help the KZN DoH, uMkhanyakude Health District to strengthen its health management systems at the PHC facility level by implementing innovations and interventions from evidence-based findings. Ineffective health management systems lead to failure in achieving health outcomes. When PHC facilities fail to achieve excellent health outcomes and to meet clinic targets, this contributes to sub-districts failure which escalates to the district level, and then to provincial level, this in turn contributes to the country not achieving the UN's Millennium Development Goals (MDGs). Hence, if the OMs fail to execute their management functions successfully, it significantly hinders the progress of the country's overall health outcomes.

This study will contribute to the body of knowledge by providing evidence on how to formulate a framework to strengthen the roles and functions of OMs placed at the PHC facility level. The data can further implement and extend the World Health Organisation (WHO) framework by identifying other key system building block(s) in the context of the management of health systems. The findings of the study will contribute towards the formulation of relevant and effective (i.e., evidence based) interventions aimed at strengthening management systems at PHC facilities. The management strengthening strategies in the District Health Plans (DHP) will thus help address identified core problems faced by OMs in PHC facilities. Furthermore, the study will contribute in identifying implementation challenges regarding management systems in PHC facilities in-line with the WHO's six core components or 'building blocks' of the health system framework. This in turn can assist in achieving the main objective of an effective health system which aims to promote, restore, and maintain health.

Finally, it is hoped that the research findings will further encourage funding agents to continue financing management strengthening initiatives directed at the PHC level, by providing evidence that the DoH is committed to addressing the evidence-based challenges, as well as implementing effective strategies which are relevant for rural health facilities.

1.10. OUTLINE OF THE STUDY

The study is presented in seven chapters and is structured as follows:

> **Chapter one: Introduction and general overview of the study.** This chapter includes an introduction to the study, background, and study focus, which details the importance of the study, its rationale, and the problem statement which highlights the need for the study. It also identifies the gap in the current literature, explains who will benefit from the study, and how they will benefit. The study aim, objectives, and the goals to be achieved by the study are discussed, as well as the questions to be answered by the research.

Chapter two: Literature review. This chapter provides a review of the literature which includes an evaluation of the current body of knowledge and literature concerning the implementation of health management systems in PHC. The chapter comprises an examination and discussion of general PHC, the evolution of PHC in South Africa, its management at the PHC level, and the scope of work of its OMs. In addition, the chapter discusses the implementation of health management systems at PHC facilities through investigating governance and leadership, the management of the health workforce, finances, information, supply chain (i.e., procurement of medical and other supplies), and the management of service delivery. Lastly, the challenges and barriers hindering performance at the PHC level, as well as its successes at the PHC level. Lastly, strategies to improve success at the PHC level and the strengthening of the health system are evaluated.

Chapter three: Theoretical framework. This chapter discusses the theoretical framework which is a description and discussion of the theory underpinning the study, in this case, a description of 'system theory and contingency.' This chapter provides a discussion of the World Health Organisation's conceptual framework of the health system, and a detailed examination of the six core components or 'building blocks' of the health system, namely: (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance. Together, these provide a broad theoretical lens that is used to shape the objectives of the present study and provide a way on how the study utilised the theory to arrive at its objectives.

Chapter four: Research methodology. This chapter defines the research methodology and approaches used to conduct the study, including the research design. Furthermore, it provides detailed explanations of the decisions made regarding the selection of suitable participants for the study, the study location, the sampling design, population for the study, data collection methods and a description why interviews were viewed as more appropriate and best suited for the study. The process of data analysis is explained including pretesting, data management, administration and storage, data quality control, as well as ethical considerations.

Chapter five: Presentation and discussion of results (Research objectives #1–#3). Together with chapter six, a presentation, interpretation, and analysis of the results of the research is provided. Together, these chapters describe the response rate, demographical aspects of the participants, and presentation and discussion of results or findings of the study, as aligned to the five objectives of the study, by extracting quotations from the research participants' responses, and supporting arguments from the relevant literature. Chapter five focuses largely on the 'building blocks' of the WHO conceptual framework and demonstrates how OMs have

been involved in the implementation of the six managerial systems at the PHC level. This chapter presents and discusses the results of the research objectives #1–#3, regarding the role of OMs in management of the six components of the health system.

Chapter six: Presentation and discussion of results (Research objectives #4–#5). This chapter presents and discusses the results of the research objectives #4 and #5, which concern the challenges/barriers which prevent OMs from successfully implementing their management functions. It also includes the strategies and improvisations OMs undertake to counterattack the challenges they have faced, and enablers of success, that better assist them to execute their managerial functions.

Chapter seven: Recommendations, limitations, and conclusion. In this final and concluding chapter, managerial recommendations based on the study findings will be offered for OMs at the PHC facility level, as well as limitations of the study, areas for future study, and a conclusion.

1.11. CHAPTER SUMMARY

An effective and efficient health management system at the PHC level is crucial for attaining the health-related UN Millennium Development Goals (MDGs), and subsequent Sustainable Development Goals (SDGs). The strengthening of management systems at the PHC level is believed to be an answer since this is where implementation occurs, and the reinforcement of the health system at this level will result in a broader system-wide strengthening. The literature affirmed that the problem has been identified to be OMs in PHC facilities, who hinder its success at this level, but no research has been conducted to investigate the role and current involvement of these managers when they execute their management functions. The challenges the primary health care environment present them with, including the actions they take to remedy these challenges are yet to be established. The formulated research questions and objectives, together with the identified study participants, will provide evidence-based findings towards the implementation of solutions to the problem.

The following chapter will review relevant literature around the research area that is being studied.

Chapter 2: Literature Review

2.1 INTRODUCTION

The previous chapter provided an overview of the study, highlighting how health management systems have contributed to weak health systems. The problem statement section supported this argument by citing literature wherein findings showed that OMs of PHC facilities have been identified as hindering strengthening interventions. Management failure was identified to be a problem at the PHC level. These failures at the PHC level have contributed to the failure and weakness of the entire health system, from the PHC level to the sub-district, district, provincial, and national, to the failure of the country's health system which is indicated by the non-accomplishment of the health-related UN Millennium Development Goals (MDGs) and health-related Sustainable Development goals (SDGs), poor health outcomes, and poor-quality healthcare services.

The purpose of this chapter is to examine the published literature in relation to management and health systems at the PHC level. The literature will be examined to see how managers at primary health care level have been managing all the operations effectively and efficiently to ensure attainment of health outcomes and DoH (MGDs and SDGs) goals. A thorough review will include looking at how these managers have been executing their management functions and making certain management decisions across all management components as per WHO components of the health system. The aim is to review exactly what the literature will reveal about primary health care managers' role and involvement in the implementation of health management systems at PHC level i.e. the environment in which they operate. This is done to identify the gaps and establish how these gaps relate to the nature and purpose of the study. A literature review is a critical summary and evaluation of a body of knowledge or subject area about a specific topic, with the aim of providing answers to specific research questions and to build knowledge (Knopf, 2006; Rowley & Slack, 2004). The following aspects will be discussed extensively:

i. General PHC in the health system.
ii. The evolution of PHC in South Africa.
iii. Management at the PHC level and the scope of work of its OMs.
iv. The implementation of the health management systems at the PHC facility level by looking at governance and leadership, human resource management/management of health workforce, finance management, information management, medical supplies, and management of service delivery.
v. The challenges and barriers hindering performance at the PHC facility level.
vi. Successes at the PHC facility level.
vii. Strategies to improve the success enablers implemented to improve health systems.

2.2. BACKGROUND

The failure to achieve the UN's health-related Millennium Development Goals (MDGs) and the sluggish progress towards achieving the health-related Sustainable Development Goals (SDGs) (which will be evaluated in 2030), in developing and low-income countries, has been attributed to health systems that are weak and fragmented (Swanson et al., 2012; Chotchoungchatchai et al., 2020). In sub-Saharan Africa, health systems are too fragile to deliver the necessary volumes and quality services to the needing and deserving communities who flood the PHC facilities daily (Mutale et al., 2013a); (Shakarishvili et al., 2010). Several barriers and challenges at the PHC level have been identified as slowing the progress towards attainment of the MDGs (Mutale et al., 2013b; Shakarishvili et al., 2010). Management challenges at the PHC facilities level have contributed to limiting service delivery coverage and quality in sub-Saharan African countries with limited resources (Sherr et al., 2013). However, the literature does not reveal if and how the identified several barriers and challenges influence the success of OMs at the PHC level.

The literature has not demonstrated or shown at which level of operation within the health care system the health system is weak. Although most reporting on achievement of MDGs and SGDs has been reported or conducted at international and national level, it is still unknown at which level of operation the research that have been conducted to inform this reporting has been conducted. This shows there is a gap in studies which have focused on management systems and operations research at PHC level, which this study is aiming to investigate. While many studies have shown that support is needed to build capacity of local management so that they can improve on management, planning, resource allocation, and financial management, there is little evidence on effective management strengthening strategies for district, sub-district and PHC managers (Sherr et al., 2013). However, the successful decentralisation of decision-making by facility managers within PHC is believed to be the main determinant of success and effective service delivery (Sherr et al., 2013). Identifying and designing interventions and strategies that address all implementation barriers and challenges is thus currently needed, particularly those using holistic system-approaches at the PHC level (Mutale et al., 2013b). Additionally, recent literature has shown that there is a significant gap between implementation and interventions that are informed by evidence (Hirschhorn et al., 2019). Although there is sufficient funding for health in South Africa, the country still has a divided health care system, with public PHC still faced with quality, access, and management systems problems (Ruff et al., 2011).

Achieving the MDGs and desirable health outcomes is a constant struggle which South Africa is failing to conquer. Conducting evidence-based interventions and identifying strategies which address implementation issues and challenges at the PHC level, as well as understanding the role that is played by OMs when executing health management systems, will be a good start towards tackling the

implementation gap. The findings of this study could be utilised to inform policy, a transitioning to execution, and a sustained system quality.

2.3. GENERAL PRIMARY HEALTH CARE

The WHO and United Nations Children's Fund (UNICEF) have both played critical roles in the development of the PHC concept first envisioned in 1948 as an outcome of the UN's Universal Declaration of Human Rights, which in Article #25 could state: "Everyone has the right to a standard of living adequate for the health and wellbeing of himself *[sic]* and his *[sic]* family." By the late 1970s and 1980s, PHC and health equity had become core concepts in the international agenda of the WHO and other UN agencies, especially in its concern for delivering good health care for all, especially the poor (Cueto, 2004; Chotchoungchatchai et al., 2020).

The term 'primary health care' emerged during the late 1960s and early 1970s in the USA. During this period, the vertical health approach which was used by US agencies and the WHO to eradicate malaria, and the transplantation of hospital-based health care system to developing countries and the lack of emphasis on prevention were criticised and questioned in John Bryant's book entitled *Health and the developing world* (Cueto, 2004). The experience of medical missionaries who were under the Christian Medical Commission in the 1960s, also influenced the concept of PHC. These medical missionaries used to work in developing countries. It was emphasised that they should train village workers at the grass roots level and equip them with drugs and simple methods of health care. Later in 1970, a contact journal was created, documenting their model, and using the term 'primary health care' (Le Roux, 2015).

The Alma-Ata International Conference organised by the WHO, and held on the 06–12 September 1978 in the (then) Soviet Republic of Kazakhstan was a key milestone for the worldwide adoption of the PHC approach. Some 3 000 delegates from 134 governments and 67 international organisations attended the conference and the concept of PHC was sold to all attendees. A universal and bold statement was made, under the rubric: "Declaration of Alma-Ata," thereby putting health equity on the international political agenda for the very first time (Le Roux, 2015). The approval of the declaration expedited and pushed for the reorganisation of the health system towards prevention of diseases and health promotion (Espinosa-González et al., 2019). Many different sectors, including international donors and the World Bank, collaborated to formulate the health care agenda and to tackle socioeconomic factors and associated elements for health (Espinosa-González et al., 2019). Public health was conceptualised as a discipline, and its major objective was to improve health at the highest level (i.e., at the national level). This was to be achieved through combined processes, approaches,

and activities of all public health authorities with a whole government perspective and environment (Chen et al., 2014).

Following its approval, there was a move from health facilities reform towards a primary care-centred approach. Primary health care became the comprehensive and coordinated frontline agenda of the health system. This took place in most countries, including South Africa (Agarwal et al., 2017). The PHC model was deemed to be the first point of entry into the health care system when communities were experiencing any health problems (Agarwal et al., 2017; Tabrizi & Nikjoo, 2013). Its aim was to bring health care services within the reach of communities, by building PHC facilities closer to where people lived, worked, and gathered for their communal activities (Agarwal et al., 2017). It was envisioned that PHC facilities were going to be responsible for providing curative and preventative health care to the rural citizens—more importantly on preventative aspects—while also raising the profile of health care (Agarwal et al., 2017).

Primary health care can be described as an entire-community approach to wellbeing, with the intention of achieving the highest possible level and delivery of health, by making it available and accessible to all community members. Primary health care comprises of comprehensive services which include: palliative care, rehabilitation, prevention of diseases and sicknesses, treatment of diseases, management of diseases, provision of therapy, as well as health promotion (Chotchoungchatchai et al., 2020).

The PHC facility is primarily an infrastructure with human, financial, and medical supplies, and other resources which all enable the delivery of health care interventions to treat, manage, and prevent diseases within communities (Agarwal et al., 2017). Primary health care is now regarded as the foundation for universal health care coverage (Abd El Fatah et al., 2019). This is because communities first approach these facilities when they need health care services. In other countries and similarly in South Africa, PHC facilities are also referred to as clinics which is a space where a variety of PHC services are delivered. These spaces usually open and operate only eight hours a day. Certain health personnel (i.e., health care professionals/nurses) employed at the clinic level in most cases reside close to or right at the clinic as they are sometimes expected to be available to respond to emergency cases (Dugani et al., 2018).

The management of this infrastructure together with all the management components of the health system at primary health care level to ensure these points of entry actually deliver on bringing effective services and interventions to the communities, has not received much attention and focus. In South Africa and other developing countries, the involvement and role on how managers of these PHC facilities (i.e. operational managers) were expected to ensure the provision of health care services for all has not been studied in detail, neither have the supportive systems to enable their effectiveness. The

core and technical component which is "service delivery" has been extensively studied as we have seen a variety of studies on strengthening interventions to ensure quality provision of service being conducted. Guidelines were put in place to enforce compliance and ensure uniformity, but the supportive structure which actually enables provision of health care services has received little attention.

2.4. EVOLUTION OF PHC IN SOUTH AFRICA

Health care in South Africa prior 1994 was delivered under a hospicentric approach. It was a fragmented health system which was structured along racial lines (Harrison & Nielson, 1995; Mayosi & Benatar, 2014). From April 1994 and the establishment of a new democratic South Africa, there was a significant health system restructuring which saw the birth of one national health system that was accessible to all. The restructuring entailed a merger of 14 previously racially-divided health departments, the abolishment of fees which were paid to access PHC facilities and hospitals by pregnant women and children under age six (Padarath & English, 2011). South Africa, like other developing countries, adopted the PHC model of providing health services to the communities. The services flow from national and are linked from its nine provinces, to Districts offices, sub-district offices (which are linked to hospitals), and finally to PHC facilities and a few community health care centres (Dhlomo et al., 2014).

This model brought PHC closer to the communities. The restructuring was done to align with the WHO promotion for the revitalisation of PHC. The South African government developed a ten-point plan to transform its health system. The strengthening of PHC is central to health system transformation because PHC is the backbone for service delivery (Padarath & English, 2011). With decentralised management which is led by District Management Teams (DMTs), PHC services are provided to rural and township communities (Padarath & English, 2011) through PHC facilities as a first entry point. These facilities (PHC and CHCs) are led and managed by managers known as 'operational managers' in the South African context, and they are located right where these facilities are located, with the support of primary health care (PHC) offices which are housed in their respective sub-districts.

2.4.1. The extent of management in SA

South African contemporary PHC facilities provide a range of integrated services. This means different services are located within the same facilities even if they are staffed separately; personnel are trained to offer multiple health care services; provided tools and other resources; training and processes are provided to integrate separate services; referrals and follow-ups and done between PHC facilities and sub-district hospitals. There is supposed to have a well-coordinated logistics system, data collection and management, drug distribution, transport, and supervision across all services (Pfeiffer et al., 2010).

The nature, role, and extent of co-ordination to be displayed by the managers of the local facilities has never been outlined.

Since the inception of PHC in 1994, the South African government has been struggling with the quality and advancement of the public PHC services it provides (Moosa et al., 2017). Accordingly, the government is still committed to bring improved PHC services to the public. There is a relentless determination on the part of government to improve the quality of the services it provides and strengthen the health system by improving health management systems (Moosa et al., 2017). Numerous infrastructure and programme-related interventions were implemented to improve health systems at the district, sub-district, and PHC level (Adindu, 1995; Chotchoungchatchai et al., 2020; Budrevičiūtė et al., 2018); however, there is still a need for the implementation of interventions to strengthen health management systems at the PHC facility level. This is because after so many interventions that have been implemented, health service is still fragmented and weak, and health outcomes remain poor in South Africa (Adindu, 1995; Sherr et al., 2013; Espinosa-González et al., 2019; Cueto, 2004; Moosa et al., 2017). To date, it is not clear where the point is being missed. Considering the management research on management of primary health care, it is evident that a thorough examination of the management role at PHC level has been ignored, even though some research has boldly shown that the managers at this level are seen to be the ones hindering implementation of strengthening interventions. Hence, this research will unpack what these managers experience and go through, including all the sacrifices they make when they execute their management functions.

It is believed it is due to the legacy of apartheid which is still affecting the inability of contemporary health management and leadership to succeed (Moosa et al., 2017). Apartheid led to the inheritance of both private and public health systems, of which the latter had significant built-in inequalities, poor infrastructure, insufficient health care specialists, and was significantly fragmented (Kon & Lackan, 2011). Many public PHC facilities, especially in black communities, were neglected and inadequately funded. As a result, the infrastructure of the public health system was by 1994 found in a dire state and was dysfunctional (Mayosi & Benatar, 2014). National Health Insurance (NHI) has been introduced as an undertaking to correct these factors affecting the public health system and bridge the gap between public and private inequality and provide a funding landscape (Moosa et al., 2017). NHI has brought initiatives like the reengineering and reorganisation of PHC, which is a move towards anticipating and stopping diseases before they even occur (Moosa et al., 2017). These apartheid legacy issues have somehow presented many structural and disease-specific problems which needed immediate attention and resolutions, as a result the focus on issues pertaining to management components and streamlining including strengthening those managers entrusted with managing these public health care facilities, took the back seat as the main aim has been on correcting the apartheid inadequacies and inefficiencies. When the non-attained targets continue to show the system is still weak, regardless of all the

interventions and initiatives, there is a great necessity to refocus efforts to management components strengthening at PHC level.

2.5. MANAGEMENT AT PHC LEVEL

In the Department of Health's setting, OMs are assigned with the overall management of facilities at the PHC level. This makes them responsible to carry out all the four functions of management. In terms of the management process, effective planning, leading, controlling, and organising is required to ensure that all operations run smoothly and the clinics can achieve their goals and meet set targets (Hellriegel et al., 2012). By virtue of their positions and scope of work, OMs have been assigned a responsibility and authority to manage the overall implementation of all six components of the health system. The pressing issue is that the actual scope of their work, as well as level and extent of decision-making applied by these managers is still cause for concern, more so if the literature is still identifying them to be the cause for the poor implementation of improvement interventions at the PHC level (Scott et al., 2014). It is thus essential to find out what these managers have been doing wrong, what challenges they have encountered when executing their management tasks, to be labelled as the ones hindering the success and progress of the provision of quality health services in the public sphere.

Operational managers are supported by scheduled supervisory visits from sub-district, district, and provincial programme managers. Even though the main aim is to monitor programme implementation, these visits are also utilised to identify problems, escalate problems, and recommend solutions for OMs to overcome management systems deficiencies (Dhlomo et al., 2014; KZN DoH, 2013). These visits have shown to be unsupportive and unsuccessful in improving the management skills and abilities of OMs at PHC facilities. In other words, they are not delivering their intended purpose, as OMs describe these visits as being vehicles to attribute blame and undermine their work (Serapelwane & Manyedi, 2020).

A study conducted in Mozambique, in which similar quarterly supportive supervisory visits by District and Provincial programme managers were provided to sub-district and hospital managers, revealed that challenges were encountered in supervision capacity. It was found that there was a need for using skilled mentors and supervisors to mentor, train, and support individual health managers at lower levels of health care as these managers seem to be struggling to make an impact in their management efforts (Sherr et al., 2013). Another study conducted by Budrevičiūtė et al., (2019) in Lithuania, established that the main concerns and priorities in the management of PHC facilities or institutions included: policy making, decision making, management of human resources, management of an organisation, and management of patients (Budrevičiūtė et al., 2018). These concerns unpack the depth and management complexity for managers at the PHC level, and reveals how challenging their work environment is to

manage and control. These concerns also demonstrated that the scope of work for OMs is more complex and requires both management and technical or clinical skills. It also requires a variety of other elements like clinical knowledge and experience, support, relevant resources, and commitment from managers (Budrevičiūtė et al., 2018).

2.5.1. Definition of management

There is no universally agreed definition of management; as a result, researchers have come up with many definitions. Management can be defined as a process of planning, organising, leading, and controlling organisational resources to achieve set organisational goals (Hellriegel et al., 2012). Certain individuals at different levels or hierarchy within an organisation are given an authority and are entrusted with each or some of the four key management functions in the management process, with those in senior levels being given the responsibility to oversee that all functions in the process are implemented accordingly (Hellriegel et al., 2012). Management comprises the activities which managers perform, to get the work done, and accomplish goals (Civelek, 2019). It is what managers do to keep an organisation moving forward to achieve its goals, and deliver in terms of its organisational mission and vision (Civelek, 2019). Accordingly, management is a process of managing the utilisation of organisational resources such as human, financial, machinery, and information, by formulating strategies and objectives to accomplish organisational goals, mission, and vision (Miles, 2012). Managers monitor processes and provide guidance on how things should be done (Civelek, 2019; Hellriegel et al., 2012).

2.5.2. Scope of work for Operational managers

As managers at the PHC level, OMs are expected to ensure the implementation of all health system components. They must execute all key management functions, which include: planning, organising, leading, and controlling all human and other resources, with the aim of achieving organisational goals efficiently and effectively (Jones and George, 2009; Griffin, 2021). In other words, the management function of OMs at the PHC facility level must yield consistent, superior performance by ensuring provision of quality health care and the accomplishment of targets. Operational managers are also responsible to lead and motivate their staff; to maintain relationships with external stakeholders (e.g., the public, patients, communities, and corporate health partners), and to mitigate and resolve any challenges they might encounter to be able to accomplish good results against the backdrop of any complex situation (Daire & Gilson, 2014). All these abovementioned tasks, indicate that OMs must act as both leaders and managers. The question always remains if when OMs embark on this management journey, do they have the capacity, drive, and value, either the tasks they are entrusted with, or value the people they are managing? (Jones & George, 2009; Daire & Gilson, 2014).

The findings in Adindu (1995) and Naledi et al., (2011) emphasise that since PHC facilities are categorised as the operational and execution level of the health system, OMs must make operational decisions daily (Adindu, 1995; Naledi et al., 2011). Strategic decision-making within the DoH setting is still top-down, where higher-level managers are responsible for the formulation of strategies which includes activities such as procurement of resources to be utilised to accomplish comprehensive, organisational and long-term goals, the formulation of policies and setting of long-term strategies (Adindu, 1995); (Naledi et al., 2011). Therefore, managers at the PHC level have been concentrating more on the execution of resolutions agreed upon at the strategic level (which in this case is the National Department of Health), to ensure that all set goals and objectives are achieved. They have been responsible for monitoring and supervising the results and effects of the approved health programmes. They are prohibited from devising their own new innovations and interventions. Overall, OMs are responsible for ensuring the efficient and effective utilisation of health resources (Adindu, 1995; Naledi et al., 2011).

The above findings completely exclude the planning function from the scope of managers who are based at the PHC level, and this is contradictory to other research which promoted and recommended the importance of involving and taking into consideration all the views of managers at the operational or PHC facility level when making decisions about governance and planning. This was seen to be crucial, as their perspectives and inputs proved to possess the potential for building relations, encourage ownership of the strategies taken at higher levels, and increase the likelihood of building stronger health systems. On the other hand, this shows how according to management principles, decision making is less focused on guidance, oversight, and planning at the higher levels of care, and more focused on organising and monitoring at lower levels of management (Scott et al., 2014; Ross et al., 2014).

The investigation of the scope of work for a manager of a PHC facility, demonstrated that the largest percentage of their job is comprised of a variety of daily responsibilities and processes which are concentrated on managing clinical services (Daire & Gilson, 2014). However, the scope does not end there; the PHC manager job also entails activities of resolving the health needs of the public and the community where the facility is located (Daire & Gilson, 2014). This shows how dense and complex the scope of the PHC manager's job is, as the expectation is to be accountable to all these stakeholders of health care services. The PHC manager, executes and accomplishes her or his functions through others, i.e., health care professionals, the public, and the local community. All this necessitates high levels of competency in self-management (Daire & Gilson, 2014).

Through leadership and management of OMs, who are managing all functions and system components in their respective facilities, the DoH provides PHC services such as preventative and curative care at the PHC level. In addition, there has been the introduction of community health workers and

community-based nurses who provide promotional services directly to households. All these health professionals are under the supervision of OMs (Marten et al., 2014).

According to Gilbert (2013), the successful implementation of the PHC re-engineering approach (which is one of the interventions for improving effectiveness and strengthening management at the PHC level), requires the review and description of roles and scope of work, task shifting, new team relationships, training, re-skilling, re-orientation, and new health interventions (Gilbert, 2013). The importance of this study is thus highlighted, as it will unpack the role of OMs regarding managing the management components, the challenges they face, and improvising actions they perform to mitigate those challenges. In this present study, evidence-based interventions centred on the OMs perspectives of implementation of health systems will be provided, including their experiences, hardships, and best practices, that have made them succeed in executing their duties.

2.6. IMPLEMENTATION OF MANAGEMENT SYSTEMS AT THE PHC LEVEL

The enhancement of PHC has been identified as a top policy priority in strengthening health systems. This is not a surprise, since PHC facilities are at the forefront in providing constant health care which is easily accessible to all people. Hence, it is also pertinent to examine how the OMs of PHC facilities have been managing, and find why research has located the cause of hindering the success and progress of the health-related MDGs to be at this level (Espinosa-González et al., 2019). Primary health care is an initial gateway to the health system (Tabrizi & Nikjoo, 2013). With this comes the responsibility and need to focus on research that explores how implementation can be improved by strengthening all components of the health system (Espinosa-González et al., 2019). For the purposes of this present study, implementation basically pertains to the execution of the six management components of the health system which includes leadership and governance at the centre, and then service delivery, human resources, medicine and technologies, finance, and information.

A review of the literature established that most research on strengthening PHC has been conducted by researchers who are not from low income and developing countries, and that their research has excluded implementation research on PHC policy and interventions (Hirschhorn et al., 2019). As a way forward, the focus and priority should be on implementation research as this can enable the formulation of evidence-based strategies and interventions, as well as policy change. Conducting implementation research should focus on the key players in order to close the gap identified by the research. By key players, this refers to the level of management where health care is being provided; letting appropriate participants be part of the study, including those who are key players; conducting it in a developing country, thereby enabling an examination of the participants' role and involvement in all aspects of health systems management (Hirschhorn et al., 2019).

2.6.1. Governance and leadership

According to Welch (2013: 253), a governance activity can be defined as a "controlling, directing or regulating influence." It is about ensuring that things happen according to the way they are supposed to happen. This is achieved by providing direction through developing and utilising policies and procedures (Welch, 2013). For the governance function to be implemented successfully, there must be some set goals and objectives which outline what needs to happen and what needs to be achieved (Peters, 2014a). Governance is when those who are given authority to govern, are leading and providing direction and guidelines on how the set goals and objectives are to be achieved (Peters, 2014a). Governance at the PHC level is about how OMs have been ensuring that things happen according to how they should happen at their clinics. This includes the manner and approach they use to direct employees and influence them to achieve clinic goals. As OMs, they are responsible for making sure that things happen according to planned strategies, and includes what it takes to conduct this activity to show how they value the task and role given to them in terms of their managerial position.

Leadership is about guiding and influencing people to behave in a particular manner (Hellriegel et al., 2012; Jones & George, 2009). Although other researchers regard leadership and management to be different concepts, for the purposes of this study, these two terms are going to be treated different. Accordingly, both will be used throughout this study where management will be the focus. This is because OMs are managers for PHC facilities and they execute management functions, Leadership provides direction and ensures things are carried out as planned. Governance also provides a roadmap and approach in terms of business plans and business strategies. Operational managers, even though they are leaders in a PHC setting, are more responsible for management in terms of their leadership, where stewardship and oversight is provided by their supervisors (i.e., PHC Supervisors) who are located at the sub-district office level (Spehar et al., 2017).

2.6.1.1. Definition of clinical governance

The term 'clinical governance' was first coined in the United Kingdom in the late 1900s (Abd El Fatah et al., 2019). The term refers to a system that is utilised to refine and improve the standard of clinical practices and processes, to ensure that extraordinary standards of clinical care are always sustained (Starey, 2003). Clinical governance can also be described as a system that improves the excellence and safety of heath care (Kwedza et al., 2020). Ensuring the constant provision of high levels of health care in PHC facilities is what OMs are entrusted to do by the DoH, whereby the execution of the governance function is one of the duties of OMs. As facility managers in PHC facilities, they contribute to the execution of clinical governance (Kwedza et al., 2020). Although substantial research has been conducted on the significance of clinical governance in PHC and on the contribution of management

and leaders in the execution of governance, managers at this level still encounter various challenges to successfully influence health professionals and other non-clinicians to follow governance procedures. Operational managers at the PHC level work hard trying to improve the implementation of other personnel around the issue of clinical governance and its execution (Kwedza et al., 2020). Currently, the literature has not provided answers to the cause and extent of these challenges. It is important therefore to establish the challenges they currently face, and what they do to improvise and mitigate around such governance challenges.

2.6.1.2. Governance in primary health care

The research conducted globally and in developing countries including South Africa, governance systems have shown to be weak in most facilities at the PHC level. This is attributed to the fact that most hospitals in the region or district in which they operate, do not want to take responsibility or ownership to support these facilities and its managers (Naledi et al., 2011). As a result, the district, sub-district, and primary health systems are still at the revival and re-engineering stage. A study conducted in South Africa showed that, because OMs at the PHC level are still finding their feet, poor leadership and governance is recognised as one of major challenges facing new PHC facilities (Mash et al., 2013). The new leaders at this level need more support, guidance, and mentorship, to be able to oversee operations and deliver expected outcomes and targets (Mash et al., 2013). Most of these leaders have transitioned from being clinicians to being leaders in a multifaceted hierarchy without receiving proper management training. Accordingly, the distinction in the role of District Health Management teams, sub-district leadership and PHC managers seems blurred, as the focus is more on chasing targets and dodging taking responsibility (Mash et al., 2013). In other words, the PHC environment has shown to be more focused on accomplishing the task at hand, and has neglected providing the support and mentorship that might help managers improve and elevate their management competencies to the desired level (Waters, 2013). The focus is more on provision of health care services, not on equipping managers with management skills and competencies that they will need to manage operations.

Since PHC facilities are positioned as a first-entry into health care services, they receive large numbers of both possible and already confirmed patients. As a result, they are susceptible to many errors in procedure, workforce, medical resources, and organisation (Tabrizi & Nikjoo, 2013). These errors underline the critical need for good governance at the clinical level, because if these errors occur at the PHC level, they are likely to cause more challenges than they would at other levels of health care. Looking it through the lens and assertions of systems theory and the interconnectedness of components, if procedures and standards are producing poor quality at an entry level (i.e. the PHC level), these poor-quality results are filtered higher up to all levels of the DoH. It is for this reason that effective measures of improving governance and clarifying roles at this level are important as challenges thereafter

negatively impact the entire health system. It must be identified how effectiveness is affected, and how facility managers can be assisted so that their role is strengthened as it can strengthen the management systems for which they are responsible (Tabrizi & Nikjoo, 2013).

An improvement in governance is seen to be at the core to strengthening and improving the entire health system. As the evidence has suggested, if this one central component of the health system is improved, it can result in improving the performance of the other core components or 'building blocks' such as finance, human resources, information systems, medical supplies, and equipment (Sherr et al., 2013; Scott et al., 2014). It is believed that alleviating bottlenecks and issues about governance at the PHC level is crucial, as the implementation of a top-down and centrally-driven approach to governance of the whole health care system has yielded challenges and presented multifaceted tensions regarding policy implementation at the PHC level (Ross et al., 2014). One good example is that of target setting, in which numbers has been constantly formulated at higher levels, and filtered down to PHC facilities. This has created misunderstanding and exhaustion, and has demotivated managers and health care professionals as they find themselves having to implement new innovations to try and meet these inflated targets. The managers have unanswered questions as to what informs these set figures, and feel that their contribution and involvement can help in setting more realistic numbers (Ross et al., 2014).

Although it has been accepted that governance is a significant aspect that needs to be improved when strengthening the health system, most health research has focused on governance at the global and national level (Scott et al., 2014). Indeed, little emphasis has been placed on strengthening the role of health managers on how they can execute their governance function and sharpen their governance processes at the PHC level. The perspective of these managers on governance structures, procedures, and philosophies, has been seriously neglected at the PHC level (Scott et al., 2014). Their role and perceptions, as people who have been given authority and accountability regarding the implementation of health system strengthening interventions, has virtually been ignored in the health systems literature (Scott et al., 2014). This is astonishing, because the comprehensive rationale on the implementation of public policy has confirmed the significance of involving managers at the planning and execution level when talking about the implementation of governance and its issues (Scott et al., 2014).

The findings in a study conducted by Ross et al. (2014) suggested that new reform measures should foster and promote collective governance between managers at all levels. The findings further emphasised that the assessments of managers at the PHC level should be considered because they can positively contribute to the building of good relations and stronger health systems (Ross et al., 2014). Tabrizi and Nikjoo (2013), found that to improve health outcomes and the standard of health care, governance at the clinical level needs to be studied, by taking into consideration the experiences of those responsible for implementation, and examining all the barriers that lead to governance failure.

Another related finding was that governance at the clinical level is still encountering challenges that make it is difficult to execute governance functions and tasks, and that there are still insufficient resources (e.g., talent and skill) to support execution (Abd El Fatah et al., 2019).

Additionally, it is believed that leadership support programmes need to be implemented to strengthen governance (Nieuwboer et al., 2018). In a study conducted by Nieuwboer et al. (2018), leadership support programmes were seen to be essential as they helped to guide leaders in strengthening the implementation of integrated care offered at the PHC level (Nieuwboer et al., 2018). Those leaders possessing medical and other related training and qualifications, such as physicians and nurses, proved to be ideal candidates for driving the implementation of health care services (Nieuwboer et al., 2018). Hence, with proper leadership support, including organisational skills and change management training, leaders like OMs can become better managers who successfully manage the implementation of health care programmes at their clinics. (Nieuwboer et al., 2018). If leadership is invested with the aim of strengthening clinical governance, those who have been given the authority and obligation to lead, must be provided with applicable interventions and the means to strengthen and support them, instead of throwing them in the deep end without adequate management skills, and hope that they will swim (Kwedza et al., 2020).

2.6.2. Managing the health workforce

Primary health care managers are key to the provision of quality health care services. This is because these managers play an instrumental and significant role in supervising and mentoring health care personnel who are responsible for serving patients and providing health care programmes at the entry level of the health care system. These managers must ensure high performance standards are always maintained, including ensuring the wellbeing of their health care personnel (Anyangwe & Chipayeni, 2007). In other words, OMs through their health personnel are enablers for the implementation of health systems. As a result, they are responsible for the achievement of the desired health outcomes (Anyangwe & Chipayeni, 2007). Health care personnel are crucial in delivering satisfactory and quality health care programmes at the PHC level (Kumar & Khan, 2013). Yet, not much is known about the workforce structure, training, and development, as well as performance (Beaglehole & Dal Poz, 2003). There is still a need to establish whether government health departments should finance more initiatives at the PHC level, aimed at building and strengthening public health personnel (Beaglehole & Dal Poz, 2003). Research which can examine public health environment, its configuration, scope of work, size, existing talent and skills, training and development requirements, current tasks, existing performance levels, suitable roles, and occupations of the labour force, is still needed (Beaglehole & Dal Poz, 2003). The findings of this research study can play an important role in the formulation of new methodologies

to reinforce human resource management systems at the PHC level, which will eventually lead to a stronger and effective health system (Beaglehole & Dal Poz, 2003).

Human resource management is not about selecting warm bodies to fill vacancies in the organisational structure. Personnel must be qualified, and have the required PHC training and other required skills, and must also be motivated to execute their duties effectively and efficiently. This is where OMs play a significant role, especially within an inadequately-resourced staff environment where almost all staff members must expand their workload to ensure clinic targets are achieved (Kumar & Khan, 2013). Motivated and enthusiastic staff members who possess relevant PHC qualifications are an investment and create a competitive advantage for a facility. This can only be achieved with enthusiastic managers who are prepared and equipped with skills to inspire and motivate other staff members. The winning combination is inspirational, trained managers, together with motivated enthusiastic health care personnel (Budrevičiūtė et al., 2018). A competitive advantage is a set of distinctive standards and assets or capabilities which set a performing health facility apart, and place it in a better position than other competitors (Hellriegel et al., 2012). A facility which has qualified clinical nurse practitioners who are experts in all the programmes the facility offers, is more likely to provide quality outcomes. Similarly, a facility with an OM who has management and leadership training, is computer literate, with good communication skills, and driven to work hard, is more likely to head up an effective clinic, which can achieve its set targets, produce quality health programmes, yield desired health outcomes, reach all country goals and targets, and ultimately ensure a strong health system. Correspondingly, this kind of a facility manager can be an asset to the clinic and staff members they manage because of their ability to motivate staff, forming them into a loyal and committed workforce that can achieve organisational goals and view their achievement of clinic targets as an overarching accomplishment, not only for the clinic, but for the entire DoH. Such managers can convince and encourage staff members to multi-task and take on challenging work assignments. This will create a competitive advantage for that facility (Jones & George, 2009; Hellriegel et al., 2012)

Most PHC facilities, especially those located in developing countries are struggling with managers of such calibre, and yet lack skilled health workers. In addition, they continually face the challenge of being unable to rapidly train sufficient health workers to fill vacant positions. Also, the type of PHC training that is conducted is inadequate to meet the demands that the public health workforce requires. Accordingly, these challenges create a PHC environment with managers who lack management competencies, experience a shortage of clinicians due to unfilled vacancies, and are forced to employ clinicians who lack experience and specialised PHC skills. This is a recipe for failure and contributes greatly to weak health systems, since both management systems components are weak and the service delivery component is also weak. Weak health systems components are incapable of yielding positive

health outcomes, and certainly cannot lead clinics to achieving set targets (Anyangwe & Chipayeni, 2007).

Operational managers as managers of health care facilities, are responsible for controlling and managing all human resource functions, activities, and resources (Jones & George, 2009). Understanding the limitations and problems faced by managers at the PHC level is crucial to understand how effectiveness around human resource management can be achieved and maintained (Kumar & Khan, 2013). Unpacking what actions managers at this level of care have performed to mitigate and counterattack the challenges, since the environment is not enabling them to thrive, can be used as best practices and a foundation for strengthening strategies. When examined, their actions will show how being driven by task-accomplishment can benefit a manager in a work environment that is otherwise unfit to manage effectively (McAdam et al., 2019).

2.6.3. Managing finances at primary health care facilities

The availability of adequate finance and the effective control of financial resources is a determinant for success for any organisation. The same notion applies to PHC facilities. Primary health care facilities also need effective control of its finances to succeed. They must ensure that their facilities have access to adequate finance and ensure that there is effective control of their facility's budget. This in turn can not only lead to the successful execution of all clinic activities, but also result in the meeting of clinic targets (Uzochukwu et al., 2015). Unfortunately, no research has been conducted on how OMs have been involved in the management of the finances at the PHC facility level, especially in South Africa. Most research has emphasised financial management responsibility and activities within the District Health management teams. However, a study conducted by Moosa et al. (2017) in Johannesburg, which looked at the implementation of community outreach teams' programme, also showed that poor financial planning was one of the factors preventing successful implementation of this programme. Centralised financial planning proved to be a cause for unavailability of resources needed to execute the community outreach teams programme (Moosa et al., 2017). So, similar to PHCs in other African low and middle income countries, financial management must be included in the scope of work for facility or clinic managers in South Africa, to ensure that all elements of these managers' clinic's financial arrangements are in order. This can only be possible if financial planning function is decentralised (Moosa et al., 2017). A close examination of the extensive role played by OMs in the management of finances in PHC settings would help to discover where the bottlenecks are regarding health financing and financial management in general (Blecher et al., 2008). It would be grossly unfair to identify OMs as people who are holding back the implementation of health management systems and all other strengthening interventions, without first intensively examining their role in executing management functions, including that of managing and controlling their health facility's budget.

Health care finance characterises how money moves from patients to the providers of health care services in exchange for receiving health care service. In a PHC environment, health care is funded and provided to the communities through government health programmes. An excellent health care funding strategy is one which ensures that there are enough resources for the provision of health care to all those who cannot afford to pay. The PHC approach ensures that healthcare is accessible to everyone, is of high quality, and that all services and goods required for the provision of health services are available to all PHC facilities (Uzochukwu et al., 2015; Coovadia et al., 2009). To ensure accessibility and quality, health finances must be monitored and controlled to ensure that health-related MDGs and SDGs are attained. Indeed, access to quality health care services is expected is by default to be monitored by the OMs administer the PHC facilities (Uzochukwu et al., 2015).

The literature does not provide much on the role of OMs because many of the studies examined health financing at the district level. The study conducted by Blecher (2008), in South Africa showed that financial planning is done at the district level and that district management is fully responsible for the execution of this function. The study further revealed that the execution of this function at the district level had its challenges as it was not effective. It went on to suggest that district personnel responsible for managing this function needed to be supported to improve their effectiveness to execute this function effectively (Blecher et al., 2008). The District Health Expenditure Report (DHER) is utilised to understand district spending and to properly design and formulate district services and activities. The gap can be seen right there as it shows estimates and projections are done at the district level, while its implementation is at the PHC level, the function of which has already been identified as ineffective. This could be the reason many programmes and services offered at the PHC primary were found to be inadequately financed/funded (Blecher et al., 2008). The literature recommended that training should be given to PHC managers and others, to improve budgeting/planning and finance skills at the district, sub-district, and PHC level. The literature also showed that, even though sub-district and PHC managers were not involved in managing finances, the inefficiencies identified at the district level revealed that there is a need to capacitate DoH managers at all levels in financial management irrespective of whether they are involved in the execution of financial management or not.

Government departments, especially in rural areas, are struggling due to increased costs for PHC services and overall maintenance. Facilities at this level are struggling to sustain quality services as financing of all programmes is a challenge and exceeds the allocated government funding. Seeking additional help from non-government organisations (NGOs) has been endorsed (Dutta et al., 2020). It is not clear whether the financial management situation can improve if managers at the PHC level are permitted to play a certain role, or whether this role will be seen to be the right and appropriate one for them. Thus far, the recommendation has been made to investigate and implement cost-saving initiatives and the effective monitoring of finances, to improve operations and proficiencies at the PHC level

(Dutta et al., 2020). This is an approach which can slowly begin introducing OMS to financial management activities such as budget and expenditure control. These efforts support the need for investigating the involvement and role that is currently played by managers of PHC facilities in managing the finance component of the health system. Identifying the financial challenges they encounter and the activities they embark on, in the execution of their financial management function, will assist in formulating evidence-informed financial strengthening strategies and interventions.

In this regard, the South Africa Government has adopted and endorsed the implementation of the National Health Insurance (NHI) programme as another approach to increase financing for health (Fusheini & Eyles, 2016). Health care facilities are being restructured and prepared to be certified and accredited for NHI implementation. This programme is intended to bridge the quality gap between private and public facilities, and to pool monies for the provision of quality cost-effective health care services to all South Africans based on their health needs (Fusheini & Eyles, 2016). The endorsement of the NHI programme further supports the necessity to embark on implementation research and scrutinise how the finance management function can be brought closer to local managers so that they can be involved in making sure that the implementation of the NHI programme is a success, and that the NHI accreditation status acquired is maintained.

The financial management component plays a significant role in the implementation of other components. For example, the effective management of finances is needed to ensure the procurement of the resources needed to implement quality health care services, otherwise there will be a shortage of crucial supplies. Ineffectiveness in financial management can have a negative effect on the supply chain (i.e., procurement of medical supplies) and service delivery components. These three management components are linked and affect each other, and if all three are dysfunctional or ineffective, the entire primary health system is affected, as are the attainment of set targets.

2.6.4. Managing supply chain

Supply chain management can be described as the process of producing a product and then transporting it to the person who is going to use it (Mentzer et al., 2001). Sometimes, the producer will produce and send another person to deliver the product to the end-user. Supply chain management can thus be defined as a network of two or more entities (i.e., individuals or organisations) who are responsible for producing and delivering a product to an end-user (Christopher, 1992; Copper & Ellram, 1993; Mentzer et al., 2001). The process can consist of a variety of entities or individuals, such as manufacturers, buyers, distributors, and lastly consumers. Buyers and consumers are sometimes not the same because there are individuals who are employed or given the responsibility of procuring products on behalf of others (i.e., end-users or customers) (Mentzer et al., 2001; Christopher, 1992).

Supply chain management is a process of managing the movement of products or services from the manufacturer to the consumer (Kanda & Iravo, 2015). In the PHC model and environment, the supply chain is defined as the process of managing the procurement process of medicines, medical technologies, medical equipment, and other supplies from the manufacturer to the PHC facilities. This process is a very important one as health care service provision depends on usage of these medical supplies.

The OMs at the PHC level are responsible to safe guard all the supplies, technologies, and equipment under their care at the clinics. An effective and functional supply chain management process is one which can integrate, build, and maintain interrelations by using an effective information management system which interfaces logistics, sourcing and procurement, and customer relations (Kanda & Iravo, 2015).

The review of literature revealed that most PHC facilities have experienced the dilemma of having an insufficient stock of medicines, equipment, stationery, and sometimes data collection tools (Mills, 2014; Kanda & Iravo, 2015). The poor management of the supply of medicines, the insufficient training of relevant staff on supply chain management processes and principles, and the non-adherence to good pharmaceutical practice, have been ascribed to be the main causes of this dilemma (Tayob et al., 2014). Training, suitable supervision, support and mentorship of staff entrusted with the execution of supply chain management activities have been recommended as a strategy that can resolve all the challenges, errors, and shortfalls identified in supply chain management at the PHC facility level. To alleviate supply chain management challenges, some research has suggested that staff assigned to pharmaceutical duties such as dispensing of medicines, should be supported, trained, and assisted to acquire dispensing licenses (Tayob et al., 2014).

From the review of literature, there was no notable role played by OMs in performing any supply chain management functions, except the management of dispensing staff who work in PHC facilities under their supervision. Although there are many challenges such as insufficient stock and the poor management of medicines, a research study has yet to examine how OMs have been managing the supply chain in their PHC facilities.

2.6.5. Managing information at primary health care facilities

There is a belief that if PHC data can be managed effectively, PHC facilities will be able to perform at a higher level, resulting in global health systems that can accomplish worldwide health coverage (Ratcliffe et al., 2019). However, this is impossible for many countries to achieve, because their PHC services are weak and are unable to deliver on the countries' set targets. Enhancement approaches are also impossible to implement because of inadequate, questionable, and impractical data and

information, which could otherwise be used to drive and inform the development of policies and setting of priorities (Ratcliffe et al., 2019). This not only underlines the importance of correctly managing data, but it can also mean that some health facilities are performing well, but are failing to capture their data accurately and correctly.

Within the context of the health system, quality health information (in the form of statistics, numbers, reports, and narratives clarifying numbers, and other health records), is crucial for planning health programmes, and the allocation and management of health resources, including formulation of health policies, procedures, or guidelines (Feicheng, 2020). This information is needed at all health levels but more importantly at the PHC level, since that is where the initial provision of health services and referrals to sub-districts occurs (Feicheng, 2020). Quality and accurate information is also needed to assess programmes or systems (Chen et al., 2014; Feicheng, 2020).

The management of information at the PHC level is done to be able to provide detailed and meaningful health information (Adindu, 1995; Al-Jefri et al., 2018). Health information comprises of information on the wellbeing of individuals, groups of people, and the population at large. Health information also includes details of health services that are provided, as well as resources and other aspects or factors which affect health. While manual systems like registers and patient charts are used, over the years, a variety of electronic health information systems have been developed to assist with the collection, capture, and analysis of health data to produce viable health information (Adindu, 1995; Al-Jefri et al., 2018). The effective, successful, and seamless running of health care systems is reliant upon a rigorous health information system at the PHC level. Such systems enable managers to conduct an analysis of such information in the production of reports and statistics in a timely manner.

The management of health data seems to be a complex process. Looking at the role and location of data within the context of health, OMs play a very significant role in data management as all the activities occur at the PHC level. Yet, it is not known what activities the OMs perform in terms of this function. It is thus important to understand explicitly the activities they perform and the kind of supervision and management they provide for their clinic staff members.

2.6.5.1. Definition of data and information

Health information is defined as data on the diseases or illnesses that inflict patients, and the healthcare programmes that are being provided. Such information is collected, documented, sorted out, and processed into a method or arrangement that is meaningful to the persons who are receiving the resultant health information (McKenna et al., 2017). In other words, information comes from collected and captured data. Once this data has been collected, it is then analysed into meaningful information (McKenna et al., 2017; Al-Jefri et al., 2018). Comprehensibility is a distinctive quality which

differentiates data and information, because if the receiver has not understood and utilised information it remains "data" (Adindu, 1995; McKenna et al., 2017). It has been shown that different people might not comprehend or deduce the same meaning from the same analysed data that is being presented (Adindu, 1995; McKenna et al., 2017). Therefore, another definition of information can be described as the outcomes which come from a thoughtful examination and demonstration or show of data in a way that makes sense to the receiver, and is of factual worth to be used to make possible conclusions (Stoner & Freeman, 1992; Adindu, 1995; McKenna et al., 2017; Chen et al., 2018).

Information can be in the form of knowledge, a thing, or a process, and can include such things as objects, events, written text or audio, video, any form of data, or documents. In the health environment, information can be patient files, recorded symptoms of patients, different diagnoses, treatment options, disease prognoses, and many other types of information (McKenna et al., 2017; Chen et al., 2018). Information can be stored and retrieved in a systematic way or form, involving manual or electronic storage systems. For example, information can be collected from consultations and talking to patients, documented in patient files, and then produced into meaningful information through statistical analysis or narrative reports (Buckland, 1991; Chen et al., 2018). Information can be stored in some form of system, including a book, report, statistical graph or table, digital media, or in the form of a database. Much patient data is collected and captured at the PHC facility level on a daily basis. The collected data is further analysed and presented either as statistics or reports, and sent to the sub-districts for interpretation and understanding how the clinics function and perform. Statistics are also used to make important decisions, so that clinics can develop plans, policies, and guidelines, or report further up to the National office on PHC performance and the achievement of targets. Since reporting should take place at all level of health care, and PHC facility level is where most health care programmes are provided, these facilities under the management of their OMs, can capture, produce, and report on a range of rich data which they ensure is processed into meaningful information.

To ensure the standardisation of processes and accuracy of the data and that PHC facilities are collecting, capturing, and analysing the data, using the approved data collection tools, OMs must ensure that standard data collection registers and manual charts, all with the same data elements, are used by all clinicians in all districts to capture patient's data during consultations. They must make sure clinics do not run out of the correct data collection tools, in order not to miss capturing important and pertinent information at all stages of the data flow process (KZN DoH, 2013).

2.6.5.2. The importance of data and information

Data is a vital source of information (Feicheng, 2020). Both clinical data and information is a very important aspect of the health care system, as it is utilised to make essential and critical decisions

regarding programmes, treatments, medicines, staffing and other clinic resources (Feicheng, 2020). Data is also used to evaluate and measure whether the clinic is performing according to the set standards and targets, as well as to ascertain if it is providing an adequate standard of health care (Feicheng, 2020). Accordingly, there is a requirement for the accurate capturing, collection, collation, and analysis of all clinical data because inaccuracies can result in poor and incorrect decisions being made. Without the effective management of information and data at the PHC level, the entire public health system can become dysfunctional, because as an initial entry to the health system, data captured at the PHC level is what is being filtered up and reported upon to the national level (Feicheng, 2020). Planning for management of health services and patient care actions is therefore reliant on data and information that is generated locally at the PHC level. This requires OMs to have a good command of data management and analysis skills to be able to produce reliable health information about their clinics. The literature has not shown how much data management training is provided for OMs to ensure that they are adequately carrying out their role in this regard.

Primary health care data is a representation and reflection of the health and wellbeing of the population. This data also determines factors of health, determinants of health, health interventions, and organisational resources (Chen et al., 2014). Data and information that is gathered is processed and analysed to produce statistics and reports which are then used to monitor the targets and health outcomes that are met. Data is also used to monitor trends, variations, and developments in health, to make decisions, devise interventions, monitor and guard diseases progression and adverse events, so that health policy makers and leaders will be able to develop relevant health policies and frameworks (Chen et al., 2014).

Data and information are utilised during assessments and evaluations to determine those areas which need improvement, and that enable the development of quality improvement plans. Such quality improvement plans in turn help to improve quality standards and are also utilised by policy makers, senior managers, and public health funding agencies to make suitable decisions to improve and strengthen primary health. A review of the literature revealed that OMs have been called upon to ensure the implementation of quality improvement plans. This is evident in several quality improvement programmes such as Ideal Clinic and the NHI programme which are implemented at the PHC level (Chen et al., 2014; KZN DoH, 2013).

Furthermore, OMs at their level of operation, require accurate, complete information which does not have omissions or lack key details at precisely the time when it is needed. Such quality information should be available on a daily basis for OMs to be able to make informed operational decisions, track progress, assess health outcomes, allocate resources, and provide solutions to all the problems delaying the smooth execution and provision of health care at their PHC facility (Feicheng, 2020; Chen et al.,

2018). This confirms the need for the effective management of data as it is critical in an OM's job, because most problems must be addressed daily. Hence, if there is incomplete, inaccurate, or delayed information, many things can go wrong, tragedies can take place, which will be too late to resolve (Chen et al., 2018). A perfect example is if a pregnant woman comes to a PHC facility and the information on the woman's chart on her due date is not captured, there is no staff member with midwifery or obstetrics skills on site as they are all attending off-site training, that pregnant women might not receive relevant or appropriate care, which could lead to the death of the baby and the mother, due to errors and omissions in the data and poor planning.

The literature has shown examples of countless barriers and challenges encountered in South Africa and many developed and developing countries with respect to the implementation of information management systems in PHC facilities (Afrizal et al., 2019). Some of these barriers are caused by too many patients which are seen or served by nurses in consultation rooms every day. Secondly, nurses experience too heavy workload because they must see or serve so many patients per day, which results in nurses focusing more on treating patients and omitting to fill in registers. In some cases, nurses choose not to fill-in the registers and patient's charts during consultations, to save time and see as many patients as possible. Another challenge is that some PHC facilities lack the personnel or clinicians who possess information technology skills to implement certain information management systems because they are installed without the proper staff training on how to use these systems. Some systems require network or internet connectivity to function effectively, and most facilities in the rural areas either do not have connectivity to the internet, or connectivity is unreliable. The issue of the non-availability of electricity also negatively affects the functioning of information management systems. Some clinics depend on one or two staff members who have knowledge of operating the information management system, and if that person is on annual or sick leave, the capturing of data in the system comes to a halt (Afrizal et al., 2019). Although these challenges do not seem to be directly linked to actual management functions, it is impossible to establish from this study how they directly affect the activities that are performed by OMs daily.

Lack of information technology infrastructure has also been identified as a serious challenge. Some systems are developed for overall implementation across all facilities, but budgets are only sufficient to procure a few machines for a limited or select number of facilities. When implementation commences, only a few facilities have systems available. Other facilities will continue to use either manual or locally created spreadsheets. This can result in the failure to implement the entire system, as the capturing and collating from different systems is not easy. The lack of staff training (i.e., users of the system) is also a problem. Sometimes a new information system is adopted and purchased, but training is only provided to sub-district and district staff members with the hope that they will train PHC staff members who use the system. Implementation of the system resumes when none of the PHC staff have been

trained by district or sub-district staff members. Nevertheless, PHC staff are still expected to implement the new system. The study should be able to reveal how all these information technology-related challenges affect the efforts of OMs when trying to execute their data management function (Afrizal et al., 2019).

2.6.6. Managing service delivery

The management of service delivery entails the management, supervision, implementation, or provision of health care programmes. Possessing extensive training and experience of working as nurses, OMs supervise and mentor clinical staff that are employed to offer health care programmes. Primary health care facilities offer a variety of health care programmes, such as the treatment of chronic diseases like HIV/AIDs; diabetes; high blood pressure; immunisation against childhood illnesses; counselling; maternal-child health and family planning; nutrition; youth programmes; school programmes; prevention of endemic diseases; health education; provision of medical care and treatment of any other disease (Coovadia et al., 2009). There has been an overwhelming world-wide concern, interest, and determination to strengthen the entire health system in developing and under-developed countries (Scott et al., 2014; Hirschhorn et al., 2019). This determination was and is still aimed at improving and strengthening service delivery. As the literature has shown, with improved service delivery, quality health care can be provided, resulting in health outcomes also improving (Scott et al., 2014; Davis et al., 2008). All strengthening interventions are aimed at improving the core services at PHC facilities in their delivery of quality health care. Since service delivery is a component within the health system, and it exists and depends on other components, a partnership approach to strengthening service delivery and other management components was designed to lead to improvements in all six, health system 'building blocks' identified by the WHO (Davis et al., 2008; Chan, 2007).

Other research has indicated that in South Africa, the quality of health care services provided by PHC facilities is still poor (Coovadia et al., 2009; Hirschhorn et al., 2019). This is caused by many systemic challenges which are found within all components of the health system. These challenges have continued to impede the success of service delivery research and strengthening interventions that have been implemented since the inception of PHC (Maphumulo & Bhengu, 2019). A variety of evaluation and analysis programmes have been introduced, followed by the formulation of quality improvement plans. While these plans were piloted, customised, and then implemented in both rural and urban PHC facilities, they were unable to yield the expected level of quality service delivery (Maphumulo & Bhengu, 2019). The endorsement, adoption, and implementation of National Core Standards (NCS), by the National Department of Health is one of the initiatives being utilised to prepare PHC facilities to improve the quality of health care programmes being offered at this level. National Core Standards is a programme which reviews and addresses inaccuracies, bottlenecks, and disturbances in the process of

the delivery of health care to improve their effectiveness, efficiency, and quality (Maphumulo & Bhengu, 2019). Surprisingly, even after all these efforts, the outcomes remain unfavourable, with the standard of quality health services remaining a major problem at the PHC level (Maphumulo & Bhengu, 2019). This problem has been directly associated with poor management practices by PHC facility operational managers, since they are expected to supervise and mentor clinical staff members who are providing health care programmes on a daily basis at their facilities. The literature has not provided solutions on how OMs at PHC facilities can improve their management and supervision tasks. It has also not been established how these OMs have been involved in the management of service delivery, and what they have been doing to alleviate the burdens caused by the challenges they face.

2.7. CHALLENGES IN PRIMARY HEALTH CARE

Public health has been revitalised into an organised, cohesive system which offers a wide-ranging health care service to the communities across the country. However, leadership, supervision, and a weak management system is still a challenge, resulting in the ineffective implementation of policies which were devised to meet the health department's goals and objectives (Coovadia et al., 2009; Malakoane et al., 2020). Primary health care facilities as a point of entry, are an important focus as they are susceptible to a variety of challenges. All the patients approach the PHC facilities when they need healthcare services.

Management and health practitioners in PHC facilities are faced by a wide range of challenges. These range from regulatory policies, social norms, credentialing, changing levels of evidence to support interventions, commercial pressures, incorrect assumptions about health, conflict of interests, as well as inadequate education and training (Swanson et al., 2012). Poor communication, consultations, and poor leadership and planning, are some of the challenges that were identified to not only affect health management systems, but also have a negative effect on the integration of services and the quality of services being offered at the PHC level (Moosa et al., 2017).

2.7.1. Weak and fragmented health system

Although there is sufficient funding for health in South Africa, the country has a fragmented health care system, with public PHC facilities still offering poor quality health programmes, poor access to these health programmes, and challenges and problems associated with health management systems. Strengthening PHC has not been easy since the scope of the challenges experienced is widespread and multifaceted, ranging across all components of the health system. Secondly, some of the challenges are infrastructure-related, which means addressing such challenges will require a complete relocation of the facility. Thirdly, some of the challenges were not financially supported by the scope of

strengthening programmes from funders, or they were not priorities in terms of the strengthening policies. Previously, the strengthening interventions were focused on reinforcing and perfecting health programmes, but the desired outcomes and targets were not met. The reform of strengthening management systems is still believed to be the solution in yielding the desired results and meeting targets. Again, most research has tried to identify implementation challenges and strengthening PHC, conducted at the district, sub-district, and provincial level. The results have shown this to be a significant mistake, because this is not where the implementation is happening. Instead, it has been identified that the PHC level, together with the OMs who are driving implementation, should not have been neglected, since this is where the actual implementation occurs. Primary health care thus remains weak and further research needs to be conducted to strengthen the health system by looking at the role played by OMs at these facilities (Bailie et al., 2013; Coovadia et al., 2009; Kumar et al., 2014; Ruff et al., 2011; Mills, 2014; Ratcliffe et al., 2019; Espinosa-González et al., 2019; Bailie et al., 2013; Marten et al., 2014).

The fragmented health system at the PHC level include all the management components which are linked with to the six components or 'building blocks' of the WHO health system framework. These six components make the health system more complex, requiring OMs to look at the PHC system in terms of a systems approach. No component can be looked at a single entity. OMs must view all the management systems as being important and related, as together they form the context within which they must manage. It is the complexity of the components which brings a variety of challenges which in essence include the facility manager's style of managing and controlling; the tasks to be accomplished; the relationships between staff at PHC facilities; the relationship between management components and the overall PHC environment. All these factors influence the effectiveness of management provided by OMs, and ultimately the effectiveness of management systems (Waters, 2013; McAdam et al., 2019).

2.7.2. Shortage of staff

Primary health care remains in a dire situation as there is a critical and widespread shortage of clinical staff. This in turn affects how OMs allocate tasks and responsibilities, as well as other facets of the health system (Coovadia et al., 2009). OMs have to deal with this challenge on a daily basis as and when patients flock into the clinics expecting to be assisted, no matter whether there are enough staff members to provide all the needed services or not. The shortage and poor distribution of appropriately qualified staff at the PHC level – especially in rural areas – has been identified as one of the major challenges hindering the success and provision of quality health care service in many PHC facilities. The shortage of staff disturbs effective planning and the fair distribution of staff resources as OMs find themselves grappling with the bare minimum that they have, trying to ensure that the provision of health

care services is not affected or halted (Mills, 2014; Marten et al., 2014). In developing countries like South Africa, healthcare workers and professional health care professionals are disproportionately disseminated. Many qualified staff members choose to work in urban and semi-urban areas, while rural located PHC facilities have many unfilled vacancies and larger populations to serve (Mash et al., 2013). This has contributed to high levels of dissatisfaction and demotivation among all staff members employed at PHC facilities. Demotivated staff requires OMs to conduct a lot of encouragement and motivational actions to persuade staff to fill in the gaps (Kumar et al., 2014). The literature revealed that interventions such as training community health care workers to treat common illnesses, and increasing allowances for those practitioners who chose to work in remote areas were suggested as possible solutions. This was done to equip them with extensive nursing skills which they can utilise when asked to assist during times of need (Mills, 2014; Marten et al., 2014).

A study conducted by Shihundla (2016), found that the unavailability of essential staff members, such as clinicians or health care professionals, intensifies the workload of other nurses in such a way that these nurses find themselves having to do more work than what is expected from them according to their job descriptions and workload calculations (Shihundla et al., 2016; Chabikuli et al., 2005). The expectation for nurses in PHC facilities to provide a variety of programmes, with this notion of offering comprehensive health services on a daily basis as an obligation and commitment by the National DoH in South Africa is difficult for OMs to manage. There is also a limit on how far OMs can push staff members to step in and assist to implement these comprehensive health care services when there are too many unfilled essential vacancies. Also, OMs must strike a balance to maintain harmony so that staff members who are asked to take on an extra work load do not feel like they are being mistreated as employees. Pushing staff members to take on extra workloads can give the impression that OMs are insincere and this can seriously affect relations between the facility managers and staff members within the clinic (Shihundla et al., 2016).

An examination of the literature has revealed that since PHC facilities are often portrayed as local hospitals in miniature, they are expected to be ‘one-stop shops’ for all PHC programmes; yet surprisingly, staffing resources are not treated as a priority. These two issues should be prioritised so that OMs do not find themselves not find themselves overwhelmed by an abundance of patients coming to their clinics, without an adequate compliment of staff members to deliver services. Most facilities have unfilled vacancies as most posts were frozen and have remained unfilled for the longest time after staff resign. The unavailability of staffing budgets for PHC has been cited as a problem and cause for the freezing of unfilled vacancies. The question remains as to why staffing budgets are often reallocated elsewhere when a staff member resigns (Shihundla et al., 2016). Chabikuli et al. (2005) confirm that the insufficient production or training of nurses contributes to the shortage of suitably qualified staff, with the DoH failing to meet the demand by PHC facilities. Staff shortages are also caused by migration

as more nurses relocate to other countries seeking greener pastures, thereby negatively affecting the PHC facilities by increasing the workload of a depleted staff compliment. Efforts should be directed to make the working environment more stimulating and fulfilling at the PHC level, inducing nurses to stay, as monetary rewards alone are insufficient to sustain them as these kinds of interventions are not guaranteed to create the intention to stay (Chabikuli et al., 2005). It is important to find out how OMs can make the working environment more stimulating and fulfilling, when they have such staff shortages, as well as large numbers of demotivated staff members. It is not known what interventions or actions can be performed by OMs to motivate their staff members, if the challenge of the widespread shortage of staff remains a problem.

2.7.3. Increased workload and over-time

The shortage of staff because of the unavailability of essential staff with required skills, or due to the freezing of unfilled positions has inevitably led to an increased workload for remaining nursing staff, or health care professionals. It has also added to the daily worries of the OMs. This cannot be ignored because according to the literature, an increased workload can lead to nurses not being able to finish their work during working hours and they end up having to work overtime. Too much overtime at some point requires operational managers at the PHC facility level to monitor closely how staff feel, and carefully assess if they can cope with the increased workloads, while also monitoring the extra hours worked in terms of overtime, to ensure that affected personnel are given time to recoup and rest. The PHC facility managers must also ensure that the hours worked are within the stipulated hours for each individual employee, and in-line with the Basic Conditions of Employment Act [No. 75 of 1997] (Mash et al., 2013). An increased workload also causes nurses to miss their breaktimes, which is not healthy for their wellbeing as they have to take in extra workload to try to fill in positions when other staff members are on leave (Mash et al., 2013). Research has shown that staff members surveyed confirmed that when their workload was increased, they felt pressured, tired, and burned out. There was a lack of harmony and synergy between staff members, and no undivided attention was given to patients during consultation (Mash et al., 2013). The literature further confirms that the effects of an increased workload indirectly affect patients as clinicians fail to dedicate enough time to them and end up providing a rushed and poor health care service.

2.7.4. Too many data collection tools

Data collection tools are the means for OMs to collect data used to analyse and provide accurate meaningful health information regarding their PHC facilities. The OMs supervise and monitor the nurses in their facilities, ensuring that while in the process of consulting, making a correct diagnosis and treating their patients, they complete all relevant documents, patient charts, books, and forms

(Shihundla et al., 2016). The DoH has developed a variety of data collection tools where information related to patient information, illness, and other data elements are recorded to ensure that the department can analyse the resultant health data. Some data is captured and recorded manually, while some is recorded electronically on different information management systems. Some data collection tools require a duplication of work, whereby the same information must be filled in on several forms. This duplication in work affects the quality of care, as nurses spend a lot of time filling in the same information on patient's charts, instead of serving their patients. While all this data must be captured accurately, completely, and timeously, to ensure effective collation and analysis of data, this created additional administration work for the nurses and dramatically increased their workload and consultation times (Shihundla et al., 2016; Adindu, 1995). Accordingly, there is a need to identify interventions to help lessen this administrative burden upon the OMs and nursing staff.

2.7.5. Demotivation and work-related stress

Demotivation and work-related stress can be caused by a variety of factors. For example, an increased workload due to staff shortages and the duplication of data collection tools contributes to a demotivated and stressed workforce within PHC facilities. A demotivated workforce changes the setting and contributes to a culture of laziness. Managing a demotivated staff compliment requires a lot of additional effort on the part of OMs of PHC facilities to try and implement staff motivational activities. This takes away valuable time from their other core management functions. A demotivated work force will not be interested in taking on challenging tasks or giving input and suggestions when required to do so (Dugani et al., 2018; Shihundla et al., 2016).

Within the literature, many nurses confirmed that the duplication in data collection tools was the cause of much stress. Nurses reported that sometimes they would decide to complete the registers and patient charts late after work, during their spare time when they had finished their shift. All this led to an inaccurate and ineffective management of data and the production of inaccurate information like statistics and reports. All this affected health information and reporting (Shihundla et al., 2016; Adindu, 1995). All these factors contributed to fatigue, work-related stress, and demotivation. Demotivated and staff members with fatigue tend to make mistakes at work.

2.7.6. Lack of management, supervision, and support for OMs

According to Mills (2014), the lack of sub-district personnel to provide programme management, supportive supervision, and technical guidance to OMs, are some of the challenges experienced by managers in PHC facilities. Supervision that is provided to OMs in PHC facilities is inadequate and does not help these managers resolve challenges and improve the way they perform their management functions. Mills (2014) acknowledges that there is a requirement for strengthening management,

mentorship, and supervision for OMs. The literature recommends the provision or implementation of management training reforms for OMs of PHC facilities to improve their management capabilities and equip them with the necessary skills to succeed in implementing management functions at the PHC level. Such training reforms are believed will aid both management components and the delivery of services (Mills, 2014).

Another study by Serapelwane and Manyedi (2020) conducted in South Africa, also confirmed that unlike the developed world, OMs of PHC facilities in South Africa face the challenge of the absence of supportive supervision (Serapelwane & Manyedi, 2020). The supervision provided to OMs by officials was found to lack emotional support and characterised by attributing blame and belittling remarks, lacked positive feedback, and failed to provide solutions (Serapelwane & Manyedi, 2020). This issue has had a detrimental effect on the management of PHC facilities. Recognising this failure, the WHO has suggested that OMs need all the support they can get to ensure the implementation of high-quality health care services to fight the burden of disease (Serapelwane & Manyedi, 2020; WHO, 2017).

In other developing countries, such as Nigeria, Kenya and Egypt, the supervision of OMs or PHC managers, was also found to be non-supportive and irregular (Roomaney et al., 2017). Those who supported them would not come when needed, or would not even keep supervisory visit appointment time frames. Not knowing whether the mentors will come as planned made these OMs lose hope, as were engulfed by pressing problems that needed their urgent solution. Positively, it has led many managers to be self-reliant and innovative, devising their own solutions to tackle the challenges in their clinics. They understand their work environment is demanding, but without immediate support. The study also showed that when supervisors eventually visited the OMs, they would act like superintendents, by focusing on fault-finding without providing solutions on identified or reported problems (Roomaney et al., 2017). Identifying current challenges in the KZN DoH, uMkhanyakude Health District will help find solutions for those affected OMs in executing their management tasks. It will also provide answers as to how they have tackled challenges in the past, and whether they have encountered any supervision challenges.

2.7.7. Insubordination

The lack of respect and disregard for the authority of health managers by lower-level employees, was another challenge which research has shown hinders performance at the PHC level, in a study conducted in India (Kumar et al., 2014). In study conducted in Norway, it was discovered that the defiant attitude shown by lower-level employees, perpetuated fear and lack of self-confidence and drive from the managers, and worsened the situation. Managers were found to be hesitant and indecisive to assert their authority and role as a leader and manager (Spehar et al., 2017). This was caused by self-doubt, fear,

and lack of management skills. Accordingly, managers at the PHC facility level felt they required training in leadership to improve and strengthen their leadership and decision-making skills, thereby boosting their confidence to lead (Spehar et al., 2017). Sometimes, the lack of respect from staff comes because of a manager not displaying confidence in making decisions and and/or in failing to assert authority. If staff members sense a manager is in doubt and not sure of what needs to be done, they do not show their respect. The way a manager displays self-confidence and advanced knowledge of a tasks, can be the means of earning respect.

A further study conducted in South Africa supported the literature in showing that fear or inability to assert authority by managers in PHC facilities could be caused by not having management capabilities and skills and by not receiving efficient and effective support from their own managers (Chabikuli et al., 2005).

2.7.8. Poor information management systems

The findings in the study conducted by Afrizal et al., (2019) in South Tangerang District in Indonesia, showed that the implementation of systems can be affected by many other factors that might not seem or thought to be related to data or information, but are due to poor interrelations between these different functions, resulting in the unsuccessful implementation of a system (Afrizal et al., 2019). The interrelationships between management systems, staff members, relevant management styles, and the environment in which a manager is managing has an ability to cause and maintain effectiveness in all management systems, and therefore the attainment of good results or set targets. It is thus possible, that if one or other functions are dysfunctional and have challenges, they have the probability to affect other different functions within an organisation, since different functions within an organisation are interrelated and interconnected. If a nurse is not trained on how to capture information accurately into a system after providing health care, the nurse may capture the wrong or insufficient information. This will result in the quality of care provided not appearing in the system, which will directly affect targets by being recorded as being of poor quality or not provided at all (Afrizal et al., 2019).

Lack of information management training for health managers at the PHC level was identified to be a problem. Although deemed essential, it was not supported due to lack of policy and resources. More suitable training programmes on information management training should be scheduled and directed to the identified managers at this level. This will provide managers with appropriate skills and understanding, as well as improve their attitude and approach in applying and executing their duties. These programmes also can support and strengthen the execution of information management functions, thereby improving the distribution of health information and strengthening the entire health system (Adindu, 1995; Mutale et al., 2013b; WHO, 2017).

2.7.9. Centralisation of decision-making

The centralisation of key decision-making at the national, provincial, district and sub-district level, while the actual implementation and access to the health system should be at the PHC facility level is one of the challenges that has proven to contribute to ineffective management systems, resulting in a weak health system at the point of entry (Mash et al., 2013); (Moosa et al., 2017). Managers at the operational level felt like they were left out, their inputs and suggestions not being sought or incorporated in the sub-district plans. These same OMs were however held responsible when things went wrong or not according to district and sub-district plans. The study conducted by Mash et al. (2013) in some of the PHC facilities in Cape Town confirmed that the top-down decision approach is a challenge (Mash et al., 2013). Managers at the PHC facility level felt little sense of control and lack of desire to take responsibility when things go wrong. One example they gave was they felt it was unfair to hold them responsible for quality service and the non-availability of resources when they have almost no control on the work that is done by service providers. There is a call for collective decision-making and delegation of power to OMs so that they can check progress, follow-up and take ownership when things do not go according to plans (Mash et al., 2013). Centralised planning which is not customised to district needs is also a major problem.

2.7.10. Inadequate funding for PHC facilities

Research on health care financing has indicated that most PHC facilities are under-funded (Blecher et al., 2008; Uzochukwu et al., 2015; Dutta et al., 2020). This problem is even more acute in PHC facilities located in low income, developing rural regions such as the KZN DoH, uMkhanyakude Health District. Government-funded programmes are in many cases insufficient to serve all the communities in need of PHC services. If there is no funding for human resources to implement health programmes for the communities, OMs must find ways to enable their staff members to multi-task and work in different programmes. Operational managers do this because of the knowledge and understanding of their work environment. They understand the DoH is inadequately funded, but programmes are still expected to be offered to patients. Hence, they encourage their staff members to multi-task to address the challenges and conditions they find themselves under so that they can implement all the activities they are expected to perform as clinics. Such task-oriented managers do not believe in making excuses, but rather embark on getting the job done. This present study will look at how OMs have improvised in order to get activities done and to accomplish targets.

Local and international NGOs and other health funding agencies like PEPFAR, the UN, and the WHO have for many years extended their support to health departments in under-developed and developing countries, but this has not been enough to sustain some of the programmes, or to expand the reach of

health care services to rural communities (Dutta et al., 2020). The support they have offered has been two-fold: (i) Support for programme implementation and provision of health care services, and (ii) strengthening interventions to health care institutions. Nevertheless, rural-based PHC facilities still struggle to finance all their programmes. The lack of funding unfortunately has contributed to other challenges such as shortage of staff as there is no money to pay salaries for some personnel. The shortage of staff is a contributor to many other related, identified problems like increased workload, poor quality health care, fatigue, and stress on remaining personnel, to the point where some staff members have chosen to leave inadequately staffed facilities, thereby exacerbating the problem (Dutta et al., 2020; Mash et al., 2013; Shihundla et al., 2016). It is therefore necessary to examine how far OMs have gone, and how much they have sacrificed to successfully implement their managerial functions at the KZN DoH, uMkhanyakude Health District PHC facilities.

2.8. SUCCESSES IN PHC FACILITIES

According to the literature, success in PHC facilities is largely dependent on collaboration between management, PHC staff and other key stakeholders within which these facilities are situated. These two groups need to have same shared vision and develop systems thinking at the primary level. This means setting common goals and targets with patients, NGOs, other government organisations, and other relevant stakeholders (Swanson et al., 2012). Collaborative participation makes it possible to keep everyone informed and engaged with all the current challenges faced. There is also a need for the creation of learning organisations that will work together continually to create a common future goal (Swanson et al., 2012).

Weak health systems in PHC, are attributed to poor health management systems at these levels, and on managers at these PHC facilities have been managing. The management of PHC facilities is an essential link to achieving improved health systems performance. These managers need appropriate management training to better understand that their operations are interconnected systems which focus on the facility level and service-sector indicators, rather than vertical isolated indicators of disease-specific programmes (Sherr et al., 2013). Strengthening management capacity at this level requires carrying out operations research that will guide integration and management systems strengthening and viewing each component as important and dependant on each other, such that if one management component is ineffective, it will influence other management components within the PHC environment.

As the literature has shown, a major challenge has been the shortage of staff. Correspondingly, several strategies on task-shifting, increased training, and development, as well as sourcing local private sector resources, has been implemented to tackle this challenge (Marten et al., 2014). While the research findings have identified staff shortages as a major problem in PHC, and strategies have been

recommended and some implemented, contemporary studies continue to highlight this to be a challenge. Different approaches to implementing interventions addressing the shortage of staff need to be explored.

An analysis of the literature has shown that several studies have been conducted on aspects of PHC policy, the health workforce, and financing of health services within the PHC system (Bitton et al., 2019). However, there is a gap in the research, concerning the lack of evidence on implementation of findings and customising recommended approaches and interventions to different PHC environments. Moreover, the management and execution aspects at the PHC facility level, including actual evidence on management systems and movement of finances to strengthen and improve facility management an services delivery, still remain under-researched (Bitton et al., 2019). There is not much evidence examining all remaining components of the health care system at the PHC level.

2.9. STRATEGIES TO IMPROVE CHALLENGES AT PHC LEVEL

A variety of reforms and strategies have been directed towards capacitating skills of management at the district and sub-district level. This is obviously due to the delegation of decision-making functions from provincial to district, and district to sub-district level (Marten et al., 2014). In supporting calls for the delegation of decision-making, the study conducted by Moosa (2017) asserted that decentralisation is important in reviving and strengthening the management system at the PHC level (Moosa et al., 2017). Weak health systems and non-attainment of health outcomes requires a multifaceted system-thinking methodology, which recognises all the management components as essential to overhauling the entire health system (Moosa et al., 2017). Managers in local PHC facilities need to be practical in their management approaches, anticipate problems to improve local priorities, and must be involved in most of the decisions made (Moosa et al., 2017; Mash et al., 2013). However, it is not known whether PHC managers have the necessary management skills and capabilities. It is also not known how the PHC environment has affected the management styles of these managers. It is also not known if the effectiveness of management components can be affected by the management styles and relations between PHC staff and OMs.

The challenges identified in the literature have led to the development and implementation of a variety of strategies and interventions to strengthen all components of the health system. The health workforce at the PHC level is in great difficulty due to the shortage of staff (Anyangwe & Chipayeni, 2007). The health workforce shortage can be improved by removing all obstacles that hinder the professional training of PHC professionals so that there will be a pool of staff available to fill vacant position as and when they become available (Anyangwe &Chipayeni, 2007).

The decentralisation of management processes to the sub-district and PHC level has been recommended to improve efficiency and fast-track innovation initiatives. Equally, the research has demonstrated that a supportive work environment and managerial support, including the development of management capabilities should be provided to the OMs employed at the PHC levels of the health system (Fusheini & Eyles, 2016). Training on traditional management functions, management philosophies, as well as problem-solving training should be provided to build their management capabilities and confidence (Fusheini & Eyles, 2016).

2.10. CHAPTER SUMMARY

The health system has evolved in both the developing and developed world. Accordingly, the adoption of the PHC approach to health service provision was endorsed by the democratically-elected government of South Africa. The adoption of the PHC approach resulted in countries establishing the district health system and District Management Teams. All this led to the decentralisation of decision-making and management functions to the district and sub-district levels, while implementation remained at the PHC level with OMs instantly becoming drivers of an effective and efficient health system.

One major concern is the weak and fragmented health system which has resulted in the non-attainment of health-related MDG goals, as well as succeeding health-related SDGs, and related universal health coverage. The challenges identified ranged from staff shortages, lack of supervision and support for OMs, increased workloads, poor management of data and information, poor service delivery, and centralised decision-making. This shows that PHC facilities have some significant facility-wide problems. It was emphasised that managers at this level should prioritise the management of work in the facilities, policy and decision making, management of the health workforce, and management of patients.

Although funding has been made available and research has been conducted, most interventions implemented at the PHC level have been focused on strengthening health systems through strengthening the provision of health care services. The few studies that investigated health management systems focused their attention on the district and hospital level, and investigated the areas of leadership and governance. The findings of these studies clearly advocated for the need to include managers at the PHC level in all decision-making.

None of the studies however examined how other components like finance, human resources, supply of medicines, and information can be strengthened at the PHC level. This gap in the literature supports the need for further studies to examine the perspectives of OMs and the role they play when executing

their management function, the challenges they face, and how they improvise to mitigate and tackle those challenges. This will enable the formulation of evidence-based strengthening approaches on how health management systems can be improved, which in turn will result in strengthening the entire health system.

The study conducted by Hirschhorn et al., (2019) confirmed that research in low income and developing countries should prioritise implementation research and advocated that PHC research concerning these countries should be conducted and steered by researchers in those countries (Hirschhorn et al., 2019).

What the literature has failed to do, is to show how the role that facility managers play in executing all management systems leads to success. This is because it has not been examined how facility managers have been involved in managing and executing all management functions within all components of the health system at the PHC level. The literature has also not shown how the challenges within the management systems create an environment which is unfavourable for facility managers, including how such an unfavourable environment at the PHC level has the potential to impact the effectiveness of facility managers. The interaction between management components has also not been shown. In recognising this gap in the research, this study will show how management systems are related and dependent upon each other for success. It will also be shown how the management systems components exist within or create an environment in which facility managers must lead to accomplish their tasks and clinic targets. In addition, the way that facility managers manage and act will be examined, together with how it affects relations between staff members at the PHC facilities and the accomplishment of tasks.

The next chapter will discuss the theoretical framework underpinning the present study.

Chapter 3: Theoretical Framework

3.1. INTRODUCTION

This chapter discusses the chosen theoretical framework, where General System theory (GST) and Contingency theory (CT) will be used as theories that underpin this research project. The World Health Organisation (WHO) has recommended that a systems thinking approach should be adopted to address all challenges that weaken the health system, since most of these challenges are continually changing, are intricate, and are often from the external environment (Bailie et al., 2013). General System theory will be evaluated in relation to the WHO conceptual framework of the health system. The WHO conceptual framework, General Systems theory, and Contingency theory provide a broad theoretical lens that will be used to support this study.

In this chapter, all the components of the WHO health system will be analysed, and definitions as well as descriptions of General System theory and Contingency theory will be provided. This study aims to test and show that the health system is a complex issue with all its components (management systems) interconnected and interrelated, functioning as a system. The interdependency of the components (management systems) of the health system will be shown to influence the entire health system. It will also be demonstrated how Contingency theory impacts on how OMs execute their management functions under the PHC environment which is filled with barriers and challenges.

3.2. THE WORLD HEALTH ORGANISATION'S CONCEPTUAL FRAMEWORK

The main goal of the WHO conceptual framework serves to promote a common understanding of the definition of the health system, including what constitutes the strengthening of a health system. Consequently, a health systems framework was formulated and described health systems as a system which comprises of service delivery, information, financing, medicines and technologies, human resources, leadership, and governance. System theory has been linked to the WHO's "Framework for Action" which formulated the concept of the six core components or 'building blocks' of the health system. While this concept seeks to simplify critical functions of a health system (Chan, 2007), the WHO understands that the six core components are interrelated and all need to be strengthened if an effective health system is to be achieved (Chan, 2007). The six components all play a key role towards ensuring an effective health system as well as achieving desired health outcomes, therefore strengthening interventions should be focused on all six components (Chan, 2007).

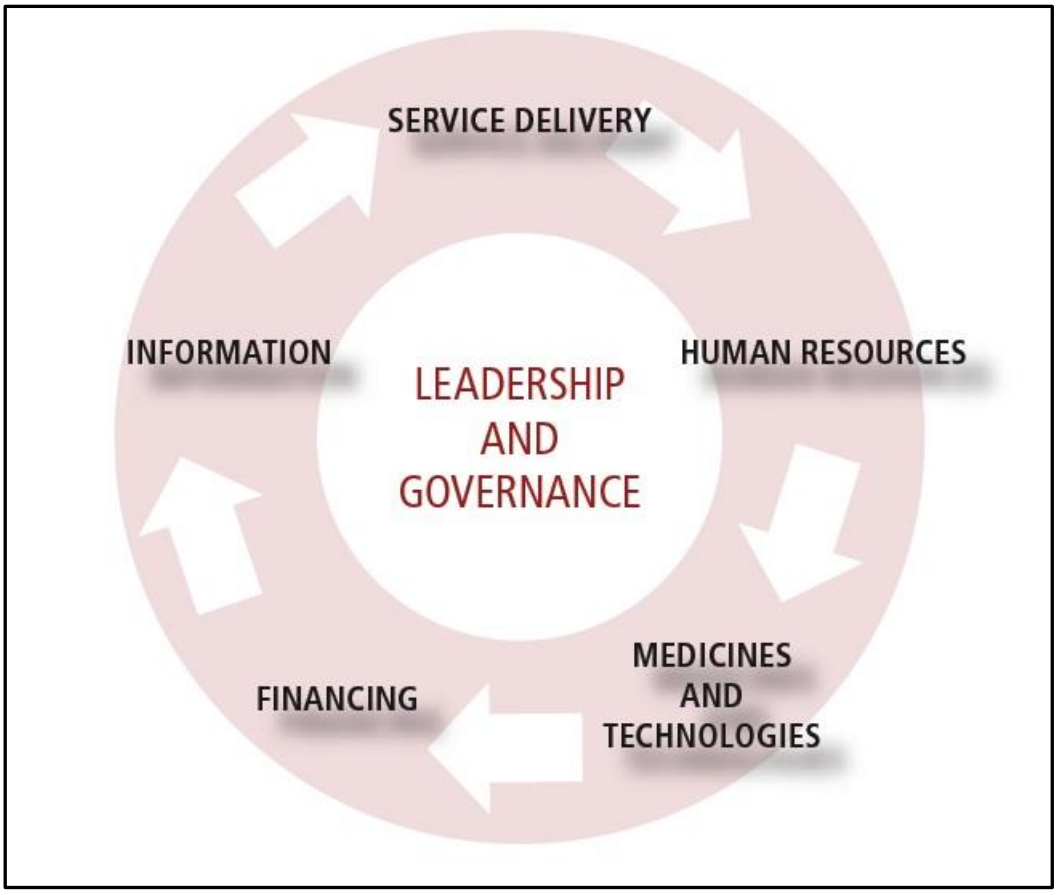

Figure 3.1. The six core components of the WHO health system

Source: Chan (2007: 5)

Figure 3.1 illustrates the six core components or 'building blocks' of the WHO health system, and include: health work force, drug supply, health financing, information systems, service delivery, governance and leadership (Chan, 2007: 5). All these six core components work together to achieve an effective health system. They are each connected and interrelated. As in General System theory, a change in one component of the health system, can affect other components. Improvements or strengthening should be applied to all six components because each contribute to the successful functioning of the other in achieving the desired health outcomes (Chan, 2007).

This study aims to test and show that a strengthened, effective, and stronger health system can be achieved through the implementation of a General System approach. The strengthening method should entail building and reinforcing the capability of the entire system by making sure that all six components of the health system are strong, effective, and cohesive, and are not fragmented.

3.2.1. Leadership and governance

The central, most critical, and complex component of the health system is that of leadership and governance. This component or 'building block' is the direct and full responsibility of OMs at the PHC facility level. Operational managers must provide oversight, and ensure the implementation of all strategic policy frameworks at the PHC level of operation. They need to build relationships, enable the implementation of approved and appropriate regulations, and ensure accountability. Operational managers must also be accountable for the implementation of the other five key components because the successful implementation of these five is dependent on the successful implementation of the leadership and governance component (Chan, 2007).

3.2.2. Human resources

The availability of a qualified, skilled, and motivated health workforce is what health care facilities require at all levels. In particular, the requirement for such personnel is high at PHC facilities as these represent an entry to the health system. Many patients initially visit PHC facilities, even if they subsequently need to be transferred to sub-districts/hospitals. An effective PHC facility is the one that is adequately staffed with healthcare professionals who have the capacity to deliver all programmes that are being offered. These are highly performing personnel who are committed to providing quality healthcare services, are approachable, with good attitudes, and the desire to achieve supreme health outcomes, and possess the skills and competencies to attend to any type of patient (Chan, 2007).

3.2.3. Medicines and technologies

An effective and fully-functioning health system requires a functional supply chain system that will ensure PHC facilities have continuous access to all needed and critical medical supplies, equipment, technologies, stationery, medicines, and all healthcare products. These supplies must be obtained in a timely fashion, be of good quality, and at lower costs. In addition, procurement systems must be robust to ensure there are no delays, so that the PHC facility do not receive medical supplies and technologies with wrong specifications, expired medicines, dysfunctional, or broken equipment. Such supplies are essential for delivering quality service delivery and allowing healthcare professionals to provide high quality healthcare services without worrying about the unavailability of stock and equipment (Chan, 2007).

3.2.4. Financing

Funding for the DoH is crucial for communities to be able to receive all the healthcare services they require. Because of shortfalls in the healthcare budget, the DoH approaches many funding agencies,

NGOs, and other sponsors for healthcare funding to supplement the health budget that is received from government. This is because of the many South Africans from disadvantaged communities who cannot afford private health care or even pay for government healthcare services, and implicitly rely on the free PHC services provided by government. There should be adequate funding to hire a skilled and professional health workforce and procure all medicines and technologies required to deliver healthcare services to the communities (Chan, 2007).

3.2.5. Information

Health information and data is essential for making critical health decisions. Information and data are collected and analysed to produce meaningful information and statistics to be able make financial decisions, staffing decisions, assess the quantity of medicines and supplies that are needed, and when they are needed, as well as assess and evaluate if health outcomes and targets are being accomplished. Such information must be timely, accurate, and reliable, to ensure that precise and effective decisions are made. The information from PHC facilities is essential as this is what is conveyed higher up to the provincial and national level (Chan, 2007).

3.2.6. Service delivery

Service delivery is the core business function of the DoH. The delivery of healthcare services is the reason PHC facilities are built and located close to the local communities they serve, thereby ensuring easy access. The PHC facilities have a duty to provide effective, safe, and quality health care programmes that are accessible to all. These healthcare services must be available as and when they are needed, including facilities that provide 24/7 support. To accomplish this task, OMs need adequate, skilled, and driven, health care personnel. Operational managers should be able to manage the implementation of service delivery, support, and mentor healthcare professionals, including providing resources the staff need to provide quality health care services.

3.3. GENERAL SYSTEM THEORY

General System theory has multiple origins which range across many disciplines such as biology, physics, mathematics, anthropology, psychology, and management. General System theory seeks to explain the behaviour of complex, structured systems (Whitchurch & Constantine, 2009). Originating in the 1940s, in the work of the biologist Ludwig von Bertalanffy (Anderson, 2016), General System theory is premised on the notion that a system comprises of a sequence of portions or parts which work together in harmony. The portions or parts of a system are interconnected and have interrelations, which to be understood, must be viewed as one. The effect on one part or component will affect other constituent parts and therefore by extension, will affect the entire system (Anderson, 2016).

Accordingly, General System theory can be used to examine adaptive systems which comprise of complicated multifaceted groups of components to comprehend and identify the reasons why they are not relating in a sequential way (Anderson, 2016).

General System theory has also recognised that a system can be affected by external factors (Anderson, 2016; Kanda & Iravo, 2015). In this, Miller (1978) claimed in a number of instances that because world systems are unprotected and vulnerable, they interact with outside effects and surrounding environments (Kanda & Iravo, 2015). Thus, when implementing a General System theory approach, the emphasis is on acknowledging that the constituent components of a system have connections and linkages which interact with one another, and that their behaviour affects the other in one way or another, with the result, that it influences the overall system (Bailie et al., 2013).

Operations research was initiated by management philosophers such as Russell Ackoff and Peter Senge, who endorsed and popularised the learning organisation, and characterised health organisations as learning organisations. The research showed that although a health organisation is a learning organisation due to the constantly changing nature of the health environment, operations research in the health organisations should be conducted through systems thinking techniques founded on General System theory (Poston & Stewart, 1978; Peters, 2014b; Huz et al., 1997; Sterman, 2000).

General System theory has been used by many researchers who have conducted studies in health systems strengthening, public health, etc. According to Adam (2014), systems thinking views a system and all the sub-components within that system, as interrelated and interconnected to one another. As a result, to understand how things work, it is important to interpret the interrelationships and interactions within and between the system (Adam, 2014).

The regular use of General System theory in both public and private health care research has been linked to the Donabedian model developed by the Lebanese physician, Avendis Donabedian, and consists of three categories or elements: structure, process, and outcomes. The Donabedian model helps define how patient care is provided, where the three categories or elements of the model are separated by arrows which denote that there is a guiding effect between all three. These three elements are not characteristics of quality, but rather dissimilar tactics or angles that can be engaged to obtain information on the existence or non-existence of the characteristics or features which describe quality (Rupp, 2018; Real et al., 2017). The structure symbolises the environment where care is provided, and comprises of inputs such as hospitals, clinics, infrastructure design, equipment, and all other health resources (e.g., staffing, medical supplies, and technologies, etc.). The process symbolises ways through which patient care is achieved, including exchanges which occur between health care providers and patients, such as the provision of treatment, consultations, diagnosis, or analysis of disease. The

outcome symbolises the results or outcomes achieved due to process and inputs. This refers to the impact or change in health status of patients because of the health care that was provided. The application of General System theory to this model demonstrates how these elements are interlinked and interrelated. Poor inputs and process is guaranteed to lead to poor health outcomes (Rupp, 2018; Real et al., 2017).

3.4. SYSTEMS THEORY IMPLEMENTATION IN HEALTH SYSTEM'S RESEARCH

A study conducted to investigate challenges and barriers to execution and adoption of a Primary Health Care Information System (PHCIS) that was implemented in a health facility in Indonesia revealed that systems theory can be used in health management systems. The aim of implementing this system was to improve data collection, analysis, storage, and transmission of information to the grids that were used to produce timely data for making decisions (Afrizal et al., 2019). The findings of the study demonstrated that operational issues such as infrastructure, human resources, organisational support, and processing, were barriers to successful implementation (Afrizal et al., 2019). It was established that the PHCIS system would have been executed effectively and was going to be more functional if there had been an improved interface between human resources, infrastructure, organisational support, and process factors (Afrizal et al., 2019). This study illustrated that although the issue was with the implementation of the PHCIS system, an improvement can only be realised if the other components such as human resources, organisational support, technology infrastructure, which were negatively affecting the process, and thus the overall implementation of the system, were also improved.

Another study conducted in Australia by Bailie et al. (2013), on how strengthening of PHC can be done systematically, showed that the drive to improve efficiency of the operational status of PHC can be achieved by addressing challenges within its clinical structures, including universal challenges, addressing individual and family needs, as well as those within the PHC facility. This was categorised as a systematic and partnership-based approach (Bailie et al., 2013).

Research conducted by Huz et al. (1996), aimed at integrating mental health and vocational rehabilitation services in New York, used the experimental approach to evaluate systems thinking interventions. The impact of systems thinking interventions were measured by evaluating reflections of the modelling team, participant self-reports of interventions impact, measurable system change, and bottom-line results, in comparative conditions that may explain the intervention's effectiveness (Huz et al., 1997). The research recommended that similar systems thinking interventions should be repeated in other countries.

The study conducted by Peters (2014b), recommended using systems thinking when conducting research and tackling implementation challenges in public health. The study revealed that health systems are complex as they involve various networking and the working together of various healthcare professionals, specialists, several funding agencies, NGOs, and various other stakeholders. The context and conditions under which health systems function are complex and constantly changing, and are faced with multifaceted challenges including the discovery of new diseases which require the swift response of a variety of stakeholders within health sphere (Peters, 2014b). One contemporary example, is the Covid-19 pandemic which affected the entire world in January 2020. The world-wide health system came under immense pressure, everyone including policy makers, government, researchers, specialists, health professionals, and global communities were in a state of panic. Everything came to a stand-still. The initial goal was to understand this new Coronavirus, its patterns, how it spread, its symptoms, its effects, and many other factors. The health system was in dire need of additional resources health resources such as hospital beds, ventilators, oxygen, treatment methods, and a vaccine (Naidu, 2020; McFadden et al., 2021). This new disease came at a time when there were other previous challenges, diseases, and many other issues which the health system was still dealing with, as the country outcomes, targets, and progress towards the attainment of targets and gaols had declared the health system to be weak and ineffective. This shows that resolving health system challenges requires systems thinking approaches (Peters, 2014b).

In their article, Lai and Lin (2017), illustrate how Systems theory can be applied to large public organisations such as health care systems, in order to show how its management, communication, and overall organisational effectiveness can be improved (2017: 10). For health systems to offer comprehensive, effective health care services, health departments should be viewed as a system. According to Lai and Lin (2017: 3), Systems theory focuses on three levels of observations: (i) the environment, (ii) the social organisation as a system, and (iii) the human participants within an organisation. The DoH districts and its personnel are regarded as a united group, connected through a network of contacts and affiliations. Within this structure, all individuals participate in a variety of connected and associated activities in the form of systematic connections. This in turn leads to the formation and presentation of a complete organisational group or cluster. In accordance with Systems theory, the activities of individuals are connected and affected by various levels of environments such that healthcare professionals need to identify "the environments of influences surrounding their patients" to better comprehend the extent of their continuing health challenges, and thereby provide comprehensive treatments (Lai & Lin, 2017: 10).

Another study conducted in an urban hospital in the US State of Kentucky, focused on health communication. Its aim was to investigate how the layout of a hospital (i.e., the built environment) affects the outcomes of patients, communication, and processes of patient care (Real et al., 2017). This

study was underpinned by Systems theory in the sense that each hospital is understood as a complex system, comprised of a number of interrelated and interdependent components or sub-systems, including a laboratory, trauma unit, obstetric unit, pharmacy, normal wards, food and kitchen facilities, emergency services, physical therapy, and the operating theatres. The study investigated the perceptions of health care professionals in their examination of a decentralised physical background as an essential physical factor or component impacting on procedures and results in health care systems. Their findings revealed that the hospital layout shapes and affects patient outcomes, procedures, and communication (Real et al., 2017).

3.5. APPLICATION OF SYSTEMS THEORY TO STRENGTHENING THE HEALTH MANAGEMENT SYSTEM AT THE PHC LEVEL

The basis of Systems theory should be entrenched into the thinking of OMs, health care professionals, and other staff in health facilities, so that it can be seamlessly applied within the PHC facility environment (Anderson, 2016). Managers who understand Systems theory recognise how different systems affect a worker and how a worker affects the systems around them. Systems theory is a broad perspective that allows managers to examine patterns and events in the workplace. This helps managers to coordinate programmes to work as a collective whole for the overall goal or mission of the organisation, rather than for isolated departments.

Employees in each division or functional unit must understand and accept that their individual or departmental performance, requires that they also consider the effects it will have on other employees in other divisions or functions, and to the entire facility (Anderson, 2016). A practical example could be that of nurses who spend their time alone in consulting rooms with patients. They must understand that the information on how they assisted the patient is of vital importance, and should be recorded properly and accurately, so that the data can be collated and analysed, thereby ensuring the clinic can report appropriately. No information should be left out since not having accurate data on patients that the clinic serves can have a detrimental effect. An example with be in the pharmacy, as they need accurate data to know the stocks levels of medication they need to order and maintain. Similarly, when the stores department takes long to deliver equipment and the clinic has a shortage of medical equipment and beds to conduct the delivery of babies, this will affect maternity nurses from being able to perform their duties, requiring expectant mothers to be transferred by ambulance to sub-district hospitals or another PHC facility for the safe delivery of their babies. This example clearly illustrates how challenges in the medical supplies supply chain can affect the work of nurses in terms of their service delivery function. The fact that the clinic could not perform this function and had to refer it to another clinic or sub-district, could have affected the Maternal Child and Women's Health (MCWH) targets for the clinic. If the pregnant woman had complications, or the ambulance arrived late to take her to another

facility, the women and/or her baby could have died in transit. This would not only have been a needless human tragedy, but it would also have impacted the mortality targets for the clinic, sub-district, district, provincial office, and country's MDG goals. Such an example shows how other factors external to the clinic can have an impact on the clinic, its management systems, and the entire health system.

The shortage of health care professionals has been identified as a major challenge at the PHC facility level. A clinic that has a shortage of nursing staff reveals that there are vacant positions in the organisational structure. If one nurse is on leave and there are many patients to be seen on a particular day, the nurse on duty can easily become overwhelmed by large numbers of patients. Such a scenario can result in a drop in the quality of health care provided and patient's charts not being filled in correctly. This in turn will have a detrimental impact on data collection and collation by the data capturers. Service delivery will also be impaired, negatively impacting the information management function.

All these scenarios confirm what can happen in one component or division, or even outside the boundaries of a PHC facility, where failures in one area can affect other components or divisions, and the clinic itself. The management of the components of the health system is a connected and interrelated process, where one problem can affect an entire chain of health care functions and services (Anderson, 2016). Strengthening one management component will not necessarily contribute to strengthening the overall PHC management system, and certainly will not strengthen the entire health care system. Also, leaving one management system dysfunctional or with unresolved challenges, and focusing on other management systems elsewhere will not help in strengthening the entire health system. Instead, strengthening approaches should be directed at resolving all challenges in all management components, to strengthen the entire system.

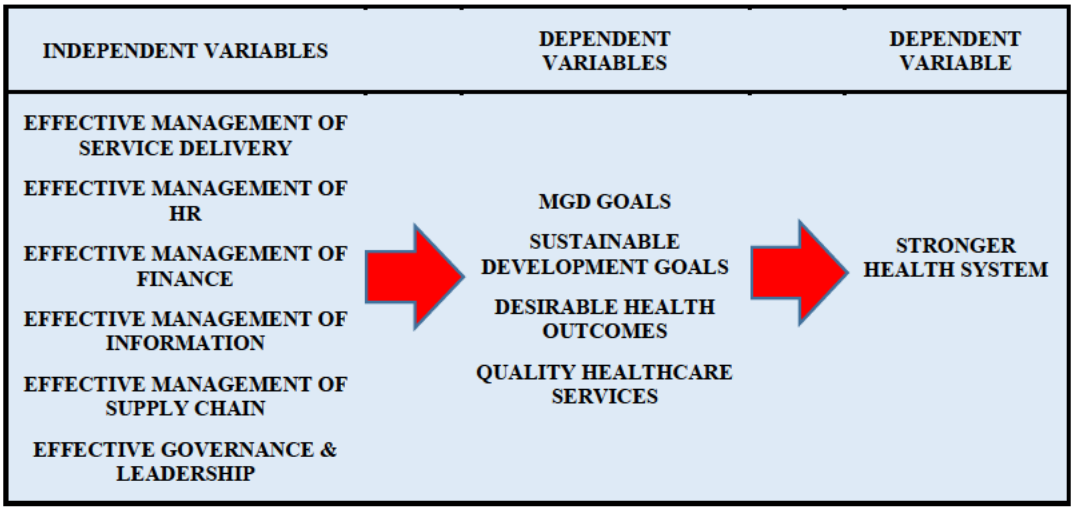

Figure 3.2. Health management systems independent and dependent variables

Source: Adapted by the Researcher from the Survey Data (2018) and Peters (2014b)

Figure 3.2 depicts the health management system at the PHC facility level and its six core components or 'building blocks' of the WHO health system framework, each of which will be examined in this study. The six core components of the health system are the management systems which OMs are responsible to implement. The role played by OMs in the implementation of these management systems examined in this study is linked to Systems theory, as it has components which form part of the health system at the PHC level. The six components of the management systems which OMs are responsible to implement are as follows:

i. Service delivery;
ii. Human resources;
iii. Finance;
iv. Information;
v. Supply chain;
vi. Governance and leadership.

The entire system is complete and fully functional if all these components (management systems) are operational and effective.

Figure 3.2 further demonstrates that the effective implementation of all six components (management systems) at the PHC level will result in the attainment of the health-related MGD goals, and the subsequent health-related Sustainable Development Goals (SDGs), producing desirable health outcomes and a quality health care service. A stronger health system is dependent on effective health management systems. A stronger health system can only be achieved if a systems approach is utilised. All these components (management systems) are important, and all should be strengthened so that they become effective in achieving a stronger health system.

3.6. CONTINGENCY THEORY OF LEADERSHIP

Contingency theory of leadership provides another broad theoretical lens to support this study on the role, actions, and attributes of OMs when performing their management functions. Contingency theory will be used as a lens to analyse the styles, behaviour, and actions OMs have used to manage in different challenging situations at the PHC level. Contingency theory of leadership was suggested and developed by the psychologist Fred Edward Fiedler in 1964. This theory suggests that the conditions under which the leader works and the leader's personality are both important for a leader to be effective (Mitchell et al., 1970; Fiedler & Chemers, 1974). It recognises leadership styles and defines a leader as either motivated by task that must be performed, or their relations with staff or units within an organisation (Waters, 2013). The theory affirms that some leaders are more effective and successful under certain

conditions and work environments, while others are not. In other words, the success and effectiveness of a leader is dependent on the conditions under which she or he operates, because situations influence the styles the leader will use or enforce. The leader is assumed to be more effective if her or his style suitably matches the conditions and situations under which she or he operates and thus matches the requirements of the job. Likewise, the leader can fail dismally under conditions which her or his leadership style is not a perfect match. According to this theory, no leader is always successful in all situations. Using this theory, the management styles of OMs will be scrutinised in terms of whether they fit within the context of the PHC facility (Siverbo et al., 2019). What this theory implies is that not all OMs will be effective under current working conditions within the PHC environment. It is possible that some OMs will be effective at tackling current challenges that are faced due to their leadership style matching the work environment. Some others might fail or struggle because their management style does not match the PHC work environment and the challenges they face (Fiedler & Chemers, 1984; Waters, 2013).

The leaders who are inspired and interested in achieving given tasks, are more concerned with accomplishing organisational goals, instead of being worried about maintaining relationships (Waters, 2013). In the PHC sector in which the success of clinics is measured by the achievement of targets, it is not surprising to find that facility managers are task-oriented regardless of whether the conditions, environment, or structure support them in meeting their targets. The level of confidence and loyalty employees have towards their leader, together with clearly stated task requirements and objectives, and the autonomy given to the leader to punish or reward employees are some of the distinct factors which make for favourable and effective leadership conditions or environments. Leaders who are operating under such work environments are likely to thrive (Waters, 2013). For example, if employees at PHC facilities have a high level of confidence and loyalty towards their OMs, in return, OMs will communicate clear and unambiguous instructions to their staff members as to their expected duties. Lastly, because OMs are given permission and the autonomy to punish and reward their staff members as they see fit, the conditions become favourable for them to accomplish their management functions effectively.

Acting in accordance with the current situation is very important in the application of Contingency theory. This theory states that managers should make decisions which are centred on and aligned to the current situation or task at hand. Similar management methods should not be applied to different work circumstances because that will not work. Operational managers must act in accordance with the tasks they are trying to accomplish and the current conditions. For an example, when managing a PHC facility, engaging with staff members (especially clinicians) and letting them participate in most decisions pertaining to service delivery, might work better and yield positive results, as it will allow the PHC staff to share in person the challenges they encounter with their patients. This might be entirely

different to managing in environments such as Information Technology (IT), where providing clear, elaborative instructions on how the system should be used will be sufficient, in that it might not require any feedback, interaction, or decision-making involvement from the IT staff themselves. The performance of staff members in both these given work environments, is dependent on their interaction with their manager and her or his style of managing, including whether the situation is agreeable to the current condition or tasks to be performed (Mitchell et al., 1970).

3.7. APPLICATION OF CONTINGENCY THEORY

Contingency theory has been supported by many studies, indicating that it has provided a consistent and valid approach in describing effective leadership. It is affirmed by many studies for succeeding to persuade many researchers to acknowledge that environments and/or circumstances affect the success of leaders. This theory has managed to move away from the belief that only a leader's traits and attributes are responsible for the effectiveness of a leader (Waters, 2013).

For a leader to be successful, they must change their style to fit the context under which they lead, because each leader's success or effectiveness is reliant on how well their style of leadership suits their work environment (Shala et al., 2021). If an OM is managing in a PHC facility which is full of staff members who are experienced and have extensive knowledge of their jobs, but that the OM prefers to micro-manage and monitor staff members closely all the time by giving detailed step-by-step instructions on how their jobs must done on a daily basis, that OM will not be effective in managing those staff members. Instead, they will feel that they are not give the opportunity to apply their own knowledge and experience to do their jobs, but instead are tediously micro-managed by their managers. Staff members will soon become frustrated and even defiant and deliberately go against the provided guidelines. This will create bad relations between that OM and those staff members. To be effective, the OM will have to change her or his management style, be more relaxed, and refrain from micro-managing her or his staff. Instead, the OM must give them autonomy to do the job in the way they know how, allowing them to apply their own knowledge. This will motivate staff members to work hard, be creative, and come up with innovative ways of doing their job without fear of being reprimanded for not following tedious instructions. This will create a harmonious, happy working environment, where close relations between the PHC facility staff members and the OM will be developed. Staff members will be highly productive and always strive to excel and achieve excellent and results. They will clearly understand their given tasks (Shala et al., 2021).

3.8. CRITIQUES OF CONTINGENCY THEORY

While Contingency theory is praised by many researchers, others maintain the theory has failed to clarify why some leaders with certain leadership styles are more successful and efficient in determined types of conditions. For example, an OM who is concerned with attaining clinic targets, might be effective in a clinic where they are able, even under stressful conditions, to have direct control over the tasks related to service delivery/health programmes. They may even feel more positive and confident under clinical contexts, because they have experience of the tasks and the environment. But when the same OM, who is more concerned with maintaining relations with their staff members must apply control, also under stressful conditions, they may feel more overwhelmed, where for example there is a shortage of professional staff and they must coerce nurses to take on more work responsibilities. Such OMs may feel less certain to apply control, afraid this may destroy their close working relations with staff, due to their being unhappy to take on extra workloads. As a result, the OM may fail to provide a quality service, or reach targets (Waters, 2013).

Contingency theory also promotes the idea that every leader has leadership potential (McGrandle, 2016). In an environment such as the DoH, where the hierarchical structure does not allow OMs to be involved in the execution of some key management functions since these are centralised the at the sub-district level, OMs in such work situations might not recognise that they have leadership potential because they lack exposure, or are not permitted to perform such tasks. The environment does not enable them to realise or see their potential. Therefore, they may downplay their potential due to lack of exposure or involvement. This is against the notion that every leader has leadership potential.

3.10. CHAPTER SUMMARY

This chapter discussed how General System theory (GST) and Contingency theory (CT) has been used in public health research. In this study, General System theory is used to show how the approach can assist in resolving challenges currently affecting the health system. Operational managers have the responsibility to implement the WHO's six core components or 'building blocks' of the health system. The challenges affecting all six components supports the need for the implementation of systemic interventions, as focusing on strengthening one or a select few components will not provide a strong health system. If management systems are weak and fragmented at the PHC level, the standard of care will be undesirable, resulting in poor health outcomes, and targets will not be achieved. When PHC facilities fail to achieve quality health outcomes or meet clinic targets, this contributes to the sub-district's failure which escalates to the district, province, and finally contributes to the country not achieving the UN's MDGs and the subsequent SDGs. If operational managers fail to execute their management functions successfully it hinders the progress of the country's overall health outcomes and

its health system. This is because the health system is complex with a variety of components at different levels of care. The DoH does not function alone in a vacuum, but there are other stakeholders who affect the performance of the health system. Implementing a systems approach towards strengthening management systems will ensure the formulation of cohesive strengthening strategies and interventions. Finally, the chapter explored how OMs can use Contingency theory to achieve effectiveness by changing their management styles to suit the work environment or situations under which they are managing under to be successful.

The WHO conceptual framework of the health system depicts the management systems within the health system, which are implemented at primary health care level. The objectives are derived from the WHO Conceptual framework of the health system. The contingency theory of leadership looks at the lens of how OMs adapt within their environment /contexts in order to tackle the challenges they are faced with at primary health care level. The WHO conceptual framework and Contingency theory provide complementary lenses for the study.

The next chapter will discuss the methodology that was employed to conduct the research, sample the participants, and collect data from the PHC facilities in the KZN DoH, uMkhanyakude Health District, on the role and involvement of OMs on the implementation of health management systems in PHC facilities. The chapter will further explain in detail how data was analysed to arrive at meaningful information and findings of the study.

Chapter 4: Research Methodology

4.1. INTRODUCTION

This chapter provides a close description the research design, research techniques, the study site, study population and participants, chosen sampling techniques, data collection and analysis methods, data quality control, data management and storage, as well as how reliability and validity will be ensured. This is an important step in the research process as it clearly shows how all the research tasks and activities unfolded.

4.2. RESEARCH PURPOSE AND KEY RESEARCH QUESTION

Every research project is conducted for a specific purpose. Research is either conducted to examine or investigate some issue or problem, and be able to provide solutions to organisational problems and issues of concern, or to provide answers to certain questions (Alvesson & Sandeberg, 2011; Sekaran & Bougie, 2011). Research is always conducted in a systematic and organised manner by following a sequence of important steps (Sekaran & Bougie, 2011). The research aim and questions provide clues about the substance that the researcher is aiming to evaluate (Alshenqeeti, 2014). These two elements, are the starting points for the development of a research design (Alvesson & Sandeberg, 2011). The research purpose is the backbone of the study, and is an overarching statement, which formally stipulates what the study plans to achieve (Alvesson & Sandeberg, 2011).

The purpose of this study is to investigate the implementation of health management systems in PHC facilities in the KZN DoH, uMkhanyakude Health District.

The key research question for the study is as follows:

> **How have OMs been involved in the implementation of health management systems in PHC facilities in the KZN DoH, uMkhanyakude Health District?**

4.3. RESEARCH OBJECTIVES

The purpose of the research, objectives, and questions are very important, as they offer indications about the substance and elements which the researcher is aiming to assess (Wahyuni, 2012). The main objective of the research study represents the starting point for developing a research design (Wahyuni, 2012). The main objective of this research study is to investigate how OMs have been involved in the

implementation of health management systems in PHC facilities in the KZN DoH, uMkhanyakude Health District.

A study conducted by Gilson & Daire (2011) demonstrated that staff working at the PHC level act as a barrier to centrally-led initiatives aimed at strengthening PHC. Therefore, it is necessary to uncover the perspectives of those who are responsible to ensure implementation at this level, how have they been implementing and what challenges they have faced, including what are the suggested or proposed strategies that can be implemented to improve implementation.

The goal of the study is to propose a strengthening framework for OMs to improve health management systems and functions at the PHC level, to put effective health systems in place, and improve health outcomes.

The specific objectives of the study were as follows:

> **Objective #1:** To investigate the role of OMs in governing the PHC facilities in the KZN DoH, uMkhanyakude Health District.
> **Objective #2:** To investigate the role of OMs on the management of the workforce, finances, information, and medical supplies in PHC facilities in the KZN DoH, uMkhanyakude Health District.
> **Objective #3:** To investigate the role of OMs on the management of service delivery in PHC facilities in the DoH, uMkhanyakude Health District.
> **Objective #4:** To identify barriers/challenges faced by OMs when implementing health management systems (as per WHO components of the health system) at PHC facilities.
> **Objective #5:** To identify enablers of success when OMs implement health management systems (as per WHO components of the health system) at PHC facilities.

Governing refers to providing oversight, guiding implementation of policies and ensuring compliance. As facility managers in PHC facilities, OMs contribute to the execution of clinical governance.

Health management systems refer to the overall complex health system with all its components (which are management systems), since the aim of effective management at the Department of Health is to ensure that health programmes that are provided yield desirable health outcomes

The above research objectives were formulated to close the gap of the findings by Uwiwama et al. (2012). This study sought to identify the views of OMs on health systems barriers in the implementation of collaborative TB/HIV and mother-to-child transmission of HIV programmes; the researchers found that the barriers to effective health systems included: management; planning; inadequate financing;

human resources capacity, and power issues. The objectives were formulated in such a way that they incorporated and captured all the areas that were identified to be barriers to effective health systems. Secondly, the formulated study objectives are aligned to the conceptual framework of WHO components of the health system. Thus, it was important to execute this study in order to understand the role played by OMs in executing all the management functions which are in essence components of the WHO framework.

4.4. RESEARCH DESIGN AND METHODOLOGY

Research design comprises of the procedures and steps that guide the process of gathering, organising, documenting, analysing, and interpreting data (Srikanth & Doddamani, 2013). Research methodology outlines all the specific tools, methods, and techniques used to gather, analyse, and present data (Wahyuni, 2012). Designing a study and choosing a research methodology involves making choices about research techniques, the type of population upon which to conduct the research, the type of cases to use, the sampling procedures to utilise when choosing the research participants, and finally, how data will be collected, analysed, and presented (Choy, 2014).

4.4.1. Research paradigm

A research paradigm can be described as an established collection of beliefs and agreements on how scientists believe the problems should be understood and solved. This guides how to view the world and informs the ways and techniques on how to conduct research (Rahi, 2017).

This study was based on the interpretivist paradigm. Interpretive approaches rely heavily on naturalistic methods that include interviewing, observation, and analysis of existing texts. The interview method was used to collect data. The interpretivist method ensured that there was an adequate dialog between the researcher and the research participants with whom she was interacting, in order to collaboratively construct a meaningful reality (Cohen et al., 2007; Tuli, 2010).

Operational managers and CEOs were considered as human beings, wherein their perceptions and subjective interpretations of their work life will be considered (Ernest, 1994; Walsh & Downe, 2006). The research study considered the direct experiences and perspectives of the OMs in the KZN DoH, uMkhanyakude Health District PHC facilities, in terms of the role they play in implementing health management systems. The overall aim of the research study was to understand, explain, and interpret social reality through their eyes (Cohen et al., 2007). The main objective of the research study was to discover and deeply understand and establish the viewpoints and perspectives of OMs regarding the implementation of health systems in PHC facilities in the KZN DoH, uMkhanyakude Health District, but not to generalise (Tuli, 2010).

4.4.2. Research methodology

There are different types of research methodologies. Qualitative research methods are carried out to understand some aspects of the social life, experiences, and attitudes of people, with the aim of generating data or information (McCusker & Gunaydin, 2015; Wolf, 2017). The focus of qualitative research is to answer questions such as: "how" and "why."

Quantitative research methods aim to measure things like percentages, numbers, and statistics (McCusker & Gunaydin, 2015). Qualitative research produces data or information on what and how things happen the way they do, instead of producing proportions, numbers, or magnitude of those pertinent factors (Galvin, 2015). The intention of most qualitative studies is to achieve a depth of understanding (Palinkas et al., 2015). These methods are employed to reach saturation, wherein researchers obtain a comprehensive understanding by continuing to sample until no essential new information is acquired (Palinkas et al., 2015). Quantitative research methods often use correlational studies to analyse data collected from surveys and experiments (Parylo, 2012).

The aim of these two research methods is to achieve a breadth of understanding (Palinkas et al., 2015). These methods are more concerned with generalisability, which is to ensure that the results and knowledge gained is a representation of the whole population from where the sample was drawn (Palinkas et al., 2015). Unlike qualitative studies, the way quantitative studies are designed make it difficult to describe human and unquantifiable phenomena such as emotional experiences and consciousness (Koch et al., 2014). According to Koch et al. (2014), the intent of quantitative studies is to isolate causes, facts, and truth.

This study was conducted using qualitative research methodology. Qualitative research is a logical way of collecting, analysing, and construing word-based material which results from verbal communication or interactions (Grossoehme, 2014). A form of exploratory study was undertaken to be able to clearly define and explore the role that OMs have played on the implementation of health management systems in PHC facilities. Exploratory studies were conducted to better understand the nature of the problem, the results of which clearly revealed the paucity of studies conducted in this problem area (Sekaran & Bougie, 2011).

Using qualitative methodology enables the description and analysis of social practices and understanding of how both OMs and Chief Executive Officers (CEOs) view these in the context of their work environment (Koch et al., 2014). Chief Executive Officers responsible for supervising the work done by OMs. Operational managers are responsible for managing and implementing health systems and programmes. These two groups of individuals were interviewed to obtain a thorough understanding of the implementation of management systems at the PHC level. The views of OMs are very important

in answering the objectives of the study because this group is responsible for management systems at this level. Also, the views of CEOs are important, as they are responsible for managing, supervising, and supporting OMs. Qualitative research design is more appropriate in studies where information is to be obtained directly from the people who are involved and experiencing the issue that is being examined (Bradshaw et al., 2017). In other studies that has been conducted in PHC facilities, the focus has been more on conducting disease-specific studies and interventions; as a result, there is limited knowledge on the implementation of health management systems at the PHC level, where all decision-making functions are delegated to.

4.5. STUDY SITE AND PARTICIPANTS

The study site is the place or area where the study is be conducted. It can be an organisation, an area, or a community. Participants are the people selected to participate in the study (Sekaran & Bougie, 2011). Selecting the wrong subjects to participate in a study can prejudice the study, rendering the findings of the study invalid (Althubaiti, 2016). For example, selecting managers who were not in any way involved in the management of health systems in PHC facilities was likely to produce undesirable findings, as those participants would not have been able to provide any responses about their experience as they are not involved and have no experience in the subject phenomenon. Such a scenario is called misclassification, where the selected participants are not best suited, and therefore they provide wrong information, or are unable to provide any information, as they do not belong to the category pertaining to a certain phenomenon as they are wrongly placed (Althubaiti, 2016).

4.5.1. Study site

The study site was Department of Health, uMkhanyakude Health District in the Province of KwaZulu-Natal, South Africa. The uMkhanyakude Health District has five (5) sub-districts and 56 PHC facilities, four (4) of which provide a 24-hour open door service. These are: Ndumo Clinic, KwaMsane Clinic, Jozini Clinic, and Sipho Zungu Clinic.[1] Five of the PHCs are purely day clinics, with the remaining clinics provide an on-call service (KZN DoH, 2013).

All 56 PHC facilities in the KZN DoH, uMkhanyakude Health District were part of the study. The KZN DoH, uMkhanyakude Health District was selected because uMkhanyakude is one of the presidential nodal regions. This district is one of the deep rural districts and includes sites/facilities that have been selected for the NHI pilot project. The district was also supported by many partners such as the Maternal, Adolescence and Child Health (MAtCH) programme, Heath Systems Trust (HST) all

[1] See: KwaZulu-Natal Department of Health. Home page. http://www kznhealth. gov.za/health.asp [Accessed: 06 February 2022].

funded under the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The Africa Centre for Health and Population Studies, now called Africa Health Research Institute (AHRI) is also involved in supporting the Department of Health by implementing many health programmes in the KZN DoH, uMkhanyakude Health District.

4.5.2. Study participants

All OMs in PHC facilities and CEOs were identified as participants for this study. The identified participants were best suited to answer all the research questions and to contribute to elements of the research problem as they possess in-depth knowledge of the topic being examined. Operational managers are placed at the forefront of PHC facilities as managers of health systems components. It is their responsibility to manage health systems and implement strengthening interventions that will improve health outcomes at the PHC level. Chief executive officers from all five sub-districts in the KZN DoH, uMkhanyakude Health District were also suitable to participate in the study, because they are responsible for supervising and overseeing the work done by OMs. Knowing the perspectives of these two groups of people in terms of how OMs have been involved in the implementation of health management systems helped to better understand the challenges they face, the enablers for success, the strengths, and weaknesses of PHC operational management, and to suggest evidence-based strategies for improving and strengthening management systems. Furthermore, a framework on strengthening the roles and functions of OMs at the PHC level could be developed.

4.6. STUDY POPULATION

A research population is a total group of people or objects which the researcher is interested to study (Sekaran & Bougie, 2011).

The study was conducted at the UKZ DoH, uMkhanyakude Health District. The targeted population was 61. This comprised of 56 Operational managers, and five (5) sub-district Chief Executive Officers (CEOs), from across the entire district. This population was purposively targeted to be part of the study because this group was best suited for the study aim and its objectives (Etikan et al., 2015).

The KZN DoH, uMkhanyakude Health District has a variety of managers. These include the District Manager, Deputy Managers, and Programme Managers from the district office and sub-districts who all support PHC facilities, five (5) Chief Executive Officers for the sub-districts, as well as Deputy Managers for PHC facilities, and lastly, 56 Operational managers who manage and lead the 56 PHC facilities. Operational managers and Chief Executive Officers lead and manage the implementation of health management systems at the PHC level, and hence they were best placed to answer the research questions for this study.

It was the best and most viable option to solicit responses on the perspectives and viewpoints of the OMs and CEOs regarding the implementation of health systems in PHC facilities. The OMs were suitable for the study because they are responsible for the overall management at PHC facilities, and they are leading the implementation of health systems at these facilities. On the other hand, CEOs are responsible for supervising and supporting OMs to manage the implementation of health systems. Obtaining the perspectives and viewpoints of these two groups was crucial to ensure that the research study was not one sided.

4.7. SAMPLING

Sampling can be described as extracting out or choosing a group of items from a larger population for the purpose of conducting a study (Oppong, 2013; Sekaran & Bougie, 2011). Those items can be people, objects, substances, or anything dependant on what the research is aiming to study (Sekaran & Bougie, 2011). The chosen items or participants are selected with the hope that they will provide relevant responses to answer the research questions and help solve the research problem (Oppong, 2013). Sampling is therefore a representation of the subset of a population (Etikan et al., 2015). Sampling is done because it is impossible, costly, and time-consuming for a researcher to collect data from everyone; therefore, there is a need to select a group from the overall population (Taherdoost, 2016). Sampling can either be done statistically by following a certain formula, or it can be non-statistically by not following any scientific formula, but rather following a certain justification or reason provided by the researcher (Etikan et al., 2015; Sekaran & Bougie, 2011).

Statistical sampling involves random selection and can be referred to as probability sampling, where every item in the entire population has an equal and fair opportunity of being chosen or selected. Non-statistical sampling can be referred to as non-probability sampling. This is a subjective sampling where some items within a population do not have a chance of being selected (Sekaran & Bougie, 2011; Etikan et al., 2015).

4.7.1. Sampling design

Designing sampling for qualitative studies and that of quantitative studies are not the same. For quantitative studies, more focus is on random selection and representativeness of the selected sample to the population so that there can be generalisation (Ishak et al., 2014). On the other hand, in sampling for qualitative studies, researchers must be creative to make sure that the selected groups are appropriate and will be able to provide answers to the research questions and expand the knowledge and understanding of the topic or aspect that is being examined (Ishak et al., 2014; Etikan et al., 2015).

This present study used the non-probability purposive sampling method. The OMs and CEOs were deemed to be appropriate and to be able to provide answers regarding the implementation of health management systems in PHC facilities. They have an understanding and experience of working in PHC, and managing the implementation of the six core components or 'building blocks' of the health system.

4.7.2. Sampling technique

The sampling technique used in a study should be appropriate for the type of research that is being conducted. It should also take into consideration the study purpose and the issue or problem that is being studied (Bradshaw et al., 2017). Some sampling techniques are more suitable for qualitative studies, while others are more suitable for quantitative studies.

In this present study, the purposive non-probability sampling method was used, wherein only OMs and CEOs were selected to participate in the research study. In purposive sampling, the participants are selected not as representatives of a larger population, but because of their personal experiences with the research that is being conducted (Koch et al., 2014). Operational managers and CEOs are a purposeful sample who both have the essential knowledge and experience about the implementation of the health management systems in PHC facilities, that is being researched (Bradshaw et al., 2017). No other groups would have been able to provide responses that were provided by these chosen groups (Taherdoost, 2016)

Purposive sampling ensured that selected participants were able to provide information-rich and intense descriptions of their own experiences and perspectives in relation to the selected study phenomenon (Koch et al., 2014; Palinkas et al., 2015). The OMs and CEOs were most suited to answer all the research questions for the researcher to be able to achieve the research objectives. Operational managers and CEOs are the only group who were responsible for managing the implementation of all six core components of 'building blocks' of the health system components at the PHC level. The aim was to ensure that all OMs and CEOs were interviewed to ensure that all five (5) sub-districts of the KZN DoH, uMkhanyakude Health District participated in the research. This meant that OMs and CEOs, representing the best and worst performing PHC facilities formed part of the study participants.

The other managers in the district were not interviewed because some are not based at the PHC level, they being only able to provide specific support, which is mostly on disease-specific programmes. Some of these managers are also not involved in the daily implementation of management systems at the PHC level. Some were responsible for only managing one or two components of the health system, and they were managing it at the sub-district or district level.

Purposive sampling made conducting research to be more manageable, cost effective, and time saving because selective and contained groups are targeted instead of the whole population (Dura & Nita, 2011). The selected group will also be responsible for the implementation of the findings and recommendations of the research as the research is solving actual organisational problems.

Although non-probability purposive sampling is good for some qualitative studies, it has its own disadvantages. First it cannot be generalised to the whole population because the chosen population is not a representation of all the population (Etikan et al., 2016). Secondly, it is subjective and biased in its nature because other are not given an opportunity to be chosen (Etikan et al., 2016). Lastly the effects of results generated from such studies cannot be applied or implemented into the whole population since it is not representative (Etikan et al., 2016). If we relate these mentioned disadvantages to this study, its recommendations and findings can only be implemented at PHC facilities of the Department of Health in the district sampled.

4.7.3. Sample size

Sample size is the number of participants who actually participated in the study by either answering interview questions, answering or completing the research questionnaires or participating in the focus group discussions (Sekaran and Bougie, 2011); (Ishak et al., 2014). It is often not easy to decide on the sample size for qualitative studies, but a variety of factors like saturation in terms of new information, study aim, and study framework, are normally used as determinants of the study sample size (Vasileiou et al., 2018; Mason, 2010). These factors determine whether the researcher should continue to collect data from the identified population.

Out of the population of 61 identified for this study, the total number of units (sample size) who participated in the study was nineteen (19). This number included seventeen (17) Operational managers and two (2) Chief Executive Officers. Although the sample size of nineteen (19) might seem to be small, its composition was purposive and appropriate to support the scope and depth of knowledge on the topic being examined (Vasileiou et al., 2018). Operational managers and CEOs had the capability to provide answers to all the interview questions as they have experience and are involved in managing the implementation of health management in PHC facilities on a daily basis. It is their scope of work.

According to Boddy (2016), in qualitative studies where in-depth interviews are used as a data collection method, a sample of twelve (12) is sufficient to attain saturation. Mason, (2010) has also emphasised that for studies using qualitative interviews, the sample size should be determined by reaching saturation where no new content is forthcoming and when the new content is not adding any value to the study purpose and objectives (Boddy, 2016; Mason, 2010). In this study, after conducting nineteen (19) in-depth interviews saturation was reached as there was no new information and no new

content that could be derived from the responses that were given by the participants. The researcher ensured that OMs and CEOs from all five (5) sub-districts were included in this sample size of nineteen (19) to gather responses from the broader health district perspective.

4.8. DATA COLLECTION METHODS

Data can be collected as primary or secondary data. For qualitative studies, primary data can be collected either through conducting interviews, focus groups discussions, and observations. Interviews can be unstructured, structured, semi-structured and in-depth, and can either be conducted face-to face or telephonically (Hofisi et al., 2014). Structured interviewing is mostly used because it is seen to be one of the instruments that provide reliable data. These types of data collection methods are mostly used for formative assessments as they allow for standardisation and replication, can easily engage respondents, are easy to create, interpret and code (Hofisi et al., 2014). The weakness is that structured interviews are inflexible and they require thorough prior planning (Hofisi et al., 2014).

For quantitative studies, primary data can be collected utilising questionnaires (Sekaran & Bougie, 2011; Wahyuni, 2012; Bradshaw et al., 2017).

Secondary data can be obtained from analysis of relevant published literature, as well as analysis of reports and other organisational documents (Bradshaw et al., 2017). Before collecting data for this study, a literature review was done to formulate the main interview topics and discussion points. An analysis of organisational plans and reports was conducted. These included, District Health Plans, District Expenditure Reports, Implementation Plans/Operational Plans, service delivery reports, management reports, audit reports, assessment, and other relevant documents. Management meetings conducted by Operational managers at PHC facilities, sub-district and district levels were attended to gather more information on their experiences, activities, challenges. All these activities allowed for the design of the main interview questions, as well as preparation of interview guide and possible probing questions to use when answers were given during interviews.

For this study, face-to-face individual semi-structured in-depth interviews were used to solicit answers from the targeted group, i.e., Operational managers and Chief Executive Officers. Face-to-face interviews assist the researcher to use complex instruments and ensure that misunderstandings are prevented (Hilgert et al., 2016). Interviews are most suited for qualitative studies like this one, because they enable the researcher to explore, construct and negotiate meanings in natural settings (Alshenqeeti, 2014). Interviews can enable participants to share their experiences, perspectives, and stories about certain social phenomena (Alshenqeeti, 2014). In this study, CEOs were able to share their perspectives and viewpoints on the role of OMs in the implementation of health management systems at the PHC

level. Operational managers were also able to share their own experiences and stories on how they have been involved in the implementation of health management systems in their respective PHC facilities.

Interviewing is praised for a variety of advantages, which includes the ability to examine and analyse words, build a holistic picture, report comprehensive views of the participants, enabling participants to express own thoughts and feelings and speak in their own voice, as well as enabling researchers to conduct analyses of narrative data in great depth (Alshenqeeti, 2014). Other advantages are that interviewing can involve reality, has fewer incomplete answers, has a high rate of return, the answering order can be controlled and lastly, it is a relatively flexible data collection method (Alshenqeeti, 2014).

Even though interviews have many advantages, this method is also discouraged in that it is costly and time consuming, it has the potential for subconscious bias and potential inconsistencies, and can be done as a small-scale study (Alshenqeeti, 2014). The researcher was fortunate to be awarded a data collection grant from University Capacity Development Programme (UCDP), at the UKZN Research Office and was able to book accommodation to stay in the uMkhanyakude district to be able to interview as many participants as possible until saturation was reached. The interviews were not rushed, and the participants were given enough time to talk and explain the responses they were giving and the interviewer listened attentively instead of just speaking. This allowed for all interviews to flow and responses were rich in detail. The interview guide was used as a point of reference, interview notes were taken, and interviews were digitally recorded where participants gave their consent.

4.8.1. Interview questions design

The interviews consisted of individual semi-structured in-depth questions. Since these were semi-structured interviews, there was an interview guide which included all topical areas which the interviewer used to provoke thinking and recollection when soliciting answers from the respondents (Galvin, 2015). This ensured that respondents were not limited to choose from given answers, but were able to think and provide their own answers based on their experiences and knowledge. Unlike structured interviews which are rigid, semi-structured interviews are flexible and allow probing by the researcher to get more explanation and expansion on given responses to achieve profound understanding and meaning (Alshenqeeti, 2014). The kind of interview questions designed for this study were designed in such a way that prompts and probing questions were used, which enabled the participants to speak openly around topical areas (Galvin, 2015). These prompts permitted for new thoughts and insights to come from the participants, especially on things the researcher had not thought of. Open-ended questions were used (Galvin, 2015). The topics for the questions that were used to formulate the interview guide were derived from the data that was gathered during observations and

attendance of management meetings and also from the analysis of internal DOH reports, performance reports and other internal documents.

4.8.1.1. Face-to-face structured in-depth interviews

Face-to-face structured in-depth interviews comprising of semi-structured questions were conducted to selected OMs and CEOs of the clinics and sub-districts. This method allowed for primary data which is first-hand information to be directly obtained from targeted individuals and for obtaining qualitative information which might have been overlooked during the literature review. Interview guides was used to conduct these interviews. Nineteen (19) interviews were conducted. The first round of interviews took place while data was being analysed to identify gaps and more themes were added to the interview guide to ensure that all rich information was sought from the participants.

Face-to-face interviews were conducted individually with OMs and CEOs. An interview guide with a list of pre-determined questions was used. The questions were focused on issues that surfaced during the literature review, as well as during the review of District Health Plans, District Expenditure reports, Operational Plans, quarterly and monthly reports. Topical areas that were discussed were also focused on issues that are relevant to the research objectives and research problem.

4.9. PRETESTING AND VALIDATION

Testing the developed data collection tool is an important step for the researcher to perform, before going to the field and beginning to collect data. Pretesting helps to evaluate the data collection tool, as well as identify and correct any errors before the actual data is collected. Pretesting also allows the researcher to get a perception of the flow of questions and assess if the language used is easy to comprehend (Hilton, 2015). Two (2) trial interviews were held in person with an OM in one of the clinics in the KZN Department of Health, eThekwini District, and with a CEO for one of the hospitals to test the interview guide. The OM gave her opinions on the length of topics in discussion and the interviewer became aware that the average time of the interview would take fifty-five (55) minutes to one hour. She also provided her feedback on the fact that she understood all the topics and confirmed that they were relevant to the scope of work and role of any OM within the Department of Health. The CEO provided feedback that PHC Supervisors or PHC Managers must be interviewed instead of CEOs, as they are the people who are best suited since they closely supervise OMs on a monthly basis.

4.10. ADMINISTERING INTERVIEWS

Pre-planned questions and topics were developed. These included all six core components of the health system (management systems). The developed questions helped guide the researcher to be able to ask

relevant questions during the interviewing process. The interview questions were asked and administered in such a way that the participants were given a chance to elaborate further and to explain in detail on certain issues. The kind of questioning enabled participants to provide their own unique and authentic experience about the topic without being led or swayed. All questions asked were open-ended in nature, also trying to avoid leading the participants to respond in a certain manner (Alsaawi, 2014)

4.11. DATA ANALYSIS

Data analysis refers to scrutinising and dissecting responses from the participants to provide meaning to be able to answer the research questions to objectives. In so doing, the researcher can identify and categorise emerging themes. One important action during this important activity, is to allow many themes to develop, then constantly review and consolidate those themes to ensure that eventually the researcher ends up with pertinent issues in the research area (Wolf, 2017). Analysis of data becomes more fascinating and meaningful as and when the researcher begins to see possible answers emerging (Wolf, 2017).

In terms of this present study, thematic analysis was used to analyse data that was solicited from participants during interviews, to find answers to the research problem. Time was also committed for a thorough analysis and review of the processes and procedures, policy documents and guidelines, as well as analysis of previous district and clinics' performance towards meeting organisational outcomes and MDGs. Furthermore, an inductive analysis of data was done to understand what it expressed about the experiences, views, and practices of OMs. It was not made to adapt to the pre-existing theories (Koch et al., 2014).

When the researcher was confident that the field notes accurately represented the interactions that occurred in each interview, the process of thematic analysis was used to elicit common themes between interactions. The themes were designed or formed through identification of responses/phrases that were repeated many times and by many of the participants. The researcher also took note of the things that were emphasised and elaborated at great length, and further analysed recurrent expressions and remarks, including an analysis of the tone of the voices and body language of the participants.

An analysis of the interview transcripts and audio tapes was done to develop themes and make data more meaningful. Data reduction was done where data was selected reduced, coded, and categorised into themes. This assisted in drawing meaningful conclusions about the data collected. The reduced data was then displayed in a condensed, organised, and compressed format.

Manual methods of analysis were used initially and the qualitative data analysis software program NVivo 12 was used for further analysis. The NVivo 12 software program was also used to organise the data into themes and sub-themes. In NVivo 12, a theme or sub-theme is denoted by a node. A node is like a container which houses all the information relating to a particular theme. The themes that emerged from each of the objectives are illustrated in the data presentation chapters.

4.12. DATA MANAGEMENT AND STORAGE

Data management is a process of collecting, collating, and documenting raw data and information, and finally processing it into meaningful information that can be easily understood by everyone, especially other researchers (Surkis & Read, 2015). It is a process of categorising data from the point of entry, analysing, sharing, and archiving it (Berman, 2017). The significant end goal can be that of publishing the information either in the form of a peer-reviewed journal article, thesis, report, or any scientific and non-scientific format (Berman, 2017; Surkis and Read, 2015). During this entire process, the researcher kept and preserved all the records and data in a safe and secure place and manner (Surkis & Read, 2015). Data was securely stored manually as hard copies and electronically on a computer hard drive (Surkis & Read, 2015).

The interview responses and field notes were recorded during each interview that was conducted. These were kept for each participant to protect against bias and to document the entire process. Reflective journaling was done after the interviews were completed. Reflections of the interviews as well as extraneous variables particular to the interaction were noted. Major ideas, concepts, and issues raised by the participants were also documented. Interviews were recorded in a digital audio format for all participants who gave their consent. Transcripts of all the interviews were made.[2]

Audio interview recording, interview transcripts and researcher notes were all kept as hard copies in a lockable cabinet and electronically on hard drive and in a folder on a laptop, as well as securely stored on the university network. This was to ensure that this data is not lost should the laptop and hard drive get stolen or crash. These will be kept securely for a period of five years post their collection by the researcher. This data will be visited and used again in the future, for the purpose of further analysis and the publication of academic articles.

4.13. DATA QUALITY CONTROL

Data quality control is the process of controlling the storage and usage of data that has been collected. This process ensures that there is ownership and protection of data and information, including protection

[2] See: Annexure E: Sample Field Research Transcript.

of all those who have participated in the study (Keller et al., 2017). Data quality control includes correctness and accuracy, completeness, reliability, appropriateness, validity, and uniqueness (Sekaran & Bougie, 2011; Keller et al., 2017)

The entire research project, together with data collected is the property of the University of KwaZulu-Natal, and was done for the purposes of attaining a doctorate from University of KwaZulu-Natal. The participants were asked to sign consent forms prior to being interviewed. They were also asked for permission and agreement to having their interviews recorded. All original documents, voice recordings, interview transcripts, and all other researcher notes, are kept securely in a locked cabinet in a secure room at the university for a period of five years. All interview notes, electronic transcripts, and voice recordings are stored on in a file on the researcher's laptop, on a hard drive, and on the university network secure cloud storage system.

4.13.1. Trustworthiness

Validity is usually concerned with the truthfulness and correctness of research findings (Brink, 1993). The term validity means the degree to which a study reflects the specific notions it aims to examine. In qualitative research, internal validity is substituted by credibility which is about ensuring that there is an expressed level of confidence in the area that is being studied, and the findings of the study (Lemon & Hayes, 2020)

The intention of trustworthiness is to ensure honesty, precision, or righteousness, about all the processes followed from the beginning to the end, to be able to trust the results (Alshenqeeti, 2014; Brink, 1993). There are two types of validity: internal and external validity. Internal validity is about measuring the degree to which an investigation of the study measures what it is supposed to measure; whereas, external validity is about checking if the findings of the study can be generalised (Alshenqeeti, 2014). Some research studies such as case studies are mostly criticised and categorised as being weak, as they are believed to produce results that cannot be generalised to other settings (Tsang, 2014).

To ensure validity, trial interviews were conducted to pre-sample one (1) OM and one (1) CEO in the KZN Department of Health eThekwini Health District prior to the actual commencement of the study proper to test the interview guide. Interview transcripts were sent to all participants for confirmation and validation. Authenticity was also done as another technique to ensure validity. A list with the full names and details of all OMs and CEOs/PHC Supervisors/PHC Managers was obtained from the District Office prior to commencement, and South African Identity Documents were required as a valid form of identity prior to the interviews to verify authenticity and to ensure that the interviews were conducted with the relevant participants.

4.13.2. Dependability

Reliability is about checking the degree to which the research instrument used can produce the same results if the same study was to be conducted again by another person (Alshenqeeti, 2014). In qualitative research, study reliability is replaced by dependability (Lemon & Hayes, 2020). Dependability proclaims that the study findings are unique to a precise place and time and that there should be uniformity across the quality of data (Lemon & Hayes, 2020). It is important for researchers to pay attention to reliability and/or dependability issues, and implement certain tactics to ensure that these issues do not weaken the study and do not present any risks to the results of the study (Brink, 1993). Reliability ensures that others do not question or doubt the study findings.

Triangulation was used to ensure validity and reliability, wherein data was collected from several sources individually during different time periods. The OMs and CEOs were identified as two groups to participate in the study. Data was collected from these two groups of participants. These two different groups of individuals were interviewed around the same study phenomenon to ensure that there was validity and reliability, because the same questions were asked from different groups at different times.

A thick description was used to enhance validity and reliability. The interviews were digitally recorded with the consent from the participants. The researcher also noted and wrote down detailed descriptions, explained all situations, and all background contexts. The expressions and body language of the participants were also noted and written down as they occurred. These were taken into consideration during the interviewing process and during analysis (Pacho, 2015).

The bracketing method was also done to ensure reliability or trustworthiness. It ensured that the way the questions and the probing questions were asked were not biased and did not cause any preconceptions. The values of good research were employed. Enough time was given to the participants for them to explain their responses in detail and allow for listening by the researcher without trying to cut or lead the participants. The researcher's own values and beliefs were put aside to allow the participants to be free and answer as they felt. Continued engagement and probing was done when the researcher could see that there was more that the participant wanted to divulge (Serapelwane & Manyedi, 2020).

4.14. STUDY LIMITATIONS

The strength of the study is that both OMs (as people who are involved in implementation of health management systems) and PHC Supervisors/Managers (as people who supervise the work of Operational managers) were interviewed to give their views and perspectives on the study topic or

research purpose, so that two groups of people giving responses on the role of one group of people is far reaching.

The limitation of the study is that only PHC facilities in KZN DoH, uMkhanyakude Health District were selected to participate in the study. As a result, generalisation will only be for KZN DoH, uMkhanyakude Health District, and not for the entire province or beyond.

Not all OMs in the KZN DoH, uMkhanyakude Health District participated in the study. Some agreed to be interviewed and scheduled appointments, but due to their workload and the high number of patients during the interview dates they could not participate. Others could not participate because they were not at the clinic due to sick leave, or were called to an urgent meeting by the District Office during the interview phase.

4.15. THE BENEFICIARIES OF THE STUDY

Every study is conducted with an aim to assist or benefit someone or something. The following will benefit from this study.

4.15.1. Communities and patients

The improved health systems will equip the PHC facilities with effective and efficient management systems which will lead to the provision of quality health programmes which will help in prevention and treatment of communities and patients.

4.15.2. Operational managers

The strategies proposed will address the pertinent issues faced by OMs. Their daily commitments, struggles and the sacrifices they make to execute their management functions have been noted. It is hoped that the KZN Department of Health will formulate management strengthening strategies and support for OMs to lessen the burden of challenges, especially the shortage of staff, as it consumes 80% of the time that should be directed to management duties.

4.15.3. Department of Health District offices and Sub-district offices

Other districts and sub-district offices will benefit from the study because these levels of the Department of Health are aligned to the PHC facilities. The findings of the study could be utilised to improve and implement inclusive policy and decision-making approaches, as well as devise relevant strategies for strengthening interventions at PHC facilities, since the South African DoH organisational structure of

its health system is the same in all the provinces. Rural districts and sub-districts will find the findings more relatable as the issues and variables might be the same.

4.15.4. Funding agencies

Health funding agencies (both local and international) might utilise the findings and recommendations of the study to fund more strengthening interventions of health reforms interventions that are focusing on strengthening the components of the health system that have erstwhile been neglected.

4.16. ETHICAL CONSIDERATIONS

Ethical approval was obtained from the University of KwaZulu Natal, Humanities and Social Sciences Ethics Research Committee (Protocol Reference No: HSS/2107/017D). A Gate Keeper approval letter, which is the permission to conduct the study was received from KwaZulu Natal Department of Health, Health Research Committee. Informed consent was attained from each participant who participated in the study.[3]

4.17. CHAPTER SUMMARY

This chapter comprehensively discussed the research design, methodology, and approaches that were adopted in this study. The chapter included an in-depth discussion of the research paradigm, research design, sampling methods, sample size, study population, selection of participants, and the data collection method. Further arguments presented why and how the chosen methods and all other research decisions were made.

The next chapter will provide a detailed presentation of the results and discuss the responses that were obtained from the participants during the interviews, with respect to research objectives #1–#3.

[3] See Annexure C.

Chapter 5: Presentation and Discussion of Results

(Research Objectives #1–#3)

5.1. INTRODUCTION

Chapter four discussed the methodology that was used to collect and collate data, including how interviews were conducted, how data quality was ensured, and how participants were sampled from the population. This chapter will be a presentation and analysis of the qualitative data and will address the six core components or 'building blocks' of the WHO Health Systems framework. In particular, the chapter will focus on demonstration, analysis and unpacking how OMs have been involved in the implementation of the management systems of the health system at the PHC level. The presentation and analysis will be done in-line with the structure of the study objectives. This chapter will discuss Research Objectives #1–#3 which are as follows:

> **Objective #1:** To investigate the role of OMs in governing the PHC facilities in the KZN DoH, uMkhanyakude Health District.
> **Objective #2:** To investigate the role of OMs in the management of the workforce, finances, information, and medical supplies in PHC facilities in the KZN DoH, uMkhanyakude Health District.
> **Objective #3:** To investigate the role of OMs in the management of service delivery in the PHC facilities in the KZN DoH, uMkhanyakude Health District.

Various formats including narrative description, graphs, tables, and figures will be used to present and interpret the data.

5.2. RESPONSE RATE

A total of nineteen (19) individual, semi-structured, in-depth, face-to-face interviews were conducted.

The following participants were interviewed:

i. Seventeen (17) Operational managers who are employed across the five (5) sub-districts of the KZN DoH, uMkhanyakude Health District. Other OMs could not participate because some were not available during the proposed dates of the interviews, while others agreed to be interviewed but on the day of the scheduled interview, they had to attend meetings and training courses that were unexpectedly scheduled by the sub-districts or district office. Other

operational mangers were situated in deep rural areas and the roads were bad and not conducive to travel in a small car.

ii. Two (2) out of a population of five (5) PHC Supervisors were interviewed. The three (3) PHC Supervisors/Managers from the other three sub-districts were not available during the interview dates and could not participate in the study. The initial aim was to interview Chief Executive Officers (CEOs) as sub-district managers, but the CEOs and the pre-tested participants suggested that PHC Supervisors/Managers were best suited to participate in the study as they are the ones responsible for closely monitoring, supervising, and supporting Operational managers, including reviewing their performance.

The interviews were quite long, averaging approximately 70 minutes per interview. An interview guide was developed through usage of analysis from management meeting attendance and observations, and analysis of internal DoH documents. The participants were allowed to give detailed responses and express their views without interruption. The interviewer/researcher asked probing questions to get clarity on all the responses that were given.

5.3. BIOGRAPHICAL INFORMATION

Biographical information is showing the presentation of data in terms of gender, race, qualifications they each possess, the number of years they have been employed within the department of health and the number of years they have been employed as OMs. This information is useful for this study as qualifications.

5.3.1. Race and gender of participants

Table 5.1. Race and gender of participants

Race	No. of participants (OMs)	Gender	No. of participants (OMs)
Black South African	19	Female	16 OMs 1 PHC Supervisor
Indian South African	0		
Coloured South African	0	Male	1 OM 1 PHC Supervisor
White South African	0		
Total	**19**		

Source: Interview Data (2018)

Table 5.1 illustrates that all the participants who participated in the interviews were black South Africans. This is beneficial to communities which the clinics serve as most people and patients in these communities are black people. It is easy to communicate and understand the culture of the population which the clinics serve.

Only 1 OM was male, and 16 OMs were female. Of the two PHC Supervisors that participated, 1 was male, and 1 was a female. Most OMs responded that they were promoted from being Clinical Nurse Practitioners (CNPs) to OMs. Most CNPs in most PHC facilities are female. This resulted in only being one (1) male OM among the participants. There is no reason or justification, except that the participants reported that even when new staff are employed to fill vacant CPNs positions, they are always given female employees because it is mostly female CPNs who apply.

5.3.2. Qualifications and management training of participants

Table 5.2 illustrates that all 17 OMs possessed a High School Matriculation certificate, Nursing Administration diploma/degrees, Midwifery diploma, General or Professional Nursing diplomas. This shows that OMs have extensive knowledge and skills in nursing. All OMs possessed a Primary Health Care diploma, which is a requirement to be employed as an OM, and this must be coupled with five years working experience as a senior nurse in a PHC environment. Some 14 of the OMs possessed Psychiatry nursing diplomas. All these qualifications provide technical skills and knowledge to function in all aspects as a nurse. None of the participants had obtained management, leadership, or any qualification that is relevant to their scope of work as managers. A few responded that there was a component of management training that they obtained in Nursing Administration diploma, some responded they could not remember because they did this qualification a long time ago. Accordingly, the OMs are leading and governing PHC facilities without proper management training. A Research Participant could recount:

> *Yes, all OMs must have a PHC diploma; they must also have 9 years of experience working as a Professional Nurse, and 5 years of experience working as a Nurse (in a PHC environment) after obtaining a PHC diploma.*

The results showed how important a PHC qualification and extensive experience of working as a nurse at PHC level are for managers of clinics. This is evident from the confirmation that OMs are only employed if they have a PHC diploma and 9 years professional Nurse experience. This is because they are responsible for ensuring the overall implementation of all health care programmes i.e. service delivery.

Table 5.2. Qualifications and management training of operational managers

	Have you received any management/leadership training including training in management of finances, supply chain, data, human resources, and other related training?			
	Qualifications	**No. of OMs**	**Yes**	**No**
Qualifications of Operational Managers	Matric / Grade 12	17	1	17
	Nursing Administration diploma	17		
	Primary health care diploma	17		
	Midwifery diploma	17		
	General or professional nursing diploma	17		
	Psychiatry nursing diploma	14		
	Diploma in nursing management	7		
	Advanced midwifery	2		
	Diploma in community nursing	9		
	Diploma in nursing science	3		
	Diploma in community nursing science	4		
	Diploma in education	1		
	Degree in governance, admin & Development	1		
	Diploma in occupational health & safety	1		
	Nursing education degree	1		

Source: Interview Data (2018)

5.3.3. Employment duration as operational managers

All 17 operational managers have been employed for a period of more than two years in their positions. This was very important for the study, as it confirmed that all the participants had enough work experience as OMs in PHC facilities, and have been exposed to all aspects of their job for a long period,

to be able to understand the complexity of the job and what it entails. Consequently, all the participants were eligible to participate in the study and to share their valuable work-related experiences.

From these results, it can be confirmed that management qualifications and experience is not highlighted as a requirement for OMs to be considered in these management positions. This is strange considering that the OMs are entrusted and expected to execute all the management functions across all components of the health system at PHC level. It is not known how OMs are expected to succeed in carrying out these management functions when they have no prior knowledge, qualifications and skills of management, but their core responsibility is management. The results further showed that there is no structured and compulsory requirement for board management training for OMs as they also do not receive any form of management training even after they have been employed. This showed that DoH does not see the value of management experience and training for OMs prior and after they have been employed to this management role.

5.4. DATA PRESENTATION AND INTERPRETATION

Data presented in the form of themes and identified themes will be used as sub-headings under the relevant study objectives. Quotations or extracts from the transcripts will be used to support the analysis and interpretation of the themes, including presentation of the literature to support the findings of the study.

Data will be presented and interpreted chronologically in line with the five objectives of the study. The main themes and sub-themes which emerged during the analysis of interview discussion will be presented and interpreted for each of the five objectives.

5.5. GOVERNANCE AT PRIMARY HEALTH CARE FACILITIES

Objective #1 was formulated to investigate the role of OMs in governing PHC facilities in the KZN DoH, uMkhanyakude Health District. Governance is one of the WHO conceptual components of the health system. It is described as “governance and leadership”, which is a component that pertains to controlling, directing, and influencing staff members to behave in a particular manner for things to happen according to the way they have been designed and planned to happen. Correspondingly, the aim was to establish how OMs have been involved in governance, planning, and ensuring implementation, including identifying the role they have played in executing this function on a daily basis. This is because as the managers at this functional level, OMs are expected to ensure execution of this management component at PHC level. They are the ones who have to ensure that things happen the way they are supposed to. They are expected to provide direction.

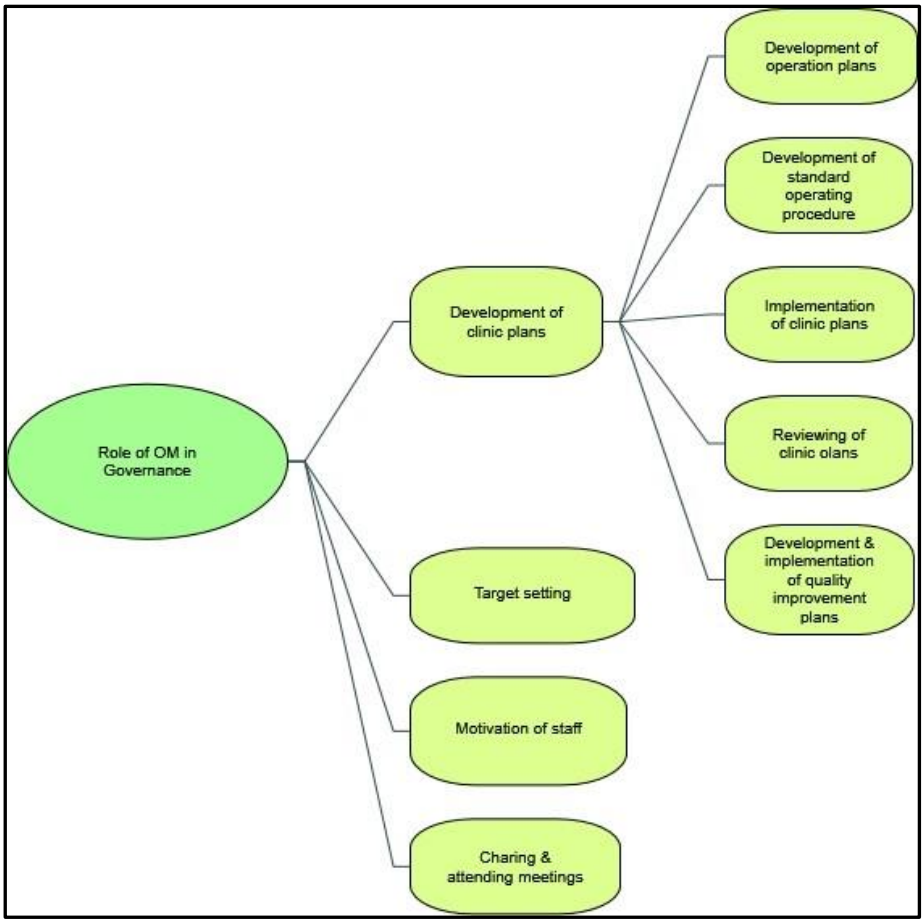

Figure 5.1. Themes on the role played by operational managers in governance and planning

Source: Interview Data (2018)

Figure 5.1 illustrates the themes which emerged when the OMs were asked to explain in detail the role that they play regarding governance and planning in their PHC facilities.

Four main themes and five sub-themes emerged from Research Objective #1. The main themes were: Development of clinic plans; Setting of targets; Motivation of employees; Chairing and attendance of meetings. OMs execute governance and control through formulating plans which staff at the clinic have to implement. These plans ensure that staff member conduct activities which are aligned to the sub-districts and district, in other words these plans ensure that staff pull in the same direction and staff do things according to what has been planned and also how it has been planned. OMs also set targets which staff members have to reach, and these targets are aligned to the sub-districts and district targets. To control and influence staff to work hard and reach targets, OMs execute motivating activities to push staff members to do what they are excepted to do, according to how it is expected to be done and according to the set timelines and targets.

5.5.1. Development of clinic plans

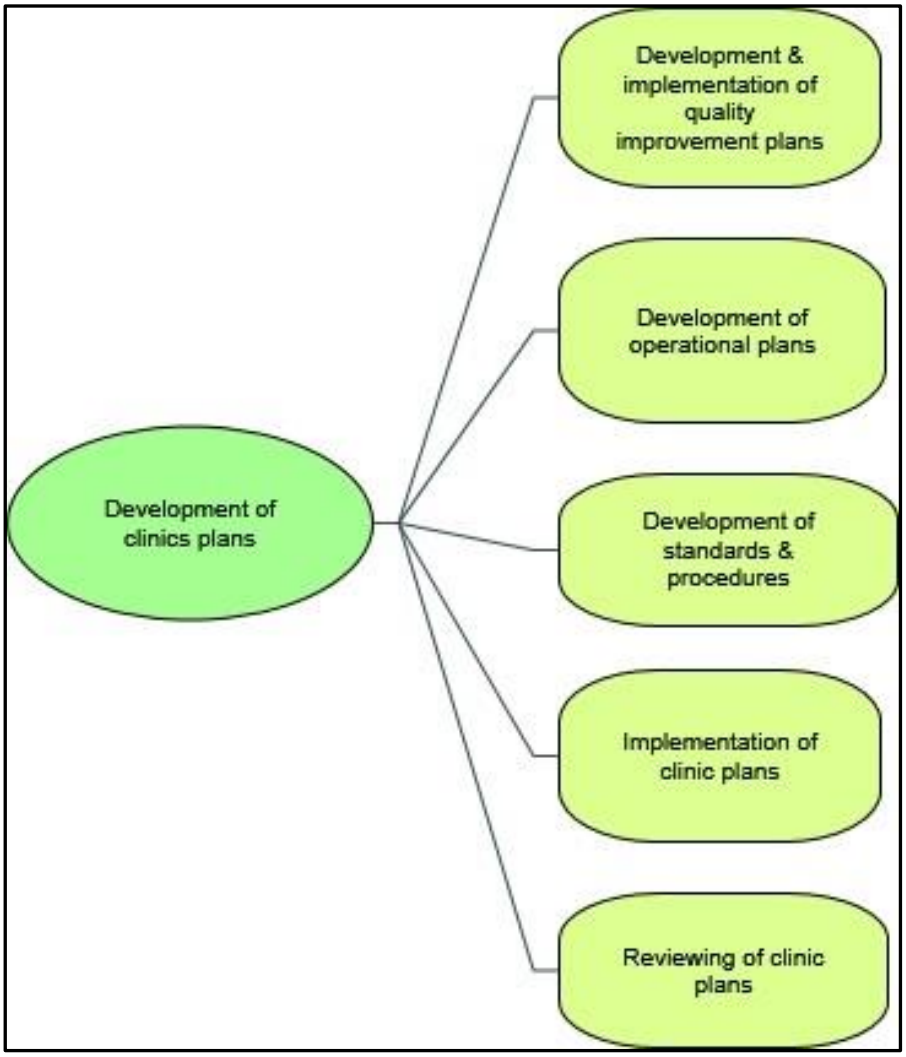

Figure 5.2. Sub-themes from the development of clinic plans

Source: Interview Data (2018)

Figure 5.2 illustrates the themes which emerged from the development of clinic plans main theme. Five sub-themes emerged. These were: Development and implementation of quality improvement plans; Development of operational plans; Development of standard operating procedures; Implementation of clinic plans and reviewing of clinic plans.

It was reported that the development of clinic plans is one of the major functions for OMs. The emphasis is on clinic plans because that is the only planning activity for which OMs are responsible, as they do not play any role in the development of strategic plans and business plans, since these are developed at the Provincial Office level, and OMs are not invited to be part of the development team. It should be emphasised that most planning activities performed by OMs are related to service delivery. This type

of planning includes tasks such as: planning and conducting outreach programmes to reach targets where the clinic is lagging behind; developing activities which the clinic plans to perform through the year; designing activities to implement and improve the quality of health care services. Some OMs complained that, even though it was their responsibility to develop plans, they knew that their plans were not final because the sub-districts could come back and change what they had put in their plans. Operational managers commit and dedicate a significant amount of time to the development of clinic plans. First, they participate in the development of hospital or sub-district plans. Second, they come back, coordinate and sit with all other staff members from their clinics to develop their own clinic plans. It is quite a substantial and exhaustive activity. Therefore, it is so demotivating for the OMs when the sub-districts change things that have been previously planned. This act by sub-districts, instils a feeling of being undermined and not being taken seriously. Accordingly, some OMs do this planning task to simply tick the register, and they do not give their full commitment into developing solid plans as they know that more than likely they will be changed later. The OMs feel they are not involved even though they do this task. Responsibility and ownership of this task has been taken away from them as they feel their efforts into performing such tasks are not valued and are often regarded as unimportant.

The OMs do not play any role regarding health workforce planning, financial and budget planning, as well as planning in relation to supply chain or procurement of medical supplies. This is in contrast with the literature which showed that the location of implementation is at the PHC level, where the formation of district and sub-district teams has led to the decentralisation of decision-making and made OMs the drivers of the implementation of the health systems.

The close to non-involvement of OMs in the task of planning is contrary to what the functions of management entails. Previous studies have shown that the management task should include planning, organising, leading, and controlling of organisational resources (Stoner & Freeman, 1992; Hellriegel et al., 2012). However, based on the responses received from the OMs, this is not the case with their designated management task. The OMs reported that in their experience, their responsibilities only include leading, controlling, guiding, and supervising implementation. Leading mainly entails making certain that the plans that have been developed are implemented. Controlling entails controlling the wastage of resources when they have arrived at the clinics. Guiding and supervising entails the implementation of health care services. The management tasks that are performed by OMs lack full commitment and responsibility, and this is attributed to the way and manner in which they view their involvement in the planning task. Their involvement in the planning task is partial and they view this task as unimportant, as it only includes service delivery, but excludes other critical planning activities such as finance, procurement, and human resources.

These results concur with the findings of the study conducted by Moosa et al. (2019) in Johannesburg, wherein the results showed that facility managers in the clinics where the community outreach programmes were implemented reported that the planning function is still centralised at sub-district level, and this was one of the factors which led to failure in implementation of this programme. The managers in the primary health care facilities felt that planning should be decentralised to improve implementation.

The results demonstrated that there is still a challenge with governance at PHC facilities, where the involvement of OMs is minimal and their contribution is not valued. Therefore, this should be reviewed and strengthened to ensure that OMs are fully involved and play a role in the planning function (Rispeli et al., 2018). Some of the research participants responded in the following ways:

> *To tell you the truth I am involved but not involved. I plan and finish then later I am told to change things that I have planned.*

> *We do those plans because we have to. Seriously, we do them because they tell us to do them, otherwise they mean nothing to us because the hospital and district office change our plans as and when they want.*

> *I was called this year for the development of operational plans for the hospital. We do the hospital plan first. Then I come back to do the clinic plan with my staff. The clinic plan is done first because the clinic one has to be aligned to the hospital plan. My Operational Plan expires after a year, this year on the 31 March next year. Then I set objectives, timeframes, and everything for the clinic.*

As much as OMs are involved in planning, but some confirmed that their involvement is near to non-existent. The sarcasm and tone that was used in saying "I am involved but not involved" shows that the participants want to be fully involved and despise the fact that they do the planning work and then later they are told to change the activities that they have planned. The OMs perform the planning activities twice because they have to redo the planning function again when they are told to change what they have planned. As a result, such behaviour makes OMs to not take this planning activity seriously, and they do not commit themselves fully when they are doing this activity because they know what they do is not taken seriously. The OMs even confirmed that they perform this function because they have to. Thus, the behaviour of the sub-districts and districts managers when they tell primary health care managers to change their plans have contributed to these managers not taking this task serioulys. The planning task is done to tick a box or as a compliance exercise. This action make OMs view their planning tasks as interim and subjective, as their plans are only there until the sub-districts decide to

change and develop new plans or change some aspects of the plans (Stoner & Freeman, 1992; Hellriegel et al., 2012).

5.5.1.1. The development of operational plans

Under the development of clinic plans, it emerged that OMs play a crucial role as all of the participants reported that they do this activity. Operational managers do this activity together with other staff members in the clinics to ensure that everyone understands and has knowledge of what the clinics plan seeks to accomplish. One important factor is that OMs ensure that the clinic operational plans are aligned to the sub-district plan to ensure that they are in-line with the entire DoH planning and set targets. The OMs do an analysis of the statistics to ensure that they base their future projections on previous achievements. Nevertheless, the entire exercise is weakened by the sub-districts because in most cases they change the plans that have been developed by OMs at a later stage. This renders the efforts of the OMs fruitless and has created negative attitudes towards this task. The OMs view it simply as a compliance exercise.

An operational plan is a document which outlines how identified goals will be achieved, activities and resources allocated, and outline how potential problems can be solved (Kirigia et al., 2001). It clarifies where an organisation wants to be; how it intends to get there, and when it wants to get there, while tapping into opportunities, capitalising on organisational strengths, mitigating any threats, and addressing own weaknesses (Hellriegel et al., 2012). A well-designed and effective operational plan should comprise of objectives, activities to be implemented, targets, expected results, resources required to implement activities, and strategies for monitoring and evaluating implementation. A detailed operational plan which is done collaboratively with other staff members assists PHC managers and the entire clinic team to know what needs to be done (Kirigia et al., 2001). The district office and District Health Management Team (DHMT) should have a co-ordinated plan to ensure that the sub-districts and clinics similarly work towards achieving the same goals and purpose. Most management literature has shown that, co-ordinated plans (at functional or operational levels) which are aligned to overall corporate or high-level strategies are effective as they ensure that all the levels within an organisation are aligned and in tune with the mission, vision and broader strategic goals. Such plans normally are guaranteed to yield positive results (Kirigia et al., 2001). It is left unknown as to what hinders attainment of successful implementation of operational plans in primary health care facilities if these plans are done collaboratively and with the involvement of staff members at higher (district and sub-district) level and functional (primary health care) level.

The study found that not valuing the OMs efforts negatively affected the entire development of the plans. When the OMs do not commit 100% to this task, and view it simply as a compliance issue, it

has led to OMs not taking ownership, with the result that it affects implementation. If OMs lack the ownership of plans, this will automatically affect implementation, which in turn will negatively affect the entire governance function. When there is a challenge with this function, it will also affect the other management functions because they are all interconnected.

The OMs can be commended for knowing and engaging staff members from the clinic in the development process of the operational plans. This is an important aspect that most successful managers do in order to ensure that everyone who is involved in implementing organisational strategies within an organisation, understand the set organisational goals, objectives and activities. Involving other staff members ensures that there is acceptance / buy-in in including ownership of the plans and strategies.

Some of the research participants reported the following:

> *I have an Operational Plan which I developed together with my staff members.*

> *I am involved in formulation of operational plan for my clinic. In fact, we do it with the help of a M&E matron. We look into our statistics, then we see or identify all the programmes in which we are not doing well; we do an Operational Plan and activities or actions as to what we are going to do to improve them, then we give them targets, timeframes, and allocate responsible people and resources to do them.*

> *I do have an Operational Plan for my clinic, and I also have a Business Plan. We did it together with PHC Supervisor because it has to be in-line with our sub-district plan, as well as with the District Office plan.*

5.5.1.2. The development and implementation of QIPs

The OMs play a significant role in the development of quality improvement plans. The responses indicated that that National Core Standards (NCSs) which are being implemented to prepare PHC facilities for the adoption of National Health Insurance (NHI), has increased the need for this task. Operational managers are expected to perform and accomplish a variety of activities and initiatives to ensure they are rated appropriately when assessments for NCS and Ideal Clinic are conducted. Many assessment tools have also been designed for NCS and Ideal Clinic assessments, and OMs must use these to assess their clinic's readiness when the assessment periods arrive. Therefore, OMs conduct these assessments and thereafter develop Quality Improvement Plans (QIPs) indicating how they intend to improve on quality or address inadequacies identified during the assessments. These assessments are conducted for all health care programmes that are provided by PHC facilities. While most of these assessments are conducted by OMs monthly, some are conducted by the Quality Managers and PHC

Supervisors who are both from the sub-district, district, or dedicated quality personnel from provincial departmental office. The OMs thereafter are expected to develop quality improvement plans and write progress reports on a quarterly basis reporting to the sub-district on the implementation of QIPs. The OMs must ensure that all the activities in the QIPs are implemented when the next assessments are conducted. Monitoring and ensuring the implementation of QIPs is a very time-consuming activity.

The development of QIPs by the OMs can be regarded as an important role because the implementation of different Quality Improvement interventions has been adopted as a methodology for improving quality and inefficiencies at the PHC level in developing countries. Through these interventions, facility managers have been able to identify areas where resources are wasted; areas where there is a need for more staff resources and then re-allocate or ask other staff members to step in and help; areas where there are delays and then implement ways measures to improve, and issues which cause clients' dissatisfaction and eliminate or address those issues (Wells et al., 2018). Research has shown that the utilisation of quality improvement methods is an effective method of improving quality in PHC facilities. It has yielded great improvement to the entire clinical programmes and contributed to the attainment of targets in most developing countries (Webster et al., 2012). Two of the research participants responded accordingly:

> *We have Quality Managers who are based at the hospital, but each and every programme, if we identify anything or gaps, I have to develop the Quality Improvement Plan (QIP). Even with the assessments that are done by the National or District, the QIPs are done by me and sent to the hospital after the assessments. Even for Ideal Clinic assessments, after I receive the report after the assessments, I am required to do the QIP. The same as with the National Core Standards, after the assessments are conducted, I have to write the QIP and send it to the Quality Manager. And I have to do the Progress Report on a quarterly basis so that they can know what activities we are doing as a clinic to correct the gaps that were identified.*

> *I am involved I told you previously that I do all Quality Improvement Plans after assessments, I also conduct our own monthly (before PHC Supervisor) and quarterly audits.*

OMs play a significant role in the implementation of this activity in order to ensure that the two national priority programmes (NCS and Ideal Clinic) are a success. Developing and monitoring implementation of these QIPs are a priority because the assessments are done at national, provincial, District, sub-district and PHC levels. This task is supported and strengthened by the dedicated Quality Managers who are placed at sub-district level. Even though these managers

are based at sub-district level, they are available to help OMs with implementation of Quality Improvement Plans and for provision of support when it is needed.

5.5.1.3. Implementation of clinic plans

The OMs reported that they play a significant role in ensuring the implementation of all plans in the clinics. They indicated that this task comprises making all clinic staff aware of what they are expected to do, allocating appropriate tasks for different programmes, providing staff members with required resources to carry their tasks, providing timeframes and deadlines on when to accomplish objectives, train and mentor them to carry their tasks effectively, review if staff members are implementing the allocated activities accordingly, identify challenges hindering successful executing of allocated tasks, provide solutions to tackle the challenges and also keeping staff motivated and committed to doing their tasks. To ensure alignment with overall DoH goals and targets, OMs align the activities in the performance agreement to those in the overarching operational plans. The operational plan is continually used by OMs as a form of reference.

What was revealed from responses in terms of the role that is played by OMs in the implementation of clinic plans is supported by the literature, which showed that every manager (whether at lower, functional, or operational, middle, senior or executive level) is entrusted with ensuring the implementation of all organisational plans. Ensuring implementation of organisational strategies is a governance function which is central and critical in the success of the health system. These plans can either be long-term plans like strategic plans, or medium-term business, operational, functional, or implementation plans. Individual key performance areas should be aligned to organisational goals, targets, vision, and mission. This ensures that even when staff members are undertaking their individual or departmental tasks, they are working towards achieving overall shared organisational goals (Hellriegel et al., 2012; Stoner & Freeman, 1992; Civelek, 2019). Two of the research participants responded in this way:

> *I am fully involved, because I monitor the implementation of the plan closely. I also allocate tasks to the staff based on what we need to do on the Operational Plan.*

> *I ensure implementation by doing supervision, checking the registers. I also ensure that what I am doing is aligned to the Operational Plan, when I allocate tasks and drawing or writing up performance agreements. I constantly check the Operational Plan, some of the things I have got used to them, so I don't always check, but sometimes I refer to the plan.*

OMs closely monitor implementation of the plans, including ensuring that implementation of these plans indirectly lead to attainment of overall DoH goals and objectives by aligning allocated tasks and key performance areas of lower level staff members to the operational plans which are in turn aligned to sub-districts plans. The scheduled ongoing supervision and performance appraisal is done strategically to check success and identify challenges in implementation and then provide support and training if there are identified gaps or challenges. Alongside motivating staff members, all OMs confirmed that they offer in-house training or health education which is dedicated to improve performance of staff members and help them achieve desired performance standards since all staff contribute to implementation of clinic plans. The OMs have committed considerably in ensuring implementation of these functional level plans.

5.5.1.4. Reviewing of clinic plans

Operational managers work collectively with staff members and other stakeholders such as the Clinic Committee to review operational plans on a quarterly basis, to assess whether the clinics are achieving their set targets and objectives. When it is identified that there are challenges and targets which have not been met, the OMs devise action plans to address the identified challenges and design and implement interventions to be able to achieve the targets. The OMs understand the purpose of reviewing clinic plans and have taken full ownership of this task, as they do it on a continual basis to ensure that should things not go according to plan, and it is discovered that the facility is lagging behind in attaining certain targets, immediate action is taken and corrective interventions implemented. Remedial action includes activities like frequently conducting internal in-service education and training when OMs see there are problems with the provision of quality health care services; providing training on guidelines if there is non-adherence to certain guidelines, and conducting awareness campaigns in the communities in order to reach targets.

The study results showed that OMs understand the reasons that they execute this management task. It is not only to review the document or to identify challenges and gaps, but they are pro-active, they take responsibility to implement corrective interventions and to improve the implementation challenges and remediate what have been identified to be challenges. The OM's intention to carry out this task is action-based, and they conduct this task from the beginning to completion. They do not come up with excuses like unavailability of training resources or budget, but they conduct in-house training and education themselves, utilise own transport to go out to pensions points to reach out to more clients / patients. Soemtimes they have to make drastic decisions, such as reviewing set targets and timelines to ensure they are realistic and the staff will be able to achieve what has been set in the operational plans. Some OMs mention that they involve staff members in the review process, in that case the review is authentic,

understood and is accepted by staff members within the entire clinic. This ensures that the review is not seen as a fault finding initiative, but rather as a corrective initiative and all staff members comply and accept the findings and are willing to take responsibility and ownership of corrective actions.

This finding concurs with the recommendations which affirmed that the reviewing of targets should be done in a developmental and reinforcing approach that is engaging and respectful towards all those involved in implementation. The recommendations further assert, that the reviewing of plans and targets should not be aimed at finding fault, but rather on providing remedial actions, solutions, and alternatives for solving problems and challenges, and thereby achieve better results (Cleary et al., 2018). The following responses were received from four of the research participants:

> *Reviewing is done on a quarterly basis or when we need to. Like if we are not doing well, remember that we have set our targets, isn't it? That we want to reach these targets, but we are not reaching them due to problems or constraints. Then reviewing is how we take action. So, we do constant review whether we are meeting targets; if not, we take action or implement interventions.*

> *When we review plans, we do a lot of things. We even evaluate and look at what we have done and what we have achieved. We also do remedial action, detailing all the things that we need to do to end up meeting our targets.*

> *I review my Operational Plan quarterly with my staff members. When things are not going according to plan, I come up with remedial actions. I normally reset the time-frames, and we try to find out what are the problems that cause us not to reach the targets. If it needs in-service education, I do in-service education of staff.*

> *If I am not meeting targets, I go out to pension points together with lay counsellors to reach out to more patients to try and reach the particular targets we are lacking on. I even use my own car, but we make sure that we identify all the programmes where we are not doing well, then we put the plan in place.*

5.5.1.5. Development of standards operating procedures

Although some of the policies and SOPs have been developed by the DoH, either at the National or Provincial level, the majority of OMs confirmed that as managers they have a responsibility to customise some of the policies to make them suitable for easy implementation at the clinic level. Operational managers also develop other policies and procedures which the DoH has not developed.

This shows that as facility managers, these managers can take the initiative to provide guidance and develop processes and standards for some of the things which the DoH has not done. Operational managers also provide training on policies and procedures to ensure that all staff members in the clinics are aware of the policies and SOPs, and have knowledge on how to implement them. All this is done to ensure that levels of standards are set, discipline is instilled, there is a consistency in the way things are done, and the way staff members conduct themselves in the clinics.

The management literature asserts that the Standard Operating Procedures (SOPs) are guiding documents which help in outlining and explaining how things should be done, what conduct and behaviour is acceptable, and how decisions should be made (Miles, 2012). These guidelines are important in helping OMs manage and shape behaviour of staff members in the primary health care facilities to ensure that they are all motivated to work towards achieving collective organisational goals. The study by Cleary et al., (2018) confirms that the implementation of policies, rules, and SOPs, including fostering an obligation to shared goals, are the essential responsibilities for managers operating at any level. This study showed that OMs as managers in the clinics also play a significant role in ensuring the implementation of policies, rules and SOPs. In a busy South African primary health care environment, where there is a variety of health care programmes which have to be provided in certain acceptable and high standards to larger populations, policies such as the SOPs provide OMs with an opportunity to ensure uniformity and uphold standards and quality of health care. SOPs also provide OMs with grounds for disciplining staff members who are not behaving or conducting themselves in an acceptable manner. It is an effective way of moulding staff behaviour, ensuring staff discipline, conformity, and doing things in accordance with acceptable clinic standards (Cleary et al., 2018). The SOPs are crucial for instilling discipline and encouraging the culture of working hard and assuming extra tasks when asked to in the environment such as PHC facilities where there is a chronic shortage of staff members. In this regard, two of the research participants reported the following:

> *I am also involved in doing SOPs for my clinic. Yes, I am doing policies for my clinic. I have developed dress codes for staff; I have also developed an absenteeism policy, even though there is an absenteeism policy developed by the Department, but I had to customise it for my own facility. These policies help to instil discipline and uniformity.,*

> *I have developed the following policies: Management of medicines; Management of schedule 5 & 6 medicines; Handing over to EMRS, while referring to clients at other facilities, or hospital SOPs.*

5.5.2. Setting of targets

Operational managers reported that they are now responsible for developing clinic targets, and that these targets must be aligned to the district targets. This is a newly added responsibility which has been incorporated into the scope of work of the OM as it was previously done by the district and sub-districts offices. Target setting is an important role within the primary health care sector because the attainment of targets is used as a major indicator for success of a clinic, and non-attainment displays failure. So when executing this activity, the OMs make sure they set realistic targets in order not to set their clinics up for failure. As a result, they consider the population they serve, as well as using the baseline from the previous three year's statistics, and analysis of previous trends. Operational managers understand that the performance of the clinic and that of individual staff members, is determined by the accomplishment of targets. Therefore, the targets are monitored daily to identify whether the clinics can attain their set targets. In addition, if challenges are identified, OMs must come up with suitable strategies to improve and accomplish the set targets.

This result is supported by the policy that determines that sub-districts and PHC facilities are located within a well-organised and constantly monitored hierarchical environment. Targets are a measure of success; hence they have to be monitored carefully and constantly from the PHC level upwards. Thus, individual facility performance results are sent up to district, provincial and national DoH departments. This is in support of literature and studies which were conducted in countries which have also adopted the primary health care model, wherein it was recommended that managers in operational levels of care such as operational managers in PHC facilities within a South African context, should be given the responsibility and autonomy to set-up and monitor facility targets, conduct assessments and reviews, and additionally to monitor the implementation of plans, policies, and standard operating procedures (Cleary et al., 2018).

Involving OMs in the setting of targets minimises the manipulation of results, leads to factual reporting of data, honest analysis, and the evaluation of challenges which hinder the attainment of targets (Dasa et al., 2021). Operational managers feel a sense of accountability for ensuring that everything goes according to plan. It also leads to ownership of the targets set, and as a result, OMs transfer the sense of ownership to the staff members they are managing. Thereafter, they motivate the staff members to take ownership and work collectively to succeed. OMs take responsibility and continuously monitor progress toward attaining what they themselves have set. For example, if there are identified bottlenecks, they make it their responsibility to immediately implement corrective measures sometimes using resources and spare time, because the aim is to provide quality health care services and improve health outcomes. They treat targets as an honest indicator of their clinic performance. There is no urge to impress the sub-districts with providing fabricated data (Dasa et al., 2021). Involving OMs in the

role of setting targets also ensures that DoH slowly do away with the top-down management approach which has proven to be an ineffective approach. As a result most organisations are moving away from that, but instead encourage a bottom-up approach which is more engaging and is preferred by many managers who are located at operational functional levels. Two of the research participants thus reported the following:

> *I would say I am involved in target setting; I even tell them at the sub-district when they put numbers that I know we cannot attain. We do it together with other OMs, PHC Supervisors, other PHC Managers, the Information Officer, together with the Monitoring and Evaluation Staff.*

> *Before they would just set targets for us. But ever since the last financial year, we are involved in setting targets using the baseline of the previous three years, which gives the performance in the previous three years. Then we say from this baseline we can move to, because seeing the trend, let's say in cases of head count when our baseline was – let me say, the baseline for 2015/2016. Let me say that, we saw around 33 000 per year, then the average for 2017/2018 we increased up to 35 000, then we increased the one for 2018/2019.*

5.5.3. The motivation of staff

Motivating staff is performed with an aim to ensure that their behaviour or conduct is changed from bad to good, and they think and feel positively about their work to make certain that they do what they are asked by OMs in terms of their job description. Such motivation is essential in encouraging demotivated staff members to achieve organisational goals. It is also much needed in an organisation such as remotely located primary health care facilities in rural setting such as UMkhanyakude district which is heavily burdened with a shortage of nursing staff and other resources such as medical supplies and equipment, as these also add towards demotivating staff members. The OMs reported that they play a key role in keeping employees motivated and satisfied with their jobs because of the shortage of staff and increased workloads. The activities and interventions OMs can do to motivate their staff members are limited to verbal and written recognition and appraisal (e.g. issuing of certificates), as they have no authority or means to utilise monetary initiatives like awarding bonuses or promotions. They appreciate and verbally congratulate, involve their best performing employees in challenging tasks, and issue certificates to all those who perform exceptionally, and exceed set standards. They equally encourage, support, mentor, and train those who are struggling and failing to reach their expected performance targets. Moreover, OMs conduct motivational talks and in-service education to motivate those employees who seem to be demotivated and not meeting expected performance standards. Some

OMs motivate staff members by going and helping in areas where there are shortages due to staff being either on leave or training, they do this to nurture and encourage the spirit of helping each other among staff members. Other staff members would simulate this same behaviour during times when there are shortages, and this shows that this motivating technique works for primary health care managers who are faced with staff shortages.

In the current South African primary health care environment, operational managers cannot promote, nor motivate for promotion, deserving staff members, as there are no performance-based promotions in the DOH. Staff members must apply for higher positions should positions become vacant. Hence, OMs encourage staff to study further, and engage them in challenging jobs in order to provide them with the experience and knowledge required in higher positions.

Employee motivation is one of the critical factors which leads to commitment, hard work, and eventually quality improvement, attainment of targets, and positive health outcomes. Motivating staff at PHC facility environment also boosts their self-esteem, which is needed for staff to gain confidence and take on challenging tasks. The complex issue is that motivation within the environment of the PHC facility can be achieved not only by addressing one factor, but by addressing a variety of factors (Kjellström et al., 2017; Afolabi et al., 2018). Although core factors that affect motivation include career development, financial rewards, satisfactory work settings, all these were unable to bring change alone, so the motivation through verbal praise that is provided by OMs is commendable because it adds to the factors which can increase motivation of primary health care staff members. Sitting down and talking with staff members who have not reached their targets to find out what their challenges or hindrances are, also help those poorly performing staff to be motivated to work hard. These findings are also in support of literature around motivation of staff, where it has been shown that leadership tactics and style, as well as the appreciation and recognition of employees, are significant motivating factors for healthcare workforces, especially in rural areas in developing countries (Afolabi et al., 2018). Confirming this, four of the research participants narrated the following:

> *I do motivate my staff because motivating them boosts their self-esteem. Like if I see that someone has out-performed and met all her targets that were set for a day or week. For example, HIV testing, if I say your target is 40 for this week and they reach it, I have to praise them so that they can be motivated to want to do it often. If they don't reach their targets, we sit down and discuss what caused them not to reach their targets. But I do encourage them.*

> *I do appreciate them when they are doing well, and the team spirit at work, and encourage them to support each other. I would also go there myself and support and*

help staff members when there is a shortage somewhere. And that thing of nominating those who are doing well to get rewards, makes people to want to work hard and enjoy coming to work every day. Others would also want to do well so that they can also be nominated for awards.

I do those in-service education and talks reminding them that we are all here to work; there must be no one who abuses others. So those who are in-service education, helps them to improve and change.

I have no input or involvement in the promotion of staff. There is a practice of rewarding staff when they have completed ten years in a position; then they are rewarded with money, and that is HR's responsibility. The only thing I do is to encourage staff to register and study so that they can apply when positions become available, so I do that especially the younger staff members. I also recommend and nominate staff for further training.

5.5.4. Chairing and attendance at meetings

The chairing and attendance at certain meetings are some of the tasks central to the OMs scope of work. Operational managers utilise meetings to gather the staff they are leading to assess and ensure that everyone is pulling together in the same direction. This is when information is shared and challenges are identified. In addition, the effects of these challenges are discussed collectively, solutions are formulated, guidance is provided, and best practices are shared to ensure that all staff members are aligned to the same set of goals and objectives.

Some meetings are scheduled and others are sometimes unscheduled in sub-districts and the district office, with communities, other health partners, and other government departments. The OMs also chair scheduled meetings in their clinics. The OMs also belong to various committees, either representing the DoH, or clinic at the local/ward level. Some of the meetings and committees are internal within their clinics, at sub-district offices or the district office; while others are external with other stakeholders in local communities. Some of the internal DOH meetings include: monthly staff meetings; information meetings; extended management meetings; weekly and monthly nerve centre meetings; perinatal meetings; monthly cash-flow meetings; quarterly review meetings; health and safety committee meetings; IPC committee meetings; clinic committee meetings, and a variety of programme meetings. Some of the external meetings include: Operation Sukuma Sakhe (OSS) meetings; war room meetings; advisory committee meetings, and other stakeholders and health partner meetings.

After attending these meetings, OMs provide feedback on the meeting's resolutions to their clinic staff members. The harsh reality is that while most of these meetings require only the OMs to attend, they are not allowed to delegate. This becomes impractical under the current conditions where there is a shortage of CNPs, and OMs find themselves having to do nursing work 80% of their time. This means sometimes OMs are unable to attend some of the meetings due to other work commitments, or they forego some of their work commitments so as to attend some of the meetings. Some meetings are far away from the clinics and there is no transport to travel to and from the clinics, and OMs must use their own means of transport and own petrol. This shows how OMs have tenacity, accountability, and a desire to accomplish their tasks at all costs. It can be highlighted that OMs are not refunded those monies expended in using their own cars and petrol for official business. The unavailability of transport to be utilised by OMs for meetings, health education and awareness and other clinic activities was found to be a challenge faced by OMs in all clinics across the district. Four of the research participants narrated the following:

> *As OMs, we attend Operation Sukuma Sakhe meetings; internally it is Cash Flow meetings, Extended Management meetings, Clinic Committee meetings, Information meetings, Perinatal meetings and these are all monthly; then there is the Weekly Nerve Centre meeting which we hold here in the clinic. Also, monthly Nerve Centre meetings, Information or Data meetings, and then in hospital we also attend the Quarterly Review Meetings… there is a lot more, some of which I have even forgotten.*

> *I attend War Room meetings and Advisory Committee meetings. I conduct monthly Staff meetings, Monthly Information meetings here in the clinic. At the hospital, I attend Weekly Nerve Centre meetings, Programme meetings, Cash Flow meetings.*

> *… all I can say is there are too many meetings; that is why we end up not doing our work in the facilities. We spend more time in these meetings and committees in the hospital.*

> *I am involved in the Clinic Committee, Infection Prevention and Control (IPC), as well as the Health and Safety Committee.*

The analysis of data confirmed that the role played by OMs in governance includes: partial planning and the limited development of clinic plans; customising policies and standard operating procedures; ensuring the implementation of plans through the effective duty allocation of staff members on a daily basis; the implementation of quality improvement plans to ensure the provision of quality services, and

the attainment of targets – in which OMs play a significant role in setting up; the reviewing of plans to identify challenges and bottlenecks, and thereafter formulate strategies and interventions to resolve challenges. Operational managers spend a lot of their time motivating staff, since most are demotivated and dissatisfied due to the increased workload caused by the shortage of staff. They spend a lot of time attending meetings and chairing committees, which makes it impossible to attend to some of their critical management functions. The OMs are insulted by their partial involvement in operational and strategic planning, including sub-district officials sometimes changing their plans. They are absolved from other planning activities like financial and human resources. The limited involvement of OMs in the development of clinic plans and their total exclusion from development of other planning activities such as financial planning, and human resource planning, weakens their governance function, which in turn affects the implementation of other management systems at the PHC level. Operational managers should be driving implementation, guiding staff to work more efficiently, and implement their activities according to the plans; yet, this is made difficult because there is no ownership of these plans. The weakening of their governance function will result in a weak health system at the PHC level.

5.6. ROLE OF OMS IN MANAGEMENT OF HR, FINANCE, IT & SUPPLY CHAIN

This objective is aimed at investigating the role of OMs in the management of the workforce, finances, information, and medical supplies supply chain in PHC facilities in the KZN DoH, uMkhanyakude Health District.

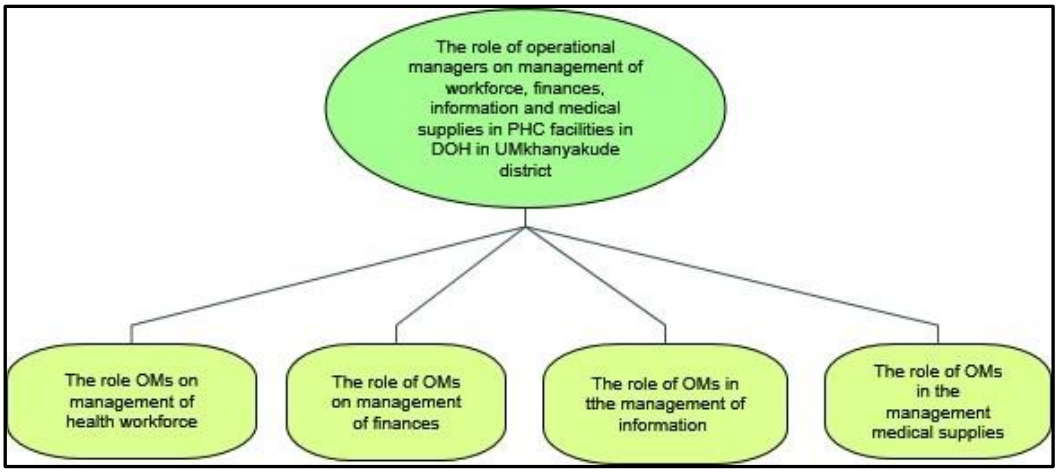

Figure 5.3. The management of the health workforce, finances, information, and medical supplies

Source: Interviews Data (2018)

Figure 5.3 illustrates the multifaceted and broader role of OMs, with sub-objectives which presents the role they play in the management of the health workforce or human resources, management of finances,

management of information and the management of the procurement of medical supplies which is management of the supply chain.

Operational managers reported that by virtue of their position and according to their job description, and the fact that they are located at the operational level which is an entrance to the healthcare system, they are supposed to be responsible for overall management which includes: managing the health workforce who are offering clinical care; managing finances used for the procurement of medical supplies; managing information which is derived from patient data they receive every day, and manage and ensure the availability of medicines and supplies which healthcare workers use to treat patients on a daily basis. The OMs confirmed that some of the key functions in the scope of their work have been centralised and are exclusively executed at the sub-district level. This is due to the approved reporting levels and organisational structures within the DoH, but unfortunately results showed that the current system has paralysed and weakened health management systems at PHC level.

This finding disagrees with most management literature which established that managers who are responsible for managing entire operations at any level (in this case OMs at the PHC facilities level) should be responsible for the entire management of the clinics, which includes all four management functions which are planning, organising, leading, and controlling. The literature and the study conducted in the Free State by Muthathi et al., (2020), showed that additionally, OMs by virtue of their positions and level in which they are operating should perform executive duties and manage the finances and the entire workforce, training, and development of staff, data, and information management, as well as ensuring adherence to policies and SOPs for excellence in PHC outcomes (Muthathi et al., 2020).

5.6.1. The management of the health workforce in PHC facilities

Research Objective #2.1 is a sub-objective of Research Objective #2, which was intended to investigate the role of OMs in the management of the health workforce.

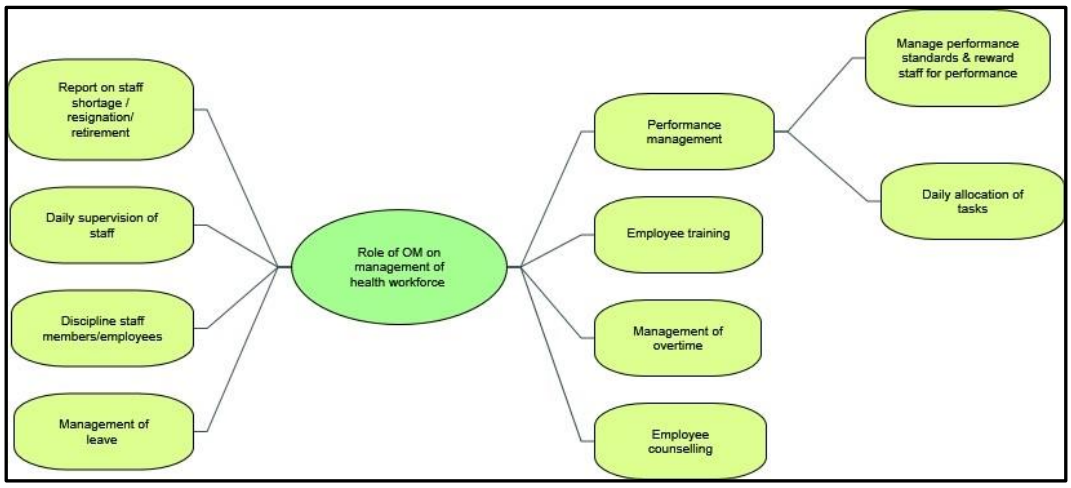

Figure 5.4, Themes on the role of operational managers on the management of human resources

Source: Interviews Data (2018)

Figure 5.4 depicts the main themes which emerged when OMs were asked to narrate and explain the role they play in management of HR. They reported their viewpoints on staff shortages, resignation, retirement, daily supervision of staff, employee discipline, management of leave, employee counselling, health and safety for employees and patients, management of overtime, employee training and performance management.

5.6.1.1. Performance management

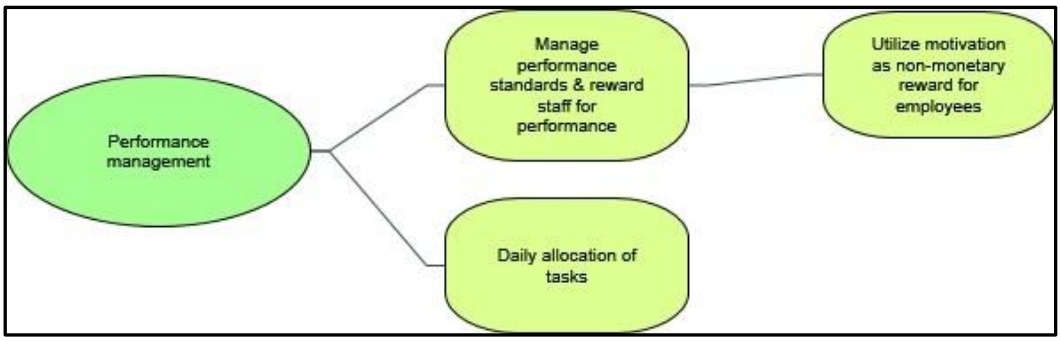

Figure 5.5. Sub-themes from the performance management main theme

Source: Survey Data (2018)

Figure 5.5 depicts the two sub-themes which emerged from the performance management main theme, and concerned, "managing performance standards and reward staff for performance" (with, "utilising motivation as non-monetary reward for employees," as its sub-theme), and the "daily allocation of tasks."

The management of performance for all clinic staff is one of the significant responsibilities for OMs. OMs in all the clinics that were part of the study reported that they are responsible for the overall management of the Employee Performance Management and Development System (EPMDS), for all staff members since staff all directly report to OMs. The activities performed by OMs under "performance management tasks" include sitting down with each staff member and formulating the individual performance agreements at the beginning of each year (i.e. April), which is done according to the scope of practice, including qualifications, and clinic activities in the operational and other business plans. Individual performance development plans are also discussed and agreed upon during this stage, where training and development needs are identified for each staff member. The performance agreements are signed by both the OMs and individual staff members; thereafter, copies are sent to the sub-district HR to be filed under individual performance records, while other signed copies remain at the clinics. All of this is done to make certain that individual yearly performance activities and

standards are aligned to the clinic-wide operational plans, which are also aligned to the sub-district and district health plans.

The other activity under the management of performance is the conducting of performance reviews or appraisals, which are done by OMs on a quarterly basis. This is as per DoH set quarterly review phases which happens at all levels (from PHC to national). In doing this activity, OMs assess how all the staff members are doing their work, if each individual staff members are able to achieve the set key performance activities, and provide scores to rate their level of achievement. During performance reviews, OMs identify reasons for the non-achievement of set activities and objectives; devise approaches which can be done to help staff members achieve the set targets. These approaches include, the provision of more training or mentorship, the provision of resources to enable employees conduct their set activities, and providing explanation or clarification of the expected activities, if it is established that staff members did not understand what their activities entailed. With regards to provision of training and mentorship, OMs have committed to continuously conduct in-house in-service education and training to help bridge the performance gap identified during appraisals, as currently there is no budget to send staff members to proper organised training. Therefore, OMs have taken a responsibility to help bridge the performance gap by capacitating their staff members with skills and knowledge, and not wait for the budget to be available.

It should be noted that the shortage of staff and excessive workloads are always identified as some of the main reasons for the non-achievement of performance targets. The OMs do not have any solutions for resolving these two challenges as they are not involved in the recruitment of staff, workforce planning, organisational design, or the reviewing of clinic organograms. Accordingly, they only acknowledge these problems, and encourage staff to try and work hard. All that OMs can do is to constantly inform the sub-districts on the nature and effects of these challenges, and request the sub-district HR and PHC Offices to resolve these problems.

What OMs currently do when managing performance in their facilities, supports the findings of the management study, which asserts that when managing performance in any organisation (whether government or private), the performance management process should include activities like the setting of performance goals, the periodic assessment of progress towards accomplishment of the set standards, issuing of performance ratings, and supporting staff members to develop and achieve satisfactory performance standards. All these activities should be done to ensure that employees' performance standards are aligned to the organisational planned goals (Mamun & Khan, 2020). Another study conducted on motivation and human resource management, showed that reviewing the performance of staff enables the identification of the problems surrounding non-performance, because through assessment, managers can identify the root causes for it. Furthermore, they can establish if it is the

employees themselves who are failing to perform their duties, or is it a shortage of resources, or a lack of certain knowledge and/or training (Ozkeser, 2019). Three of the research participants narrated the following:

> *I am just assessing staff performance as to how they do their work. I do their performance assessment. I must give them a performance agreement each and every year, then they agree with the duties to be done in the clinic for the whole of the year, so they sign and I also sign. Then I send it back to their files in HR at the hospital, and the other copies remain in their files here in the clinic that I have here, i.e., performance assessments, performance agreement, September reviews and all those things.*

> *The rating of performance for all my staff members is done by me. The signing of performance agreements, performance rating and job-descriptions are all done by me here.*

> *I am fully responsible for managing EPMDS. So, in April, I usually call staff members one by one, then we come to an agreement for each, that this year I am going to do this and this. We do this according to their scope of practice and their qualifications. Yes, we do a performance agreement. Then we send it to the hospital. Then we review it in the September review. We review all the staff to see if they managed to do what they were supposed to do or not. If not, I check what the constraints were, then they explain if there was a problem with the machines or maybe with shortages. The shortage of staff is mostly identified as a constraint by many staff members. So, it is me who assesses them because it is me who will work with them. I know them, so there is no one else.*

5.6.1.1.1. *Managing performance standards and rewarding performance*

Operational managers are responsible for managing the performance of staff to ensure that set standards are met. The results showed that the DoH currently does not have a system for rewarding its employees for excellent performance. Employees are only given money by the DoH for long service when they have reached twenty years working for the DoH. Operational managers understand the importance of recognising and appreciating hard working employees; as a result, they use their own unstructured, informal, and varied non-monetary methods of rewarding those staff members who exceed the performance standards. These methods include: issuing of performance certificates, involving other staff members to nominate peers who are best performers, offering verbal recognition and words of appreciation, involve high performing staff members in challenging projects and tasks, or involving

them in performing tasks at more senior levels/positions. OMs confirmed that these methods have proven to help push staff members to perform at their best and has created a healthy competition and competitive work environment.

The issuing of rewards is one of the strategies most employers use to keep their employees motivated and committed to their organisations as a result as a tool for managing performance. The OMs rely heavily on these non-monetary methods especially since the PHC staff members have continuously expressed unhappiness and dissatisfaction with increased workloads and shortages of staff. They hold motivational and rewards events like 'Community Open Days' or 'Quality Days' which are held with involvement of community leaders and Clinic Advisory Committees, to openly reward high performing staff members with certificates. This pushes non-performing staff members to also work hard and perform exceptionally, to equally get exposure or involvement in senior duties and tasks. It also inspire staff members to accept any additional roles or tasks that are given to them, and increases willingness to step-in and help when there is a staff shortage, or other staff members are on leave, and to work overtime even when they know they will not be paid.

The initiatives of verbal recognition and the issuing of performance certificates by OMs is commendable as research has shown that employee rewards, whether in the form of monetary, verbal and other forms of rewards results in higher productivity, staff commitment, and increased motivation (Mamun & Khan, 2020). Verbal recognition also helps in encouraging staff members to work hard and perform extra work given to them by OMs without demanding or asking for time due or time off. All of this contributes to higher performance standards. Three of the research participants recounted the following:

> *This year, I organised a "Community Open Day." I did this with Community Leaders including the Izinduna, Ward Councillor, and Clinic Advisory Committee. I used a form where I sat down with staff members to nominate the three best performers in the clinic. I nominated those who work very hard without demanding extra hours back. Those were the best among everyone. They were given certificates. This was the first time we did this and I am planning to continue doing it every year to motivate my staff. It is very different to what is normally done by the hospital where they award those who have worked long with the department maybe for 20 years etc. They are called long-service rewards, then award you with something.*

> *Although there are no monetary rewards like bonuses, the Quality Manager of the hospital used to announce that there will be Quality Day, where each facility must*

choose a best performing employee, then I choose, then forward the name to the Hospital and they used to give those nominated employees certificates as rewards.

Sometimes I give them the medals or certificates. I normally have functions here in the clinic.

5.6.1.1.2. *Motivation as a non-monetary reward*

Non-monetary rewards are utilised by OMs as a method of motivating, showing appreciation, and encouraging health workforce to work hard and commit to providing quality and excellent healthcare service to the patients. This is because DoH does not pay staff its members any monetary bonuses either as a motivation initiative or performance reward, so OMs perform a variety of motivational tasks which are non-monetary in nature. The OMs sometimes prepare and hold motivational events such as lunches and celebrate special days or events (e.g. birthday parties), using their own money to show gratitude and appreciation to their staff members and openly thank the best performing staff members. Counselling or debriefing meetings are held and staff are encouraged to open-up, and share challenges and problems (whether personal or work-related), then the OMs offer support and suggestions on how staff members can deal with the problems raised.

Staff are continually encouraged to support and help each other to create a supportive and motivational culture and work environment. The OMs also provide support when it is needed (e.g., when staff are on leave, the OMs go to the work-streams or sections where there is a shortage of staff to work, and help the staff members to accomplish organisational goals. These are essential, supportive actions and gestures, and they are needed in an environment characterised by staff shortages, and heavy workloads, yet they lack the incentive of monetary rewards.

What OMs do to motivate their staff, is supported by the study which identified various motivating factors for healthcare workers. The study demonstrated that increased appreciation by management is one of the factors that increased motivation among PHC staff members. Other factors included: respectable management, support from management and supervisors, as well as fair treatment (Daneshkohan et al., 2015).

This attests to OMs in the KZN DoH, uMkhanyakude Health District PHC facilities are on the right track in keeping their employees motivated. Rewarding, appreciating, and recognising employees' effort towards achieving organisational goals, is essential for motivation. Hard work should always be rewarded and celebrated. By so doing, those employees who surpass performance levels will continue

to work hard, and non-performing employees being encouraged to follow suit (Kumari et al., 2021). Three of the research participants described the following:

> *What I have done before as an internal reward or recognition and also as a form of motivation, I once made something for all the staff as I didn't want to appear biased. So, I prepared a special lunch for all of staff members. Then I give words of encouragement and also thank them for working hard while also pin-pointing those who are doing exceptionally well. I also share with them the information on those staff who have been complimented by patients from the suggestion box, then we eat lunch and enjoy.*

> *I motivate them. We have those meetings, like we have staff meetings maybe on a monthly basis, but sometimes we don't sit at those meeting. We encourage staff to verbalise issues. Like if I see a gap, then I try to talk to them so that we can try and close those gaps. So, if we see that we need to have something like a function or birthday party, we do all those things together, including the rewards functions.*

> *I regularly appreciate them when they are doing well, and that team spirit at work, and I also encourage them to support each other. I would also go there myself and support and help staff members when there is a shortage somewhere. And that thing of nominating those who are doing well to get rewards, makes people to want to work hard and enjoy coming to work every day. Others would also want to do well, so that they can also be nominated for awards.*

5.6.1.1.3. *Daily allocation of tasks*

Operational managers are responsible for the daily allocation of tasks to all staff members in the clinics. They allocate departmental and individual tasks, which are aimed at implementing the overall objectives of the Operational Plan and to achieve set targets. This is one of the critical and major tasks for OMs because this determines what services or health programmes the clinics will offer on a daily basis. OMs utilise daily allocation registers which are stored on Daily Allocation Files to manage this process. They also conduct Role Calls on a daily basis to ensure that all daily programmes are offered efficiently and effectively. Due to staff shortages, many programmes which clinics have to offer and the large populations to serve, the OMs allocate duties on a daily basis when they have assessed how many staff members have signed-in for work and the number of patients coming for different services. After that, they have a role call and allocate the duties for the day. The OMs assess how many staff members are present; how many are on leave; how many are on training; how long the queues are; which targets the

clinic is lacking on, as well as not forgetting to refer to the Operational Plan and the key performance areas of individual staff members. The skills and knowledge possessed by the staff members is what OMs assess, in order to allocate the tasks which all individual staff members will be able to perform. This activity requires excellent and instantaneous decision-making skills, extensive understanding and knowledge of all clinic operations and programmes, as OMs must also assess which services are needed the most, and gauge how they can move staff members around to the appropriate work stations to effectively utilise all the resources available without over-loading some employees but at the same time serving all clients who are in need of primary health care services.

Clinicians are allocated to relevant streams, and the allocated tasks are also included in the performance agreements of the individual employees to ensure that they are monitored effectively on a daily basis. The management viewpoints assert that the allocation of tasks and responsibilities should be done in accordance with organisational goals and objectives, as individual performance contributes to the overall organisational performance (Hellriegel et al., 2012). This shows how the organisational systems, mission, vision, goals, objectives, organisational strategies and its people are all interconnected and interdependent on each other hence they function in harmony as a system. Organisations work together to achieve common goals and objectives. If there is a challenge, hindrances or mis-alignment in any of the mentioned factors, the entire organisational systems is affected negatively. Four of the research participants related the following:

> *I allocate tasks to the staff members according to their knowledge and skills, and according to Operational Plan. I also supervise them to see if the work is done. If I am not meeting targets, I go out to pension points together with Lay Counsellors to reach out to more patients to try and reach the targets we are lacking on. I even use my own car, but we make sure that we identify all the programmes where we are not doing well; then we put the plan in place.*

> *Delegation and allocation of duties is done on a daily basis, I have developed a register for that. I do it on a daily basis because I have to base my allocation on the patients waiting in the line and the staff available on that day. I have to be realistic. I use the employees' scope of practice so that I allocate them work that they will be able to implement.*

> *Here is an allocation of duties file … [pointing at the file]… I have a Daily Allocation File where we see that a person comes to work and signs to accept duties to commit him or herself. We also have 'Role Call' and Daily Duty Allocation.*

The operational Plan includes all the activities to be done by the staff members, so when Performance Agreements are developed, they have to be aligned and include all activities in the Operational Plan.

5.6.1.2. Reporting on staff shortages, resignation, and retirement

Operational managers only report on the shortage of staff, resignation of staff, and retirement of staff. Other activities such as advertising, recruitment, selection of staff, monitoring and managing staff resignations and the retirement of staff is done by the sub-district. When someone resigns or retires, OMs only have the responsibility to inform the sub-district PHC Office, then wait for the sub-district to recruit someone to fill the position that has been left vacant. The PHC Manager thereafter writes a letter of motivation for filling of that vacant post and forwards it to the district HR.

The research participants felt that if they were involved in recruitment and selection of staff, they would be able to recruit and hire staff members immediately as there is a retirement or resignation, instead of waiting until these vacant posts are frozen. They can also ensure that they select staff who have the skills and experience that is needed. Currently however, they just wait to receive what replacement the sub-district provides for them. As a result, most clinics are sitting with various unfilled vacancies because PHC Managers or PHC Supervisors take long to motivate for the filling of vacant posts until these posts are frozen. This is the main contributor to the present shortage of staff and the increased workloads placed to the remaining staff members in most PHC facilities. This is a missed opportunity towards correcting ineffectiveness and strengthening the human resources component of the health system at PHC level, as results of the study have shown that OMs possess such a high level of astute, extensive knowledge and involvement in programme implementation. OMs are well equipped and best positioned to manage these human resource functions effectively while addressing current chronic challenges such as shortage of staff and increased workload, which in turn lead to demotivation.

Similarly, in a study conducted by Kumar and Khan (2013) in another developing country India, it was found that neither the planning nor filling of staff vacancies was done at the PHC facility level, and it proved to be the root of the problem. Both contractual and permanent staff were either hired by the district or sub-district human resources. This recruitment process has proven to be very slow, ineffective and has contributed to an inadequate health workforce and therefore affect provision of quality of care and increased staff demotivation (Kumar & Khan, 2013). The involvement of OMs is necessary to prevent delays in hiring and the freezing of posts. The current OM's role of only informing the sub-districts about resignations and retirements and thereafter following up is not helping and is a root of frozen posts, unfilled vacancies, increased workload and demotivation of staff at PHC level. Three of the research participants detailed the following:

If someone resigns, it depends on the Department of Health to fill that post. Sometimes, when the position becomes vacant, they will say we cannot recruit or fill that post. So, what normally happens, HR in the hospital/sub-district advertise the post, then I only check on them as to how far they are with filling my vacant post. I am not involved in recruitment or selection; they do everything and provide me with a person because there is a PHC Manager and there is a PHC Supervisor too.

The staff member who is resigning, submits their resignation letter to me, then I acknowledge receipt of that resignation letter and forward it to the PHC Office in the hospital or sub-district.

The recruitment issue is too difficult because as it stands now, I do not have a second clinician post. The one that I am having now, the post was borrowed from the other clinic, so it took some delays. If somebody resigns and leaves the clinic, it takes long to fill the post because it is our PHC Supervisor or Manager who is responsible for the filling of the post. They are the ones who do the recruitment, selection, and motivation for the post. It is either done by our PHC Manager or PHC Supervisor. In fact, it is done by our PHC Manager who does the motivation. So sometimes it takes time if the person left until the post is frozen. As it is now, we were having a clinician post in 2016 and the person left, he got a transfer from another clinic, so it took time to motivate for the post until it was frozen. When they motivated for it, it was frozen. So now we do not have a post, they said we are not hiring, they do not have a post for us at all. We are having a big problem. In August, I was working alone.

5.6.1.3. Daily supervision of staff

The organisational structure at the PHC level is flat. All staff members report directly to the OM, which means OMs are responsible for the supervision and management of performance of a variety of staff members on a daily basis. These staff members include: Clinical Nurse Practitioners (CNPs); Professional Nurses (PNs); Enrolled Nurses (ENs); Enrolled Nursing Assistants (ENAs); Support Service Officer (SSO); Data Capturers; Nutritional Advisors; General Orderlies; Expanded Public Works (EPWP) personnel, and Security Guards. The OMs allocate tasks to the staff members and monitor the execution of these tasks; but more importantly, they monitor the execution of individual tasks in relation to activities in the Operational Plans. The supervision of staff is done to support, mentor, and assist staff members at the clinics in the execution of their duties. It is also aimed at monitoring staff-performance on a daily basis, and conducting performance appraisals on a quarterly

basis to ensure attainment of clinic goals. Registers are used to supervise and manage leave, monitor absenteeism, late coming to work, and the taking of lunch and tea-break at an appropriate time for a restricted period of time. OMs provide the type of supervision that is supportive and developmental.

These findings correspond with the results of the systematic review study which looked at how supportive supervision can be used as a strategy to improve primary healthcare services in Sub-Saharan Africa, and they showed that supportive and compassionate supervision of staff can increase both job satisfaction and motivation in health workers. Inadequate, or poorly supervised employees at the PHC level, will likely produce poor quality healthcare services, which directly contributes to a weak health system (Bailey et al., 2016). The role played by OMs in supervising staff members is a significant and essential, because if it is done correctly and successfully, it can contribute to strengthening the health system at PHC level. Four of the research participants recounted the following:

> *All staff members in this clinic report directly to me.*

> *There are 3 x PNs, 3 x ENs, 1 x ENA, 1 x Support Service Officer, 2 x Data Capturers, 1 x Nutritional Advisor, 1 x Lay Counsellors, 2 x General Orderlies, 2 x EPWPs who are on contract for a year, then I have 6 x Securities at the main gate (even though securities belong to a Private Security Company, but they are under my supervision here), and they all report to me.*

> *I have about 27 staff members excluding security guards and all of them report directly to me. Even security guards I can say they report to me because their supervisor is based at the hospital/sub-district.*

> *We do have a register where we register our staff coming in and out. There is also an Attendance register for staff members. Also, there is Daily Allocation Register for allocation of duties where individuals staff members are given time when to take tea-break, when to take lunch. First lunch is 12:55. We also change lunch times taken to ensure that there is no time where it is said all nurses are away on lunch.*

5.6.1.4. Disciplining employees

Operational managers are responsible for promoting and encouraging good behaviour and conduct within their clinics. They are also responsible for instilling good discipline and correcting or punishing bad behaviour. Operational managers play a significant role in ensuring that they correctly implement

staff policies and standard operating procedures. They make staff aware of what is acceptable behaviour, the manner in which they should carry themselves, and make them aware of all the applicable policies and procedures. OMs utilise the corrective educational approach when instilling discipline, wherein staff members are made aware of the importance of respecting their work, following rules, policies and procedures and also about the consequences thereof. This is achieved through training staff on developed policies, procedures and guidelines, and by customising or developing policies to suit the clinic environment.

The research participants responded that their role includes the issuing of verbal and written warnings as they do not have the powers to fire or suspend employees. If someone who is still on a written warning is found to be contravening again, the last resort is for the OM to escalate the issue to the PHC Supervisors or PHC Managers. Some OMs felt they are obligated to discipline staff members even if they do not want to do it, because if they do not discipline them, someone higher will discipline them. The disciplining of staff members is viewed as a compliancy issue, rather than a corrective issue to some OMs. Absenteeism and late coming without valid reasons, including not reporting to the OM is what managers monitor and discipline the most at the PHC level. This is an important thing to monitor and discipline due to the present burden of the shortage of staff. One employee's absence for no reason and proper planning, disrupts the flow of work and provision of some of the health care services in the clinics.

Disciplining employees has proven to be a constructive means most employers use to improve employee performance. According to most management studies and literature, employee discipline has a significant result and positive influence towards employee performance, and it is also a motivating factor as it reduces things like absenteeism and late coming (Parashakti & Ekhsan, 2020; Parashakti & Afifah, 2018). Three of the research participants narrated the following:

> *I am involved and I play a huge role in disciplining those who misbehave or those who do not follow policies or standard operating procedures. I sit a person down and tell him or her that what they are doing is wrong, and that they must work hard and respect their work. I write everything down, then we both sign. I have the power or authority to issue verbal and written warnings. Documenting everything is important for reference purposes.*

> *If I don't discipline staff, the person higher up at sub-district or at the hospital will charge me for that person. So, I discipline staff and I issue verbal warnings. I go as far as issuing written warnings, but not up to firing. I do not fire staff. I only send reports to the Labour Relations office at the hospital.*

Yes, it's the same as when one keeps on being absent without reporting. For the first time, I talk with that staff member and reprimand him or her verbally; if it happens for the second time around I give a written warning, and if it happens for the third time then I tell them next time it will be leave without pay and they listen.

5.6.1.5. Management of leave

Management of leave is one of the tasks that is the main and complete responsibility of the OMs. This is because all staff members report directly to OMs and they also perform daily allocation of duties for all programmes in their clinics. Leave is managed manually like most of other functions in the PHC facilities, using leave registers. Due to shortage of staff, especially clinicians or nurses, approval of leave is closely monitored to ensure that staff do not go on leave at the same time, and there is no abuse of leave. At the beginning of the year, staff must indicate their preferred leave months and days, then the OM allocates leave based on the availability of key staff to ensure operations continue efficiently, even when others are on leave. The OMs ensure that staff members who occupy the same positions do not take leave on the same month/s or during time when others are away on long training durations. When an employee intends to go on leave, he or she first informs the OM, who must check if the staff member has enough leave balance according to the type of leave they want to take. In addition, the OM checks the current workload and programmes to be offered during the requested leave days and checks with HR at the sub-district. After getting confirmation that there are leave days available, the OM informs the employee to complete and sign the leave form, which is then signed by the OM and subsequently forwarded to the sub-district PHC Office, with a duplicate copy kept at the clinic. The PHC Office then forwards the leave form to the sub-district HR. The leave-approval decision by the OM is final and cannot be changed by anyone from the district office. This is an important task which requires close monitoring by OMs since there is already a shortage of staff members and increased workload at PHC level, so poor management of leave can cause interruptions to the provision of health care services. Two of the research participants narrated the following:

That function is my full responsibility. I use the leave register and also create a leave roster where leave days are allocated for a year period. I make sure that it is spread evenly and people are not taking leave at the same time or same month, especially people who are doing the same type of jobs. The staff then sign the leave form which I also sign before they go on leave, they sign two leave forms because I keep a copy and I send another copy to the PHC Manager at the hospital. But right now, I am trying to tighten and fine-tune the process since we have just moved here.

It is my sole responsibility to manage leave. Before a person goes on leave, I first must call HR to verify whether there are any available leave days, and I have a register so everything is written down. So, it is my full responsibility and nobody can overrule my decision.

5.6.1.6. Employee counselling

The shortage of staff and unfilled vacancies which eventually have been frozen has automatically led to an increased workload, as well as the demotivation and dissatisfaction of most staff members. Operational managers dedicate too much of their time motivating and counselling employees to work hard, assume more responsibilities, help out when queues are long, or when other staff members are on leave or on training, and to commit to their work irrespective of the challenges they face. Counselling is a form of strategy OMs utilise to motivate, lift the energy of their staff members and make them feel positive and enthusiastic about doing their work. This is greatly needed in most PHC facilities which are located especially in rural areas where most staff members have taken on increased workloads, are demotivated and dissatisfied.

The results showed that staff work hard due to the shortage of staff; they work extra hours or overtime, but they are not able to take time off immediately in lieu of the extra days worked due to the shortage of staff. They are also not given monetary rewards even though they work hard due to a flawed performance rewards systems and the unavailability of a monetary rewards system; as a result, they are very unhappy. Most of the staff members have expressed their unhappiness to the OMs and in employee satisfaction surveys, but nothing has been done to address the challenges and problems identified from the findings of the surveys. Many staff are demotivated, unhappy, and not even willing to further participate in these surveys because they do not see the value in participating as their complaints are not addressed. The OMs must indirectly force and persuade staff to participate, constantly provide them with counselling, appreciation, and verbal recognition, to motivate staff members so that they can remain satisfied with their jobs and be willing to take on additional workloads. They also provide counselling and psychosocial support services due to the nature of the work that is done by nurses, where shortage of resources such as medical equipment and medical supplies, too many programmes that must be implemented, and long patient queues due to the large populations being served. So, staff members are always encouraged by their OMs not to give up, and to always give of their best. The employee satisfaction survey is done, but the sub-district and district do not attend to the outcomes of the survey.

The research has confirmed many times that employees within the healthcare sector have to be provided with an enabling environment, where they can be allowed to share how they feel, and be allowed to

voice their concerns. In return, they must be assured that all their concerns will be addressed. The management in the PHC sector must implement interventions to address the challenges and problems that are reported to show that they listen to the staff members' cries and expressions of unhappiness. This form of counselling and supportive supervision boosts staff morale, which support the study results of Bailey et al., (2019), which show that supportive supervision can be used as a strategy to improve quality of health care in primary health care facilities (Bailey et al., 2016). Due to their nature of work, and the environment they work under, most nurses need different kinds of psychological and spiritual support to build up their confidence and increase their motivation levels. It is the responsibility of those managing and supervising nurses to identify the kind of support that is needed by each nurse, and provide it through different approaches and alliances (Chen et al., 2021). One of the research participants reported the following:

> *The staff are not happy at all, and the survey's findings are not attended to, and so now the staff are even more demotivated to participate in this survey and I end up indirectly forcing them to participate because it is a requirement. But I counsel them, talk to them, and assure them that I am listening to them, I am with them, and we are in this together.*

5.6.1.7. Employee training

The training of employees at the clinic level is one of the human resource functions where OMs play a substantial role. The OMs are responsible for identifying the training needs for staff members during the signing of performance agreements and during the performance appraisal period. The OMs gather information on the training and development needs for their staff and develop appropriate training plans, which are then forwarded to the sub-district HR. In most cases, the training needs outlined in the training and development plans are not provided because the OMs have no control over ensuring that the training requested by staff will be scheduled by the district or sub-district. The OMs wait for the district and sub-districts to schedule training, then they nominate those staff members who can attend the scheduled training courses from their clinics.

The OMs have taken an initiative to continually provide in-house and in-service training and education for staff in their PHC facilities themselves. They run these training courses to address the shortfalls identified when staff perform their duties. If there are new guidelines or policies that have to be implemented, there is new equipment or machinery that has to be bought, if there is slow progress in reaching certain targets, or if there is a new programme which staff have no knowledge about, there is new information and to be gained from attending the workshops or training courses. The role of facilitating and conducting training is one of the tasks which most OMs have fully embraced and

accepted as their responsibility. They see the benefits and positive results of such training. They also know that the district and sub-districts have financial constraints, which causes the training needs of PHC staff members not to be prioritised.

Constant training and mentoring improve staff confidence and self-esteem, and in turn increases job satisfaction and motivation. It also builds capacity, skills, and knowledge, causing staff to feel confident to carry out their functions even under strenuous working conditions where they have to multi-task and task-shift. The working conditions at the PHC level are strenuous, with lot of job dissatisfaction and demotivation levels high due to the increased workload and staff shortages. Most staff members must constantly take-on extra workloads, and perform the functions of other staff members (Bailey et al., 2016). Four of the research respondents narrated the following:

> *I simple write down training needs, then it is the sub-district that decides and tell us if there are any training opportunities. Then we check on our records to see who qualifies. We do not have the power to organise training for our staff, we must rely on the PHC Office. When the sub-district has communicated that there is a training opportunity available, I only nominate staff who need to attend training. Like you find that the staff will indicate on their EPMDS forms that they have these challenges and they need training to be offered (like computer training) but you find that it is ignored.*

> *I nominate staff that need to be trained. Like right now there is a position for a staff member to undergo four-year training, I will call and tell them I have someone that I can send for this training.*

> *Sometimes, other trainings happen when there is a gap that is identified, then I provide in-service training to fill that gap. I do not wait for the district or hospital, like I have told you we know they have financial constraints.*

> *I normally train staff in cases when there is new equipment or a new machine. I train them on how to operate new machines. Also, like the hospital economy, I train my staff with regards to economical utilisation of resources like water and electricity. I teach them about the importance of not allowing water taps to keep on running without anyone closing the tap. I also provide telephone etiquette training on how to answer the phone at work.*

5.6.1.8. Management of overtime

Operational managers are considerably involved in the management of overtime. Overtime is only implemented in the facilities which provide or offer 24 hour-services of health care. The OMs utilise an Overtime Register to manage and allocate staff to work overtime. Staff record the extra hours or days worked. When staff members have work that needs to be carried out after hours or during weekends, they inform the OMs who then authorise that the requested overtime can be worked.

In addition, OMs monitor staff burn-out, work life balance, and ensure that staff take their time due for all the extra hours or days worked because there is no payment for unscheduled overtime. Motivating staff to take on overtime duties is always a big challenge for OMs, so they try to use other means of encouraging them to accept working overtime because they must keep the PHC operations going, regardless of the challenges.

The research has shown that sometimes nurses work overtime due to high capacity or pressure to imitate others, or to merely improve themselves. It is important for OMs in PHC facilities to closely monitor overtime, ascertain first if there is a need to work overtime, how many hours should be worked over time, to ensure that there is no abuse or burn-out, as excessive overtime can have negative effects on psychological health and family life (Watanabe & Yamauchi, 2018). Even though the study by Watanabe & Yamauchi (2018), was conducted in a hospital in Japan, its findings illustrated how effective management of overtime is important in a health care environment where nurses always feel the pressure to take on more overtime even if it is to the detriment of their health. OMs in UMkhanyakude district ensure that they manage overtime properly to prevent staff burn-out by forcing staff who have worked overtime to take time off. They also do this to distribute available overtime work equitably among all staff members. Two of the research participants recounted the following:

> *I play a huge role here basically. I have an Overtime Book/Register. The way I manage overtime is like this, a person can have overtime when they have worked during lunch, or they have worked an extra day or worked during an off-day.*

> *We have an exercise for overtime; we have an overtime register if a staff member went to a meeting and came back late, if he or she writes down the extra hours worked. When a staff member has something to do and ends up working beyond normal working hours, he or she writes down the extra hours worked in the Overtime Register. I always manage and plan the taking back of their extra hours worked or time due and only allow them to take it back when the staff balance allows. I also ensure that those staff members who have worked extra hours are taking their time off/time due to ensure that*

they are not developing burn-out from over-working. So, when the staff balance permits and the person has worked a lot of extra hours, we let them take their time due.

Operational managers play a significant role in the management of human resources. They perform the following tasks: management of Employee Performance Management and Development System (EPMDS) under which they sign performance agreements, conduct quarterly performance appraisals, allocate tasks, and align them to the clinic operational and business plans, and lastly co-ordinate and provide in-house training and development for staff. The OMs also play a substantial role in the motivation of employees; provision of non-monetary rewards; counselling of employees; management of leave and overtime; daily supervision of all employees; disciplining employees, and reporting on staff resignations and retirements. They are not involved at all in the recruitment and selection of staff, nor with workforce planning, as these tasks are performed by sub-district HR and the PHC Office. This is a major problem, as the current recruitment system is dysfunctional, sub-districts take too long to advertise and fill positions when staff resign or retire, and the DoH eventually freeze vacant positions which are left open for long periods. Accordingly, most PHC facilities have unfilled vacant positions, which has resulted in the shortage of staff and an increased workload for the remaining staff members. The staff are unhappy and demotivated, and OMs must work hard to motivate and provide counselling to try keep their staff members motivated and willing to take on additional workloads.

5.6.2. Management of finances in PHC facilities

This sub-objective of Research Objective #2 investigated the role and involvement of OMs in the management of finances.

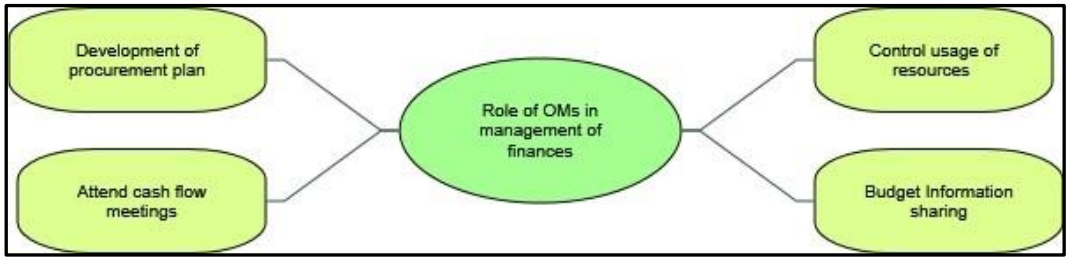

Figure 5.6. Themes on the role of OMs in management of finances

Source: Interviews Data (2018)

Figure 5.6 depicts the themes which were developed from participant responses when OMs were asked to explain in detail the role that they play in the management of finances. It was established that they play an insignificant role as they are only involved in the development of procurement plans, attending Cash Flow meetings, controlling the usage of resources, and sharing budget information with clinic staff.

The responses of the research participants confirmed that OMs do not play any role in budget formulation and planning. Some participants confirmed that they are not involved at all with budget setting, some said they are just given a budget and no input is asked from them; some said they only get told how much has been allocated to their clinics at the beginning of each financial year and if they want to know anything about their budget (e.g. knowledge of what have been bought, how much did each cost and how much is remaining on the budget) they ask at the hospital.

Likewise, OMs do not play any role in the monitoring of budgets or expenditure as these functions are performed at the sub-district level. The sub-district finance managers and PHC Office inform the facility managers of the amount of budget that has been allocated to each facility, then these managers inform their staff members at the clinic. If there is anything OMs want to know about the remaining budget balance or expenditure, they must ask the finance managers at the sub-district offices. The responses showed how much this non-involvement of OMs in these critical financial management tasks is making them unhappy, this was evident in their tone and repeated emphasis that they are not involved at all and their input on such matters is not valued at all.

From the results of the study, it is evident that even though research has prioritised and recommended the decentralisation of health management systems such as financial planning and budgeting, the research findings have not translated to implementation and where implementation has materialised, these duties have not been relinquished down to the level of PHC facilities. The results are similar to the study that was conducted in Kilifi County in Kenya, which also showed that local PHC managers are still not involved in making these critical financial management decisions, therefore there is still a need to further decentralise financial management, planning, and budgeting decision-making to the PHC level (Tsofa et al., 2017).

The results of this study are also in contrast to the financial management research conducted by Siminică, (2017) which demonstrated that the management of finances is a tactical function within the duties of an OM, and should include key activities like budget formulation and forecasting (Siminică et al., 2017). Surprisingly OMs' financial management functions in UMkhanyakude district do not include these key activities.

Four of the research participants narrated the following:

I am not part of budget setting; I am not involved. They only tell us how much budget has been allocated to our clinics. If ever there are things I want to know about, I go to the Finance Manager (FM) at the hospital and ask, "how far is my clinic budget?" Then the Finance Manager will tell me that these are the things that have been bought, so now this is the amount you have remaining on the budget. Like recently, I asked for the old air conditioners to be replaced with new ones, and the new air conditioners were reflected on my budget that they had been bought. So, then I did NSI to order new air conditioners for the clinic space below because there are no air conditioners there.

The Finance team at the hospital informs us about the budget available for each clinic at the beginning of the year. They give us the forms. Each clinic has its own form of the budget allocated in that particular year and we are able to know the budget line items.

To tell you the truth, we are not involved at all with finances and planning. They give us the budget figure just like that. For example, they will just tell you that your clinic budget is R6 million if it is R6 million, and you are given no explanation of how they came to this amount, or on what are they basing that R6 million on. They don't even tell us how much percentage from that R6 million is for staff salaries.

5.6.2.1. Development of procurement plans

The development of procurement plans is one of the functions which OMs perform pertaining to the management of finances. When conducting this activity, OMs consult and sit down with staff members from their clinics and write down the list of things they will need for the whole year. This is done towards the end of the current year. The kind of procurement plans OMs develop are just mere lists of the things which the clinics anticipate they will need to procure during the course of the current year, as a result many of the participants even referred to procurement plans as "wish-lists" because they said, not all the things they incorporate on their procurement plans make it to the budget allocation. The final buck on the items which make it to the final budgets of the clinics lies with the sub-districts as they use their own discretion to add or remove items when setting budgets for the clinics. Accordingly, OMs do not play any role in the development and controlling of the budget.

What the results of the study revealed, which is in-line with what other research has shown, is that OMs meet every year with the district team with respect to procurement planning. The role of the OMs is merely to draw up wish-lists of items they need for their respective clinics. These items are not

guaranteed, as they might not be included in the final budget that is allocated to them by HR Managers in the sub-district offices. What OMs do is neither financial planning nor procurement planning (Naranjee et al., 2019), but they are only creating lists of what they might need and it get decided by the sub-district on whether they will get it. Two of the research participants reported the following:

> *I discuss the plan and targets with my staff members. Like today, we were discussing about the things that we need to include in the Procurement Plan. I was asking them what they need so that we can add it on to the Procurement Plan.*

> *On the procurement side, I do write things down I need before and say that in this financial year I want this and this and this, according to the amount of budget you will choose to give me. You see it is my wish-list and they decide if they give to me.*

5.6.2.2. Attendance at Cash Flow meetings

The findings were two-fold with regards to attendance of OMs at Cash Flow meetings. Cash Flow is one of the meetings where financial matters are discussed, including the approval of requisitions by CEOs. Only OMs from one sub-district attend Cash Flow meetings on a monthly basis. The OMs from the other four sub-districts do not attend Cash Flow meetings; instead, they send their NSI forms and wait to hear the outcome from the PHC Offices. The few OMs who do attend Cash Flow meetings are not allowed to participate or say anything at these meetings, they are simply there to observe. Non-attendance and non-participation of OMs in cash-flow meetings prevents them from participating and giving input on financial matters, resulting in delays in approval of NSI. The staff members (PHC Supervisors and PHC Managers) who do attend Cash Flow meetings on behalf of the OMs, in most cases do not understand the need, urgency and nature of the items and goods that are being purchased by clinics. As a result, they fail to support or explain why the items are important and needed when they are questioned during the Cash Flow meetings. Sometimes, they still need to consult OMs to find out more information, and requisitions are deferred to the next Cash Flow meeting when OMs have been consulted. All of this causes much delay, and thus has a detrimental effect on operations at the PHC level.

What the findings presented is in contrast with what research has found, wherein it showed that managers at all levels of the DoH should be involved in financial planning, Cash Flow and budget setting. In the KZN DoH, uMkhanyakude Health District, OMs are not involved in financial planning. Their role is limited to procurement planning and monitoring their own facility's budget. They develop wish-lists which in most cases are not incorporated in the final budget allocation, and they do not participate in financial decision-making process during the cash-flow meetings. This finding is similar

to the findings of the study which was conducted in KwaZulu-Natal, where it was also found that nursing managers of sub-districts are not given an opportunity to participate in committees where critical financial management decisions such as budget planning and setting are made (Naranjee et al., 2019). Three of the research participants conveyed the following:

> *So, I enquire with the Finance Manager from the hospital with regard to our budget spending because we do not attend Cash Flow meetings as OMs.*
>
> *We attend the Cash Flow meetings on a monthly basis, just to be there and listen, but with no participation.*
>
> *If they can allow OMs to attend and partake on Cash Flow meetings, approval of NSI requests can improve.*

5.6.2.3. Budget information sharing

The research participants indicated that there is not much involvement or role that OMs play in budget setting, except sharing budget information with their staff members after receiving the budget allocation from the sub-district Finance Officer. The budget that is allocated is decided upon by the sub-district and district Finance team, thereafter OMs are informed how much budget is allocated to their clinics. The OMs share information on the budget allocated to their clinics with their clinic staff members, so that staff members can also be aware of how much they have available. This is all what OMs do in this activity, they do not question why certain budget is allocated, they cannot ask for any increase or alteration of the budget line items. The OMs take what they have been told and pass that information down as is.

The confirmation that OMs are only involved with sharing budget information with their staff supports the research conducted in the North West province of South Africa, which proved that facility managers were not given an opportunity to plan and control their facility budgets, including shifting budget line items. But on the other hand, they are punished for poor budget control during performance assessments which is unfair because it is something they do not have control over as they are not involved in this activity or task (Muthathi et al., 2020). Accordingly, one of the research participants re-counted the following:

> *After receiving the budget from sub-district HR, I sit down with all the staff members and share the allocated budget with them so that they know. Then every month when we are ordering (especially for medicine) we have re-order levels for medicine and other stock-items, and for surgical equipment we have stock-cards. Each and every*

item has its own stock-card. So, we are able to order according to our re-order level so that we do not buy extra things that we do not need.

5.6.2.4. Control usage of resources

The budget control function is done at the sub-district or hospital level, OMs are not involved, all they control are the use of resources to ensure there is no wastage once the goods have been delivered to the clinics. This ensures they save on their budget usage. In doing that OMs also control staff resources, ensuring that staff members come to work and are paid according to the number of days they have worked, this is a substantial activity to perform since personnel budget is one of the biggest from the overall DoH budget. The OMs complained they were always told that the budget was limited so they must use what they have been allocated economically. Accordingly, they closely monitor wastage, theft, and loss, to ensure they do not run out of things when they have not received stock, a predicament that would cause the clinic to be unable to provide clinical care. The OMs have allocated nursing staff to manage the access to pharmacy rooms and other store rooms to ensure that they monitor and distribute medicines and other stock effectively. They also supervise and manage the performance of these staff members.

This result is supported by another study conducted in Ekurhuleni, Gauteng, which also demonstrated that managers in PHC facilities complained they were not involved in the day-to-day decisions pertaining to how operations should be run. They were also completely excluded in monitoring and control of budget expenditure, therefore this study has shown that OMs have rather improvised by actually monitoring and controlling usage of resources to ensure they are used effectively as this indirectly assists in controlling budget expenditure (Mogakwe et al., 2020).

Five of the research participants recounted the following:

Since we cannot control budget and buying of medications and supplies, we control how resources are utilised here at the clinic to ensure we do not run out so quick.

We know our budget spending is more on medication, we require a lot of medication, so we ensure we order our medication accordingly. There are re-order levels that we look at and adhere to when we order. We try not to over-stock. We also monitor that our things (especially medication) do not expire, because when they expire, we lose on our budget and medication end up not going to the community that need it. When things expire, it's like money thrown down the drain.

The other thing I monitor and control closely are the printing and photocopier expenses because ink is very costly. Yes, ink is very expensive. I also monitor telephone usage and electricity too.

It is me; I am fully involved with controlling expenditure and wastage at the clinic.

In finance, the only thing that I do is controlling staff, ensure that I monitor that they come to work because they are getting paid, they are not wasting things, or stealing things, etc. All other finance activities are done by the hospital as OMs we control things on a daily basis.

The role of OMs in the management of finances is minimal as they are not involved in the setting of budgets, financial planning, or the management of budget expenditure. They are not even allowed to attend Cash Flow meetings to defend and fast-track the approval of their NSI requisitions. Their role in procurement plan development is also insignificant, as they only develop wish-lists of the items they need at their clinics on the procurement plans, but which are not guaranteed to be on the final budget. The OMs only share budget information with their clinic staff, monitor the effective usage of medicines and other supplies when these have been delivered to their clinics, and only a few OMs attend Cash Flow meetings, but do not participate or give any inputs during the Cash Flow meetings.

5.6.3. Management of information in PHC facilities

This item under Research Objective #2 was designed to investigate the role of OMs in the management of information.

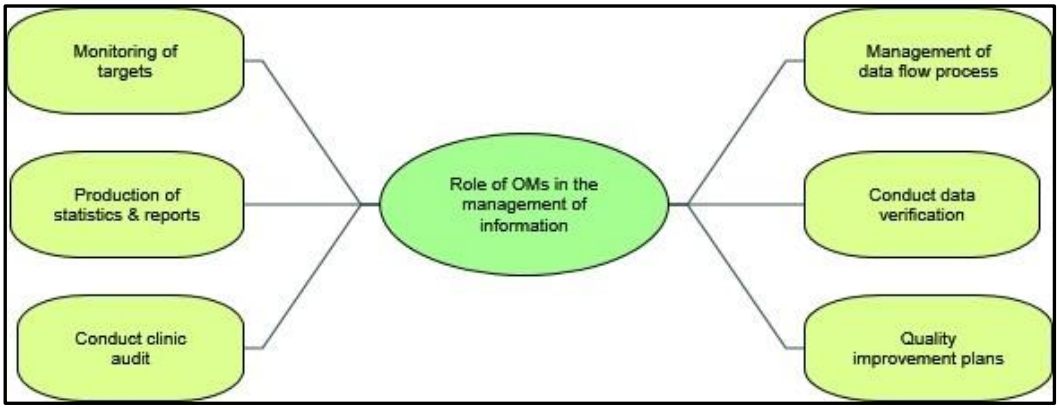

Figure 5.7. Themes on the role of OMs concerning the management of information

Source: Interviews Data (2018)

Figure 5.7 depicts the themes which developed when OMs were asked to detail the role they play in the management of information and data. Six main themes were provided. These were: monitoring of targets, production of statistics and reports, conducting clinic audits, managing the data flow process, data verification, and the development and implementation of quality improvement plans.

5.6.3.1 Monitoring of targets

The monitoring of targets is a major task for OMs as the performance of clinic staff is determined and evaluated through targets. The achievement of targets is an indicator a clinic is performing well, while the non-achievement of targets is an indicator of a poorly performing clinic. Poor or improved health outcomes are also evaluated and measured through the accomplishment of targets. Targets are utilised as a base for crafting goals, objectives, and activities for operational, implementation and other clinic plans. Correspondingly, targets are also utilised to set individual performance targets and for the formulation of key performance areas.

The reports and statistics for clinic targets are collated and then forwarded to the DoH National Office, so they can be recorded with the country level targets and help confirm the achievement of MDGs. Targets are monitored daily, weekly, monthly, and quarterly by submission of daily dashboard statistics (which is done telephonically), then weekly statistics, which are submitted at nerve centre meetings, then monthly statistics which are derived from weekly statistics, and lastly, quarterly reports which are derived from the monthly reports. The setting of clinic targets is still an issue, as OMs are not fully responsible for setting targets. While it is the OMs who set their clinic targets, sub-district officials sometimes require or coerce OMs into changing targets that they have set, putting in figures they get from the national and provincial office. Some OMs remain firm and insist on putting the real numbers which they are sure they will be able to achieve, but sub-districts will tell them to change the numbers. It thus becomes a battle between the clinics and the sub-districts. This battle and need by OMs to set their own targets and also resist the push from the sub-districts to coerce them, shows that they understand the importance of targets and the effects of not reaching what have been put or set to be achieved, as it is a reflection of their clinics' performance.

Targets are continually monitored closely and reviewed at certain phases e.g. during weekly Nerve Centre meetings and monthly Statistics meetings by the OMs to implement interventions such as awareness campaigns, health education, and other strengthening innovations, when they see that they are struggling to achieve certain targets. They prioritise the implementation of these innovations or interventions based on the resources they have (e.g., staff members, vehicles, medical supplies, and

other resources), but the main aim is on the saving of lives. Three of the research participants narrated the following:

> *Yes. In fact, I think they were trying to get us involved now but still … Okay, let me take you back, previously target setting was done higher up (by the District Office and Hospital), but now it has changed. They tell us to set targets for our clinics, based on or comparing our previous year performance, previous quarters etc. Okay, then we do that looking at our facility, staff, shortage of staff, previous performance, etc. Then we set our targets. But then when you are done, they send them back to us in clinics asking "What is this? What is that? Change this, change that."*

> *In terms of monitoring, if we are meeting targets, we prioritise on what we can do at that particular time. We also assess the situation; if it is a deadly situation or something of emergency, we will prioritise that over other things. Our focus is to save lives.*

> *During the weekly Nerve Centre meetings, and during the monthly Statistics meetings we review the targets, and if the targets were not met, we do remedial actions like we do mini-campaigns.*

5.6.3.2. Production of statistics and reports

Operational managers play a large role in production of statistics and reports for their clinics. They are involved in the submission of daily headcounts, weekly statistics (nerve centre reports), monthly statistics (TB statistics and overall monthly statistics), monthly narrative and quarterly reports, as well as quarterly TB statistics to the sub-district PHC Office. The accuracy, correctness and timeliness of these statistics and reports is very important because these documents are used to measure clinic performance, health outcomes and to allocate resources. For example, if certain data is received late, this can have effect on reporting correct information as the analysis will be incomplete and /or incorrect. What OMs do with regards to data and information management is more significant and requires time, attention to detail and lot of administrative work. While the capturing of data is done by Data Capturers, the OMs are responsible for data verification, conducting data audits which are checks and balances, checking and signing off all reports and statistics before they are sent to the sub-district offices. Due to heavy workloads, and the reality that OMs must consult and see patients 80% of their time due to the shortage of CNPs, the OMs sometimes sign and send reports without checking and verifying if the information and figures on the reports are correct.

Operational managers are also responsible for checking and signing patient files and checking the correctness of the tally sheets in comparison to the client registers on a daily basis. The OMs must do this because the Data Capturers cannot collate the tally sheets that have not been verified by them. The OMs also check on the Three Interlinked Electronic Registers (TIER) system on a daily basis. The OMs are also required to analyse and interpret the statistics to establish if they are meeting their clinic targets and assess if their health programmes are producing the desired health outcomes. Three of the research participants reported the following:

> *I am required to sign off all reports from the Data Capturer, and I have to check it before I sign. Sometimes I don't even check, but I just sign. How can you check and verify when you are seeing patients every day? Sometimes I just sign without checking and pray to God, that let it be all the correct information, because I am too busy working.*

> *Every second Wednesday of each month, there are "Hospital Data meetings" which are held at the hospital with the Data Committee which involves the hospital Facility Information Officer (FIO); M&E; PHC Supervisors and all the clinics must be represented by Operational managers.*

> *There are Tally sheets. So, it my responsibility as a Facility Manager to check whether all tally sheets that were submitted by the clinicians are correct. I go to the client register to check whether the things that are recorded on the tally sheet, and correspond with the patient registers. This means the Data Capturer must not consider and collate a tally sheet that has not been verified by the Operational Manager.*

5.6.3.3. Conducting clinic audits

Conducting clinic audits was confirmed to be one of the key tasks for OMs. The OMs conduct audits to identify errors, delays, bottlenecks, inefficiencies, or anything else which may cause clinic operations not to go according to plan. The OMs audit manual and electronic data, registers, programmes, patient files and many other aspects in the clinics. If data audits are not conducted, the OMs will not be able to identify where the problems are, or the areas that need improvement. If they do not conduct these audits many things will continue to go wrong and be left unattended and unresolved for a long period of time. Staff at PHC facilities know they must ensure they capture and collate accurate data at all times because the OMs will pick up all the inaccuracies during the data audits. The OMs conduct both scheduled and unannounced audits. It is mostly during the unannounced audits where OMs identify inaccuracies before data is collated and statistics are compiled and sent to the sub-district offices. Audits

are also conducted after PHC supervisory visits, wherein the OMs check the supervisory reports, then conduct audits to see how they can rectify the problems and challenges that have been identified and devise remedial actions on how they will resolve the identified challenges. Data audits ensure there is no room for doing work late, incorrectly, or irregularly, because this will be identified immediately.

These results are supported by the study which was also conducted in rural KwaZulu-Natal to evaluate quality management systems for HIV rapid testing services in primary health care facilities, which also demonstrated that conducting clinic audits is one of the methods utilised to audit and evaluate the implementation of a variety of programmes in PHC facilities which has been proven to work in identifying problems (Jaya et al., 2017). Clinic audits are also conducted to assess clinics in their readiness for the Ideal Clinic programme (Hunter et al., 2017). Data audits are always encouraged, they being normally assessed soon after being completed and, in most cases, have led to the improvement of the quality of data (Giganti et al., 2019). Two of the research participants reported the following:

> *We also conduct data audits, and we also do the graphs for the priority programmes.*

> *We do Data Audits after the PHC Supervisor has visited us. We have to check the report that he has given us, and correct what has been highlighted to be wrong.*

5.6.3.4. Management of data flow process

The management of the data flow process ensures that data capturing, data collation, and the production of scheduled reports and statistics take place effectively. The OMs are responsible for managing the entire data-flow process from start to finish, since there are no Data Managers employed and located at the PHC level. The role OMs play in the management of data is a very intricate one, as it requires them to perform some critical tasks on a daily basis. This work can only be done by the OMs because performing these activities requires the application of certain skills and knowledge. The OMs regard data management as a significant task because they are the custodians of clinic data. Clinic data is also utilised to make important decisions pertaining to the clinics. This finding corresponds with other data management and public health information systems studies conducted in other developing countries, which have shown that effective data management is important for making critical decisions to address global health crisis. Quality and accurate information is always needed and is key to conducting the assessment of programmes or systems (Chen et al., 2014; Feicheng, 2020).

Operational managers sometimes must fill in the blank unfilled spaces left by the Data Capturers as in some cases the Data Capturers do not comprehend some of the clinical terms appearing on the patient charts. In other instances, Data Capturers make mistakes when combining and collating programmes

since they are responsible for collating many patient files. Accordingly, OMs must regularly step in and assist. The data management activities of OMs include the verification of captured data, data audits, checking patient files and tally sheets and comparing what has been captured on the system. The study conducted in Limpopo province in South Africa revealed that the increased patient numbers at clinics have significantly increased the workload of clinicians, resulting in there being little time to correctly complete registers (Mutshatshi et al., 2018).

The OMs also attend monthly data validation meetings at the sub-district office, and hold and chair weekly data meetings in their clinics. Following their attendance at data validation meetings, the OMs share the meeting outcomes with clinic staff members. It was reported in the interviews that this task can become burdensome, as it often results in managers having insufficient time to complete other important managerial tasks due to staff shortages.

The management of data by the OMs was supported by the findings of the study where nine of the studies reviewed demonstrated that effective data management enhanced the health systems and practices, which automatically improved the quality of care. These enhancements included the administrative systems put in place at the clinics, the safe keeping and protection of records, and adherence to clinical good practice and etiquette (Bailey et al., 2016). Another study conducted in public health facilities in the Free State province of South Africa, also showed that most data management tasks are tedious and are not easy to manage considering that most clinic data management processes at the clinic level are done manually due to the unavailability of computers and internet connectivity, including the management of medicine stock, and issuing of prescriptions (Malakoane et al., 2020).

These findings are in contrast with a study conducted by Adindu (1995) which showed the lack of information management training for health managers at the PHC level was a problem. Conversely, this present study found that OMs have a strong knowledge of data and information management, they being involved from the start to the finish in the data flow and management process. It was also found that OMs even corrected the inaccuracies and omissions done by nurses to ensure that data was managed effectively. Two of the research participants narrated the following in this regard:

> *Data management is a problem due to staff shortage. One Data Capturer is bound to make mistakes when combining and collating many programmes, now I have to constantly help her out and then what about my other duties?*

> *I also attend data meetings and workshops either arranged by the sub-district or District. Then I come back and share information and give feedback to my staff*

members. Sometimes the District visit us for Data management and validation. I also attend Data Validation meetings at the hospital/sub-district on a monthly basis.

5.6.3.5. Data verification

The verification of data is a continuous process and in most cases this task is incorporated in data management activities. Data verification is done on a daily basis by the OMs, during the collation of data and before statistics and narrative reports are signed and sent to the sub-district offices. Each morning, the OMs report to the sub-district on Head Count numbers of all patients who were seen the previous day at their clinics. The OMs also check data from source documents, such as patient files and registers, comparing it to what has been captured on the system, before collating the reports. This task entails ensuring that all Head Count figures are entered in the Head Count Book on a daily basis, and also checking the Tick Register in comparison to the daily Tally sheets. At the end of each week, the OMs total up the numbers that have been collected for that past week. The OMs are best suited to do this task, as they possess clinical knowledge of disease patterns and illnesses, which the Data Capturers do not have. The results of an epidemiological study which was conducted to investigate how quality of data collected from various primary health care facilities world-wide can be verified are similar in that they also showed that verification of source documents, which includes the correction of wrong entries and data sets, is one of the approaches to assess and ensure quality (Giganti et al., 2019). Two of the research participants recounted the following:

I make sure that all the Head Counts have been entered in the Head Count Book, and then check and count the Tick Register, and check the daily Tally sheets. At the end of the week, I total up all the numbers that were collected. Every day in the morning, I check head counts and send the numbers to the hospital/sub-district.

I do verifications daily and weekly immediately after checking the daily tally. I do verifications and then I do monthly verifications.

5.6.4. Management of supply chain in PHC facilities

This sub-objective of Research Objective #2 aims to investigate the role of OMs in the management of the supply chain and the procurement of medical supplies.

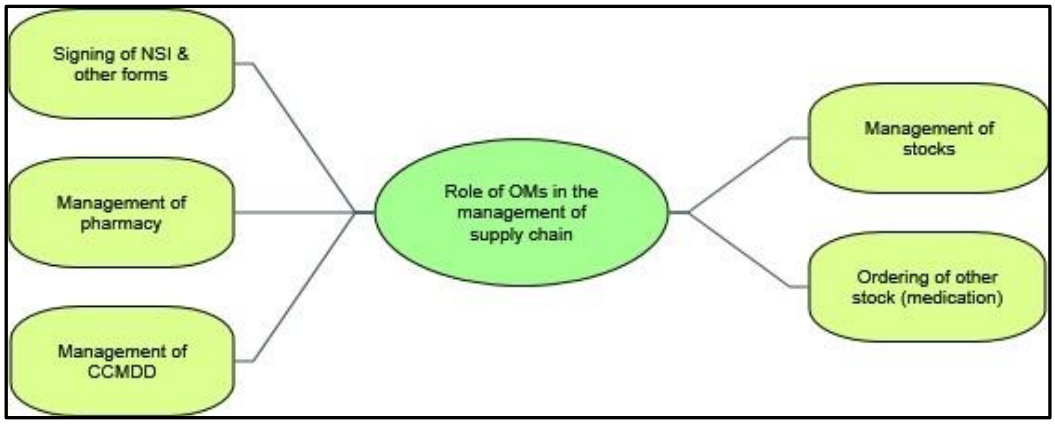

Figure 5.8. Themes on the management of the supply chain

Source: Interviews Data (2018)

Figure 5.8 depicts the themes which emerged from the responses provided by the OMs on the role they play in management of the supply chain. It was established that OMs play a minimal role, which includes, the signing of NSI requisitions and other purchase forms, which are then forwarded to the sub-district office, management of the pharmacy, management of Central Chronic Medicine Dispensing and Distribution (CCMDD), management of stock, and direct ordering of medication. The execution of this function is also centralised at the sub-district level.

5.6.4.1. Signing of NSI requisitions and other forms

Operational managers are merely involved in the signing of NSI requisitions and other purchasing forms. This result shows that OMs are excluded from the main procurement function. Their role involves only signing off non-stock item (NSI) requisitions, and other purchase forms (replenishment forms, TR17 forms) and sending them to the sub-district PHC Office, as sub-districts are responsible for the main procurement function. The PHC Office then presents and defends the received NSI requisitions and other purchase forms at the Cash Flow meeting. Unfortunately, the process is a protracted one, resulting in the sub-districts PHC taking too long time to process and deliver on all orders that have been sent by the PHC facilities, which in turn causes unnecessary delays in the procurement of goods and services.

The OMs must constantly follow up with PHC Office (PHC Supervisors or PHC Managers), after which these managers follow up with the Stores department on behalf of the OMs. Unfortunately, the activities at the PHC level cannot wait while OMs anticipate the stock to arrive, so OMs regularly make plans to get stock that they need to carry on providing healthcare services by borrowing from other clinics and replace it when they receive their stock. It is one of the biggest challenges they have to deal with on a daily basis.

This finding is supported by two studies conducted within primary health care facilities in South Africa in different provinces. In the first one, it was found that most clinic managers complained that they were not involved in supply chain management, but were penalised for the negative effect it often had on their clinic's ability to provide quality health services, and which were beyond their direct control (Muthathi et al., 2020). In the other study, it was found that the ordering of stock and equipment, as well as the maintenance and replacement of broken furniture and machinery is done at the sub-district level. The turn-around time to receive even simple stock is too long and has been detrimentally affected by the implementation of the Ideal Clinic programme, as well as other programmes (Muthelo et al., 2021). Two of the research participants recounted the following:

> *To order, we fill in either TR17, NSI forms, and replenishment forms (depending on what we are ordering) and send them to the PHC Manager prior to the Cash Flow meeting. Then the PHC Manager will check it, and then send it to the Stores Department. Then the Stores Department arrange the forms in such a way that during the Cash Flow meeting day, the forms are presented, approved, and then signed by the CEO.*

> *We do NSI forms when we order and submit to the Finance Officer, but we don't even know how much those things we order cost.*

5.6.4.2. Management of pharmacy

All PHC facilities do not have Pharmacy Assistants who are employed at the PHC level. The management of pharmacies is one of the responsibilities that is solely the responsibility of OMs. In all clinics who participated in the study, the OMs responded that they have purposefully trained and allocated management of pharmacy and all other pharmaceutical duties to the Staff Nurses, for them to do it on their behalf. The OMs closely monitor and supervise Staff Nurses to effectively manage the pharmacies and perform these pharmaceutical duties. The OMs ensure that Staff Nurses alternate in performing pharmaceutical duties, such as dispensing medicine to the Clinical Nursing Practitioners, doing stock takes of the medicines, receiving stock from the sub-districts or other suppliers, and checking the expiry dates of medicines.

The OMs also manage and authorise the monthly ordering of medicine from PPSD. The entire process is managed through usage of stock-cards, Staff Nurses and OMs manage the re-ordering levels for all items so as to identify what and how much should be ordered every month. Two of the research participants conveyed the following:

I do not have any Pharmacy Assistant but I have allocated a Staff Nurse who is managing the pharmacy on my behalf.

In the pharmacy, I have allocated two Staff Nurses to do all the pharmaceutical duties, they alternate. In fact, both of them alternate in dispensing because the Professional Nurses are ordering the treatment from the pharmacy to the Consulting Rooms. And, if we do the orders at PPSD every month, we do it here and it is done by the Staff Nurse and I authorise the orders. Each and every item (the medicines, surgical and stationery items) also have stock-cards so I have got the re-order level for each item so that I can be able to see how much we should order in each particular month.

5.6.4.3. Management of CCMDD

The implementation and management of The Central Chronic Medicines Dispensing and Distribution (CCMDD programme, is one of the new initiatives which came into the implementation phase without staffing allocation and automatically became the responsibility of the OMs. The aim of the CCMDD programme is to channel the patients who come to collect their medicines away from the PHC facilities by having the collection outlets or points within communities that are easily accessible and convenient for patients, but not inside the PHC facilities themselves. The OMs had to try find CCMDD points in their local areas, which were situated close to their clinics, but within communities. It was a tactical undertaking and there were challenges as there were guidelines which these CCMDD points had to conform and adhere to. Some of the areas identified did not meet the specified guidelines, resulting in some CCMDD points being located inside the clinics. The OMs are responsible for identifying space for these pick-up points within their clinics. Once again, the OMs have the responsibility to find suitably qualified staff to work at those collection points from the existing clinic staff compliment. The OMs also must make transport available to convey nurses and medication to these CCMDD points on the assigned pick-up days.

Ideally, Enrolled Nurses can be utilised to staff these CCMDD points, but currently there are not enough suitably qualified South African Nursing Council members to permit them to issue prescriptions. Consequently, the OMs have allocated CNPs to staff the pick-up points and thus the CCMDD programme has worsened the challenge of the shortage of staff. Additionally, the CCMDD programme has increased the workload for CNPs and for the OMs. Sometimes, the OMs utilise Enrolled Nursing Assistants to staff this programme even if they are not qualified to do so. Even though this programme is run on a six-month interval, it has added to the workload and distress, as patients must come back every six months for their scripts to be reviewed. Allocating Enrolled Nursing Assistants to staff this

programme and issue prescriptions is against the guidelines and has the potential of exposing OMs and them to the risk of disciplinary procedures.

Contrary to the CCMDD programme, which was aimed to improve access of medicine to patients in rural PHC facilities, this study found that OMs are grappling with problems such as finding reliable CCMDD points, the unavailability of such points, and then they having to locate this programme in-house. They are also challenged with the unavailability of staff to manage these points, because of which there are often no staff members to perform this task (Meyer et al., 2017). One of the research participants could thus state the following:

> *Yes, you see there outside … [pointing to outside the building] … That is the CCMDD point … there should be a Sister there, not an Enrolled Nursing Assistant because when she renews, she needs to also issue the prescription as a prescriber. Who is the prescriber? It should be a Professional Nurse, not an Enrolled Nursing Assistant, and definitely not a CCG because when they renew a prescription, they need to furnish a South African Nursing Council number. So, this CCMD programme is a problem; instead of easing the work load, it in fact has increased it, except that it is run on a six-month interval but then patients have to come back and their scripts are reviewed again.*

5.6.4.4. Management of stock

Managing the safe and appropriate keeping of stock (medication, equipment and medical supplies, stationery, cleaning material) when it has reached the facilities is one of the responsibilities of the OMs. Since there are not staff members employed at the PHC level to do this task, the OMs are responsible for allocating and training staff members to perform these duties on a daily basis. The OMs then provide supervision, support, and motivate all the staff members who have been nominated to do these tasks additionally to their other core functions which they have been employed to do. This task involves identifying and making rooms available to be used as storage rooms (it should be noted that currently all clinics have a challenge of office space), sometimes working in the storage rooms when allocated staff are not available, ensuring that someone is always available to issue out stock that is needed by other staff members, doing stock intake and stock counts, and keeping track of shortages and managing the re-order levels. The OMs perform physical counts on a monthly basis to identify the amount of stock that has been used, the remaining stock, and stock that might have been stolen or lost to ensure that the physical count and stock-card record correspond. It is the responsibility of the OMs to ensure that stock is always available for the clinics. The OMs ensure purchase requisitions are completed,

signed, and sent to the sub-district PHC Office in preparation for presentation during the Cash Flow meetings. One of the research participants narrated the following:

> *I am having people who I have been allocated to do stock inside the facility. Like in the Pharmacy, I have allocated somebody who will make sure that medication is issued to the nurses who are working in the consulting rooms. Then my role is to check that everything is in order, and on a monthly basis they do a physical count and then I have to ensure that everything balance, that the physical count and the stock-card are corresponding.*

5.6.4.5. Ordering of other stock (medication)

Operational managers are responsible for managing the processing of orders for medicine directly from the Provincial Pharmaceutical Supply Depot (PPSD) on a monthly basis. An analysis of the results found that it is only the procurement process which OMs are fully responsible to manage, and it has proven to be running smoothly, effectively, and with no challenge, and delays, in comparison to other procurement processes which are managed at the sub-district level (Muthelo et al., 2021). Clinics are allocated a yearly budget for medicine. The OMs have divided the yearly medicine budget according to monthly orders, and rarely increase during busy months, but sometimes they do not increase orders as they have leftover stock from the non-busy months. This is because OMs have devised a working plan for managing their medicine and sending orders timeously. Similarly, the findings revealed that OMs have an in-depth knowledge of their medicine spend and estimates, and they can manage the stock levels properly without running out of stock, or having additional unused stock which leads to unnecessary waste due to the expiry of medicines (Muthelo et al., 2021). Even though clinics do not have facsimile machines, they understand their challenge and always make sure that orders for medicines are sent out timeously by going to use facsimile machines, either at the hospital or from other partners. This is one of the things OMs do to improvise and mitigate against the challenges they are faced with at PHC level. The unavailability of facsimile machines, is not used as an excuse for poor performance, but rather measures to alleviate this problem are innovatively implemented. Three of the research participants recounted the following:

> *We order medication directly from PPSD.*

> *Then for medicine, there is an allocated budget for medicine. So, we are the ones who are ordering for ourselves you see? We divide the amount amongst the twelve months period. So, knowing how much do we spend each and every month we order accordingly.*

I first check the stock that we have, then I estimate the stock we will need in the period of two months, then we order we send to the hospital, the nurse assisting at pharmacy checks and then go to the hospital to ask them to fax to PPSD because we don't have a fax machine in our facility, that is why she has to go to the hospital, luckily, we are closer.

5.7. MANAGEMENT OF SERVICE DELIVERY IN PHC FACILITIES

This question was formulated to investigate the role of OMs in the management of service delivery in PHC facilities in the KZN DoH, uMkhanyakude Health District.

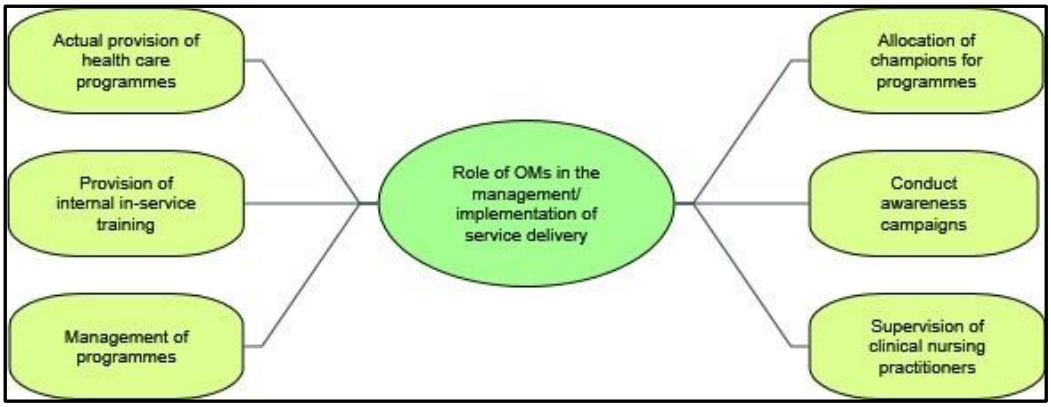

Figure 5.9. Themes on the role of OMs on the management of service delivery

Source: Interviews Data (2018)

Figure 5.9 depicts the themes which emerged when OMs were asked to explain their role and involvement in the management of service delivery at the PHC level. After extensive analysis of the data, six main themes emerged and they include the provision of health care programmes, provision of internal in-service training, management of programmes, allocation of champions for programmes, conducting awareness campaigns and supervision of clinical nursing practitioners.

5.7.1. Provision of healthcare programmes

An analysis of the results revealed that OMs are extensively involved. They are not only managing and supervising the implementation of health care programmes, but are part of the team which provides health care services and programmes to the patients. The OMs stated that they spend a large percentage of their time (80%) consulting and seeing patients. According to the job description of OMs, PHC managers are expected to spend only 20% of their time mentoring, supporting, and supervising clinicians in providing health care programmes, and 80% of their time performing management functions. Yet, due to the shortage of Clinical Nurse Practitioners, OMs spend 80% of their time and

even more in consulting rooms attending to and serving patients instead of doing their management functions and only help with service delivery only on 20% of their time.

This is an enormous challenge. While OMs find themselves having to sit in consulting rooms and serve patients, they must find time elsewhere to accomplish their core management functions. It was found that the OMs do their management functions during weekends, tea and lunch-breaks, after work hours and during leave days. The responses from most of the OMs revealed they believe this is the only workable solution available, because they cannot leave patients unattended as they need health care services.

The OMs spend the largest percentage of their time serving patients because there is a shortage of Clinical Nurse Practitioners. Accordingly, they cannot watch the long queues of patients and not help. They cannot watch patients going back home without being assisted, or watch patients not being served when targets must be met. And lastly, they cannot watch their staff members being inundated with so many patients, as this is not an acceptable culture, they want to promote in their PHC facilities. Operational managers have thus taken responsibility for this challenge and fortunately they have CNP competencies and skills to provide this service. Therefore, OMs have resorted to utilising their own time to accomplish management functions because both serving patients and carrying out management functions must take place, and there is nothing that OMs can do to remedy this chronic challenge, as they have been told several times never to mention or complain about shortage of staff.

This result supports the work of Daire and Gilson (2014) which was conducted to look at the application of systems thinking in health in the South African context, where it was shown that the work of a Facility Manager in a clinic should be focused on managing service delivery to meet patient needs holistically. Yet, most managers find themselves becoming personally committed to the provision of service and neglecting their key management functions, mainly caused because of a chronic shortage of staff. This is a problem because there are high expectations for the efficient and effective managerial performance from the managers in PHC facilities, but they must perform duties over and above those of their core functions (Daire & Gilson, 2014). Also, the study on global primary health care and sustainable development goals showed that the provision of wide-ranging quality health care services is hindered by a shortage of key workforce personnel (Chotchoungchatchai et al., 2020). Findings from other studies conducted in South Africa, has shown that the shortage of Clinical Nurse Practitioners is a significant and critical problem in developing countries like South Africa, as managers in the local PHC facilities must dedicate a large amount of their time performing non-management functions (Chotchoungchatchai et al., 2020).

Another study conducted in South Africa on how leadership is approached in nine PHC facilities in Cape Town, suggested that fear of not accomplishing set targets, has been identified as one of the reasons why managers of the PHC facilities elect to become more involved in providing clinical services and neglect their leadership and management duties. They know that serving more patients will assist them in attaining targets they have been struggling to meet (Cleary et al., 2018). Four of the research participants narrated the following:

> *Eighty percent of my work is the provision of clinical services, I spend huge amount of time serving patients. And there are times where because of staff shortages (as I have said there are only two clinicians that are responsible for patients care and myself), if one of the clinicians is away either on leave or on training, I end up not even spending this 20% of my time on management tasks, it ends up being 90% patient care.*

> *If I see that there is a delay, there are more patients, I have to be involved myself in rendering patient care. I cannot look and not help patients.*

> *According to my job description, 80% of my time should go to management, and 20% to patient care, but it is very much impossible. In reality, it is the other way round. Some 20% goes towards management and 80% goes towards patient care, and in most cases I have to take my own time to do and finish management duties.*

> *You know I spend a lot of my time seeing and serving patients, instead of doing my OM duties. I was talking with a PHC Supervisor telling her that even my Ideal Clinic files are not up to date, and policies and Standard Operating Procedures have not been renewed because I do not have time. I need to do things attentively and un-disturbed, but every time when I try to do my files, someone comes in to call me and tell me that "please come and assist, so and so is sick" or "come assist the queue is long" etc., then I have to leave everything and go serve patients.*

5.7.2. Provision of programmes mentorship

The provision of mentorship and training to all clinic staff members is another critical role that is performed by OMs. This is caused by sub-district and district offices requiring the mandatory attendance of OMs at most training programmes as a form of making them responsible and accountable for their implementation at the PHC level, as a result this equip them with wealth of superior programme knowledge to be able to mentor and capacitate their staff members at this level. The OMs conduct a variety of in-service training and education programmes to improve skill levels for the staff members

in their clinics. They understand that there is a limited budget to send staff to training courses, so the cheapest and most practical way of ensuring that staff members are equipped with relevant knowledge is to continuously conduct training at the local level. The OMs conduct training as a cost saving measure where they train clinic staff members on the effective utilisation of resources like water and electricity; how to mix cleaning solutions, and how to save linen, gauze, and other medical supplies.

The OMs have also taken the responsibility for ensuring quality of services and adherence to policies and procedures, so they continually conduct in-house training like telephone etiquette; dress code training and training staff members after new guidelines and policies have been promulgated or developed. This is to help staff understand what the new guidelines are about and how they are expected to implement and report on the implementation of these new guidelines and policies. They provide training to new staff members on DoH policies and guidelines, and refresher training courses to the older staff members on things like the correct procedures on the injection of patients. The OMs utilise internal in-service training and education as a way of improving the performance of those staff members who score low or poorly on performance ratings. Two of the research participants narrated the following:

> *I normally train staff in cases where there is a new equipment or new machinery, I train them on how to operate the new machines. Like the hospital economy, I train my staff regarding the economical utilisation of resources like water and electricity. I teach them about the importance of not allowing water taps to keep on running without anyone closing the tap. I also provide telephone etiquette training on how to answer the phone at work.*

> *I also train my staff about their dress code on how to dress at work. I also conduct in-service training for General Orderlies on how to mix the solution for cleaning purposes. Even with the Nursing staff, there are times where I need to provide in-service for them, to remind them on how to do the injection.*

5.7.3. Management of programmes

Operational managers are responsible for the management and supervision of all programmes that are being offered in the PHC facilities. Their main task is to ensure that the three health care streams (mother to child, acute, and chronic) are implemented accordingly within the PHC facility. In situations where there is a shortage of clinicians to provide some of the programmes as per the requirements of the approved guidelines, the OMs stand-in and provide these health care programmes to ensure that all the programmes are provided in their clinics. The OMs have allocated champions to lead different

programmes, but OMs must play a role in supervising these programme champions on a daily basis. The role of the OM is to make sure that resources are available for clinicians and programme champions to be able to implement all the programmes. From the analysis of the results, it was identified that the issue of shortage of staff – mainly clinicians – is a problem, as some OMs reported that sometimes they have to step-in to assist in the implementation of programmes, such that they feel they are more involved in implementation than in management of programmes. This happens regularly when nominated champions or clinicians are on leave, attending training elsewhere, or working night-shift. As a result, some OMs feel they are more involved in programme implementation than in the management of programmes.

The results revealed that OMs at the PHC level operate like being a player or referee, all at the same time, as they must provide health care services, mentor health care programmes (which means they mentor themselves), act as a programme champion, supervise programmes, and supervise and mentor the nurses in their clinics. This situation is caused by the shortage of clinicians. This is the reason there have been many strengthening interventions implemented to improve and strengthen service delivery and improve quality health care at the PHC level (Scott et al., 2014; Davis et al., 2008). These findings also support the literature which show that the quality of health care services is still poor. There are many systemic challenges that are found across all components of the health system (Coovadia et al., 2009; Maphumulo & Bhengu, 2019). The main dilemma is that those who are supposed to provide oversight and mentorship are also providing implementation and as a result there is no objectivity and it is not clear who is monitoring who. Four of the research participants narrated the following:

> *I am responsible for management of programmes. Like in other clinics, we are supposed to have three streams here at in this clinic, (Mother & Child – MCWH; Acute; then chronic). But as it stands, we only have one stream, which I am fully responsible for because I am the only Professional Nurse. But at the same time, I am expected to do my management and administrative functions, so I manage programmes and work at implementing those programmes.*

> *I am the one who is responsible for supervising all the programmes. Although I have champions in other programmes, I am directly involved in supervision because sometimes you find that you have a champion for chronic, and you find that the champion is not working during the day, but working night duty, so you have to be the one who is involved to make sure that everything is going smoothly.*

> *I am more involved on the implementation of programmes, and less involved in management.*

We do not have enough staff, we still need more staff, because as we speak, at the Youth Programme today, it is locked because I am here talking to you. Sometimes, I and another Sister are the ones implementing this Youth Programme because we are short staffed and today that Sister is also working somewhere else.

5.7.4. Allocation of champions for programmes

Operational managers play a role of allocating clinicians as champions for various programmes which are implemented at the clinic and to support those champions. These programmes include MCWH, HIV/AIDS, chronic, acute, and other programmes. They allocate programme champions and are involved in supervising and mentoring those programme champions. Since there is a shortage of senior nurses who can be allocated to be champions, the OMs in most cases must play different roles like being a referee and a player all at the same time, and provide health care programmes, act as a programme champion, and supervise programmes. This conduct by OMs has the ability to cloud neutrality and therefore temper with quality because a person cannot supervise and fairly critique own work, but there is nothing that can be done to prevent this situation. From the analysis of the results, it can be confirmed that shortage of senior clinicians has rendered OMs to be senior clinicians on stand-by all the time, because they have to step in and assist either to provide health care services in the consulting rooms, act as programme champions, or assist in filling-in patient charts left incomplete by some clinicians during consultations. Two of the research participants conveyed the following:

I am also responsible for the allocation of champions for different programmes, like allocate the problems pertaining to programmes to the champion for MCWH or champion for HIV, so that they can see what needs to be done. I have allocated champions for different programmes and different streams. I've got one PN who is doing MCWH, I have another PN who is doing Acute and also chronic, but if I am alone, I do all these activities 100% of my time.

So, in other situations I have to be a champion, provide health care, and supervise. Supervise who? … [Laughing] … Myself obviously, I am a referee and I am a player.

5.7.5. Conducting awareness campaigns

Conducting awareness campaigns is a major role for OMs, as there are no other staff members who are responsible for doing this and there are no staff members who can stand in and assist if the OMs are unable to do this task. The OMs are responsible for monitoring priority areas and to assess that their clinics are always achieving targets. When they recognise that there is slow progress or there are gaps

in any of the targets, the OMs conduct awareness campaigns and in-service education and training, either inside their clinics or within the communities themselves. These initiatives are done to raise awareness about the health programmes the clinics offer, identify more patients who need certain health care programmes, and to bring the health care services closer to the communities, and thereby reach a wider range of clients.

Health talks are also conducted by OMs to patients (in groups or on individual basis), to make them aware of the programmes on offer, as well as make them aware of their health needs and how they can seek these from the clinics. The OMs also conduct mentorship, supportive talks, or on-the-job training to the clinicians, thereby helping them to effectively execute their health functions or improve if there is an indication of wrong doing, negligence or sluggishness in serving more clients. The OMs equip their nurses (clinicians) with skills to read the situations correctly as well as the patients in terms of the services that are needed. This will maximise the usage of their time serving more clients, and provide quality health care services, while making sure that they offer a variety of services, and thereby cover a wide range of targets. The efficient utilisation of resources and time is important in health care provision, especially when there are insufficient staff resources.

The problem OMs face in successfully conducting awareness campaigns is often the unavailability of transport to go to communities and conduct campaigns. As a result, they often end up utilising their own transport and petrol without being able to claim back their money which is seen as an exploitative practice by many health professionals. This result concurs with the results of a study that was done in Vhembe district in Limpopo, South Africa, which also revealed how nurses employed in primary health care utilise own resources for the benefit of DoH without getting any refund (Mutshatshi et al., 2018).

The acute shortage of healthcare professionals proved to be a serious hinderance to a wide range of programmes, especially in rural areas. The shortage also contributes to the issue of quality health care services, as overworked clinicians are not able to render quality health care services (Chotchoungchatchai et al., 2020). Three of the research participants conveyed the following:

> *I am also doing awareness campaigns on a monthly basis to the patients and clients, and also doing in-service training or education almost every day to the clients/patients.*

> *I do random health talks with our clients in the morning and during midday. I usually monitor that staff do their provision of health care well, like I will check if they are doing their Pap smear correctly. If it happens that there is no equipment, I phone other clinics to ask them to loan us some equipment that we need.*

I can say I am responsible for making sure that priority areas are met. Like all those programmes that need to be … like when I see that there is a gap, I am the one who is responsible to make sure that everything is done. For example, like now, just like when you were coming, I've noticed that last week there was no one who was trained to insert the Intra-uterine Contraceptive Device (IUCD). I have trained people here in my facility to insert, I am the one who is the champion fo rthe insertion of IUCD. So sometimes I find that they see this as something that is time consuming. If there is someone who wants to be inserted with an IUCD, they complain "…this person is going to take lot of time and there are patients who are waiting, they will be complaining." So, they will say, "come back when there is an OM, she is going to insert it."

5.7.6. Supervision of clinical nursing practitioners

Although the OMs are responsible for supervising all staff members in the clinic, the analysis of results showed that that supervision of CNPs is one of the major tasks for OMs. The CNPs are carrying the enormous responsibility of consulting and seeing patients, as well as championing programmes, so they need to be monitored closely at all times. This supervisory task is complicated by the fact that there are insufficient nursing practitioners, so OMs play a significant role in allocating tasks and shifting staff around on a daily basis to ensure that regardless of the challenges, most targets are attended to. The OMs are committed to always be available to assist and actually do the work of clinicians because work has to be done even if there is no staff members employed, or if posts are frozen.

The results show that the shortage of CNPs which has forced OMs to also work as CNPs, which means the work provided by the OMs as CNPs is not supervised because the OMs are also working as CNPs 80% of their time. Similarly, OMs do not find enough time to supervise other CNPs. Overworked OMs who are unsupervised, are soon stressed by having to conduct their management functions and responsibilities in their own spare time. This finding corresponds with the study conducted in low and middle income countries which showed how the lack supervision and programme management leads to unmotivated staff and poor-quality health care programmes (Mills, 2014).

This is a perfect example of how the shortage of staff, which is under the 'Human Resource' component, affects the provision of health care services which is under the 'Service Delivery' component, proves the interconnectedness and interrelationship between components of the health system. One of the research participants narrated the following:

Yes, I am supposed to have some senior staff members overseeing these programmes for me, and I am only supposed to support and supervise them when they report to me. But it is not like that here. I am doing their work because there is no one.

5.8. MANAGEMENT OF INFRASTRUCTURE AND MAINTENANCE IN PHC FACILITIES

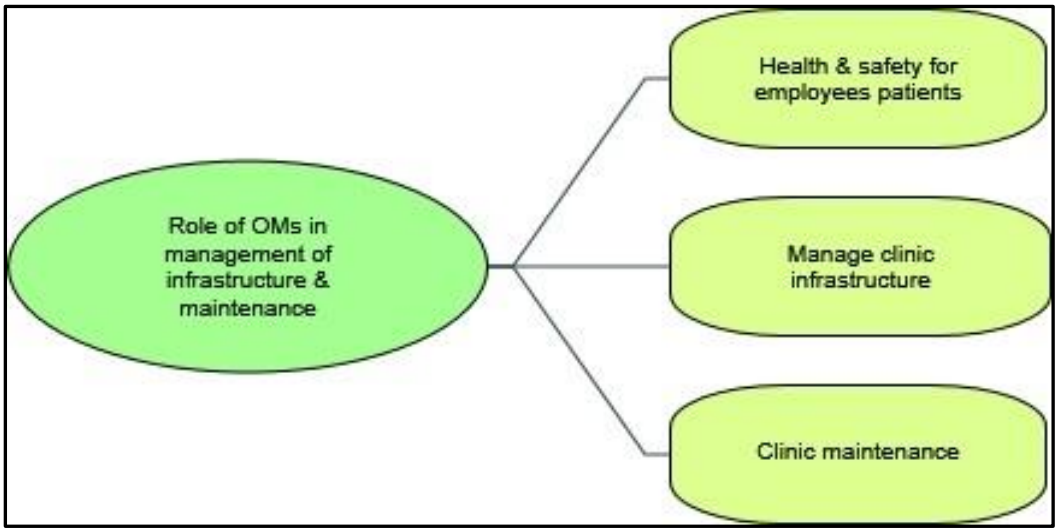

Figure 5.10. Themes on the management of infrastructure and maintenance

Source: Interviews Data (2018)

5.8.1. Health and safety of employees and patients

Ensuring healthy and safe environment for both employees and patients is the responsibility of OMs, as there are no employed Health and Safety personnel at the PHC level. The OMs conduct health and safety functions by doing checks to ensure there are no hazards or exposure to unsafe situations for staff members and patients. Accordingly, they allocate some of these health and safety tasks to nominated nurses and supervise and mentor them to conduct these tasks. The OMs have not been trained on how to perform this task, they learn while on the job and take their own initiative to learn what the Infection Prevention & Control (IPC) guidelines as well as Health & Safety regulations prescribe. The OMs have also taken responsibility for conducting in-house health and safety training where they train staff members on health and safety guidelines and SOPs. Two of the research participants narrated the following:

We do have Health and Safety policy in place. I do in-service education based on that policy and staff sign that they have received training. There are also guidelines specifying what happens on things like for example when a staff member is pricked by

a needle, what needs to happen is given step-by-step. So, I can say my role is to make sure that staff understand what the Health and Safety policy and Health and Safety guidelines say, I make them aware of these by doing in-service training to ensure that they implement and do as they are expected to.

I have allocated this task to be supervised by an IPC Nurse who always checks for the safety of the patients, cleanliness, and everything. But I am the one who is responsible for overseeing the work of the IPC Nurse and identifying all hazardous things.

5.8.2. Managing clinic infrastructure

Adequate infrastructure is key to the quality provision of healthcare services. The safe keeping of clinic infrastructure, cleanliness, and the health and safety standards of the clinic are some of the tasks that OMs perform daily. Every morning or afternoon, OMs do a walk about to check the clinic infrastructure. They check the availability of the water and electricity supply, they check if there is anything broken, check the grass outside and everything else to ensure that the entire infrastructure is in good condition and is conducive for the provision of quality health care. There is no dedicated staff member who is formally employed to do health management of infrastructure, including health and safety. Quality Managers are located at the sub-district level. As a result, OMs have taken the responsibility to ensure no staff members or patients get injured in their clinics. The majority of OMs have nominated some nurses to act as Infection Prevention & Control (IPC) or as Health and Safety officers, but the OMs still have to oversee their work. Operational managers have not been trained in health and safety protocols; therefore, they use the health and safety guidelines or policies to ensure the health and safety of everyone in their clinics.

Most studies support this finding. Clinic management (ensuring conducive and working infrastructure) and clinic reorganisation are some of the tasks which clinics achieve through the leadership and involvement of OMs. Operational managers understand that to accomplish operational efficiencies, and improve the quality of care that is provided by PHC facilities in preparation for Ideal Clinic and National Health Insurance, they need to keep the clinic infrastructure working all the time (Hunter et al., 2017; Muthathi et al., 2020). Two of the research participants conveyed the following:

No matter how busy I am, I walk around the clinic like a mad person checking if everything is working and is in order, there are no defects, or that there are things that can cause harm to patients and my staff. I have to do this because if I don't know if anyone will come to tell me, and if someone gets hurt, they will ask me why I didn't get it fixed.

We follow the Health & Safety policy, like if a needle-stick injury occurs, we just follow the guidelines on how to deal with and resolve it.

5.8.3. Clinic maintenance

Clinic maintenance is a theme under infrastructure and maintenance and OMs responded that it is their role to make sure that the clinic infrastructure and equipment is always maintained. There are currently no employees dedicated to perform this function at the clinic level because it falls under the responsibility of the OMs. This task is executed using job cards which are completed, specifying the issue that needs to be resolved or repaired, and then sent off to the maintenance department at the hospital. It should be noted that there are no dedicated vehicles which are available to take job cards to the sub-districts, so OMs must ask the Doctors who come to consult in the clinics; or sub-district teams who come to do some work in the clinics for their assistance. This poses challenges to OMs as they sometimes must use their own vehicles and petrol to transport these job cards if there are serious and urgent repairs that must be reported and there is no vehicle available from the sub-district. Operational managers make sure they follow-up with a telephone call until the issue is resolved. Follow-up is important because the sub-district maintenance department takes long to respond or they do not respond at all if there is no follow-up. Additionally, job cards sometimes get delayed or get lost if the maintenance team is not notified about what has been sent. The OMs must therefore plan to get the job-cards from the persons who have been asked to send them on behalf of the clinics. If it is an urgent issue that needs to be fixed or repaired, and the OMs feel it is detrimental to the health and safety of the clinic staff and patients (e.g. tripped electricity switches or faulty electrical cables), OMs take the initiative and use their own money to get these kinds of maintenance issues fixed; but again, they do not get refunded as it is unauthorised expenditure, so there is no reimbursement process in place.

The result contrasts with the study which examined the Ideal Clinic Realisation and Maintenance (ICRM) programme, which established that PHC clinic managers are not involved and do not partake in the implementation of this programme (Muthathi et al., 2020). The participants reported that even though OMs were not involved in the formation of Ideal Clinic intervention, they are fully involved in the execution of maintenance activities aimed at preparing for this programme. They monitor its implementation closely and have taken the role of clinic maintenance as a critical component of the programme. Two of the research participants narrated the following:

If there are things that need to be repaired, I just fill up the job card specifying what needs to be fixed, then send it to inform the maintenance at the hospital that we having such a machine that is not working, can you please come and have a look. We send

those job cards with the cars, with the Doctors, those multi-disciplinary team that visit the clinic, we ask them to help deliver our job cards.

According to Ideal Clinic, we have to send job cards then follow-up by making a call and also indicate if something is urgent. So, all these measures help to ensure they respond. But still the response rate is not always fast. I don't know, maybe it is because they are busy. Sometimes they respond immediately and sometimes not. Like I had to send the job card and call five times for them to come fix the hazardous retaining wall and cut grass here … [pointing outside] …

5.9. CHAPTER SUMMARY

The analysis contained within this chapter demonstrated through in-depth findings, the role played by OMs in the implementation of health management systems. While OMs are involved in the execution and management of all six components of the health system, the results revealed that in some components, they play a very minimal role as they are not permitted to execute certain core functions. As a result, they are not able to influence the success of the process. The study found that OMs are totally excluded from planning functions, budget formulation, monitoring of expenditure, human resource planning, and supply chain management. On the other hand, OMs play an important role in the management of staff performance, allocation of tasks, management of leave, and motivation of staff members. They are partially involved in governance as they monitor the implementation of plans which they are not involved in crafting. Furthermore, they only play an administration role in processing of orders and requisitions as everything is executed and approved at the sub-district level. They are responsible for managing stock only when it has arrived at the PHC level. The management of data and service delivery is where OMs play an extensive role. They are involved from start to finish in most of the tasks to the extent that they must step in to help in these functional positions when staff are on leave, on training, or are absent for any reason. In addition to the six management components, OMs also play a large role in the management of infrastructure and maintenance which is a seventh component in the management systems at the PHC level. Here, they ensure the health and safety for staff and patients alike, as well as the upkeep and maintenance of the clinic infrastructure, since there are no staff specifically employed to do this task at the PHC level.

The next chapter will be a presentation and analysis of the results for Objectives #4 and #5, which includes challenges which hinder OMs from successfully executing their functions, as well as those challenges OMs must improvise and mitigate around. Finally, the chapter will discuss the strategies that can be implemented to help OMs better execute their management functions.

Chapter 6: Presentation and Discussion of Results

(Research Objectives #4–#5)

6.1. INTRODUCTION

The previous chapter presented and analysed the research data for Research Objectives #1–#3, which covered an analysis of the role of OMs in the implementation of the six components of the health system. This chapter is an extension of that presentation and analysis chapter, by presenting and analysing the research data regarding Research Objectives #4–#5. Accordingly, this chapter will capture the barriers and challenges which have prevented OMs from successfully executing their functions, the actions they have performed to counteract the challenges, and the proposed strategies which if implemented, could help them better perform their functions. This chapter will therefore discuss in detail Research Objectives #4–#5 which are as follows:

Objective #4: To identify the barriers/challenges faced by OMs when implementing health management systems in PHC facilities.

Objective #5: To identify enablers of success when OMs implement health management systems in PHC facilities

6.2. DATA PRESENTATION AND INTERPRETATION

The research data will continue to be presented and interpreted chronologically, in-line with the remainder of the two research objectives of the study. The main themes and sub-themes which emerged during analysis of interview discussions will be presented and thoroughly interpreted for each of the remaining two research objectives.

6.3. THE BARRIERS/CHALLENGES FACED BY OPERATIONAL MANAGERS WHEN IMPLEMENTING HEALTH MANAGEMENT SYSTEMS IN PHC FACILITIES

Research Objective #4 was specifically formulated to identify the barriers/challenges encountered by OMs when they implement health management systems i.e. when they perform their management functions in PHC facilities.

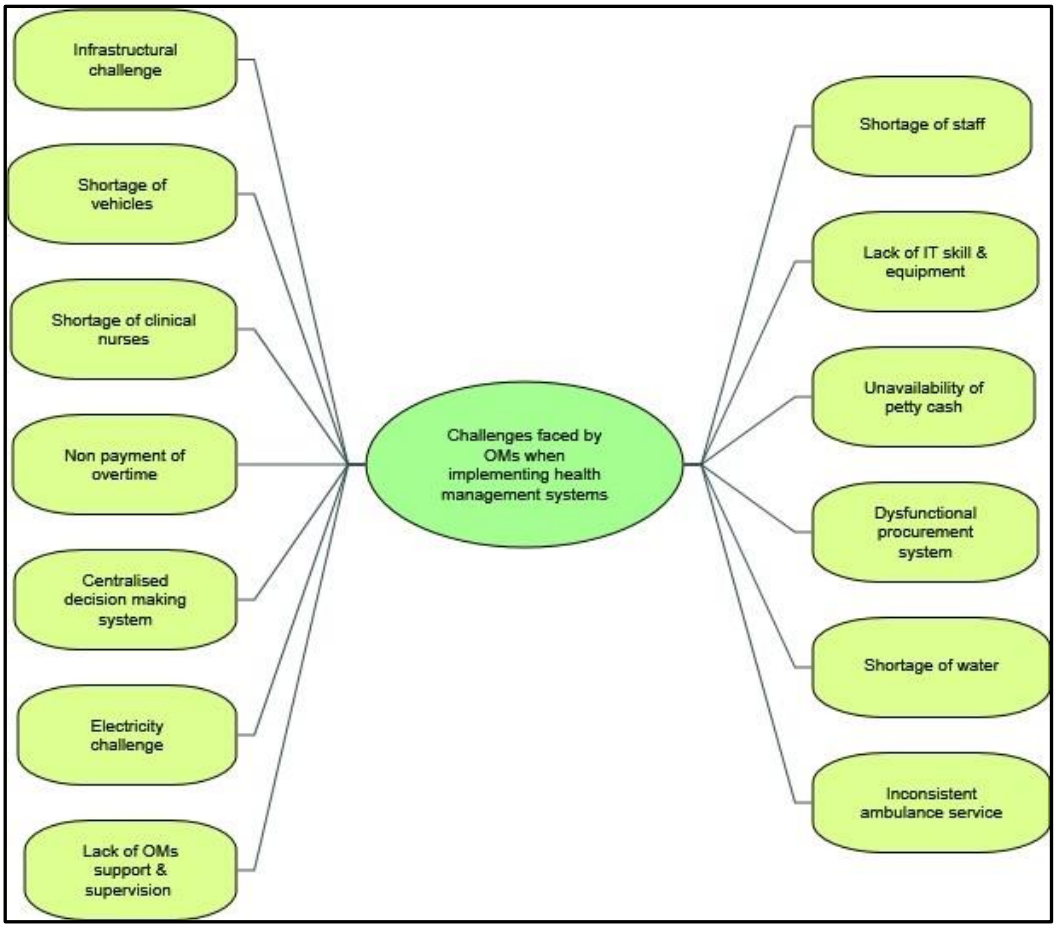

Figure 6.1. Barriers/challenges faced by operational managers when implementing health management systems in PHC facilities

Source: Interviews Data (2018)

Figure 6.1 depicts the main themes which arose when OMs were asked to talk about the challenges they face on a daily basis when they try to execute their management functions. From the analysis of the results, thirteen main themes which cut-across all management systems components emerged. These were: infrastructural challenges; shortage of official vehicles; shortage of CNPs; non-payment of overtime; centralised decision making; electricity challenges; lack of support and supervision; shortage of staff; lack of IT skills and equipment; unavailability of petty cash; dysfunctional procurement system; shortage of water, and inconsistent ambulance services.

6.3.1. Shortage of Clinical Nurse Practitioners (CNPs)

The shortage of Clinical Nurse Practitioners (CNPs) is reported to be the predominant challenge for OMs. This problem is considered predominant, as it directly and significantly affects the OMs, as they are the ones who must forego their management duties (reported as being 80% of their time) to stand-in and work as CNPs and serve patients in consulting rooms. This was reported to be a chronic problem

as presently there is a shortage of CNPs at all clinics. Furthermore, even when OM's stand-in for CNPs, there is still a notable shortage and challenge as the OM's assistance is insufficient to alleviate the problem. This challenge is exacerbated when some of the CNPs are on leave, are attending training courses, or are not at work due to other reasons. Operational managers are the only staff members who stand in 100% to help perform CNP duties. The shortage of these clinicians is posing a challenge even though OMs have acknowledged this to be a longstanding challenge, and have accepted and taken responsibility to work as CNPs on a daily basis; yet, the assistance of OMs is still not resolving the issue.

The shortage of CNPs contributes to OMs having to find alternate times such as weekends, after hours or during leave days to accomplish their core management functions. Operational managers often must resort to taking this extra responsibility, because as managers they recognise how detrimental the effects associated with this challenge can be. They understand that things do not work in isolation, and how the shortage of CNPs affects the other CNPs, other departments and systems, as well as the overall goals and targets within the PHC facility. They are always striving to assist all staff members and to provide solutions to the challenges imposed by the working conditions they are under. Their success is dependent on how they respond to the challenges. This in turn leads to an extra workload for OMs, causing fatigue, stress, demotivation, errors, poor performance, inadequate time to accomplish other core management duties, and it eventually weakens the entire management systems at the PHC level. Even the current CNPs are feeling overworked. Currently, they see an average of 100 patients per day, which is more than the required norm of 35. Their stressful attitude becomes undesirable and they become unfriendly towards the patients, resulting in many complaints and offering of poor quality and hostile customer service to the patients.

When there are challenges regarding the implementation of some of the programmes like TB, HIV, Chronic, and MCWH, staff members come to their OMs to seek help or assistance because there is a shortage of CNPs who are ideally supposed to be the staff members responsible for helping other clinicians resolve these programme challenges. There is a great need for hiring more CNPs, because as it stands, OMs work extremely hard. Yet, to the sub-district management it seems like they are doing less than they are expected to be doing as mangers of PHC facilities, and this demotivates them even more.

Due to the interconnectedness of functions and systems, the shortage of CNPs affects OMs by preventing them from executing their other core management functions such as supervision of staff, monitoring implementation of plans, conducting awareness campaigns, and more. When these management functions are neglected, this ultimately negatively affects the performance of the entire

clinic and thereafter negatively affects the achievement of targets for the sub-district, then district, provincial office, and finally the achievement of targets at the country level.

Recruiting and keeping nurses has been a problem globally, but the problem is worse in developing countries like South Africa. Qualified nurses are scarce; there is a high level of job dissatisfaction due to increased workloads, and many do not want to work in rural areas. As a result, there is a large contingent of clinical staff coming from the rural areas to the cities. The nursing profession is also challenged by an aging labour force, where the retirement rate is very high, but the training of young professionals is not keeping up with the current rising demand. Therefore, most rural health care facilities are experiencing severe shortages of skilled and experienced nursing practitioners. This has put much pressure on the current nurses, as they have a much-increased workload. This study has further revealed that this has put additional pressure on the nurses and managers of those nurses at the PHC level, which is similarly supported by the findings of the literature review of twenty papers on job satisfaction in primary health care facilities. This review further showed that nurses end up wanting to leave those PHC facilities where there is a shortage of staff (Halcomb et al., 2018). Three of the research participants narrated the following:

> *I am more involved because if there are problems, they come to me to ask about those problems, I am almost involved in all the programmes (TB, HIV, Chronic, MCWH). If one of the PNs is not at work due to certain reasons I do 100% clinical care. I am talking about seeing clients and be in the consulting room 100%. I even attend perinatal meetings so that if there are some problems that are occurring or maybe if the mother lost the child, I need to attend those meeting to identify the cause of the problem to ensure that a similar problem does not occur again.*

> *There are too many programmes to implement and monitor in this clinic, and unfortunately for me I have to implement them, and they think I am not monitoring. This thing is demotivating, I am telling you. I need more Clinical Nurses. I work hard, but to them it is like I am sitting not doing my work.*

> *Staff shortage is a problem, and with staff shortage it goes with staff attitude because when people are overworked, they are not friendly with patients, I can say. Sometimes we get lot of complaints because somebody is working alone, and have to see 100 patients in one day.*

6.3.2. Centralised decision-making

Centralised decision-making was reported to be one of the challenges hindering OMs from successfully implementing of health management systems. All the OMs find themselves in an environment and structure where most critical decision-making pertaining to financial planning, financial management, budget planning and formulation, workforce or human resource planning, recruitment and selection of staff, supply chain management, e.g., the procurement and selection and management of suppliers, processing and approval of orders, management and process of maintenance, management of training are all planned, executed and managed at the sub-district level. Operational managers are not involved in the execution of any of these functions. Surprisingly, these decisions are critical, and OM's successful execution of their management function is dependent on their effective and successful execution of these functions. The most difficult part is that OMs are not even kept informed on the progress of the implementation of these functions. Operational managers are rendered as mere 'post offices" when it comes to the performance of these function, as they are only required to submit everything for processing at the sub-district level and thereafter wait.

The centralised decision-making has resulted in many challenges, e.g., shortage of medical and other supplies due to the poor processing of NSI requisitions orders. This leads to total failure in implementing these functions, wherein they are core components of the primary health system. Other departments or functional areas in the clinic are dependent on the proper functioning of these management function to perform their functions. For example, the provision of health care services to the patients is dependent on the availability of medical and other supplies, where the delay to get such supplies to the clinics timeously is experienced, if the procurement function is ineffective. Also delays in attending to maintenance requests, can render a clinic dysfunctional if there are unattended water leakages, tripping of electrical systems and other potentially dangerous faults, as well as other maintenance issues. The entire clinic can be closed and this will affect the implementation of functions in other departments and the attainment of clinic targets.

Operational managers play a small role in these matters, except to forward everything to the sub-districts, then wait for delivery. But due to the current infectiveness and delays, OMs have devised a survival mode which is to constantly follow-up with the sub-districts through their PHC Office. This has proven to be a better way to help them track the progress and at least have an idea of what causes the delays and estimate how much longer they are going to wait. This helps them to decide if there is a need to do perform other alternatives (such as borrowing from other clinics or utilise their own money to purchase needed items) while waiting on the sub-district to deliver.

This process causes stress to these managers as they complained that they are not involved, as it often turns into a catastrophe. The sub-districts fail to keep the OMs informed on the status and progress of the processing of orders, this includes informing them when some orders have been cancelled, lost, or if there is some required outstanding information. The centralised decision-making system has led to intolerable delays, such that some orders must be re-submitted because they are not processed for reasons unknown, and are thus delayed sometimes for a year or more.

The same thing applies to recruitment and the selection of staff, including workforce planning. The fact that this function is carried out at the sub-district level, leads to delays in recruiting and employing replacement staff timeously and immediately when the other staff members leave. The OMs would inform the sub-district HR and PHC Office timeously that a certain staff member is about to leave, and nothing will be done by the sub-district to kick-start the recruitment process. The OMs will further remind the sub-districts when the staff member has left, asking what should be done to be able to continue to carry on with normal clinic functions, and no replacement staff member will be employed to fill the vacant post. This delay in recruitment and the filling of vacant posts is a serious matter because the unfilled vacancies are eventually frozen after a long period of time. The inefficiencies of sub-districts negatively affect OMs from successfully carrying out their function, but there is nothing that is done to fast-track recruitment initiatives and OMs feel that their success is at the mercy of the sub-district offices. The OMs feel that if they can be involved in the recruitment and selection of their staff, they will work extra hard to ensure that unfilled vacancies are filled timeously because they understand and have experienced operating with a lean staff compliment. Not only does it affect the implementation of other health care programmes, but it also affects remaining staff members as they must step in and assist. Operational managers have the desire to ensure the smooth operation of their clinics, and fill in when there is a shortage, as this challenge directly affects them and demotivates the remaining staff members.

This finding is supported by various studies conducted in South Africa, Africa and other lower and middle income countries which demonstrated that prohibiting PHC managers from participating in critical decision-making processes like staff recruitment and selection has resulted in flawed recruitment functions which result in long delays in filling vacant positions (Muthathi et al., 2020). Studies have further shown that senior management in the DoH, especially District Health Management Teams (DHMT) are failing to include managers of PHC facilities in their decision-making procedures, committees and structures (Mogakwe et al., 2020). Contrary to the findings of this study, more and more studies have advocated for seeking the inputs, suggestions and involvement of facility managers when executing governance (especially planning) functions (Ross et al., 2014). This is not disrespecting the current hierarchical DoH structure and traditional management levels, but it is to ensure that the experience and inputs of OMs as implementers is taken into consideration.

Involving OMs in decisions pertaining to staff recruitment and selection has the potential to assist the sub-district recruitment team to understand the detrimental effects that delayed appointments of clinic staff and frozen posts can have on OMs, including the entire PHC work force and towards the attainment of targets. Having OMs in the recruitment teams can push sub-districts recruitment teams to work at a faster pace because they will have OMs as constant reminders of what it at stake if they stall the process. The OMs must run around the clinic, begging, and encouraging staff to take on extra workloads, or work after hours. Involving them to fast-track the recruitment processes will help build a happy workforce which is not worried about having to take on burdensome workloads.

Centralised decision-making which is still located at sub-district level as shown by the findings of this study, is contradictory to the research which has shown that sub-Saharan Africa and other low- and middle-income countries should move towards decentralising decision-making and move it closer to local managers, as they are responsible for implementation. Decisions taken from the bottom to top have proven to be more effective and inclusive. This type of managing ensures the inclusion of local managers in planning, and by extension, ensures accountability and early detention and resolving of problems. It also increases the autonomy and confidence of local managers (Eboreime et al., 2018).

This study supports the literature which has shown that excluding local and lower-level managers from making decisions pertaining to their work and facilities and from plans they must implement, makes them feel alienated and not willing to take ownership when things fail. There is a call for joint and inclusive decision-making and delegation of powers to PHC managers so that they can be able to monitor progress, commit fully to ensure things go according to planned actions, and take ownership for failure (Mash et al., 2013). Three of the research participants recounted the following:

> *The supply chain or procurement system is a challenge. They are not informing us as to where the orders are now and what they are doing with them? Sometimes you order things and wait until you follow up for yourself, only to find out that it was cancelled buy they do not tell you that the equipment order was cancelled until you enquire for yourself. The feedback is not forth coming.*

> *There is no such thing. I am not involved at all in management of workforce planning. It becomes a disaster, as it is a disaster right now. I normally report early that I have someone who is about to leave on such a year or month, I tell them the exact date. (I tell them early). But after that I don't have the power to do anything. I keep on reminding them that, the person is retiring soon; please do something, the person is retiring in three months, "Hey the person is leaving next month," but nothing is ever done until the person leaves. I will report again that the person is gone, so what should*

we do? So, it depends on the hospital, when they decide that now we are going to fill that vacancy at this clinic so we must start recruiting, then they do it. So, it is really tough.

There are things I ordered in January and April this year, and also in the previous financial year (2017/2018), but I still have not received them. So, I had to repeat orders again in this financial year (2018/2019).

6.3.3. Shortage of official vehicles

The shortage of official vehicles both at the PHC and sub-district levels has been shown to be one of the challenges impacting the implementation of management systems at the PHC level. Without official clinic vehicles, OMs have been unable to attend meetings, attend training courses, perform other core management functions such as conducting awareness campaigns, health education, and other interventions aimed at strengthening healthcare and improving the achievement of targets. However, OMs have not allowed this challenge to completely derail them from performing these functions, as they understand the effect non-performance may have on the accomplishment of their individual goals and overall clinic targets. They must attend meetings to engage, get information, share ideas, and come back to share the information with the staff members in their clinics. Also, it is compulsory for them to attend training workshops.

Operational managers have taken the initiative to use own vehicles because they understand that their role does not allow them to put blame on the challenges, but they must work towards providing solutions; hence, they must respond positively to counter attack the negative work environment.

There is also no transport available to travel and implement key activities like Ideal Clinic, Youth Programmes, CCMDD and other programmes. Furthermore, there is no dedicated transport to collect and transport things such as NSI requisitions, maintenance documents to and from the clinics to sub-districts. The OMs have again willingly decided and committed to use their own vehicles and their own petrol to get these transported, and they are not reimbursed for wear and tear on their vehicles, or for money spent on fuel. This is unfair, unsafe, and costly to the OM's private financial standing and it exposes them to risk should anything happen to their vehicle during these unapproved journeys in their own vehicles while on official business. In other instances, they co-ordinate lifts to help them with their transport needs.

The shortage of vehicles at the sub-district level also prevents PHC Supervisors from visiting facilities for their scheduled supervisory visits. Sometimes, when PHC Supervisors manage to get a lift to the

facilities, they are unable to complete their work or dedicate sufficient time to listen to the concerns of the PHC staff, and address the identified challenges as the duration of their official visit is dependent on the people who have given them lifts.

The above results are supported by the literature which has shown that the unavailability of transport contributes to the insufficient supervision of managers at the PHC level. Some PHC Supervisors and managers have tried remote supervision, but it has proven to be unsuitable and impractical in a healthcare environment because the work carried out by PHC Supervisors and OMs requires them to be physically present to assess work documents, programmes, patient files, and general work-flow matters, including face-to-face engagement with PHC facility managers (Nkomazana et al., 2016; Serapelwane & Manyedi, 2020). This effect of unavailability of transport and its direct result in poor and insufficient supervision shows interconnectedness of the management systems at PHC level. One problem leads to many other inefficiencies and ineffectiveness in other management systems. Two of the research participants related the following:

> *The transport is a big problem too. If Ideal Clinic has its own ambulance, and the facility has a car to travel in and assess cases, it would be better. But now we have to always request the car from the hospital and we are lucky if we get it.*

> *No, there is no one or no car that is solely responsible for collecting our things to and from the sub-district. When any car comes from the hospital to this clinic to collect their own things, we grab a chance and give them things to take to the PHC Supervisor. And many people now even refuse to sign when we ask them to sign to confirm that they received stuff from us because they do not want to be responsible for any loss of documents.*

6.3.4. Unavailability of petty cash

The analysis of the results showed that another challenge is that facilities are not provided with petty cash to purchase urgent clinic-related goods and supplies. It has become a norm that OMs utilise their own money for things like buying light bulbs; petrol for grass-cutting machines, or even to hire grass-cutting machines; fix broken windows; buy tea essentials for meetings; printing and making photocopies; provide fuel for other staff who lend their vehicles to the clinic to be used for official duties, or those who drive their own vehicles for work-related activities and many other things.

Operational managers have accepted this and sadly they must use their own money because those things must be bought or paid for, and the sub-districts are not willing to provide petty cash to the clinics. The

OMs must use their own money because if not, they must send procurement orders either through NSI for the sub-district to buy and for it to go out on tender. Some participants reported that they are doing this for the love of their jobs, while others indicated they are doing it to get the work done because they know that if they do not do it nobody will, or if they pursue the current official procurement process, it will take longer for all these things to be done. One participant even mentioned that, if they do not use their own money, they can find themselves buying a loaf of bread through a tedious tender process. The OMs also confirmed that they can find themselves working unfavourable conditions such as open windows, or staying with un-cut lawns. The OMs and even clinic staff members use their own money to buy supplies that are needed for Ideal Clinic assessments. This is because when they order through the current procurement process, there are delays or the things they order are never delivered. The OMs therefore have no other alternative but to utilise their own money because scoring low on an assessment will affect the performance of the OMs, and the clinics in general.

It was discovered that OMs are not refunded any of their own monies they utilise for DoH activities and they accept this because they have taken responsibility and accountability for the shortfall in their own personal finances. This is too costly and unfair on OMs, and something needs to be done to correct this problem.

Similarly, findings in the study conducted by Muthathi et al (2019) in two provinces in South Africa, confirmed that PHC managers in PHC facilities are not provided with petty cash as all finance functions are executed and managed at the sub-district level. The OMs utilise their own money to pay for activities that should require to be paid by DoH petty cash (Muthathi et al., 2020). Four of the research participants recounted the following:

> *But there are those items that are supposed to use Petty Cash. Like if the window is broken, I have to make sure it is fixed immediately. How do I fix it now if there is no money? I call someone to come and fix it and I have to pay that person using my own money.*

> *We do not have Petty Cash in our facility. I am not managing any Petty Cash; I just use my own money to buy things for my clinic.*

> *Yes … Imagine having to buy bread on tender? There is no petty cash to buy bread. There is no money to buy food for the Clinic Committee meetings, all this would have to go out on tender.*

Lots of things we buy ourselves … like for assessments, my clinic staff had to buy water coolers using their own money because they ordered and they still have not received them. So, to ensure they are ready for assessments which were due, they buy from own pockets. What can they do? They are thinking more about their facility, so they must use their own money.

6.3.5. Dysfunctional procurement system

The study results revealed that the current procurement supply chain management system utilised at the PHC level is inoperative. Supply chain management, i.e., the process of the procurement of goods and services, is performed and managed at the sub-district level and has been identified to be a major challenge. The OMs are not involved, and do not play any role in the process except for sending NSI requisition forms and other purchase forms to the sub-district offices. Once orders have been sent to the sub-district PHC Offices for presentation at the monthly Cash Flow meetings. The OMs wait for feedback on the orders that have been approved and ones that were not approved due to various reasons. The current procurement system is inefficient, as orders get delayed sometimes for over six months to a year without good reason, before supplies and services are delivered to the clinics. The challenge is that feedback is not provided, and the OMs are not informed on what causes the delays, or if orders get lost, rejected, or when more information is required to support the approval of the order. In other instances, the OMs end up waiting and only being told later to resend new purchase forms when they enquire with the sub-district Stores department. All study participants reported dysfunctional supply chain management to be a major challenge in all the primary health care facilities, and articulated how this challenge led to other challenges, including how it impacts other management systems within the entire healthcare system at PHC level, which then shows that this challenge further escalates and causes challenges even in other levels of the health care system. The supply chain management system is dysfunctional such that it is not even easy to trace where the delays are within the system.

The procurement of medicine which is controlled and executed by the OMs at the PHC level, is made directly with the provincial supplier, and is the only procurement process that is effective. Clinics do not run out of medicines, but for other supplies and services that go through hospitals, clinics wait for many months before the things ordered can be delivered. It was indicated that for all the functions that must be performed by PHC Supervisors or PHC Managers through the PHC Offices, there are delays, inefficiencies, losses, and non-performance. The OMs should be allowed to perform their functions. For smaller things, the OMs sometimes use their own money to buy items or they may borrow from other neighbouring clinics. This sometimes results in PHC facilities being unable to offer some healthcare services, or poorly execute their clinical care services, all of which can seriously affect the quality of service delivery.

The findings are similar to those of a recent study conducted by Muthathi et al. (2020) in South Africa, which found that managers of PHC facilities had no control over procurement processes, and no control on when ordered items would be delivered to the facilities as that decision was solely reliant on the supply chain or stores department at the hospital or sub-district. Accordingly, receiving orders late, and the cancellation of orders without informing the facility managers were some of the challenges that managers at PHC facilities had been forced to accept (Muthathi et al., 2020).

This result is not a surprise as the supply chain management and procurement system in the South African healthcare system has proven to be in a hierarchical format with approval only coming from higher up. This has crippled the health service and weakened the system at lower or the PHC level, and exposed the entire system to abuse by many opportunists coming either from employees from the DoH, consultants, corrupt schemes, organised crime, or even politicians (Mantzaris, 2019). Four of the research participants narrated the following:

> *The procurement system is a major challenge. They are not informing us as to where the orders are and what they are doing with them. Sometimes you order things and wait until you follow up for yourself, only to find out that it was cancelled. But they do not tell you that the equipment order was cancelled until you enquire for yourself. The feedback is not forth coming.*
>
> *But feedback is a problem. It is not clear where things get lost or delayed. For example, if I send NSI forms, and then I follow-up with the PCH Supervisor if she has received them, then she says she has not received the, then I end up not knowing where it is delayed. You end up not knowing whether it is the driver of car that you sent the forms with who did not give it to PHC Supervisor or it's somewhere.*
>
> *I can say one of the other challenges is "the long procurement process." The only thing that does not give us a problem when we procure is medicine because we do it directly with the supplier. Otherwise, anything that we send to hospital we wait months and months. Like now I am still waiting for the Photocopier, like we said we no longer want to buy things like photocopiers and printers, but rather we rent because if we buy once it is broken, it stays here not working; but with rental one, you do not stay a day without having these things getting fixed by Nashua because once you report, they come and fix.*
>
> *The procurement system is also a problem. What can I say? The fact that the PHC Supervisor or PHC Manager are the ones doing our things all the time is a problem.*

This current system makes things sometimes to get lost on the way before they get to them, then you find that your NSIs are not presented in the Cash Flow meeting because nobody knows where they are. Like now that I am talking to you, my overtime register was sent to be signed but it never got back until today.

6.3.6. Infrastructural challenge

Clinic structures in terms of space, size, and design, is a challenge for the implementation of health care programmes in all facilities. The results have shown that most clinic structures were constructed a long time ago before all the new programmes were introduced. The constantly changing guidelines and need for implementation of new additional health care programmes such as Ideal Clinic, National Core Standards, IPC, and many other new programmes all require clinics to be revamped and reorganised, so that additional consulting rooms can be made available, and waiting areas provided.

Some clinics are very old and in bad condition. As a result, they are in a poor state and need extensive renovation. The older infrastructural designs make it impossible to implement additional new healthcare services according to the newly stipulated and regulated guidelines or programme requirements. Some clinics are very small and there is not sufficient space to expand and build more structures and consulting rooms, but rather require to be relocated to new sites. Another important factor which has been identified, is lengthy waiting time that patients must wait until they are seen by clinic staff. This discourages patients from coming to seek health care services. This challenge is exacerbated by the unavailability of proper and suitable waiting space. Most assessments have recommended that patient waiting times should be reduced so that when patients are sick, they will come to seek health care and not be discouraged by the need to wait a long time before they receive clinical care. Most clinics are therefore trying to have strategic waiting spaces to ensure the smooth flow of patients to different healthcare stations, and have enough space to put out chairs for patients to be able to sit (Muthelo et al., 2021).

Poor maintenance such as delays in responses and the unavailability of transport for maintenance staff members are some of the factors which prevent continuous renovations and the timeous repair of reported broken infrastructure at the clinics. The unavailability of the CAPEX budget for all PHC facilities makes it impossible to repair things and make recommended renovations to suit the current PHC facilities' needs.

Some clinics are too small with poor ventilation, and due to new municipal demarcations, these clinics find themselves with a responsibility of serving large population numbers. As a result, clinics become

overcrowded with poor ventilation and little to no waiting space. This is particularly problematic when patients come to the clinics with infectious diseases such as TB or Covid-19.

Inadequate infrastructure, especially small and poorly designed clinics, prevent OMs from being able to reorganise their facilities effectively for Ideal Clinic. Reorganisation allows for the easy flow and proper channelling of patients as they enter the clinics, to when they get to the consulting rooms. It also ensures there is no unnecessary congestion and significantly decreases waiting times. However, the study conducted in the Makhado region in South Africa, indicated that there is not enough space even for keeping medical equipment, medication, cleaning material and stationery appropriately in most PHC facilities (Muthelo et al., 2021).

Most facilities are providing sub-standard quality of health services due to infrastructure which is not up to the required standards in terms of size and design. It is difficult to even predict when this will be improved because overhauling infrastructure is complex and requires a lot of funding which is currently not available for developing countries like South Africa (Kapologwe et al., 2020). Three of the research participants recounted the following:

> *Another challenge is infrastructure. Our clinic is too old and run-down, and lots of things are broken and not working. Some toilets are closed because they are not working, we have sent requisitions so we are waiting for them to be fixed. Some things are fixed today and after two weeks they are broken and not working again because most of these things are too old, I can even show you.*

> *Our clinic is small but we are serving too many patients and we cannot accommodate all of them. Sometimes other patients have to stand because space is too small; there is not even space to put chairs.*

> *See our windows are too small, Nurses and other patients are going to be easily infected with TB and other contagious diseases.*

6.3.7. Non-payment of overtime

The non-payment of overtime to staff in clinics that are not providing 24-hour service was identified to be a challenge. The DoH does not pay overtime, but rather staff members who have worked overtime are allowed to take time off in lieu, to make up for overtime worked. The OMs manage and allocate staff to work overtime as there is occasionally a need and requirement for clinical staff to be called to the clinic to attend to patients outside of normal working hours. These managers must request staff members to work overtime if there are patients that need to be attended too after hours, or at night,

during weekends, or when staff are needed to work extra hours during outreach programmes and awareness campaigns. The problem arises when a staff member who works at a clinic that operates an on-call system, who sometimes refuses to come to work when they are called, or refuses to work overtime, even when there are patients that desperately require health care services.

Managing overtime always poses challenges for OMs as some staff members would come to work when they are called, but demand their time-due during busy days of the week. The OMs then must step in and help in their respective programmes. Operational managers are the ones who work overtime in most cases to ensure there are staff available to see patients when other staff members refuse to come to work. This is not healthy for their wellbeing, because they also need to take time off, rest to recharge, especially since they are working with patients who may need a lot of attention, they cannot provide quality service if they are fatigued.

The non-payment of overtime by the DoH and allowing staff to work and take time-due is not an effective method, especially under the current situation where all clinics are faced with the challenge of staff shortages. Sometimes there is no perfect time for staff members to take time-off due to busy work schedules, staff shortages, and the large numbers of patients who always visit the clinics, but the OMs must let them take their time-off because of the fear of burn-out and being overworked. Sometimes staff refuse when they are called to work. The non-payment of overtime does not motivate staff to work overtime as they are not monetarily rewarded for the additional time they spend at work. Hence, the burden of working overtime always becomes the responsibility of the OMs. This is unfair and impractical as OMs must utilise their free time to catch-up on doing their management functions which are always neglected, as OMs must assist CNPs since presently there is a chronic shortage of these staff members.

The findings are in contradiction to a study conducted by Bailey et al. (2016) which found that payment of overtime is one of the strategies managers utilise to motivate employees to assume more responsibilities, and work extra hours under conditions where there are staff shortages. Employees are motivated to work hard if they know they will be compensated for the extra hours worked (Bailey et al., 2016). Three of the research participants related the following:

> *Another challenge I have is overtime. Remember my clinic does not offer overtime, there is no overtime claim and there is no money for that. So maybe if it happens that patients come to the clinic after hours and I am sleeping there in my room, so if they see my car around the clinic premises they come for help and I cannot chase them away. But it is wrong to do it because if it happens that I have a problem or complex issues arise, how will I account for that?*

We are a busy clinic but we are not allowed to work overtime, we are not paid for overtime.

We only work and take time off or time due for any extra hours worked. This normally happens during outreach programmes or campaigns.

6.3.8. Lack of IT skills and equipment

It was established that faulty photocopiers and computer printers present significant challenges to OMs, and this challenge was notable in all PHC facilities who participated in the study. These two pieces of equipment are used daily to make photocopies (especially registers and forms to collect data during consultations), and to print reports and other work documents. At present, PHC facilities struggle to make photocopies and print work documents as these are faulty or have run out of ink. The OMs must constantly remind and request the PHC Office in the sub-district office to attend to this issue, but often nothing is done to resolve it. The OMs must once more use their own monies to pay for photocopies and to print documents, from local printing companies and copiers, or alternatively ask for help from other health partners or nearby clinics who are willing to help. Again, they cannot claim any refunds back from the DoH as there is no refund system in place. The participants reported that it was embarrassing and unprofessional to be always asking for help, and it reflects badly on them as managers. The local partners see the PHC managers as being disorganised and unprofessional.

There is also a shortage of computers in most facilities, and in some facilities where computers are available, some nurses and OMs lack computer operating skills, as they have not been provided with computer training. Some OMs have resorted to manual work, where they prepare hand written reports, etc. Those OMs who do not have skills to use computers, regularly ask staff to type up their work and reports for them, which is an unfair added workload for those staff members because they are still expected to do own work too. Also the OMs who do not have computers in their clinics, utilise their own computers after work to type up the reports and other work they must perform for the DoH.

The unavailability of things like stationery, photocopiers, computers, equipment, and medical supplies negatively impact on the delivery of quality healthcare services, as clinicians will not be able to correctly document the assessment of patients. It also impacts on accuracy and the timeous production of reports and statistics, which directly affects clinics reporting on the achievement of targets. The unavailability of accurate reports leads to poor reporting, and in turn indirectly reflects on clinics and its staff members as being unable to provide quality services. Also, reports are produced (especially weekly reports) to measure success and indicate if there is a need to implement necessary interventions for improvement. Another study conducted in primary health care facilities in Ekurhuleni in South Africa corresponded

with this finding as it also affirmed that if there is lack of IT equipment such as computers and computers skills at PHC level, no interventions can be implemented and reporting will be affected as these are needed to write reports (Mogakwe et al., 2020). One of the research participants reported the following:

> *The lack of computer skills. Like my HAST champion is expected to be the leader of Nerve Centre Committee, and she is the one who must compile Nerve Centre reports weekly, but she cannot do it, so I ended up being the one who compiles her reports because she needs computer training.*

6.3.9. Inconsistent ambulance services

The unavailability of ambulances when called to assist communities was found to be one of the challenges affecting OMs from executing their management functions in all clinics. The interpretation of results revealed that within the boundaries of the uMkhanyakude Health District, ambulances often take many hours to arrive after they are called, and sometimes they never arrive at all. One study participant confirmed that sometimes one can wait about six to ten house after calling the ambulance for it to come. Lately, communities have developed a tendency of going to the clinic to request the OMs to take patients to the nearby hospitals and OMs have taken this responsibility to assist as chasing away sickly patients is a hard thing to do by OMs. Acting as an ambulance and transporting sick patients in their own vehicles exposes OMs to great risk, because should a patient die while being transported, the OM will have to take responsibility and be held accountable for the death of the patient. There are also no first aid or emergency equipment used to resuscitate or help patients in the OM's private vehicles. This action can be a serious case which might be difficult to prove innocence or absolve OMs from being the cause of death, and they might end up being charged with murder and sent to prison. Similarly, OMs use own private vehicles and their own petrol to transport sick patients to the hospital without being able to claim any refund from the DoH. It is unfair that such costs incurred by the OMs, must be personally absorbed.

These findings concur with studies such as the one conducted in some of the PHC facilities in the Free State province in South Africa, which found that Emergency Medical Services (EMS) is dysfunctional in most PHC facilities, especially those based in rural areas. These studies also found that staff members in the call centres were rude and possessed poor telephone etiquette, resulting in community members being very reticent to call them (Malakoane et al., 2020). Two of the research participants narrated the following:

> *Ambulances are called but patients end up coming here to ask me to transport them. Why? Because the response is slow, ambulance takes a long time to come, if they ever*

come. And what will happen if someone dies in my car while under my care? Who will protect me?

The ambulance service is also a challenge. You can call an ambulance and wait for six to ten hours for an ambulance to come.

6.3.10. Shortage of staff

Besides the chronic shortage of CNPs, the analysis of the results showed that there is a shortage of staff in general, across all job functions, in all PHC facilities. An ineffective recruitment and selection function which is centralised at the sub-district office has led to chronic delays in the filling of vacant posts. When staff leave, either by resignation or retirement, the sub-districts take long to fill the vacancies, and when they are left unfilled for long periods of time, the DoH eventually freezes these posts. There are many unfilled frozen vacancies. Consequently, the remaining staff members often feel overwhelmed since they must take on additional workloads for the clinics to continue providing the programmes and services on offer. Many vacant posts have been left unfilled; hence, they are no longer available as they have been frozen. Even when some staff members die, posts are left vacant, and no recruitment is conducted to fill these posts. Non-clinical posts such as Data Capturers and Support Services Officers (SSOs) take even longer to be filled because these posts are regarded as non-essential posts, so sub-districts do not start the recruitment process immediately. Their response, when questioned by OMs is always the same, that the Provincial Office does not prioritise non-essential posts.

Operational managers encourage and motivate staff members to take on extra workloads, while also continuously reporting to the PHC Managers or PHC Supervisors to recruit and employ new staff to replace those who retire or resign. This has inspired many staff members to multi-task to ensure that the clinic operations are not affected by the inability to replace the staff that have left. Staff members even take on additional functions which are not in their job descriptions or line of work. Staff shortages have led to poor attitudes, as the remaining staff are tired, stressed and feel demotivated; as a result, they are unhappy and unfriendly to the patients. This has resulted in a marked increase in patient complaints.

There are too many programmes that are being implemented at the PHC level, but there are inadequate staff members to carry the additional workloads. The organisational structure was revised a long time ago before the implementation of these programmes, so the current staff members have excessive workloads as the structure does not match the programmes on offer.

These findings support the literature which has shown that there is inadequate funding for personnel in PHC facilities in South Africa and other developing lower and middle income countries, especially in Africa (Uzochukwu et al., 2015; Harfield etal., 2018). Furthermore, this finding is supported by those studies which found that the delivery of healthcare services model at the PHC level is not aligned with funding model and mechanisms of government. In most cases, it has been found that there is shortage of funding to support the newly approved programmes; yet, clinics are told to continue implementation with the current staff compliment. It is understood that if communities demand or need healthcare services, these services must be provided without making any excuses (Harfield et al., 2018; Dutta et al., 2020).

Another study conducted in the Free State found that staff shortages and high vacancy rates are some of the workforce challenges faced by healthcare facilities, resulting in the remaining healthcare professionals feeling overworked. Increased workloads have contributed to demotivation, stress, and unhappiness among health care staff (Kjellström et al., 2017). It has also caused patients to have to wait an entire day to receive clinical care, and sometimes some patients leave without being attended. Increased waiting times have increased the default rate levels among some patients and is contributing to the non-attainment of targets (Malakoane et al., 2020). Five of the research participants reported the following:

> *Staff shortages arise because some vacancies are not filled. That side, we had SSO, Data Capturer, Auxiliary Nurse and Enrolled Nurse. The staff are all gone but there were no replacements.*
>
> *The challenges are that there is more work, yet there are no staff; like there is no staff to carry out all these new changes that are being implemented. The department is giving us more work, but no staff.*
>
> *Staff shortage. And with staff shortage it goes with staff-attitude because when people are overworked, they are not friendly with patients, I can say. Sometimes, we get a lot of complaints because somebody is working alone, and must see 100 patients in one day.*
>
> *It is difficult. Most of the time staff feel tired. Yes, they are always tired. They feel overworked, they are overworked, really, they are overworked. Because you can find that the Staff Nurse who is going to give an injection and dressing is also the one who is going to weigh the clients (the children), she is weighing, doing MOWAC, Body Mass Index (BMI), and height. After she is finished, she must go that side and give an*

injection you see. The reality is we need more staff to work in such a way that people are not getting tired.

With the shortage of staff, I encourage and motivate staff to take on extra workloads, and keep on reporting to the PHC Manager and she said, for those who have retired there are no posts at the moment because the posts are frozen. Even if someone dies, the posts are not filled.

6.3.11. Lack of support and supervision for Operational managers

All participants reported that as OMs in all clinics, they do not get enough supervision and management support. Supervisory visits are scheduled to occur once a month per facility. The shortage of official vehicles at the sub-district level result in PHC Supervisors sometimes not be able to honour their scheduled Supervisory visit. Sometimes they ask for lifts from other staff members who also have their own commitments. This results in PHC Supervisors spending limited time on their Supervisory visit, causing it to be ineffective because they are unable to attend to all identified problems, as well as not having the time to work with OMs to provide solutions or remedial actions to the challenges encountered on a daily basis.

The PHC Supervisors undertake a lot of tasks for the clinics, including checking and forwarding a variety of documents to different business units, since according to the workflow, the PHC Offices are a gateway for PHC facilities. It has been established that one PHC supervisor is responsible for supervising many clinics in the entire sub-district. Consequently, there is a lack of capacity, including a lack of knowledge on how to assist OMs in resolving some of the challenges. All the participants of the study reported that PHC Supervisors and PHC Managers also need to be supported as there are no resources to reach the facilities and there is no specific support and mentorship structure for them, but they are expected to support OMs. This means those who are perceived to be able to provide support to OMs are also in need of support in order to be able to resolve challenges and provide solutions to the reported problems from OMs. The fact that every month they go back and listen to the OMs reporting similar unresolved challenges shows that they are not making any improvement in their support and mentorship activities.

The above results are in accordance with the findings of another study conducted in Mozambique which is one of the developing countries, which demonstrated the need for utilising skilled supervisors and mentors, who can adequately support, mentor, and train local health managers to enhance their leadership capacity and help them to resolve challenges (Sherr et al., 2013).

Again, this present study has shown that the lack of supportive supervision for facility managers is one of the challenges limiting their potential. Scolding, belittling, and blaming facility managers without providing proper guidance, support, and solutions to their problems will not strengthen their management skills, and consequently, will also not improve the quality of health services in PHC facilities. These managers also need to be supported emotionally and mentored, considering they have not been provided with any management skills. Hence, they must deal with innumerable management challenges which are not the result of their own actions (Serapelwane & Manyedi, 2020). Two of the research participants narrated the following:

> *I do get support sometimes but it is not enough according to what I need, it's minimal. But who should provide support to us? … [laughing] … This is so funny because they also need support. But to answer your question, I am expecting to get support from my supervisor/s, PHC Manager and PHC Supervisor. But they also need support from above.*

> *Yes, that thing of the PHC Supervisor doing all our things is a challenge. That lady (PHC Supervisor) has got a lot do for all of these clinics, then she needs to visit us and do her assessments.*

6.4. ENABLERS OF SUCCESS OMS PERFORM TO EXECUTE THEIR MANAGEMENT FUNCTIONS

Research Objective #5 is two-fold: To identify the enablers of success when OMs implement health management systems at PHC facilities, as well as the actions and strategies OMs use to mitigate challenges, to improve implementation, and help them better execute their health management functions at the PHC level.

Figure 6.2 illustrates the improvisations, enablers of success, and strategies to improve the implementation of health management systems which OMs identified as actions they take to successfully execute their management function.

Figure 6.2. Enablers for success or actions OMs perform to mitigate challenges and strategies to improve implementation

Source: Interviews Data (2018)

6.4.1. Enablers for success or actions performed by OMs to mitigate challenges

This is sub-objective to Research Objective #5, and is aimed at identifying the enablers for success and best practices which are the actions that OMs perform to improvise and mitigate around challenges to to successfully execute their management functions.

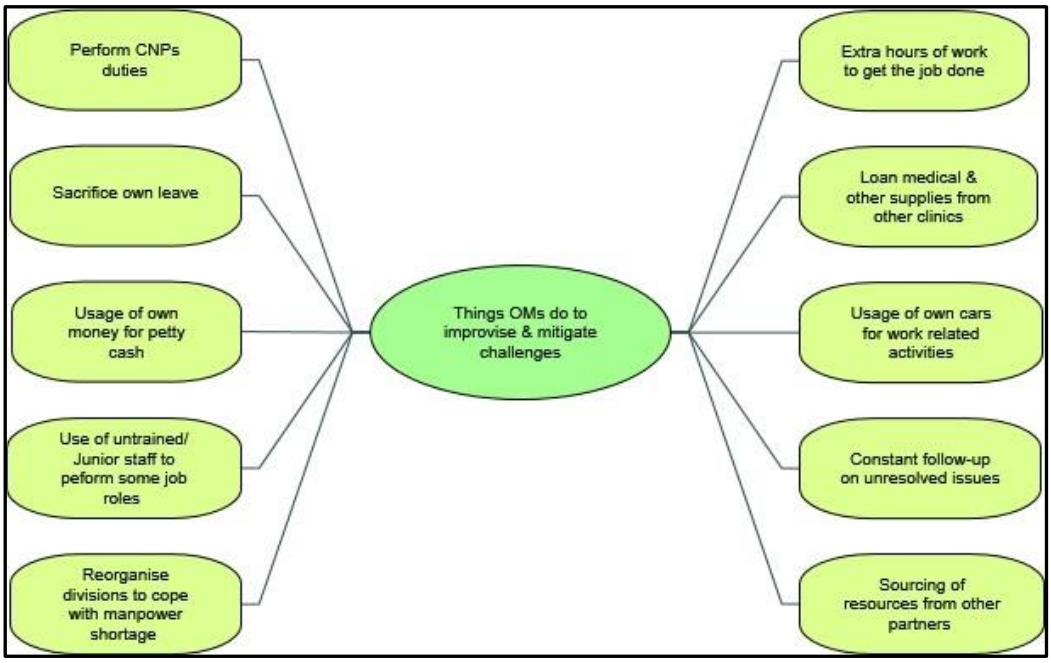

Fig 6.3. Themes on enablers for success and what OMs do to improvise

Source: Interviews Data (2018)

Figure 6.3 depicts the themes which emerged from the analysis of responses that were given when the OMs were asked to narrate and explain what they did to successfully implement their management functions, and how they improvised and mitigated the challenges and difficulties they encountered daily. The themes which emerged were as follows: performing CNPs duties; sacrificing own leave; use of own money for petty cash; utilising untrained/junior staff to perform some job roles; reorganising units to cope with workforce shortage; work extra hours; borrowing medical and other supplies from

other clinics; the use of personal vehicles for work-related activities; constantly follow-up unresolved issues, and the sourcing of resources from other partners.

6.4.1.1. Perform CNPs duties

The main thing OMs do is to improvise as the environment under which they work under is leanly staffed. Hence, they forego their management functions to perform the work of Clinical Nurse Practitioners (CNPs). This is one of the greatest sacrifices, as it takes 80% of their management time. The interpretation of the results showed that OMs in reality are actually CNPs, but they are called operational managers in terms of their job title. This is known in the sub-district offices and district office too in the KZN DoH. Operational managers understand the effects of the shortage of CNPs, they have accepted that they need to take full responsibility to stand-in and assist in performing the work of these clinicians since there is a chronic shortage. Accordingly, OMs have resorted to practically work as CNPs to get the work done, meet clinic targets, and ensure that the patient waiting times are attended to. They have accepted that this a challenge and the best thing to do is to step-up and assist, because as it stands there is no plan of hiring any more CNPs, but patients still must be served. They do this to improve the provision of quality healthcare services, because CNPs are responsible for sitting in consulting rooms and serving patients. This work however is taking 80% of their time, which should have been dedicated to attending to their management functions. This is a huge sacrifice by OMs because they still must find time to perform their management functions during their spare time, after work hours, during weekends, and even during leave days. In other words, Operational managers must find the time elsewhere to execute all their management tasks, because even though it is known that they spend 80% of their time during working hours working as CNPs, they cannot use this as an excuse because they will get called out by the PHC Supervisors and PHC Managers. This is an unpleasant situation for any OM to find themselves in, but there is nothing that can be done to remedy the situation. As per contingency theory, OMs in UMkhanyakude have managed to find a way to adapt to the challenges within the current situation and work environment without making any excuses. Their actions are dependent on the current situation they are faced with at PHC level, hence they have to customize their management approach to adapt to the environment by stepping in to get the work done. Three of the research participants recounted the following:

> *To tell you the truth, we are operational managers in name, but in reality we are Clinical Nursing Practitioners. OM is a just a glorified CNP, but the difference between myself and CNPs is that I have to find time to do all those other management duties because I will be shouted at as if they do not know that I am doing CNP work every day, but what can we do? Nothing.*

But to tell you the truth, in other clinics other OMs are short-staffed so they have to see the patients in the bench for most of their time, like in 80% of their time. Even here, I as OM, see patients for more than 80% of my time.

I forego or leave my management functions to do clinical care, when other staff are on leave, I assist in their duties. I abandon my management duties.

6.4.1.2. Sacrificing own leave

It can be confirmed that all OMs in all clinics have to sacrifice their spare time due to the dire nature of the shortage of staff members, as a result at some point in their daily operations OMs neglect some of their management functions. OMs in all facilities find themselves having to work during spare time (either after hours, during weekends and leave days) to be able to catch-up on their management functions. The examination of the study results found that OMs sacrifice most of their leave to be able to catch up on their management functions. This is due to the reason that during the day, when OMs should be executing their management tasks, they choose instead to work as CNPs (80% of their time) to ensure that all patients in the queue are served and their targets are met. This action on the part of OMs is because there are not enough CNPs to serve in the consulting rooms, implement different streams of care, or champion various programmes. Thus, OMs improvise by working during their spare time which is to the detriment of their own health, as according to basic conditions of employment act, every employee should rest after working nine hours per day (excluding lunch) if working five days per week. However, the conditions and environment in which OMs find themselves force them to disregard this in order to successfully perform their management functions.

Currently, OM's face many challenges in the managerial function, as it is impossible for them to take uninterrupted leave. Even when on leave, they receive work calls from their staff members asking them to come in and sign-off certain documents, reports, or statistics. Sometimes, OMs even must cut their leave days short to ensure that the key clinic functions are implemented. The OMs are tactical with the days during which they take their leave, ensuring they are not taken during submission dates of key reports, or when some CNPs are also on leave, because this can be detrimental to health service provision in their PHC facilities. If OMs are not strategic, it is guaranteed that they will be called to come and assist or be forced to cut their leave days short. Operational managers have accepted this challenge, and foregoing or cutting their leave short were some of the things they did to improvise. One of the research participants reported the following:

I sacrifice my management time or own time to do patient care or nursing work. I cannot stay with the patients waiting. People here, they just come to my office and say "we have waited for a long time."

6.4.1.3. Use of own money for Petty Cash transactions

The use of own money for Petty Cash transactions is one of the sacrifices done by OMs all the time. Operational managers are not allocated money to use as petty cash for their clinics, so to improvise and to comply it has become a standard act to use their own money for all petty cash transactions. These managers have willingly accepted the responsibility to incur petty cash costs and there are no refunds because the sub-districts and district office does not provide PHC facilities with petty cash money, and neither do they refund unauthorised payments. Operational managers have taken the responsibility to ensure that they cannot let the unavailability of petty cash prevent them from carrying out such transactions because they must comply; they cannot expect their staff members to contribute and they do this because they love their jobs. It can be confirmed that all OMs who participated in the study reported that all managers of the PHC facilities perform this sacrifice since there is not one facility which is provided with a petty cash facility in the whole of UMkhanyakude district, but they always find themselves having to step up and assist to get things up and running. The infrastructural repairs which need sudden fixing or repairs, and incidentals which have to be procured immediately forces all OMs to make this sacrifice in order to mitigate the current situations they are faced with on a daily basis. Other clinics even reported it is not only OMs who use their own money, but sometimes even lower level staff members volunteer to help out and pay for these transactions with their own money. This shows that both the OMs and staff members know that this has become the burden or responsibility for OMs.

This is similar to the results of another study conducted in 127 facilities in two districts in Gauteng and Mpumalanga which also revealed that PHC managers find themselves having to use their own money, in some instances when orders were delayed, or they received the wrong orders due to mistakes being made, or they were not involved in the orders, and have no means or the power to ensure that the procurement processes are fast-tracked (Muthathi et al., 2020). One of the research participants narrated the following:

We do not have Petty Cash; they do not give us. If it happens that you have to buy small things for the clinic, we use our funds, and actually it is me who uses own money and I do not get any refund back. It will be unfair of me to ask or expect staff to use their own money, but me I have to do it in order to comply plus I do it for the love of my job.

6.4.1.4. Utilise untrained junior staff to perform other roles

The shortage of staff has pushed OMs to engage and encourage junior staff members to multi-task and do a variety of tasks and activities across the facilities to help out when the need arises. According to the study participants, this is happening across all facilities in uMkhanyakude district. In the current situation, the need is always present, which means employees are always multi-tasking. Staff members are even allowed to do tasks which are not within their scope of work or job description. Sometimes staff are given a difficult tasks or activities and allowed to assume the responsibility for jobs they have not been trained to do, and they do not have the immediate skills to do them. This is called task-shifting. For example, Staff Nurses have been allocated the responsibility of performing the duties of pharmacy assistants; yet, these nurses have not attended any pharmaceutical training. This poses both a danger and a risk to the nurses and the OMs alike, because some functions are critical and require extensive knowledge and even licenses to perform certain delegated tasks. If anything does go wrong, both the nurses and the OMs will be held liable. Junior nurses who do not have dispensing training and licences, are allowed to work, and assist in the CCMDD programme and issue prescriptions to patients. Operational managers minimise the risk by conducting internal in-service education and training to those staff members that are given such extra responsibilities. In tough situations when posts are frequently frozen, staff members are even asked to occupy two posts and move around between them, as they cannot abandon their rightful posts for which they were employed.

Similar results were found in a study conducted by Okyere et al., (2017) in another developing low and middle income country such as Ghana. The results of this study attested that staff members at PHC centres in Ghana, worked as cohesive teams that always strove to support one another to get the work done, and to ensure that clinic expectations and targets were met. They did not mind performing duties which were not within their scope of work or job descriptions, and even above their level of education, to ease the burden of staff shortage. This behaviour of always wanting to help out and multi-task by staff members in PHC facilities is a culture that has been adopted in primary health care environment in African countries and low middle income countries as they are always faced with limited human resources (Okyere et al., 2017). Three of the research participants recalled the following:

> *Another thing I do is to utilise junior staff to do the work that they are not supposed to do and not qualified to do, e.g., I am using junior nurses to work on CCMDD even if they are not supposed to. But they leave space for the Sister to sign because I don't want them to get into trouble since they do not have dispensing licences.*

> *Like in the pharmacy, I have allocated it to someone to dispense medication. I have allocated a Staff Nurse to manage the pharmacy.*

Her duties are now done by the Staff Nurse, and the Staff Nurse cannot abandon her other duties totally, so she hops in between these two vacancies.

6.4.1.5. Reorganise units to cope with staff shortages

The continuous reorganisation of units and programme streams within the PHC facilities is what OMs do on a daily basis because of the enduring shortage of staff which is a daily challenge. Operational managers plan the work in advance, which includes scheduling and allocation of tasks according to operational plans, targets, key performance areas, and the scheduling of leave to ensure staff are available for all the programmes. But when some staff members are on sick leave, annual leave, on training, or absent from work for any reason, things become chaotic and the OMs must review and change the plans, step in and help, provide direction, re-organise work, and re-allocate tasks to staff members.

The study results demonstrated that it is the OM's daily responsibility to assess the number of patients who have come to the clinic, the services they came for, the availability of resources (staff and equipment) everyday, and infrastructure availability. They must then arrange tasks accordingly in the clinic needs to ensure that everything runs smoothly and effectively. The OMs do this assessment every morning to ensure that all the operations are running smoothly and that all programmes have been allocated a clinician to implement. Leave is also managed effectively to ensure that all business units and programme streams are adequately allocated with staff members to ensure everything works smoothly and effectively. This kind of activity requires OMs to have knowledge of the nature of programmes being offered in their clinics, the staff abilities and competencies and the disease patterns presented by patients when they consult the clinics on a daily basis, as well as availability of medical and other supplies including the equipment. This is important as OMs have to re-organise their units of function to adapt to the needs and environment they are faced with each and every day. They have to think on their feet to ensure that all patients are assisted, no matter what the conditions are at the clinic. Two of the research participants reported the following:

My clinic space is very small, so I have grouped two streams (Chronic and Minor Ailment) together, but MCWH is done on its own cubicle.

Sometimes, I come to work and say "you know today I want to make sure that all my staff files and admin work are all up-to date," but then I will find out that somebody is off-sick, so I have to be in the consulting room the whole day until the next person who is releasing me comes at 6 pm to relieve me. Then I will say, "I cannot go home without finishing my work." Like it's month end tomorrow and data should be completed by

the end of the day, Saturday or Sunday I will come together with the Data Capturers and make sure that we finalise reports and everything, and by Monday we send everything. So, we do work extra hours just to meet deadlines and complete work, but we are not receiving any compensation for that.

6.4.1.6. Work extra hours

Operational managers work extra hours every day to accomplish their management tasks. This is because OMs spend 80% or more of their time doing the duties of CNPs, consulting and seeing patients; hence, they are only able to do their management functions during their own time. The OMs improvise by working in lunch and tea-breaks, and remain working outside their normal hours, sometimes until very late to do data verifications, audits, checking tally sheets, and catching up on any other outstanding managerial duties, as these are mostly the only times they are free from doing clinical work i.e. seeing patients or helping out wherever there is a shortage. If they do not perform these sacrifices, patients are likely to wait in the clinic to be served until late at 6pm or 7pm, or might even leave without being assisted. Sometimes, the OMs come to the office at 7 am and only leave the office at 12 midnight. Additionally, the OMs come to work during the weekends to solely focus on catching up and completing any of the outstanding management tasks, since during this period there are no patients and no other disturbances.

This is an unhealthy sacrifice from OMs as it affects their health and wellbeing. They work long hours and rest few hours which is against the basic conditions of employment act. One OM even confirmed that instead of working eight hours, they end up working an extra five or even six hours. Every employee deserves to rest, that is why there are stipulated working hours per day and per week for an employee. Employees who take on extra workloads resort to working long hours, and do not rest to recharge and recoup. They end up suffering from mental, physical, and emotional exhaustion (burnout), because of which they struggle to provide quality work and fail to execute tasks that need attention to detail. According to the research conducted on burnout amongst frontline primary health care professionals in low- and middle-income countries, this is not right as employees who work as hard as OMs do are likely to produce unsatisfactory work with errors and this has an impact on the quality of care and attainment of targets (Dugani et al., 2018). Three of the research participants narrated the following:

I am not able to take lunch or tea-breaks, and I finish work late instead of 4 pm due to the number of patients that we have to serve.

I do not go to tea-break, I do not go to lunch, I work non-stop and if I do not do that, patients will be here until 6 pm or 7 pm.

I also work during my own spare time; I am spending more time here. I am supposed to be working eight hours, five days a week, but I find myself at 12 midnight here still working. You know, I work from morning from six or seven o'clock; I knock off maybe at half past seven and they will say here is an emergency come and assist, then I will come and assist.

6.4.1.7. Borrowing medical and other supplies from other clinics

Operational managers across the entire district go to great lengths to ensure that the clinic and staff members have all the required medical and other supplies to be able to implement all the health care services needed by the patients. When orders are delayed and there is no stock at the clinic, the OMs borrow medicines, medical supplies, and equipment from other neighbouring clinics or sub-districts, to ensure that operations always run smoothly and effectively. They monitor stock, check if there is a shortage and they are out of stock, then they timeously approach the local PHCs for assistance. The OMs reiterated that they cannot sit and do nothing when patients are waiting to be served. Likewise, they cannot tell patients that they are waiting for the approval and delivery of certain supplies when they can borrow from neighbouring clinics.

When the ordered stock has arrived, the OMs replace the supplies that they have borrowed from neighbouring clinics. They also send emergency orders to the PHC Office, but that does not always yield positive results as emergency orders are not processed on an emergency basis. This action proves how committed and responsible OMs are to their jobs and to their clinics. They have accepted accountability for any failures, and are always on the counter attack to remedy any challenge. They even incur costs (e.g., using their own money for photocopying, buying light globes, cutting grass, purchasing fuel for the grass mowers, etc.), just to ensure that everything takes place as planned and they achieve all the set targets.

Operational managers additionally improvise by requesting other local stakeholders and partners to help with other necessities such as photocopying and printing services, because maintenance takes long to repair broken equipment, even when they are constantly reminded. The OMs do all this out of willingness to serve patients and to show that they take responsibility in ensuring that all primary health care programmes are implemented. They understand the environment they operate under, and they innovate in their sacrifices to adapt to the needs and circumvent to possibilities for non-delivery in order to reach their targets.

Critical equipment and supplies should always be made available for the PHC facilities to be able to provide quality healthcare and meet targets. This will ensure that OMs stop running around borrowing

from other clinics, and instead focus on implementing their key management functions. Four of the research participants narrated the following:

> *I borrow from other clinics and replace it. Even if it is something out of stock from the hospital or from PPSD, I borrow from others and replace whatever we have borrowed. We also do emergency orders.*

> *I borrow from other clinics if I do not have equipment or medicines or any other surgical supplies.*

> *To keep moving I would say borrowing things that we need from other clinics and also using own money to buy things (e.g., to photocopy, buying light globes, etc.) because we do not have petty cash, is helping me a lot. Sadly, we do not claim our own money back.*

> *We are using the Library or Education Centre, and then sometimes if we need to make photocopies, we take photocopy papers and we send it to the hospital. But for those things that we need to use urgently, we send somebody to the Library or Education Centre.*

6.4.1.8. Use of personal vehicles for work-related activities

Participants use their own vehicles to carry out activities such as attending external and internal meetings, conducting awareness campaigns, conducting health education for the communities, attending trainings, and transporting a variety of things to and from the sub-districts and attending to other errands like buying goods and taking documents for photocopying or printing. Sometimes, the OMs transport patients to the hospitals due to the ineffectiveness of the ambulance services which often arrive many hours after they are called, or do not arrive at all. The OMs are not paid back money for the wear and tear in using their own personal vehicles for work-related activities, and neither for the fuel expended. The analysis of the results found that OMs use their own vehicles willingly as there are no other alternatives, except that the quality health services their clinics offer will suffer if OMs do not improvise, as the DoH does not have enough funding to purchase sufficient official vehicles that can be utilised by the PHC facilities. The OMs have assumed the responsibility to bear this cost because the achievement of some of the targets is dependent on some of these activities. Unavailability of funding especially for things such as transport for usage by PHC facilities, is one of the factors hindering the success and attainment of targets at the PHC level. It is also a financial burden or reap-off to the OMs. Two of the research participants narrated the following:

I use my own car and petrol and I do not claim back.

We go to work and do campaigns with our own cars.

6.4.1.9. Constant follow-up on unresolved issues

The Operational managers indicated that one of the tasks they do on a daily basis is to constantly follow-up on the issues and challenges reported to the PHC Office (PHC Manager and/or PHC Supervisor). This is a monotonous task and OMs have made it their priority to do all the follow-up early in the morning and late in the afternoon. This is exacerbated by the fact that there are many things to follow-up on since there are many challenges and the sub-districts take long to respond and resolve issues, and some issues have remained unresolved for a long period of time. They also take long to inform the OMs when some of the issues have been completed, or have been resolved. If constant follow-up is not done, the OMs end up being uninformed, or their issues are put at the back of the queue, hence it has become the main responsibility of OMs to constantly follow up to keep updated or put pressure for the issues to be resolved. Operational managers always follow-up on matters such as unprocessed orders, maintenance issues, staffing, finance, equipment, and the unavailability of supplies and other issues, because that is all they can do as they have no powers or means to change the situation or speed up the processes. This is one of the unnecessary activities which OMs do as it takes away their time and prevents them from performing critical and significant tasks.

Operational managers also constantly report and follow-up on outstanding unfilled vacancies, especially the shortage of Clinical Nurse Practitioners (CNPs), as this issue directly affect the OMs from executing their management functions. Such constant reporting and follow-up ensure that the sub-district PHC Offices and HR speed up their recruitment processes, as well as follow-up on and request frozen posts to be unfrozen at District and Provincial Offices. The OMs also do this to demonstrate how important and how challenging the reported issues are with respect to them accomplishing their tasks and meeting their targets. This relentless follow-up keeps the sub-districts on their toes and pushes the PHC supervisors and PHC Managers to listen to the needs of the OMs. When an issue is not followed up, it is forgotten and left unresolved for a longer period of time. The fact that some of the reported issues are beyond the scope and powers of PHC Supervisors and PHC Managers and needs resources which the sub-districts do not have, makes continual follow-up a futile activity. Yet, the OMs are not discouraged, as they understand that doing this has a potential to speed processes up and eventually resolve issues within a reasonable period as it pushes those who do not listen to them to eventually listen. Three of the research participants recounted the following:

I have been reporting the issue of shortage of CNPs to the PHC Supervisor and PHC Manager because I cannot report to the District, I am the only CNP who is also an OM in this clinic.

When I follow up, she says … [laughing] ... "Not that we are not doing anything Sister, we are trying."

I do constant communication with PHC Supervisors. But they do not listen, you are always told it is beyond our powers, we cannot assist you, it needs money. So sometimes, even that constant communication does not help.

6.4.2. Perceived strategies and interventions to improve the implementation of health management systems

This Research Objective was formulated to identify strategies and interventions (according to their perspectives), which can be implemented to assist OMs to better execute their management functions.

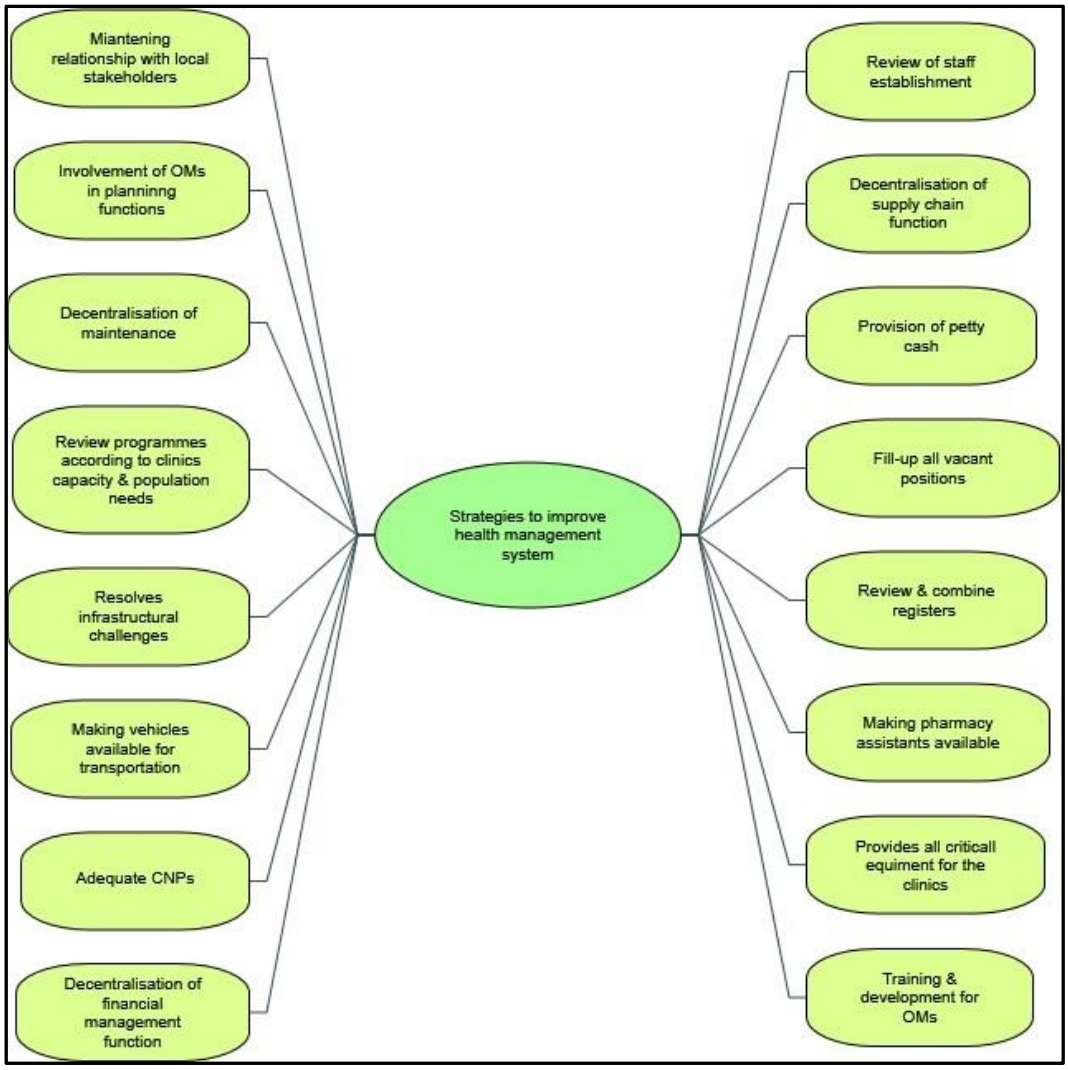

Fig 6.4. Themes on strategies to improve the execution of health management functions

Source: Interviews Data (2018)

Figure 6.4 depicts the themes that emerged when OMs were asked to give their perspectives on the strategies and interventions that can be implemented to help them tackle the challenges they face, and thereby execute their management functions and implement health management systems at the PHC facility level. It should be noted that all the themes on the suggested strategies, understandably originate from the challenges that they encounter on a daily basis, to improve the execution of their health management duties.

6.4.2.1. Hiring of CNPs

All PHC facilities have insufficient Clinical Nurse Practitioners (CNPs) in comparison to the population that each facility must serve, the number of programmes they offer, and the number of currently employed CNPs. The hiring of additional CNPs with relevant qualifications such as Midwifery and

Dispensing Licenses is perceived to be one of the recommended immediate strategies which OMs believe can assist them to successfully implement their management duties. This will ensure that all OMs will have enough time to focus solely on their management functions. The shortage of CNPs is a major challenge as it contributes significantly in taking almost 80% of OM's time which should be dedicated to perform management functions. The OMs resort to working after hours, during weekends and during leave days to catch up on their outstanding management tasks. It is unfair and unrealistic to expect OMs to execute their core management functions effectively and efficiently when they only have 20% of their time to do it. Employing enough CNPs will also ensure that when CNPs goes on leave or on training, the OMs do not forego their management functions to help fill-in the gap left by these clinicians. It will also ensure that PHCs are able to implement all programmes and streams, without staff members having to work two or more positions. In other words, hiring more CNPs will be a direct and relevant strategy to alleviate the burden and free OMs to succeed in performing their duties. This is because leaving this issue unresolved is exposing OMS to extra workload, stress and burnout.

There is a great need to increase and allocate more funding towards health personnel in PHC (Muthathi et al., 2020). All participants confirmed that all PHC facilities are in need of extra CNPs. Some of these posts have been left unfilled and later frozen. Even the filled ones still show that the current number of CNPs who are employed according to the current structure are not sufficient for the current staffing needs. Hunter et al. (2017), in a study conducted in Gauteng and Mpumalanga provinces also support this finding. The findings of his present study concur that PHC facilities have been challenged by shortage of nurses for a long period of time. Other research has found the shortage of primary health care nurses has been found to be challenge, but the negative effects it has on managers of PHC facilities has not been known. It has not been identified that the shortage of CNPs takes 80% of OMs time that should be dedicated to performing management functions. Hiring of CNPs can also help in effective provision of all programmes in accordance with the DoH guidelines and all the streams that facilities are expected to provide e.g. CCMDD programme. It is difficult to provide some of the programmes since nurses have to juggle two roles. Operational managers can also take leave, lunches and knock off timeously in accordance with the prescriptions of the Basic Conditions of Employment Act. They will also be able to do personal activities or rest during their spare time, instead of utilising that time to catch-up on their management functions. The research findings of another study conducted in South Africa also recommended that the shortages and surpluses in primary health care facilities, should be determined by using workload as a base to examine where each facility stands in terms of staff compliment (Hunter et al., 2017). Four of the research participants narrated the following:

> *My child, hiring of CNPs can drastically change things for the better for my clinic, if now you can give me at least two Sisters (CNPs). I am waiting for three, but things can change with just getting two, things can change completely. You see currently, I*

need a Sister in CCMDD who can work as a straight shift, I need a sister here in Minor Ailments, and others are off. But I will make it a point that in HAST and CCMDD I have two Sisters working straight shifts, others we can see how we can juggle around, but things can greatly improve.

Another thing I do is working in my own spare time to do my management duties. Or do my management duties when staff are back from leave and I do not have to cover for them. Like I am saying this with pride, if I can get two CNPs I will be able to do my management functions.

If the Department can employ more staff, especially Clinical Nurse Practitioners or Professional Nurses with Midwifery qualifications, we can be able to focus on implementing our management duties.

Allocate and employ Professional Nurse for CCMDD programme because they will be able to renew prescriptions.

6.4.2.2. Decentralisation of the supply chain management function

The decentralisation of the supply chain management function from sub-district to the PHC level is one of the strategies that OMs believe has the potential to help them successfully execute their management functions. According to the findings of this study, the location of the procurement function at the sub-district level has proven to be ineffective as it is the root cause for the shortage of medical and other supplies as well as other challenges. All the participants reported experiencing many long delays in the processing of orders, loss of requisitions, receiving of incorrect items and the non-delivery of ordered items to PHC facilities. All of this has resulted in an inadequate supply chain which leads to the inability of PHC facilities to perform essential healthcare services and/or health care programmes optimally. Clinicians are also facing challenges as shortages of some of medical supplies make it impossible to perform some of their functions. OMs end up improvising and when they try to improvise, they end up performing poorly as there are a bare minimum number of resources. Some of the things they do to improvise include usage of own money and cars without getting any repayments back which is not financially fair for them. The decentralisation of the supply chain management function will ensure that OMs will not have to constantly follow-up on their orders with the PHC Offices. It can also assist OMs to cease having to borrow medical and other supplies from neighbouring clinics and local partners.

There is a strong need to relinquish some of the supply chain management function from the sub-district, and place it at the PHC level for execution and management by managers of the PHC facilities. The

OMs know how important this function is, and they understand the timeliness of receiving ordered items, so they are best suited to be involved and effectively manage this process smoothly to prevent unnecessary delays and flaws in the supply chain management process. The identified faults within the current supply chain management process have rendered clinics to be inoperative or to function improperly at best. This current situation can lead to the death of patients and the responsibility is always blamed on OMs.

A clinic with the challenge of an inadequate supply of medicine and other supplies cannot be classified as an Ideal Clinic, and will not be able to implement the necessary health reforms and interventions effectively (Muthathi et al., 2020). The recommended strategy seems to agree with the findings of the study conducted in some of the facilities in South Africa (in Gauteng and Mpumalanga provinces), which proved that centralised procurement practices within PHC hinders the procurement of medicines. Without adequate medicine, the PHC facilities run the risk of not being able to serve the patients who seek clinical care. Although it is believed that centralised supply chain management has the ability to influence departmental buying powers in terms of cutting costs, studies have shown that it causes delays, losses and impacts negatively on quality service delivery (Meyer et al., 2017). One of the research participants recounted the following:

> *Especially when we are ordering equipment, it takes time because they do not know how important it is to us. So, if maybe they can involve us in the process so that we can be able to see and prevent delays because some of the equipment really you cannot function without them. Sometimes, if we do not have enough equipment, a patient can die at the clinic and the blame will come back to me. We feel that if they can involve us, then we can prevent and manage this process.*

6.4.2.3. Decentralisation of maintenance function

The analysis of results showed that relinquishing the maintenance function from the sub-district to the PHC level will ensure that maintenance issues are addressed immediately before they become a hindrance to the implementation of clinical programmes or the provision of quality health services. It will ensure clinics have a functional maintenance system as this function is currently dysfunctional. The DoH has not provided resources to facilitate the processing of maintenance requests as there are no dedicated official vehicles to be utilised by OMs when sending job cards from the clinics to the sub-district maintenance offices. Furthermore, there are also no official vehicles that can be utilised by sub-district maintenance staff to travel to PHC facilities to assess and repair reported problems. There are also not enough maintenance staff to attend to the many clinics who report maintenance problems. The OMs often have to find own means to send jobs cards and maintenance requisitions to the sub-districts,

either by asking the cars that transport blood samples from the sub-districts to the clinics, other partners, or staff from sub-district offices who visit the PHC facilities. This action causes delays in getting the job cards to the sub-districts and hence delays the response by sub-district maintenance personnel. The clinics also have to wait long periods of time to be assisted as there is a shortage of official vehicles and staff to action their requests. Waiting four months for reported problems to be attended to, represents an enormous inefficiency. The OMs often utilise their own money to resolve some maintenance problems that cannot be left in disrepair. This is not fair and is a huge burden on the financial well-being of OMs. The decentralisation of the full maintenance function will help improve the work of OMs as maintenance problems will be resolved immediately before they cause any major problem in the facilities. These include things like repairing leakages in burst pipes and replacing the broken glass in windows and doors. Dedicated maintenance personnel should be stationed at the PHC level and be always available to action the maintenance requests and repairs and OMs will ensure the process runs effortlessly by providing the necessary support and resources.

Even with Ideal Clinic implementation, it has been established through research that most clinics that scored low on Ideal Clinic assessments had challenges mostly with infrastructure and maintenance in their PHC facilities. Centralised maintenance is affecting the performance of the clinics and the OMs. Likewise, it also affects the implementation of key programmes and rating of PHC facilities and this reflects poorly on clinics and affects their achievement of targets. Not addressing these problems will be detrimental towards improving operations and strengthening health management systems in PHC facilities (Hunter et al., 2017). This shows how interconnected the challenges and problems in all management functions are. A problem such as unavailability of transport for sub-district maintenance staff, result in maintenance problems not being attended to which then impacts on provision of some primary health care, which ultimately affects achievement of targets and then leads to a weak health system. Two of the research participants narrated the following:

> *Another challenge is that the maintenance system does not function properly. We do send requisitions because we cannot do anything here, so we send requisitions and wait because hospital maintenance has to attend to many clinics as per a long schedule that they have. If something is broken, you find that I have to send requisitions and wait four months before they come to fix, except for emergencies like burst or leaking pipes and fitting, where they sometimes try to come immediately. If maintenance personnel or repair person can be located and managed by myself here or if they can authorise me to find a local repair person to fix things for me, things can be much better.*

Let the OMs do the job cards themselves and then have a roving car to come and collect job cards from the clinics maybe once a week to release the PHC Supervisor and prevent the loss of job cards.

6.4.2.4. Decentralisation of the financial management function

The decentralisation of the financial management function from sub-district to PHC facility is one of the strategies which OMs believe will help in strengthening the finance component of the health system at the PHC level. Currently, OMs only send NSI requisitions and only a few (those in one sub-district) attend Cash Flow meetings as it is presently under negotiation that OMs in all sub-districts should attend this meeting. Decentralising this function will ensure that OMs are involved in key activities such as financial planning, budget planning and monitoring, management of procurement, and tracking of orders which are the things they are involved with. The OMs will also get an opportunity to be trained so that they can acquire financial management skills which will enable them to successfully execute this task. All the OMs in this district will also be able to attend, present and defend their orders during monthly Cash Flow meetings and get first-hand feedback on the approval of their requisitions, while also providing clarity when it is needed to support approval. Decentralising the financial management function will ensure that there will be no delays in the processing of purchase orders, and no loss of NSI requisitions and orders, as OMs can personally take the orders to the Cash Flow meeting. This will also ensure that the correct medical and other supplies are requisitioned and received timeously.

The research has shown that the decentralisation of the financial management function is one of the strategies that has proven to strengthen financial planning. Decentralising this function will ensure the involvement of clinic managers to manage and steer the process, including involving them in budget formation and the management of expenditure. The study conducted in the Free State province of South Africa supported this finding as its results also showed that, decentralising financial management function has the ability to speed up the procurement of resources such as medical supplies, and that will lead to the provision of quality healthcare services and the acquirement of positive health outcomes (Malakoane et al., 2020). Two of the research participants narrated the following:

But it is under negotiation as to when we should start to attend Cash Flow meetings because we have asked to be included to go and present our NSI personally. Because the challenge is even when we send our NSIs, we do not get feedback, and you don't even know whether they received your NSI and whether it was approved or disapproved in the Cash Flow meeting.

And also the issue of budget, they must train us so that we can be able to work on the budget and they must let us manage our budget. They must let us develop our own budget.

6.4.2.5. Involvement of OMs in the Planning Function

An examination and interpretation of the study results found that the involvement of OMs in the planning function is a strategy worth implementing. This will ensure that OMs are involved to provide truthful and viable input, as well as suggestions for all the plans and strategies that are formulated. Also, the budget provided for their clinics will be realistic, based on what the OMs know about their clinics and past data, and will be sufficient to cover the needs of the clinics to avoid expending it completely before the end of the financial year. There will be no unjustified increases or unnecessary budget cuts, as decisions will be informed by knowledge from the people who work with the budget on a daily basis. The OMs should be involved to monitor and support the execution processes of weak management systems like financial and budget planning, health workforce planning, planning of organisational objectives and targets and management of procurement. This will ensure effective, proper, and informed planning, as it will be conducted by managers who are involved in managing the implementation and monitoring progress of the implementation of the strategies while executing management functions and managing all management components at the PHC level on a daily basis. Involving them in this function will also ensure that the MOs take responsibility and accountability for all the decisions made.

There is a greater need to involve managers of PHC facilities in planning for all health reforms that are to be implemented at the facility level because in the end they are the ones responsible for ensuring implementation. Involving them will ensure appropriate planning because they have knowledge of the primary health care facilities' current situation, complexities, challenges and all the consequences thereof (Muthathi et al., 2020). The management planning capabilities at the PHC level have proven to be very fragile and this is not good considering that this is an entry of the health system and where implementation occurs. The health planning study by Eboreime et al. (2018) in Nigeria, correspondingly supported the results of this study as it also proved that PHC managers need to be trained, mentored, and be allowed to participate in planning functions (Eboreime et al., 2018). Two of the research participants reported the following:

They give us the budget figure just like that e.g. they will just tell you that your clinic budget is R6 million, if it is R6 million, and you are given no explanation of how they came to this amount or on what are they basing that R6 million on. Is that fair? What if I need R10 million. They must involve us?

Sometimes I will find out the allocated budget has decreased during Cash Flow meetings, because we have cash-flow meetings where they tell us how much budget is remaining. But the information on who make budget plans? Planning with what? Using what information? We don't know all of that because we are not involved.

6.4.2.6. Provision of petty cash

Currently, there is no Petty Cash system at the PHC level. As a result, OMs have taken the responsibility to utilise their own money for petty cash transactions. Petty cash should be made available for all PHC facilities and it should be managed by the OMs in order to prevent OMs from using their own money for clinic related transactions. One of the participants pleaded for petty cash to be made available as OMs are tired of using own money, but they do not have any option expect to use their own money even though they know that they will not be repaid. There is also no way of making patients pay in order to generate Petty Cash because clinics are servicing patients who cannot afford to pay for primary health care services. It is contended that petty cash should be stationed at the clinic level for easy access when it is needed. The OMs can monitor, record, and submit receipts and invoices to the sub-district offices, when petty cash is used.

Commitment and determination should be put towards making all required resources (especially finance) timeously available to ensure the smooth execution of management functions. Petty Cash is one of those financial resources that should be made available. This will help OMs to better implement all the programmes and health improvements (Muthathi et al., 2020). Two of the research participants narrated the following:

Please make petty cash available and accessible to us, we have been using our own monies for a long period of time. Siyacela (lit: 'we are pleading').

So, there is a need for Petty Cash because we use our own money. I don't know how we can generate Petty Cash because the patients do not pay for health services.

6.4.2.7. Make official vehicles available for transportation

Official vehicles should be made available at the PHC facility level and at the sub-district level for all staff members whose task is to support PHC facilities. Firstly, official vehicles should be made available for PHC Supervisors so that they will be able to conduct their scheduled PHC supervisory visits. Unavailability of transport renders the PHC Supervisors to be deemed incompetent. It is like they are failing to do their jobs, whereas they do not have required resources to reach all allocated clinics and spend enough time when visiting clinics to make impactful visits and resolve all reported issues

and challenges. The time they spent during visits is limited and in most cases does not allow them to identify all areas that need attention and improvement. If PHC Supervisors have dedicated official vehicles they will be able to spend enough time with each clinic, and make meaningful, supportive, and effective visits, as they will not be dependent on receiving lifts from other people. Depending on other people for lifts makes them not focus on doing quality visits but rather conduct rushed visits which are like ticking the boxes that they visited the clinics. If the PHC Supervisors were provided with transport, they will be able to attend to all challenges and work closely with OMs to come up with strategies to resolve all reported challenges and problems. Currently, most OMs feel as if they are not supported by PHC Supervisors and PHC Managers. They feel like they are thrown in the deep end but are expected to swim and are despondent. Unavailability of vehicles for transportation of laboratory equipment is also reported to be a big problem. Previously, these vehicles were hijacked and as a result it was decided that motorbikes would be used. That did not help the situation as it was not sustainable, thereafter OMs utilise their own vehicles to transport laboratory equipment.

Secondly, OMs also need transport to be able to perform all their oversight functions, attend all meetings, and conduct their healthcare duties (like awareness campaigns) within the communities. If these functions are not performed successfully, targets will also not be met. Lastly, official vehicles are needed to transport all work documents to and from clinics to the sub-district offices, this includes the transportation of job cards for maintenance requests, NSI forms for procurement, reports, and statistics, as well as the transportation of laboratory equipment. The non-availability of official transport hinders the PHC clinics with respect to reaching their quality performance targets and prevents the OMs from carrying out some of their management duties. It also prevents sub-districts and PHC Office staff members from supporting and mentoring the OMs. The provision of official vehicles for PHC facilities will also help OMs from having to use their personal vehicles and own petrol for DoH work-related activities. Two of the research participants narrated the following:

> *Another strategy is to allow PHC Supervisors to spend more time during Supervisory visit. You won't go wrong there. Provide transport for the PHC Supervisors.*

> *If they can provide transport for laboratory equipment because we always get the information from the lab because they send us the memos, but after the problem of hijacking of the car, they are using a motorbike and we end up having to use our own transport for laboratory equipment.*

6.4.2.8. Review of staff complement

The analysis of the results uncovered that another winning strategy will be to conduct a review of the current staff complement at the PHC level. The current organisational structure and staffing levels seem to be a problem as they appear to be inadequate and do not match the current programmes that are being offered at the clinic level. It also does not match the current staff members available to do the work, including the workload each nurse should carry. The current population each facility is expected to serve is not aligned to the current staff member levels permanently employed at PHC facility level. As a result, current staff members are over-worked, especially OMs. Operational managers are expected to attend meetings on behalf of their facilities and when they are not at work there is absolutely no one who can stand in for them, where they even receive phone calls from staff while out attending meetings or conducting other management duties outside the office. The current staffing levels make it impossible to conduct all the newly initiated programmes, so these programmes are found to be unsuccessful and ineffective and fail to address the intended objectives they have been developed to address due to shortage of staff. There are no new staff employed for the implementation of the new programmes, and OMs must find ways to reallocate staff members to these programmes. This is demotivating to most staff members. Consequently, there is a call for the DoH to conduct a WISN (Workload Indicators of Staffing Need) assessment again to determine current staff shortages and surpluses, in relation to current programmes and new guidelines, as well as population numbers that are served by each facility.

This recommendation concurs with the findings which advocated for a review of staffing levels or complements in the PHC sector. It is suggested that the Organograms should be revised and approved in line with the WISN assessment results and thereafter a budget should be made available to fill vacancies according to these results (Hunter et al., 2017). As it stands, the adopted WISN assessment strategy was done a long time ago, where an appraisal was undertaken of the then current workload and staffing requirements. The assessments made were based on the programmes that were then currently on offer, but the staff complement levels for clinics were not approved according to the WISN outcomes and funding was not made available for the identified staffing combinations (Hunter et al., 2017). Two of the research participants narrated the following:

> *Another challenge is the staff issue. You find that I am the only one who has to attend meetings or committees, there is no second in charge. When I leave the office, I receive phone calls. I our work is too much but we have never been trained.*

I am referring to things like this CCMDD programme, we are promising people that you are no longer going to wait, you will just come and pick up your parcel, yet there is nobody, there is no new staff dedicated to provide this service.

6.4.2.9. Review clinic programmes

According to all the participants there is an urgent need to review programmes in relation to clinic capacity. The OMs confirmed that currently there is an urgent requirement for reviewing the ratio in relation to all the programmes clinics are required and expected to offer, staff capacity, and population numbers to be served. As it stands, there are many programmes to be offered, while the department adds still more programmes or interventions to be implemented at the clinic level. Yet, the staffing numbers have remained the same and no new staff members are recruited when new programmes or interventions are initiated or rolled-out. All this puts further strain on an already lean staff complement which is challenged by frozen vacancies which are not immediately filled in when staff members retire or resign at primary health care level, due to staffing budget constraints.

To name a few current scenarios, the newly initiated Central Chronic Medicines Dispensing and Distribution (CCMDD) programme never allocated any new staff members to run with the programme; instead, the OMs had to find ways to allocate and encourage the current CNPs (whose numbers are already insufficient to implement other, older programmes) to help implement the programmes since they are the only staff members with dispensing licenses which are required by the programme guidelines. The Tuberculosis (TB) programme which requires constant staffing, continuity, and close monitoring, has been revamped, where its guidelines now no longer require this programme to be implemented by Staff Nurses, but instead must be implemented by CNPs, who are already scarce and overworked. What makes the situation even worse is that when staff resign, the recruitment is slow and some posts are frozen for a long period of time, while the remaining clinic staff are expected to carry the extra workloads. Because of this, the many new programmes are taking longer to implement. In addition, the increased number of patients that need to be served by the current staff complements, has resulted in increased waiting times. This is against the Ideal Clinic guidelines and waiting time targets. There is however nothing that can be done to reduce these extended waiting times because of the chronic staff shortages. Increased waiting times have not only increased the number of customer complaints, but have also resulted in some patients leaving before being assisted; while with others, it has increased the number who default on taking their medication.

These findings concur with the results from Hartfield et al., (2018), a systematic review of primary health care service delivery models, which found that different funding models must be developed where budgets should made be available for all new programmes before they move into the

implementation stage. This will ensure adequate staffing prior to implementation, to ensure new programmes do not negatively impact the existing programmes. If health care programmes are in demand, then indefinite and fixed funding for relevant and required staff members should be made available at the PHC level, because the short-term and interim funding from health partners and agencies has uncertainty attached to it. When these funders and health partners pull out or funding comes to an end, the DoH does not always have funding to continue with the implementation of funded programmes. Government must work in close cooperation with its funding partners and agree on hand-over and continued funding terms before new programmes are implemented. In addition, a thorough review needs to be conducted of the existing programmes to establish if all programmes are still in demand, as well as review the capacity issues in terms of staffing and financial resources, so that adequate provisions for implementation are included in the budget (Harfield et al., 2018). Three of the research participants recounted the following:

> *Another challenge are the many new programmes. CCMD is new, TB has come back from Staff Nurses to Professional Nurse, and we do not have that Professional Nurse employed. TB requires constant staff, continuity, and close monitoring, so it should be CNPs.*

> *They introduce new programmes; they introduce new initiatives which we can't and are not able to do due to shortage of staff.*

> *With many programmes that are being implemented now, they take more time for staff to implement or do them, and patients have to wait longer than they are supposed to be waiting, waiting time or time spent in the clinic is long.*

6.4.2.10. Make pharmacy assistants available

From the interpretation of results, another excellent recommended strategy is to hire Pharmacy Assistants to be located at the PHC level, because currently all the clinics in the study have no Pharmacy Assistants employed to manage pharmacy rooms, issue out medication, and write prescriptions for patients. Staff nurses have been allocated to do pharmaceutical tasks, while also doing their other core nursing assistant duties. This is too much for these nurses, the increased workload is unbearable, and they are not able to perfectly perform these two functions effectively. Secondly, these nurses who assist with pharmaceutical tasks are not trained to be Pharmacy assistants, and therefore do not have the required pharmaceutical skills, or possess dispensing licenses. Sometimes OMs must stand in as Pharmacy Assistants in those occasions when allocated nurses are on leave, busy with their core functions, or are attending training. It is therefore suggested that if clinics can be allocated a personnel

budget to fund and be provided with permanent, trained, and qualified Pharmacy Assistants, the pharmacy rooms will be effectively managed and staffed, pharmacy duties will perform effectively, both Nurse Assistants and OMs can effectively perform their dedicated core functions, and stress and anxiety from performing different functions will be eliminated. Pharmaceutical mistakes, unbalancing of stock, and the misplacement or loss of medication because nurses sometimes take medication from the pharmacy rooms without being monitored, are some of the problems that can be prevented if qualified Pharmacy Assistants can be employed at the PHC level.

Research of a study which was conducted in the Free State province in South Africa, has shown that the lack of suitably qualified Pharmacists and Pharmacy Assistants due to the unavailability of funds has aggravated problems such as facilities constantly running out of stock, the non-tracking of medicine, and non-performance of stocktaking, as well as other pharmaceutical duties (Malakoane et al., 2020). Another study conducted in primary health care facilities Indonesia, found that pharmacists located at the PHC level play a large role in reviving pharmaceutical services as pharmacists are crucial in the delivery of medicine and the achievement of health outcomes (Hermansyah et al., 2020). Three of the research participants narrated the following:

> *They must give us or employ Pharmacy Assistants because there is so, much work Nurses helping there are overworked and they end up doing mistakes.*

> *Another challenge I do not have the Pharmacy Assistant and I end up allocating the Staff Nurse to do pharmacy duties. Now you find that the nurses are not trained in Pharmacy and secondly these Nurse are expected to do two jobs and sometimes I have to stand-in and do their work sometimes.*

> *It's too much, and if ever we can be given more staff and be given a Pharmacy assistant who will do precisely Pharmaceutical duties, we will never go wrong. Right now we have lot of mistakes you find that stock is not balancing, the Sister borrows the keys to take medication without being monitored when she needs medication.*

6.4.2.11. Resolve Infrastructural challenges

One other important strategy that can be implemented to help OMs better execute their functions is to resolve of all current infrastructural challenges. There is a strident call to resolve all maintenance and infrastructure challenges because they hinder the implementation of some of the programmes, as well as contribute to the non-achievement of targets and the non-attainment of MDGs. Most of the current structures are old, worn out, broken, and not conducive for the provision of proper health care services.

Some clinic structures need to be renovated to add shelters so that patients do not get wet when waiting in the rain, or burnt by the sun during sunny days. Sometimes during rainy or very hot sunny days, other patients opt to leave, having not being assisted. More additional rooms are needed for adequate consultation and implementation of some programmes and streams. More consulting rooms and open waiting rooms must be built and adequately ventilated to ensure that patients with infectious disease such as TB and Covid-19 are not infecting other patients and clinicians. All these infrastructural challenges prevent the OMs from successfully implementing their tasks and prevent the implementation of some of the new programmes and strengthening interventions. This ultimately results in most facilities not achieving set targets and as a result, contributing to making the primary health care system weaker.

An effective clinic which meets the Ideal Clinic classification is one with good infrastructure, has adequate space, is designed ergonomically to implement all programmes and all streams, has all the required consulting rooms for nurses to be able to serve all chronic conditions and other illnesses, and adequate waiting areas for patients (Muthathi et al., 2020). One of the research participants narrated the following:

> *Another issue are maintenance needs, I need to have a shelter because nurse get wet when it is raining and are burnt by the sun when it is hot and sunny. So, the shelter will help. But thing this problem has to do with infrastructural challenges.*

6.4.2.12. Fill all vacant positions

All of the study participants recommended that the filling of all vacant positions proved to be one of the immediate significant strategies that can help to resolve the current chronic challenge of the shortage of staff. The immediate filling of vacant posts as soon as staff resign will ensure that vacancies do not become frozen, as currently all clinics have unfilled frozen vacant posts. Filling vacant CNP posts will help relieve OMs from doing CNPs duties and from assisting in any identified gaps when staff members are on leave or attending training. This will release OMs to focus on doing their management duties 100% of the time.

Other vacancies which need to be filled cuts across all positions within the clinics, and includes both clinical and non-clinical positions. There are insufficient senior nursing staff who have CNP skills including midwifery qualifications, requiring that vacant positions be filled immediately. Likewise, as soon as staff members leave through resignation, retirement or for any other reasons, their positions should be filled. Currently, there is a chronic shortage of Support Service Officers (SSOs), Data Capturers, Auxiliary Nurses (ANs) and Enrolled Nurses (ENs). All the positions have been left open

for too long. It has been identified that leaving vacancies unfilled for an extended period, leads to the Provincial and Head Office freezing these posts. It is believed if the recruitment function can be transferred to the PHC level, the process can be prioritised and sped up, and appropriately qualified staff hired before the vacant posts are frozen.

Similar to the findings of many other studies conducted in South Africa, Africa and other low and middle income countries, the results of this present study found that the filling of vacancies should be prioritised in order to strengthen weak health systems within the public health care sector. These studies have shown that, no clinic can function without adequate staff members, regardless of whether the vacancies are clinical or non-clinical positions, vacant positions prevent the provision of quality healthcare services (Halcomb et al., 2018; Muthathi et al., 2020). The delivery of wide-ranging health services and programmes including the implementation of health reforms and interventions has been hindered by chronic shortages in the health workforce, and this has been a long-standing problem in developing countries, especially in rural areas. Adequate staff members in primary health care facilities are core to service delivery and attainment of targets. DoH cannot have these point of entry with insufficient staff members to offer what have been promised and committed to be offered to the public. This is seen as setting these facilities up for failure (Chotchoungchatchai et al., 2020). Three of the research participants recounted the following:

> *If OMs can be provided with more staff members that can help a lot. Like we can find time to even sit in our office and do management functions. It is the longest time I have spent in my office today; I am telling you, I never sit this long in this office.*

> *Employ more staff especially Clinical Nursing Practitioners (CNPs) or Professional Nurses with Midwifery qualifications.*

> *Staff shortage because of the fact that some vacancies are not filled. That side, we had SSO, Data Capturer, Auxiliary Nurse and Enrolled Nurse. The staff is all gone but there were no replacements.*

6.4.2.13. Review and combine registers

Reviewing all current registers utilised by PHC facilities to collect data, and merge those which capture the same information is one of the perceived strategies that can assist OMs to successfully execute their functions and thereby improve quality of care, attainment of targets, and achievement of MGD goals. The study results advocate for the combining of registers because currently there are too many registers, and some are asking for the same information, so there is so much duplication and writing the same

information from one register to the other. Having too many registers takes too much time for nurses to fill in, and for OMs to check when they are doing their task of data verification.

Merging some of the registers will greatly improve efficiency in the PHC facilities, as it will ease the workload of nurses. In addition, it will strengthen the management of information. Nurses will have more time to focus on serving and treating patients, instead of completing numerous registers which requires the same information (Afrizal et al., 2019). This recommendation is similar to that of other studies, which found that too many data collection tools hinder performance at the PHC level (Shihundla et al., 2016). This study also demonstrated that too many registers and other data collection tools increase the administrative workload of nurses. There is a great need to review all current registers and patient charts, and combine all these data collection tools to lessen the administrative burden of nurses and OMs at the PHC level (Shihundla et al., 2016; Adindu, 1995). One of the research participants reported the following:

> *The number of registers, the patients file that we have to fill is too much.*

6.4.2.14. Training and development for OMs

It was reported that all operational managers have not received management, leadership, and supervision training since they were employed in their current positions. The skills they utilise to execute their management tasks (e.g., management of all the components of the health system), are the life-long skills they have learned for themselves, and some were learned a long time ago as a module on their Nursing Administration qualification. Most OMs have found it difficult to navigate and do their tasks especially at the initial stages of their appointment, after that they learn as and when they do their duties through the process of trial and error. The OMs are not even enrolled in the induction programme after they are appointed, as they are expected to learn the ropes on their own and fly on their own as it were. Sadly, they are blamed for failure or struggling to do their functions, even though they have not been trained and fully inducted into the positions they hold. Most of the training they have undergone is programme-related training and only finance management training which was recently conducted. Providing management training and development is a strategy which the results have shown can equip OMs with management skills that will help them to better execute their management functions. It will also give them confidence because sometimes they do things on a trial-and-error basis without proper knowledge and skills and it thus becomes a daunting exercise at times. Operational managers would also appreciate if they can be given mentorship to help them strengthen their management skills and tackle the management challenges they are exposed to.

A lack of funding has prevented districts and sub-districts from conducting management training for OMs and other staff members. The training budget is seen to be increased by the fact that PHC facilities are sparsely located in deep rural areas. As a result, training would have to be conducted at a central venue which would require OMs to have overnight accommodation at the training venue during training. This is seen to increase the budget as accommodation costs are expensive. This finding is similar to a study which indicated that a supportive work environment and managerial support which includes building management competencies should be provided to the managers located at the PHC level of the health system (Fusheini and Eyles, 2016).

A study conducted in Norway found that most nurses and general health practitioners entrusted with leadership roles in PHC facilities felt that they were not ready to undertake governance functions, and always opted to prioritise clinical work as they felt comfortable and confident doing it. They would look for easy ways to not tackle or deal with management and governance challenges and treat it as something to do as and when needed. Most were not proactive and strategic with governance and management tasks, they adopted reactionary approach, waited for challenges and glitches to occur, and then act later (Spehar et al., 2017). Three of the research participants narrated the following:

> *But at first it was so difficult because they said we have to continue already heading and managing the clinics even though we were just Clinicians but they didn't give us the training as such until later on they gave us training on Finance Management. In fact it was last year where they gave us finance training. You know I didn't even do Induction, we just continued because we were already heading the clinics so we just continued like that.*

> *We will really appreciate mentoring or trainings that is management related. Because though we do get training, but it is not in all service areas, so we need more. Sometimes they say they can't train all of us due to financial restrictions. The example I can make is that maybe there might be training in Othungulu district, and that training requires that staff sleep over, but due to finances they will end up saying only these few clinics out of seventeen can attend due to finances, and then other clinics end up not going for that particular training.*

> *I would say training, like in some of the duties and activities we are not trained and they end up accusing us if we didn't manage Human Resource issues well whereas we have not been trained in that.*

6.5. CHAPTER SUMMARY

Operational managers are faced with a variety of challenges which cut across all key components of the health system. The main challenges are the shortage of staff which exists in all functional units within the PHC facilities, and shortage of CNPs which is directly affecting OMs and hinders them from performing their core management functions as they must sacrifice 80% of their management time to assist and work as CNPs in consulting rooms. Centralised decision making proved to be one of the major problems, as it showed that OMs are not permitted to perform key functions such as the recruitment and selection of their own staff, workforce planning, budget formation and financial planning; management of procurement, or supply chain management and management of maintenance. All these functions are executed and managed at the sub-district level and currently all these functions are dysfunctional and this negatively affects the successful execution of management functions at the PHC level. It also hinders the provision of quality health care services.

Operational managers have realised the context or work environment under which they operate is unfavourable, but currently there is nothing they can do about it. They have taken the responsibility to remedy the current dire situation by performing certain actions, they improvise and make a lot of sacrifices to try to accomplish their tasks. These include actions such as performing their core management functions during their spare time, work after hours and during weekends, sacrifice their own leave days as they mostly stand in for CNPs. Operational managers also utilise their own money since there is no Petty Cash system in place at the PHC level. They also utilise their personal vehicles and petrol for work-related activities, for which they are not reimbursed. A variety of strategies that can help OMs to tackle the current challenges and enable them to best perform their management functions successfully include, the decentralisation of core management functions from sub-district to PHC facilities, the review of current staff establishment in relation to programmes currently offered in all clinics; the filling of all vacant positions, including employing more CNPs and Pharmacy Assistants, also making key resources such as transport and petty cash available for all clinics, and the reviewing of registers and other data collection tools.

In the final, concluding chapter which follows, managerial recommendations based on the study findings will be offered for OMs at the PHC facility level, as well as limitations of the study, areas for future study, and a conclusion.

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Chapter 7: Recommendations, Limitations, and Conclusion

7.1. INTRODUCTION

The previous two chapters provided a thorough presentation and analysis of the data. This final chapter will summarise the findings of the study, discuss the research implications, provide detailed recommendations, and make conclusions. The conclusion that will be constructed will be founded and aligned to the problem statement, research purpose, and research objectives. The chapter will also provide answers to the research questions. The recommendations on what strategies should be adopted and implemented to tackle and resolve challenges faced by OMs in PHC facilities will be proposed. These recommendations will be based on the best practices and activities which OMs perform to improvise and mitigate around challenges they face on a daily basis as they try to execute their management functions at PHC facilities in the KZN DoH, uMkhanyakude Health District. The recommendations and conclusion made will also take into consideration the experiences of the OMs on their involvement and role they play in the implementation of health management systems.

7.2. RESEARCH IMPLICATIONS

This research study has contributed to scholarship by identifying the exact role that is played by OMs in the implementation of the health management functions at the PHC level, as aligned to the six core components or 'building blocks' of the health system framework. In addition to these six core components, the research study identified an additional seventh management function, namely, the management of infrastructure, in which the OMs confirmed they also play a role.

The recommendations from this research study will assist the KZN DoH, uMkhanyakude Health District to formulate evidence-based strategies that can be implemented to help OMs improve the implementation of management functions at the PHC facility level. These strategies are based on the responses received from the research participants in their field interviews, as they recounted the approaches, they as OMs undertook to execute their management functions, including the things they did to improvise and alleviate the burden of the challenges they faced on a daily basis. These will be used as benchmarks to propose possible solutions and strategies that can be adopted to strengthen health management systems at the PHC facility level.

The results of this study provide an evidence-based implementation research, and is supported by the literature which calls for the prioritisation of implementation research in low-income and developing world countries. In recent years, studies have been advocating for more implementation research to be

conducted at the implementation level of the PHC sector. Evidence-based implementation research will inform the devising of relevant strengthening interventions, which will help to improve the execution of health management systems, thereby strengthening the health system and improving health outcomes. This is important and will close the gap, where the literature review confirmed that more research had focused on strengthening service delivery, while little had been conducted on strengthening management systems.

7.3. DISCUSSION

The findings discussed in chapters five and six, were the result of the analysis of nineteen (19) face-to-face, individual, semi-structured, in-depth interviews. The research participants consisted of seventeen (17) Operational managers employed across the five (5) sub-districts of the KZN DoH, uMkhanyakude Health District, and two (2) PHC Supervisors. This section of the chapter will summarise the findings as aligned to the five research objectives of the study.

The five research objectives of the study were as follows:

> **Objective #1:** To investigate the role of OMs in governing the PHC facilities in the KZN DoH, uMkhanyakude Health District.
>
> **Objective #2:** To investigate the role of OMs in the management of the workforce, finances, information, and medical supplies in PHC facilities in the KZN DoH, uMkhanyakude Health District.
>
> **Objective #3:** To investigate the role of OMs on the management of service delivery in PHC facilities in the KZN DoH, uMkhanyakude Health District.
>
> **Objective #4:** To identify the barriers and challenges faced by OMs when implementing health management systems at PHC facilities.
>
> **Objective #5:** To identify enablers of success when OMs implement health management systems at PHC facilities.

Operational managers are faced with a selection of complex challenges which contribute to their failure in executing all their management functions. These challenges cut across all six core components or 'building blocks' of the health system and additionally include the challenges experienced with the management of infrastructure and maintenance. Many of these challenges arise from the functional areas in which OMs are not given permission to execute, as these are centralised, to be executed and approved at the sub-district level. The OMs try to improvise and mitigate the burden imposed by these challenges on a daily basis in order to execute their management functions. This includes actions such as abandoning their own management functions to help serve patients, to assuage the chronic shortage

of CNPs and other staff in the PHC sector; using their personal transport and own money to purchase fuel to perform work-related activities and tasks without asking for any reimbursement, since there is no petty cash system at the PHC level, and borrowing medical and other supplies from neighbouring clinics since the procurement function is dysfunctional. As one research participant could narrate:

> *… [sigh] it is difficult to get Petty Cash, we do not have it here. Sometimes I request it until I end up buying from my own pocket. Especially petrol for cutting the grass, sometimes I end borrowing the grass cutting machine from other clinics who are using petrol. Sometimes I end up taking money from my own pocket and buy petrol. Sometimes when we are having campaigns, I end up buying food like sandwiches, juice or tea using own money.*

The research findings disclosed how health system components such as finance, human resources, the supply of medicines and other supplies, and the management of information and data can be strengthened. It was established that the key to strengthening these components is to decentralise all these functions from the sub-district to PHC facilities, to be executed and managed by the OMs themselves. Authorising OMs to fully execute and manage all these functions at the PHC level will play a very significant role in mitigating the current identified challenges.

All the strategies which can help OMs improve the execution of their management duties are evidence-based and have taken into consideration other findings from the reviewed literature and the lived experiences of the OMs, including their daily challenges when it comes to the implementation of management systems.

7.3.1. Multiple management components at the PHC level

The health management systems at the PHC level comprise of the six core components of the health system as per the WHO conceptual framework. These are:

i. Management of service delivery;
ii. Human resources;
iii. Finances;
iv. Information;
v. Supply chain;
vi. Governance, and leadership.

The operational managers are responsible for managing these six interconnected and interrelated components of the health system to ensure the management systems are effective at PHC level.

The findings revealed that, in addition to managing these six core components, operational managers also play a significant role in the management of an additional component which is 'infrastructure and maintenance.' The OMs should play a significant role in ensuring that they execute their management functions to ensure effective and smooth running of all the seven components of the health system at this level since PHC facilities are an entry point to the health system, so these facilities are like mini-hospitals. That is why OMs have to manage and keep these seven components effective.

The results of the study showed that all the identified seven management systems at PHC level are weak, dysfunctional, and ineffective. This is caused by the fact that OMs have not been playing a significant role in managing these management components. The OMs are excluded from making key management decisions as these decisions are centralised, executed and managed at sub-district level. This has created an unfavourable environment which is full of challenges for OMs. The sub-district PHC Office which OMs access through PHC Supervisors and PHC Managers is the gateway or link where OMs report. There is no support to ensure that these challenges are remediated or resolved to make the environment better and conducive for OMs to execute their management functions. OMs are not provided with relevant management skills to ensure that they can perfect their management skills to ensure effective management. Instead, OMs have to improvise.

The identified challenges which prevent OMs from successfully executing their management functions is found in all the seven management components. This means that all the seven management components need to be strengthened for the entire system to be strong and functional, as this will improve health outcomes and ensure attainment of MDGs which have now transitioned to NSD goals. The weak health system at PHC level therefore translates to a weak health system at sub-district level. Weak health system at sub-district level lead to weak health system at district level and it all goes up to provincial, and ultimately, national level. The health system will be fully functional, effective, and efficient, if all these seven components are working efficiently and effectively, because if one component is not effective, it affects and weakens the other six components. This will result in the entire health system at the PHC level becoming ineffective. In other words, the OMs at the PHC level must ensure that all seven management functions are operating smoothly, because they are all equally important to strengthening the entire health system at the PHC level. The OMs must be supported to strengthen their role in executing these seven management components by addressing all the identified challenges which have proven to be across all seven management components. This can be achieved by the implementation of the practical, recommended solutions and strategies which can be adopted to strengthen health management systems at the PHC facility level. Although some of the recommended strategies on what can be done to assist OMs better execute their management functions require budget and proper planning prior to implementatation from DoH, some are practical and require changes in the

scope of work for OMs by relinquishing some management functions (supply chain, maintenance and financial management) from sub-district to PHC level.

Figure 7.1. The Interaction of the management components

Source: Interviews Data (2018)

7.3.2. Functions of Operational managers

Operational managers have been managing all seven management components of the health system at the PHC level, but the extent of their participation has been minimal in most components as they were sometimes not authorised to supervise or offer suggestions and inputs in some of the critical functions pertaining to the seven components, even though these fell within the scope of their work. Accordingly, OMs have been playing a minimal role in planning, management of human resources, management of finances, management of data and information, management of the procurement of medical supplies, while providing extensive and significant management of service delivery and the management of infrastructure, which is not included in the WHO framework of the six components of the health system.

The role they play in executing these management functions is complicated as the work environment they work in has continuously presented them with a variety of challenges.

7.3.2.1. Governance function

The governance role that is played by OMs involves governance and leadership as per WHO conceptual components of the health system. This task involves controlling, directing and influencing staff members at primary health care level to perform theirs tasks according to the manner in which the plans have been designed. Operational managers have been involved with the development of clinic plans, setting of targets, management of infrastructure, motivation of employees, chairing and attendance of meetings, as well as the allocation of tasks or duties to clinic staff. The study contributed by supporting literature as it showed that OMs are indeed playing a crucial role in partial development plans and significant role in ensuring implementation of plans. The study explicitly showed that the manner in which the OMs work has been disregarded when they are told to change plans later, and has rendered this task to be treated as unimportant. These managers now merely do this activity as a compliance exercise or to tick the box as many feel "they are involved but not involved". The time and effort the OMs commit when developing these plans is not valued. This is in contrast with management literature which advocate for full involvement of managers who are entrusted to manage operations and ensure implementation at any level of management.

So to expand, although OMs are involved in the development of clinic plans, this activity is taken as something they only do to obey the rules and abide by what they are told to do by their authorities. This is because their developed clinic plans are not taken as final because in most cases the sub-districts and sometimes the district office make them change their plans. This has contributed to OMs feeling belittled and viewing their planning activities as a mere compliance exercise, as their plans are not respected and adhered to. This act by the sub-district and district offices has caused many OMs to not take ownership of the plans they have developed. That is one of the reasons that OMs play a minimal role in planning, a finding which this study has proven.

In unpacking their role in development of clinic plans, the OMs are only responsible for the development of quality improvement plans, development of operational plans, development of standard operating procedures, and the implementation and reviewing of all these clinic plans. An operational plan is a guiding document in which OMs must outline their clinic goals, objectives, and activities, to achieve the set objectives and timelines, as well as the resources required to carry out such activities. This has helped Operational managers develop clinic plans which are aligned to the sub-district plans to ensure that what the clinics plan to do is aligned to all the objectives and goals of the district and sub-districts. This is a critical aspect in safeguarding development of coordinated plans and alignment of

PHCs with overarching DoH organisational goals and strategic plans at provincial and national level too, which is similar to the findings of various management research, as it has been found that effective planning should be synchronized within the entire organisation and at all levels to ensure attainment of overall goals, vision and mission. This study showed that even if plans are coordinated and aligned to the overall organisational goals, this does not guarantee or result in successful implementation of plans and attainment of results (i.e. targets in the primary health care in the context of this study), if the challenges such as unavailability of resources (especially human resources, medical supplies and transport) are not resolved or addressed.

The study has demonstrated that OMs involve other clinic staff members when developing such plans so that everyone in the clinic will contribute and know what is expected from them. They also utilise the developed clinic or operational plans to set individual plans and targets (e.g., clinic targets and individual targets or key performance areas). This ensures that the individual performance targets are aligned to the operational plans. In other words, this study further supports performance management literature, which purports that individual key performance areas should be formulated in such a way that they help achieve organisational goals.

OMs play a major role in the development, implementation and reviewing of quality improvement plans. The study showed that this task is strengthened by the approved DoH quality improvement programmes such as National Core Standards (implemented nationally) and National Health Insurance (piloted in few districts) and Ideal Clinic (which is implemented nationally). These programmes have relevant monitoring and evaluation tools which are used to assess progress, dedicated staff members who are monitoring each programme at sub-district and district level, set performance timeframes, resources that are made available to ensure effective implementation and OMs key performance standards specifically include monthly conduction of assessments and development of quality improvement plan thus monitoring that improvement plans are implemented. Therefore, this study showed that gazetted and approved overarching operating procedures have the potential to ensure successful implementation because there is uniformity in implementation and monitoring, and there is shared commitment to making required resources available. Also, the constant monitoring and reviewing of plans enable OMs to identify the challenges and bottlenecks which hinders success, and thereafter devise action plans to remedy and resolve them on a continuous basis instead of responding when the damage has already been done.

OMs also play a substantial role in development, customising of and implementation of already developed DoH SOPs. Similarly to management literature, this study showed that OMs utilise these to make informed and fair decisions, outline what should be done, how it should be done and which behaviour is acceptable and not acceptable. This ensures that OMs uphold standards, ensure uniformity,

conformity and shape behaviour of staff members accordingly, which is helpful in a busy primary health care environment in the achievement of targets, shared goals, acceptable clinic standards and health outcomes.

The setting of targets is also one of the functions in which OMs have recently started to play a major role under the rubric of governance and planning. Clinic targets are developed to be aligned to sub-districts and district targets. This is an important function within the primary health care environment since attainment of targets are utilised to determine success and non-attainment. The study showed that involving OMs in this role has proven to be effective since the achievement of targets is closely monitored by these managers on a daily, weekly, monthly, and quarterly basis so that interventions are developed and implemented immediately if they find their clinics lagging behind in accomplishing certain targets. When setting the targets, OMs ensure they consider all the relevant factors which are likely to impact their achievement negatively to make sure that they do not set their clinics up for failure. The results showed how seriously OMs view this task, as this is seen by how firm and confident OMs are when doing this task, as they refuse to input unrealistic numbers when told to do so by the sub-districts or district. Although the PHC facilities are operating within a closely and constantly monitored hierarchical environment, setting unrealistic expectations has a way of demotivating staff members and can lead to manipulation of results and non - factual reporting. Involving OMs fully will help in preventing such behaviour of false reporting.

Attendance of meetings (attending and/or chairing) and the motivation of staff proved to be some of the functions in which OMs play a large role. These two tasks take a lot of the OM's time. Firstly, there are too many meetings which are scheduled, and some that are not scheduled, but are hastily arranged due to the nature of the work or current challenges. In addition, OMs have been identified as representatives of the DoH in the local meetings in which the DoH must participate. There are also many internal DoH meetings at the sub-district and clinic level, where OMs are expected to attend. With the shortage of staff currently at the top of the list of challenges in PHC facilities, the OMs are not able to delegate staff to attend some of these meetings on their behalf. Indeed, the OMs barely have enough time to do their own management functions at the clinic due to the shortage of Clinical Nurse Practitioners (CNPs). It is even impractical to find time to attend all the meetings which they are expected to attend because 80% of their time they stand in for CNPs. Secondly, the shortage of staff has also contributed to remaining staff having to assume an additional and often burdensome workload, which has contributed to high levels of demotivation, stress, and unhappiness. Demotivated staff require much encouragement and appreciation from their line managers. The fact that there are no financial rewards offered by OMs to staff who assume tasks at higher levels, also makes it difficult for OMs as there are not many motivation techniques which they are able to implement except to offer verbal motivation and appreciation. Many staff members are demotivated to work overtime and to take

on extra work, therefore OMs spend much effort on trying to motivate and encourage staff members to step-in and assist.

All this shows why the governance function appears to be weak at the PHC level. Operational managers are sometimes not given an opportunity to give their input or suggestions on some planning functions. Consequently, the involvement of OMs is minimal and sometimes non-existent. Their contribution towards planning should be respected, valued, encouraged, strengthened, and allowed as they are responsible for ensuring implementation at PHC level. It also shows how OMs have embraced and succeeded in perfecting their role in ensuring implementation of plans and standard operating procedures to control, direct and make sure things happen according to how they have been planned, even though they do not feel they are part of planning function. Hence, this function should be reviewed and streamlined to strengthen and resolve planning issues and other related problems. Involving OMs can foster ownership and accountability towards all the plans that have been developed.

7.3.2.2. Management of the health workforce

It has been proven that the involvement of OMs has been relatively minimal in the management of human resources or health workforce. On the other hand, OMs play a major role managing the performance of staff in their clinics. They are also responsible for the overall management of the Employee Performance Management and Development Systems (EPMDS). This is because the structure or organogram at the PHC level is flat, with all staff members reporting directly to the OMs. Their performance management tasks include such activities as: setting of performance standards and targets, daily allocation of tasks, motivation of employees, monitoring of performance, reviewing, and if set performance standards are met, issuing of rewards for excellent performance through verbal appreciation and giving small tokens of appreciation. The OMs spend a lot of their time providing counselling to try and keep their staff members motivated and willing to take on additional workloads, since there is a shortage of staff and there are no financial rewards. The results confirmed that OMs align individual performance goals to organisational performance goals through matching objectives in the clinic plans to that of their employees in their performance agreements. The performance of staff is then monitored closely since clinic targets are also managed and some data elements are reported daily. This enables OMs to swiftly identify staff members who excel and those who are struggling, then provide mentorship, support, and sometimes in-service training, since the budget for external training is insufficient at the PHC level. The study results showed that what OMs do when managing staff performance, is supported by the findings most management literature which proclaim that the performance management process must include activities such as setting performance goals and standards through signing of performance agreements, periodic assessment of performance progress, rating and supporting and coaching staff members to achieve the set performance standards.

This study indicated that unlike in other organisations, the rewards system for good performance at primary health care level, does not include financial rewards, instead OMs have to be creative and offer non-monetary rewards such as issuing performance certificates or medals which are presented during major events / functions such as Quality Days, verbal recognition and words of appreciation, involving staff in challenging tasks and also involve them in performing tasks at senior levels/ positions than their own positions. OMs utilise motivation as a form of non-monetary reward.

Through this study it has been established that operational managers are not involved in the recruitment and selection of staff, except for accepting and acknowledging resignations and then reporting to the sub-districts PHC Offices on staff shortages, resignations, and retirements. They are not involved in workforce planning, management of resignations and retirement of staff, or succession planning either. Similarly to other studies conducted in other developing countries, the study findings showed that the advertising, recruitment and selection of clinic staff is centralised at the sub-district level. This has caused major problems for OMs as sub-districts take long to fill vacant positions. It has been uncovered that it is the PHC Managers or PHC Supervisors who take long to motivate for the filling of vacant posts. Positions are left unfilled until the DoH eventually freezes the vacant posts if it is discovered that they have been left unfilled for a long period of time. This creates chronic staff shortages. The OMs are also not allowed to participate in the recruitment and selection panel, so they rely on the sub-district offices to appoint suitable candidates timeously.

This study has also shown that the non-involvement of OMs in recruitment and selection has contributed considerably to the existing chronic problem of the shortage of staff at all clinics as there are many frozen vacant positions which are the result of delays and inefficiencies in the early filling of vacant posts. As a result this has especially impacted the work of OMs when they allocate tasks and staff to certain programmes, because they must be mindful of not over-allocating tasks and eventually causing staff to be stressed and demotivated due to additional and often burdensome workloads. The increased workload is known to have negative effects such as demotivation, dissatisfaction with own job and work environment as more staff will opt to leave either to go to private health sector and work for some non-governmental health partners. Increased workload can also lead to fatigue and therefore result in poor performance and making of errors when providing health care services and this will result in poor quality health care and standards. It will ultimately lead to poor health outcomes and therefore non-achievement of targets. If the frozen vacancy happens to be for a CNP, that presents even worse challenge for OMs as they have to dedicate 80% of their time to help fill in that CNP vacant post and see patients in consulting rooms. That eventually mean forgoing 80% of the time that should have been utilised performing management functions.

The training and development of clinic employees is one of the tasks in which OMs play a notable role. They develop training and develop plans according to the training needs that are identified during the signing of performance agreements. The OMs are also responsible for nominating staff members to attend training that is co-ordinated by the district, sub-district, and sometimes the provincial office. In-service training and education help staff members improve their competencies in areas that need improvement when they perform their healthcare duties. Continuous in-service training is the full responsibility of OMs, who conduct programme-related training to develop their staff members.

It was found that the fact that OMs are expected to attend a lot of meetings, workshops, and technical training sessions, this keeps them very busy and puts them in a position which requires them to always have to transfer their knowledge and skills during these sessions or to share information. The study contributed by showing that even though OMs are not trained as facilitators, they have mastered the skills of training, developing, and mentoring their staff members because they often have to perform this activity whether they want to or not. This skill has been acquired over the years, due to the demands and nature of their jobs as they also provide health education and awareness to help improve on the attainment of targets when their clinics are lagging behind.

All staff members report directly to the OMs at primary health care level, so management of leave is a task which is the main, full and sole responsibility of the OMs. The leave is managed manually using leave registers and forms as there is no electronic system. It is ensured that staff indicate their preferred leave dates at the beginning of the year for proper planning so that no staff members from the same divisions or who occupy same positions go on leave at the same time to make sure that provision of health care programmes is not interrupted in any shape or form. In applying for leave, the leave forms are sent to the OMs, the OMs forward approved leave forms to the sub-district PHC Office for filing while a copy is also kept at the primary health care facility. The leave approval by the OM is final and cannot be reversed by anyone either from the sub-district or district office. This finding contributes to the body of knowledge and shows that management of leave should be controlled and managed by Line Managers. The OMs are also responsible for management of overtime.

7.3.2.3. Management of finances

Operational managers play a minimal role in the management of finances as most of the financial management activities are centralised at the sub-district level. These managers only develop procurement plans or wish-lists, and control the use of such resources e.g., when items have been delivered to the clinics; share budget information with clinic staff. Only a few OMs (in one sub-district) attend Cash Flow meetings. Those OMs who do attend Cash Flow meetings are not allowed to actively participate, but are there as observers, which is not meaningful and effective participation. This study

showed that this deliberate act of completely excluding OMs is a waste of travel resources (to and from primary health care to sub-districts) and OMs time, which could be utilised doing other functions which add value to the execution of their functions. It also a missed opportunity to speed up approval processes of NSI requisitions because if OMs are there they can help fast-track the approval process.

The OMs are excluded from the development of their clinic's budget. They only develop procurement plans which many referred to as 'wish lists' because not everything they include on their procurement plan is incorporated when the budget is finalised by the sub-district finance team. Hence, the OMs are excluded from making critical daily operational decisions and from decisions on the control of the budget and associated expenditure. They only hear about their expenditure from the sub-district office as they are also excluded from budget monitoring. Some of the OMs described their role in the management of finances as operating like Post Offices, transmitting documents and information to the sub-districts and receive information to share with their clinic staff. The only controlling of expenditure they do is to control the actual wastage of resources usage at clinic level; this includes ensuring scarce medical supplies, equipment and stationery are utilised effectively, there is no theft, there is no unnecessary approval of overtime and all staff come to work on time so that they are correctly paid for the work done.

This present study, in line with previously published research, strongly recommends the devolving of health financial planning and budgeting to the PHC facilities level and letting PHC managers be involved in budget planning, monitoring, and reporting. Instead, the OMs in the KZN DoH uMkhanyakude Health District are not involved in financial planning, budget formulation, or the monitoring of expenditure, as this task is entirely centralised at the sub-district level. This has caused much frustration and unhappiness as the OMs question how the allocated budget is determined, because in most cases, it is insufficient to carry out all their yearly PHC plans and commitments which are linked to inadequacies in centralised financial management and procurement done at sub-district level. Some functions should be relinquished or partially involve OMs and feedback should be provided constantly so that OMs can keep track of their NSI orders. Inadequacies and challenges in centralised financial management have a direct negative impact towards conducting of health care programmes as they lead to delays in processing of orders, delays in delivery of medical supplies or loss of NSI requisitions, which means service delivery component is directly affected by ineffectiveness in the financial management component. Without adequate medical supplies, clinicians in the PHC facilities will not be able to serve clients, or carry out certain clinical procedures or offer certain health care programmes. This results in clinics not achieving the desired health outcomes and set targets. This study further showed how the procurement of medicine which is directly executed at primary health care by OMs is running and managed smoothly without any glitches or inadequacies. This is proof that other

procurement functions could be improved and challenges lessened or resolved if OMs are somehow partially involved.

7.3.2.4. Management of information

Operational managers have played an instrumental role in the management of information and data. Operational managers understand the great importance and effect this task has on determining clinic performance. It is data and information that is used to determine attainment of targets and to inform all critical management decisions. Therefore, OMs have been managing the entire data flow process, from the capturing of data, its collation, and the production of statistics. During those occasions when Data Capturers are absent from work, OMs improvise by taking on the outstanding files and data to do at their homes during own spare time to ensure that the data flow process is not interrupted and accuracy is maintained at all times.

When managing the data flow process, the OMs perform an extensive and tedious process which includes checking and comparing source documents (including patient registers) with what has been captured, to verify whether there are any inaccuracies or mistakes. All the statistics and reports are prepared by the Data Capturers with the help of the OMs, especially with the formulation and writing of narratives, but these too must be checked and signed-off by the OMs before they are sent to Finance Information Officers (FIOs) at the sub-district level. While performing all these activities, the OMs are also responsible for monitoring progress towards the achievement of targets on a daily basis. They conduct clinic audits and if they identify any delays or factors that could lead to the non-achievement of targets or poor outcomes, they are responsible for devising and implementing quality improvement plans.

The study succeeded to show how the management of data and information is a daily, often burdensome, but critical activity for all OMs. They must find the time to do it no matter how busy they are. What makes it worse, is that OMs must perform other daily tasks such as daily reporting to the sub-district PHC Office and the FIO every morning on certain key data elements, and hold daily morning meetings with clinicians and Lay Counsellors to verify and tally up daily statistics, by physically checking the tally sheets and comparing them to the patient registers and recalculate to ensure their accuracy. This is an intense process and requires commitment, knowledge of all programmes, knowledge of data elements, including databases and systems used. This requires employees who pay close attention to detail; accordingly, OMs play a significant role in conducting data audits.

On a weekly basis every Tuesday, the OMs chair weekly Nerve Centre meetings to collate and produce weekly statistics and forward them to the sub-district. On a monthly and quarterly basis with the help of Data Capturers, OMs produce monthly statistics reports, sign them off and forward them to the sub-

district. It is the responsibility of the OMs to ensure that everyday clinicians and Data Capturers have suitable data collection tools and registers to ensure data efficiency, timeliness, and correctness in data and information management. This is critical since data and information is used as a measure to monitor success, to see if clinics are performing according to their expected targets and set standards. The monitoring and reporting of clinic data is the full responsibility of the OMs. That is why it is difficult for OMs to take leave, because they know, when they are away, there will be a disruption, as no one else at the clinic can perform these daily tasks for them.

These results further demonstrate the substantial effort that OMs put into verifying and filling in incomplete information on patient charts, as research has shown that nurses due to the staff shortage are struggling with increased patient numbers in PHC facilities and thus do not have adequate time to complete records. This shows how OMs take all the functions and that of their staff seriously. There is a high level of accountability and responsibility. There is a deep sense of understanding that each task performed by each staff member adds to the overall success of the clinic, hence they are always ready to step in and help when there is a shortage of staff within any management component. The OMs use systems thinking approach when executing their management functions and when managing clinic operations.

7.3.2.5. Management of the supply chain

The availability of medical supplies, medical equipment, stationery, cleaning materials, and other stock items must always be ensured in PHC facilities to guarantee the adequate provision of quality healthcare services. However, the role played by OMs pertaining to management of the supply chain is not an influential one, as it does not have a major effect in ensuring either the availability or timeous delivery of needed stock. The function of the OM only involves the signing of NSI requisitions and other forms and forwarding them to the sub-districts; managing stock that has been delivered to their clinics; managing medical stock that is stored in their pharmacy rooms; management of the CCMDD programme, and ordering of medicine directly from the Provincial Pharmaceutical Supply Depot (PPSD). Nevertheless, because procurement is centralised at the sub-district level, all PHC facilities are struggling with delayed approval of orders, receiving wrong supplies and loss of NSI requisitions.

The feedback on the status of order approval is also not provided timeously to the OMs, and they constantly need to follow up, or re-send NSI requisition forms to try and speed up the process. Authorising OMs to become involved in performing some of the critical supply chain management activities such as participating and defending the NSI ordering process during Cash Flow meetings will help fast-track the process, prevent delays, and improve the approval process which will directly enhance effectiveness of the supply chain management function.

The analysis of data also showed that the ordering of medicine from the Provincial Pharmaceutical Supply Depot (PPSD), which is implemented and managed directly by OMs at the PHC level, appears to be functional with no challenges, delays, or loss of medication. On the other hand, the procurement and delivery of medical supplies and other stock that is done at the sub-district level is confronted with delays, waiting periods of more than three months and up to a year, receiving of wrong specifications, and the loss of NSI requisition forms, as OMs are not involved in the management of procurement processes, selection of suppliers or development of specifications. Even the purchase of minor things like lights bulbs and petrol for use in grass-cutting machines should go through the same NSI process to be executed, processed, and approved at the sub-district office by the Stores Department. This always takes longer to approve. In those occasions when the OMs need something urgently, they use their own money because the procurement process is very slow and there is no petty cash system in place at PHC clinics for urgent orders.

7.3.2.6. Management of service delivery

Operational managers spend 80% of their time providing healthcare services, by personally treating patients in the consulting rooms. This is an unfavourable sacrifice by OMs and it clearly exposes the fact that OMs only have 20% of their time left to do all their management functions, attend meetings, and conduct in-service training. In some large degree, this is due to the shortage of Clinical Nurse Practitioners (CNPs) at PHC facilities. It is recommended therefore that the DoH should implement interventions aimed at attracting and retaining professional health workers to ensure the provision of rural PHC services. This is believed to be one of the strategies that can alleviate the workload of Operational managers and give them enough time to focus on their management functions instead of doing the work of CNPs. The analysis of data has shown that nurses are dedicated to patient care, often understanding it as a calling (Raatikainen, 1997). Consequently, they always opt to leave their management functions when they see that there are insufficient CNPs to serve the patients. The fact that these nurses have now been employed as OMs has not stopped them from leaving their managerial functions in favour of serving unattended patients, as the nursing instinct always comes into effect when they see patients waiting to be served.

The allocation of champions for programmes and management of programme implementation are some of the other tasks that must be performed by OM. Due to shortage of staff, OMs end up resorting to championing, promoting, and implementing some of the new programmes when there are no other available staff to perform these important duties.

To execute the function of the management of service delivery, OMs play a substantial role in the close supervision of Clinical Nursing Practitioners (CNPs) who are senior staff after OMs and other nurses.

Operational managers have been successfully performing the task of supervision because they have extensive nursing and PHC experience. The OMs also conduct awareness campaigns when they see that the clinics are struggling with meeting some targets. The problem OMs face in successfully conducting this task is the unavailability of official transport to visit communities and conduct outreach campaigns; as a result, they end up utilising their own transport and petrol without being able to claim back such expenditure, which is seen as an exploitative practice to many health professionals.

7.3.2.7. Management of infrastructure and maintenance

In addition to managing and executing the WHO's six core components of the health system, OMs also play a major role in the management of infrastructure and maintenance. Their role involves clinic maintenance which includes activities like the safe keeping of clinic infrastructure, ensuring cleanliness of the facilities, and managing the health and safety in the workplace for all staff and patients alike.

There are no designated staff employed at the PHC level to implement these activities since the Infection and Prevention Control staff members are located at the sub-district level. As a result, they hardly go to the clinics to assist OMs. Therefore, OMs must implement these themselves or nominate staff from the clinic to take responsibility for these activities in addition to their normal duties. The maintenance department which is located at the sub-district level is also under-resourced and unable to come and fix identified maintenance issues in a timeous manner.

This finding concurs with the research which indicated that local facility managers in PHC facilities should take responsibility to ensure the improvement of quality of care, as well as operational efficiencies in preparation for the implementation of Ideal Clinic and National Core Standards programmes.

The current centralised management of maintenance remains a challenge. When things break, OMs report the matter to the hospital and wait sometimes years for the designated person at the sub-district to come and inspect if what has been reported can be fixed and then arrange for the repairs. Sometimes they wait for over a year, then when the person eventually does come, he or she will say that the reported item cannot be fixed, and only then write it off, and provide a certificate which permits the OMs to order new items. The whole process is slow and adversely affects the provision of quality health care services. The inability to use important equipment due to its disrepair is guaranteed to slow the pace of service provision, yield unfavourable results, and frustrate and demotivate staff members who are desperate to use the required equipment. This puts more pressure on the OMs to encourage their members of staff when they face such challenges.

7.3.3. Causes of ineffectiveness

Ineffectiveness at the PHC level is caused by a variety of factors, which in turn precludes OMs from successfully executing their management functions. The challenges they endure are multifaceted and systemic and have created an environment that is not enabling OMs to succeed. These challenges have been confirmed to affect the management style of many OMs, who fail to accomplish their tasks, and by extension, some of the critical core components of the health system. These challenges force OMs to find creative ways to respond to the unfavourable environment, and even change their management style to push back on the root causes of ineffectiveness.

The identified challenges that can cause ineffectiveness among OMs include: shortage of staff, infrastructural problems, shortage of official vehicles, shortage of CNPs, non-payment of overtime, centralised decision-making, electricity problems, lack of support and supervision of OMs, inconsistent ambulance services, shortage of water, electricity and other essential services, a dysfunctional procurement system, the unavailability of petty cash, and the lack of IT skills and equipment. These identified challenges have proven that the operational management function is still poor and unproductive. While this situation persists in all levels of health management, it is particularly severe in rural PHC facilities.

The shortage of CNPs proved to be a significant challenge as it directly affects OMs by consuming 80% of their management time. This disturbs the entire management function and affects the entire health management system at PHC facilities, as it leaves the facilities without managers when these managers completely abandon their management tasks to go and work as clinical nurses in consulting rooms. This leads to OMs having to work extra time, after hours, during weekends, during own free time, and even to the extent of not taking leave. The shortage of staff in other functional areas (including non-clinical vacant positions) and many unfilled vacancies, also increases the workload of the remaining staff members. All this is not good as it causes fatigue, unhappiness, and demotivation of staff who end up providing poor quality healthcare services to their patients. This is because the attitudes and physical demeanour of unhappy and demotivated staff members becomes negative, to the extent that staff members become unfriendly towards the patients. This behaviour seriously affects the quality of health care that is provided and it also increases patient complaints.

Centralised decision-making prevents OMs from managing and leading, and prevents them from getting involved in making critical decisions, giving inputs and suggestions pertaining to the actual running of the facilities which they are supposed to be managing. These include decisions such as financial planning, financial management, budget planning and formulation, workforce or human resource planning, recruitment and selection of staff, supply chain management (e.g., procurement, selection of

suppliers and processing and approval of orders), and the management of infrastructure maintenance, all of which are executed and managed at the sub-district level. Overall, the analysis of the research data has shown that the centralised decision-making prevents managers from successfully implementing their management functions, and thus becomes a source for most of the other challenges which they face. For example, OMs find themselves having to go to neighbouring clinics to borrow medical and other supplies to continue providing quality health care services, when what they have ordered is not delivered timeously due to a dysfunctional procurement system. Likewise, OMs have to step-in and assist to ease the workload when other staff leave, resign, go on leave, take sick or attend training because there are unfilled vacancies which have been frozen due to delays and inefficiencies in swiftly filling them. Also, OMs often must use their own money to have reported maintenance problems repaired, such as leaking water pipes and faulty electrical wiring due to the inefficiencies and inconsistent maintenance system which is slow to attend to and repair, even urgent or hazardous maintenance problems. These challenges affect the entire PHC system and, as a result the entire health system is crumbling. The challenges are multifaceted and there is a great need to implement an integrated management systems approach to strengthening the provision of quality health services.

The shortage of official vehicles is also a substantial challenge hindering the successful implementation of management functions. Without reliable transport, OMs are not able to perform some their tasks. Often, OMs must use own private vehicles, including purchasing their own petrol to perform work-related activities such as conducting awareness campaigns, attending meetings and training, forwarding important and urgent documents to the sub district, and to running some official errands. The sad reality is that OMs are not reimbursed by the DoH for using their own personal money or vehicles, which is unfair and injurious to their financial standing. Should OMs decide not to make these compromises, these tasks will not be performed, meetings will not be attended, and targets will not be met as awareness campaigns are performed to improve targets in certain areas in which clinics are slagging behind. This will in turn have an impact in the achievement of MDG goals and lead to a weak health system. This is one of the reasons which has caused OMs to be labelled as the ones who obstruct the implementation of management systems at the PHC level. Yet, the reality is different, as they are not provided with necessary and adequate resources to perform their core management functions.

The lack of support and supervision of OMs is also a large contributor in their failure to successfully execute their management functions. Hurried supervisory visits due to the unavailability of official transport for PHC Supervisors and PHC Managers, too many clinics that each PHC Supervisor must visit, and the inability to help OMs resolve identified challenges does not yield positive results and is not supportive. This ultimately leads to the failure of OMs in performing their functions. Many OMs feel helpless, where the attitude and way their PHC Supervisors carry themselves is offensive. The PHC Supervisors are also overwhelmed by too many clinics which they need to support without

available official transport, causing them to rely on lifts. All this has led to supervisory visits which are unhelpful and unconstructive, and there is no mentorship or guidance offered. Instead, the PHC Supervisors scold and blame the OMs without providing proper support and solutions to the known and reported challenges.

7.3.4. Maintaining effectiveness at PHC level

Despite being faced with many complex challenges, and an unfavourable environment, Operational mangers have remained resolute and committed to executing their management functions. They try and do remarkable and extraordinary things to improvise.

Operational managers sacrifice 80% of management time to perform CNP duties due to the shortage of CNPs at all PHC facilities. The OMs must ensure that the many approved programmes are each implemented according to the guidelines, and aligned to the newly recommended health care streams which all facilities must abide with. Consequently, OMs unfortunately must step in since CNP duties have to be conducted by skilled clinicians who have extensive nursing experience and are highly qualified, no other nurses are qualified to perform these duties other than OMs. This is an altruistic act as it directly affects OMs and prevents them from performing their core management functions. It also creates too heavy a workload for them.

Operational managers sacrifice their own time and leave in most cases to catch up on doing their management functions, as their scope of work is complex, and faced with challenges which complicates their scope of work even more. For example, the daily reporting on various data elements, daily morning meetings with clinicians to verify and correct data and statistics, unscheduled meetings, championing and supervising clinicians and many other tasks, are the type of functions which can only be performed by OMs due to its nature, complexity and shortage of staff members who can be trained and co-opted to stand-in and perform these tasks. Operational mangers even work extra hours to accomplish their management tasks, e.g., finishing late to catch-up on unaccomplished management tasks, which is mostly caused by the fact that OMs spend 80% of their time doing the work of CNPs. Forgoing leave and working extra hours can cause work-related stress, anxiety, and demotivation for OMs. An overworked facility manager is likely to be unable to focus or pay attention to tasks that require much focus and attention to detail, and may result in them making serious mistakes while attending to important tasks. They may be unfriendly towards staff members, and may even expect staff members to work extra hours, or assign them challenging tasks for which they are not trained, or experienced in. All this creates an unfriendly work environment which can seriously affect the relationship between employees and their OMs.

Because of the shortage of CNPs and other staff such as Pharmacists, OMs often must use untrained or junior staff to perform certain duties, which ordinarily would be performed by more qualified personnel. This action has capacitated junior staff members with senior skills, multi-tasking and has enlarged job roles which is a good thing because job enlargement increases motivation and enables on-the-job training and exposure to challenging work assignments. The OMs utilise this strategy as a motivationa strategy or as a way of developing skills of those willing staff members and giving them work experience and exposure which they can utilise to apply for more senior positions in the future when they become available. The OMs also reorganise divisions or units to ensure they can cope with the shortage of staff. This continuous reorganisation of divisions or units, and shifting staff around where there are shortages has helped to ensure that all programmes are offered and patients are assisted regardless of the chronic shortage of staff members. The more important issue to the OMs is the accomplishment of set tasks and targets, achieving satisfactory outcomes, and having effective management systems which finally leads to a strong health system at the PHC level. Obviously, a strong health system at the PHC level will filter up to sub-districts and to other higher levels of the DoH.

The OMs use their own money for petty cash purchases due to the unavailability of petty cash at the clinic level. These managers have taken ownership and responsibility to ensure that they would rather lose their own money so that their clinics are able to continue functioning properly. The OMs have decided to continuously incur these costs even though they are not reimbursed by the DoH, because it keeps the operations running at the PHC level and assists them to accomplish their core management responsibilities.

Operational managers make sure that they borrow medical and other supplies from neighbouring clinics when they find they are out of stock of important items due to a dysfunctional procurement process. This includes sourcing other resources such as photocopying, printing, and faxing from other local partners. This has helped with continuity in the provision of health care services at the PHC level. Instead of blaming the sub-district and current supply chain management system, OMs have taken ownership to remedy the problem and thereby ensure there are no disruptions in the clinic's operations, quality of care, or attainment of targets. The management style of OMs is always positive, where their reaction and responses to systemic challenges have an empowering impact on their working environment.

They also use own private vehicles and petrol to conduct work-related activities without claiming a refund. This is because not having personal transport often prevents OMs from carrying out certain key activities such as conducting awareness campaigns, attending meetings and trainings. These acts of selfless altruism help to sustain and achieve clinic targets.

The failure by all sub-districts to give feedback to OMs on the progress of orders has resulted in OMs having to constantly follow-up with PHC Office and other sub-district staff members on unprocessed orders and unresolved issues. This has helped OMs to be kept informed of the progress of their orders, lost orders, delays, and any inaccuracies including knowing timeously if there are further actions required from their side to fast-track decision-making, since the sub-districts are not providing them with feedback.

Managers are sometimes faced with situations where they must think 'out of the box' and devise approaches to deal with volatile situations to solve unfamiliar problems. The PHC environment can often be unfavourable for OMs to smoothly manage their staff and perform all their management functions. Operational managers must deal with different recurring challenges which have been reported, but which remain unresolved due to inefficiencies at the sub-district level, including the lack of support by PHC Supervisors to provide adequate supervision. This is what OMs find themselves having to deal with on a daily basis. Their lack of involvement in planning and centralised decision-making also contributes to them constantly facing unforeseen challenges. Yet, it is left to the OMs themselves to improvise and mitigate around these challenges. If they cannot resolve these problems, it can cause irreparable harm to their clinics.

7.3.5. Improving management execution at PHC level

The PHC facilities have challenges with human resources in PHC facilities, this is seen with many human resource-related challenges which were shown by this study. As a result, a "primary health care human resource overhaul programme" should be implemented. Such a programme should include the training, development, and mentorship of OMs, conducted to strengthen their management and leadership skills and other competencies. This is vital since OMs have not received any management and leadership training since inception of their management positions and training will strengthen their management styles to suit the current challenging environment of PHC. They will be able to change their styles to suit the current settings they find themselves in. All these recommended interventions and strategies will strengthen their decision-making and give them confidence to execute their management functions, and enable them to evaluate the effect of their management style and the efforts they put towards performing mitigating actions. Induction should be a standard procedure before any operational manager resumes his or her position at a PHC facility. Continuous supportive supervision, mentorship and positive feedback is a recipe for success under the current conditions at the PHC level. This will change the current work environment into a developmental, safe space where OMs can continuously share challenges and successes, seek assistance and guidance, and be provided with solutions on a regular basis.

Reviewing current staff organograms, including reviewing all current programmes, filling all vacant positions, employing more CNPs to meet the recommended number required for implementation of all programmes, will relieve OMs from executing this function and neglecting their core management functions 80% of their time. Pharmacy Assistants must also be employed in each clinic to ensure that nurses are not overworked by taking on this additional function, which they are not qualified or skilled to do since they do not have Dispensing Licences. Experienced and suitable clinicians should be employed for each new programme before the programme commences. The recruitment and selection of staff members should be relinquished to OMs at PHC facilities, as they can fast-track and manage this process effectively, to ensure vacant positions are filled timeously without vacancies becoming frozen by the DoH due to long delays. These are some of the critical strategies to overhaul the human resource function and make it stronger. Importantly, this will resolve the problem of staff shortage in clinics, as research has shown that employees who are overburdened by heavy workloads, soon grow dissatisfied with aspects of their jobs, and become demotivated in general.

Strengthening the planning function and decentralising all key management functions and involving OMs in all the critical decision-making is essential to solving the current challenges. This can be done by involving OMs in all planning functions, by seeking their input, suggestions, and relinquishing some of the planning functions to them from the sub-districts. As much as management philosophy recognises different management functions and levels, completely limiting OMs when the challenges show that their input can help improve the current management crisis in PHC.

The decentralisation of the management of infrastructure and maintenance, planning, as well as financial management, and supply chain management should be done in such a manner that it does not disregard the current DoH leadership structure. A starting point would be relinquishing some functions to be implemented by OMs, on the understanding that they would be under the strict supervision of relevant sub-district personnel. This will ensure there is constant feedback and a fast-track decision-making process. Research has shown that decentralising these essential management functions can strengthen management at the PHC level, enhance the function of these key management functions, such as the procurement of resources; and lead to the provision of quality healthcare services and acquirement of positive health outcomes. Decentralisation has the potential to revive, overhaul, and strengthen management systems at the PHC level. Yet, as this study has shown, because these management functions are executed at the sub-district level, there remain many systemic challenges across all management components.

Infrastructural challenges can be resolved through relinquishing the maintenance function and have maintenance personnel employed locally at the PHC level to ensure there are no challenges with sending

job cards to the sub-district office. Urgent requests for maintenance can be processed swiftly and OMs will not carry the burden of having to use their own money to fix urgent maintenance issues.

Relevant and sufficient resources should be made available for the successful execution of clinic functions including making official transport available for conducting awareness campaigns, meetings, attending training, and supervision visits. Likewise, by making petty cash available, and making provision of all critical clinic equipment and supplies, will be effective strategies to enable the smooth operation and provision of quality health care services at the PHC level. The unavailability of many of these resources hinder and frustrate OMs from executing their management functions successfully and satisfactory. It compels them to carry the burden of unnecessary costs and using their own money and private vehicles. Making these resources available will be a great relief for them. It will help them focus on their core management functions, rather than running around trying to source and borrow supplies for patients to be served.

All OMs should be allowed to attend and participate in Cash Flow meetings, so that they can be able to defend their NSI requisitions and other purchase requests for all the things they need in their clinics. Their involvement will ensure that they present their requisitions, provide explanations, and convince the committee on the importance of their needs. This will prevent delays, as they will promptly address all questions during the meeting. The OMs will be able to hear directly about decisions made, instead of constantly following up with the sub-district PHC Office to receive feedback.

7.4. RECOMMENDATIONS TO ADDRESS THE RESEARCH PROBLEM

The following recommendations arise from the analysis of the data. These recommendations are based on the lived experiences of the OMs, the challenges the face, and how they have been improvising to alleviate the burden of the challenges they face daily when executing their management functions. The following measures are therefore recommended:

i. The planning function is the core function in any organisation, and it should be conducted with confidence and those who are involved in developing it should take ownership and pride in these plans. Currently, the sub-district offices have partially given this role over to the OMs, where OMs are told to develop clinic plans, but the sub-district offices will come back and change what has been formulated and included in the clinic plans by the OMs. This action has rendered the process a mere ‘compliance exercise’ to just ‘tick the box’ that it has been done. The sub-district should respect OMs, stop patronising them, and give full responsibility to the OMs so that they can take this task seriously, take full ownership and autonomy, to do it

thoroughly and effectively, and thereby ensure that the implementation of the operational plans brings success.

ii. The overall planning function which includes strategic planning, financial and budget planning, workforce planning and procurement planning should be relinquished to the PHC level to be done by OMs as these managers are better suited to execute the planning function more effectively because they have extensive knowledge of a clinic's needs, and are also responsible for the implementation and reviewing of these plans. This is also supported by the literature which advocates for the decentralisation of management activities to a lower level of the health care system.

iii. All standard required resources (e.g., official transport and money for petrol, photocopying machines, facsimile machines, laptops, desktop computers, and network/internet connectivity) should be budgeted for and made available to the clinics so that OMs are able to ensure that the implementation of plans is always done effectively and efficiently. This will ensure that OMs do not use their own money and have to keep borrowing equipment and supplies from neighbouring clinics to carry out the standard daily activities of their plans.

iv. All new programmes/interventions should be coordinated, planned, and costed properly, using approved project management standards and procedures (i.e., scope the project, define project objectives and activities, allocate all project resources in term of staff, finances, and other resource) and identify all clinics chosen to implement these programmes/interventions before they commence. It is unfair to hold OMs responsible for poor implementation when in most cases they must rearrange current inadequately staffed functional units to prepare for the implementation of the new programmes.

v. Operational managers should be involved in the recruitment and selection of their clinic staff. Their involvement is necessary to ensure that there are no recruitment delays and that this will prevent the freezing of unfilled posts. The current staff shortages significantly affect the successful implementation of management functions and the provision of quality health care services. The OMs understand the challenge caused by the shortage of staff, so their involvement is guaranteed to speed up the recruitment processes and the appointment of suitable candidates at the PHC level.

vi. Design and implement relevant training and development programmes for OMs, and conduct continuous management-related training to improve their skill levels, leadership abilities, and

competencies. Training should encompass compulsory induction, then implementation of all management functions which they are expected to perform, as all the research participants confirmed they had never received managerial training, such as on managing staff, planning, problem-solving and delegation skills, since being appointed to OM positions. Employing nurses without any management training and background, to a complex management/leadership position, with diverse functional areas to manage without any form of management training and mentorship programme is a situation destined for failure.

vii. Operational managers should be involved and lead the process of budget formulation for their clinics. This task must be decentralised to the PHC facilities level. The input from clinic managers is vital as they are the ones responsible for the implementation plans and allocation of resources during implementation.

viii. All OMs in all sub-districts should be allowed to attend Cash Flow meetings. They must also be allowed to participate, defend, and provide explanations on NSI requisitions that are being presented for approval. This will speed up the approval process, avoid non-approval of needed orders and ensure OMs get immediate feedback.

ix. Roving cars to and from clinics to sub-districts should be made available to travel every day to collect and deliver all the things that needs to be approved, including medical supplies, stationery, and equipment. This can be an interim intervention while DOH is devising a decentralisation strategy and reviewing OM's scope of work to include planning and all other key decisions that need to be made by OMs.

x. Review OMs current scope of work to include financial planning and management, budget setting, workforce planning, recruitment and selection of staff, management of procurement, management of petty cash, management of maintenance as these tasks can be executed effectively at the PHC level. Currently, there are many challenges and problems that could be resolved with involvement of OMs. This will be aligned to the WHO components of the health system and Systems theory which advocate for strengthening of all components since they are interlinked and interconnected.

xi. The nature and scope of work for OMs require them to travel to different destinations for diverse reasons. Provide each clinic with an official vehicle that can be used by OMs when they attend meetings, other staff members when they attend meetings, conducting awareness campaigns and doing any other official clinic duties. This might be costly, but should be

budgeted for and implemented as attainment of targets is dependent on it. Expecting OMs to utilise their own personal vehicles and petrol is unjust and unprocedural.

xii. DOH should add a layer of support for OMs in each clinic organogram and employ a full-time Deputy or Assistant OM, a candidate who has clinical qualifications and experience, technical and broad management skills, computer literate with public relations skills to provide assistant and support to OM for effective execution of management functions across seven management functions that have been identified to be ineffective and weak. This can be done during review of current staff compliment and organogram.

xiii. Employ permanent qualified pharmacy assistants at clinic level to ensure effective management of pharmacy rooms so that Staff Nurses can focus 100% on performing their clinical duties. Clinics are becoming big, patient numbers are increasing with many programmes on offer, and this task is becoming demanding as it needs to be done effectively to ensure there is no medicine shortage, loss, expiry, and effective dispensing to deserving patients. A qualified pharmacy assistants with pharmaceutical knowledge and expertise will be a great and relief to OM and Staff Nurses.

xiv. DOH must employ additional CNPs in all the clinics as a matter of urgency, because as it stands OMs are basically CNPs. They carry out CNPs duties for 80% or more of their time and only execute management function during weekends, afterhours and during spare time. One participant even said *"Operational managers are glorified CNPs."*

xv. A thorough analysis of the current programmes being offered at each clinic in comparison to current staff complement, population being served by each clinic, and WISN assessment reports need to be conducted to be able to develop new revised, realistic organograms. Operational managers should be involved in the investigative teams performing this analysing. This will be a starting point towards resolving the current chronic shortage of staff.

xvi. There is an urgent need to engage in a recruitment and selection drive to fill all vacant positions in all clinics as a matter of urgency. This should be easy to implement in the interim since these posts already exist and funded in the DOH staffing budget. The posts were only frozen because the sub-district took long to appoint candidate and fill the vacant posts.

xvii. Maintenance function should be relinquished to be executed at the PHC level because currently that function is non-existent. Clinics wait almost a year for maintenance personnel to come and

assess the reported problems. There is no official transport to be used by maintenance staff to travel from the sub-district to PHC facilities. Decentralising this function can also help in saving budget because currently cheap things are bought or fixed at a higher price while it is of poor quality, whereas it can be convenient and cheaper to source these higher quality product and services locally.

xviii. Make petty cash to be available at clinic level so that OMs can stop utilising own money for clinic cash purchases. Train OMs on how to manage and report on utilisation of petty cash. Should it happen that OMs ever used their own money, DOH should devise a reimbursement strategy for OMs to get refunds for monies used to do clinic duties and purchases. Strategically centralising it at sub-district where it is not easily accessible to those who needs without an approved reimbursement strategy and plan is not a wise idea.

xix. Provide PHC Supervisors with official transport so that they can visit all clinics and conduct effective, adequate, and supportive supervision as currently supervision visits have proved to be short, fault finding and not helpful. The nature of work for PHC Supervisors requires them to travel, with detailed and intensive supervision guidelines developed) since the employees they support are located far away from them. To make their work enabling and effective, they must be provided with official transport.

xx. Computer literacy, IT training and training related to data management systems utilised by clinics should be provided for OMs as they have not received such training but they are expected to compile reports and statistics and support data capturers in their clinic. Statistics and reports important and are used as determinant for success or failure, the DoH cannot afford to get this task wrong at any time.

xxi. DoH should enter into a rental agreement for photocopying/facsimile machines as the system of maintaining, repairing, and buying of ink is dysfunctional, most clinics go for over a year without these machines.

7.5. RECOMMENDED CONCEPTUAL FRAMEWORK TO STRENGTHEN HEALTH MANAGEMENT SYSTEMS

To strengthen the entire health system, all six management systems should be strengthened at the PHC facility level. The study has shown that presently, OMs play a minimal and insignificant role in the implementation of the six components of the health system. They are prevented from executing the six

core and critical functions which fall under these management systems because by design, these functions are centralised at the sub-district level. This is inexplicable, because not allowing OMs to execute these functions, is the source of most of the challenges they experience on a daily basis, as all of them originate from and are linked to the fact these functions are dysfunctional and ineffective, and currently there is nothing which OMs can do since this falls outside the scope of what they are permitted to do.

This study showed that OMs should be involved through seeking their input, suggestions, or relinquishing some functions and providing constant feedback to keep them informed as they play a huge role in management of these systems at the PHC level. They ultimately play a significant role in strengthening the health care system. They should be involved in the implementation of all six core components of the health system at their level of operation. The results of the study further showed that OMs should also be involved in the implementation of the seventh component which is the management of infrastructure and maintenance. Excluding OMs from executing (processing, approving, and managing) all the seven management functions will have a negative effect on the successful execution of these functions at the PHC level.

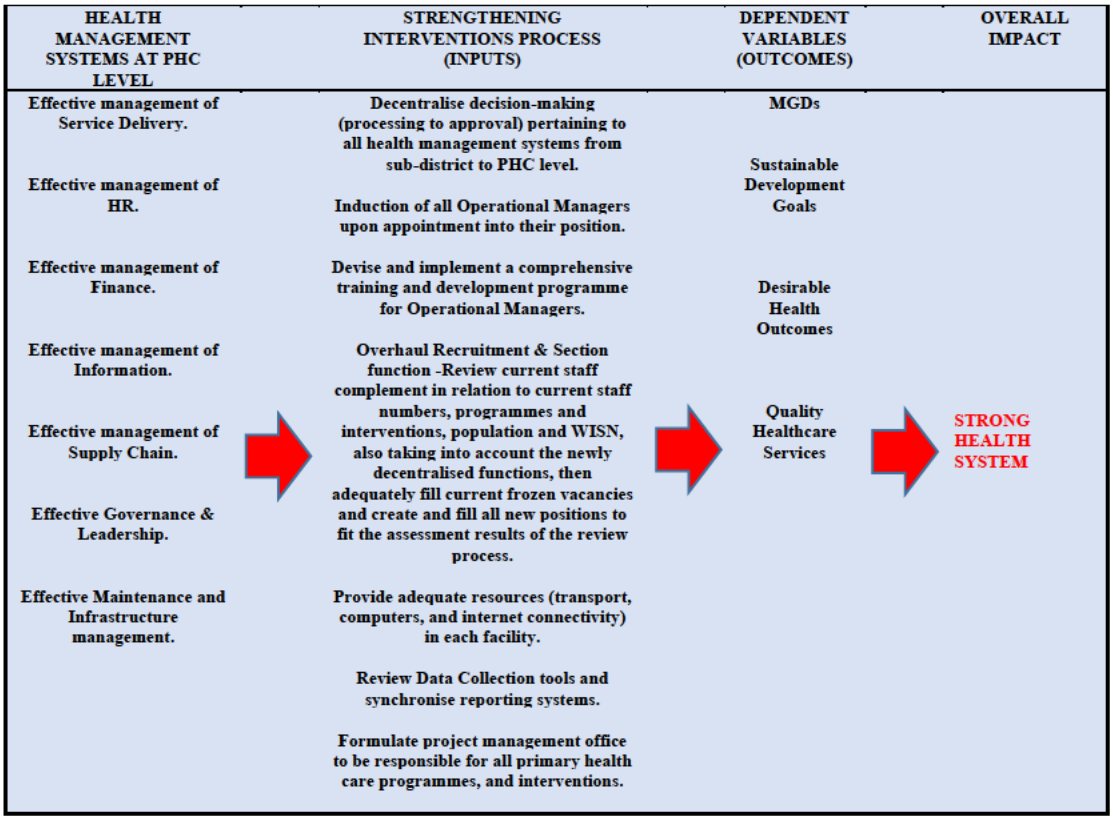

Figure 7.2. Conceptual framework: Strengthening health management systems at the PHC level

Source: Interviews Data (2018)

7.5.1. Conceptual framework: Strengthening health management systems at the PHC level

Figure 7.2. depicts the conceptual framework for strengthening implementation of health management systems at the PHC level. It shows that the seven health management systems at the PHC level should all be effective for effective implementation and functioning of the facilities. These health management systems are interconnected and interrelated. For the seven health management systems to be effective, some strengthening interventions (inputs) must be made to help address system-wide challenges faced by OMs when executing their functions at the PHC level. The implementation of strengthening interventions will lead to the achievement of MGDs and SDGs, desirable health outcomes and quality health care services, which will ultimately lead to a strong health care system.

7.5.1.1.Seven health management systems at the PHC level

Seven health management systems which are human resources, finance, information, supply chain, governance and leadership, maintenance, and infrastructure, and lastly service delivery are all management systems which OMs are responsible for execution ate PC level. All the identified seven health management systems need to function effectively for the entire health system to be strong and functional at the PHC level. All these management systems/components are interrelated and interconnected. This means each management system is equally important and none should be neglected to ensure a smooth and effective health system. The inefficiencies in any management system, affect the other systems and in turn affect the entire health care system at the PHC level. The systemic way of this, shows how if this is achieved at the PHC level, it can escalate and lead to effective health system at the sub-district, district, national, and country level.

7.5.1.2. Strengthening interventions process (inputs)

From the analysis of data, it was established that to achieve effective health management systems, major significant interventions should be implemented. These include:

i. The decentralisation of decision-making activities pertaining to all seven identified health management systems from the sub-district to the PHC level. This should entail processing to approval of all the decisions. It has been proven that the source of most of the significant challenges affecting the execution of management functions at the PHC level, including attainment of targets and provision of quality health care services, emanates from the non-involvement of OMs. Allowing them to play a role and own this process has the potential to address the identified challenges without having to unnecessarily expend scarce financial resources.

ii. Induction of all OMs upon appointment and inception of their duties should be conducted. This will help them understand the depth and scope of their new role, expectations, and how their success will be evaluated. This action can also make certain that the uncertainties and questions about the job are addressed, including being informed about the challenges and being given the skills to solve them even before they are encountered. Induction will force the DoH to formulate a manual for OMs, and induct them instead of letting them engage in trial and error.

iii. Devising and implement comprehensive training and development programme for OMs should be implemented. The emphasis is on "comprehensive" due to the complex nature of their role and the complex nature of the health system. The programme should entail training and developing them in all the identified seven health management systems, and should be customised to suit all the functions and activities they are expected to perform at the PHC level. This is essential considering that OMs only have nursing experience and expertise, so equipping them with relevant management and leadership skills will ensure they are able to perform their OM duties effectively, and be able to face and resolve the complex and diverse issues of their position.

iv. Overhauling recruitment and selection function is needed as an urgent start. Study results revealed that it can no longer be ignored that, currently all PHC facilities have chronic shortage of staff. A thorough analysis and review of current programmes that are being offered needs to be done to identify exactly where the shortcomings lie. The review should be aligned to the population each facility is expected to serve, WISN requirements and look at the frozen vacancies. This should enable the formulation of new organograms.

v. A strategy to work on provision of the adequate key resources such as transport, computers and internet connectivity should be done and implemented. Official transport is a necessity for OMs to conduct some of their management functions such as attending numerous meetings, conducting awareness campaigns, and performing other work-related errands. Currently, all OM are using their vehicles and petrol without claiming any refunds. Computers and network/internet connectivity is required to produce certain work documents such as reports and statistics. These are crucial for effective reporting on targets which are an indicator of clinic performance.

vi. Reviewing all current data collection tools (registers, patient's charts, databases) and synchronising reporting systems should be conducted to reduce the time clinicians/nurses spend on capturing the same patient's information in different registers. This will ensure time is

dedicated on diagnosing, treating, and serving patients, which yield quality health care provision, and will in turn lesson patient complaints due to long waiting times.

vii. Formulation of a project management office which will be responsible for development of project/programme plans for all new programmes or interventions to be initiated in PHC facilities. This office will ensure programmes and interventions are costed and planned properly to determine project objectives, goals, scope, resources, and timelines before implementation. This will allow the DoH to make finances available before new programmes are implemented.

7.5.1.3. Outcomes

The outcomes are dependent on interventions. The implementation of strengthening interventions will lead to the achievement of MGDs and SDGs, desirable health outcomes and quality health care services, which will ultimately lead to a strong health care system.

7.6. STUDY LIMITATIONS

The challenges that were encountered while conducting this research were as follows:

i. Not all OMs from 56 PHC facilities in the KZN DoH uMkhanyakude Health District were interviewed as some clinics are in areas where the roads were very bad and the researcher could not reach those clinics driving in a small car, but 19 participants (17 OMs across all 5 sub-districts and 2 PHC Supervisors) in total participated in answering in-depth semi-structured interviews.

ii. Some OMs could not participate as they were either busy or were suddenly called to a meeting or training workshop on the dates of the scheduled interviews. Accordingly, a total of nineteen (19) participants were interviewed for the study.

iii. The study findings could not be generalised to the entire Department of Health in KwaZulu-Natal as the population was narrowed to the KZN DoH uMkhanyakude Health District, but the study contributed significantly to the body of knowledge.

iv. The interviews were very long (averaging 70 minutes each), such that some identified potential respondents refused to participate citing that they had heard from other OMs who had been interviewed and that they were long. It was explained however that the interview duration

depended on the participant's responses and available time, so they would not be forced to continue when they became tired as interviews could be done in parts with breaks in-between.

v. The planned focus group discussion did not materialise as it was difficult to get OMs in one venue on the same day as these managers are extremely busy, but the interviews were in-depth with open-ended questions to ensure the participants were given opportunity to explain everything pertaining to their experiences. The composition of participants (both OMs and PHC Supervisors/Managers) was purposive and appropriate and it supported the scope and depth of knowledge on the topic that was examined. Operational managers and PHC Supervisors/Managers had the capability to provide answers to all interview questions as they have experience and are involved in managing the implementation of health management in PHC facilities on a daily basis, with the latter solely responsible for supervising and supporting OMs. The literature has shown that, in qualitative studies where in-depth interviews are used as a data collection method, a sample of twelve (12) is sufficient to attain saturation. Mason (2010) and Boddy (2016) have emphasised that for studies using qualitative interviews such as this one, the sample size should be determined by reaching saturation where no new content is forthcoming and when the new content is not adding any value to the study purpose and objectives (Boddy, 2016; Mason, 2010). In this study, after conducting nineteen (19) in-depth interviews, saturation was reached as there was no new information and no new content that could be derived from the responses that were given by the participants.

7.7. RECOMMENDATIONS FOR FUTURE STUDIES

Despite the limitations of the study, this study has identified several weaknesses and made practical recommendations that will benefit the DoH. The DoH also stands to benefit from the implementation of the study recommendations and recommended strategies as these are believed to help improve management systems in the PHC facilities.

The recommendations for future studies are as follows:

i. The study was conducted in a rural area in one district. A comparative study could be conducted in an urban district of the Department of Health to establish if the role played by OMs in their implementation of management systems, including the things they did to improvise and alleviate the burden of the challenges they faced daily, were the same as those in urban districts.

ii. The same study can be conducted in another rural district to compare the findings of two rural districts, from either the same province, or from different provinces.

iii. A study using a mixed-method approach, wherein the researcher can use both quantitative and qualitative methodology, can be conducted to further interrogate the impact the identified challenges have on OMs when they try to execute their management functions.

7.8. CONTRIBUTION TO THE BODY OF KNOWLEDGE

The findings of the study provided the perspective of managers (primary health care managers or front-line managers) at primary health care level, and showed that what these managers do should not be neglected as it is important and critical in strengthening the entire health system. Although strengthening management has been acknowledged broadly, but little research has been conducted to assess how management strengthening at PHC level can contribute to strengthening the entire health system. The results showed that this layer or level of management (PHC management) is as important as other levels in the District Health Management team. Secondly, in South Africa, there remains little research about health managers' experiences at any level of the health system.

The findings and recommendations of this study identified challenges OMs have to endure on a daily basis and showed that these challenges at this entry point (PHC level) are systemic and are the root cause for failure of the entire health system. The results further provided perceived strategies that can be implemented to lessen the effect of the identified challenges. These strategies are evidence-based. What the study managed to do, is to show the interconnectedness of the health system, and therefore confirmed that the approaches to strengthen the health system should be system-wide approaches since the weakness of the system at any level affects the entire system, and the effects occur at multiple levels. The study further reinforces and supports usage of the system theory approach in strengthening management systems at PHC level and at all other levels within the health system.

The findings showed that operational managers' involvement in executing management functions at PHC level is minimal and insignificant in management of finances and supply chain because key management functions which are the source of most of the reported perceived challenges are not performed at PHC level. This is because the current management structure at district and sub-district level does not permit these management decisions to be performed by OMs or to be performed at PHC level. Operational managers are not the ones hindering or preventing implementation of strengthening interventions, but the environment in which they are operating does not permit them to execute some of the key management functions which could enable the effective implementation of the planned strengthening interventions.

The results further revealed that the environment at PHC level presents many challenges and inefficiencies, and that these challenges are found in all management components. It is these challenges which prevent OMs from executing their management functions, but these managers are not deterred by that, as all of them sacrifice their time, money and personal possessions in order to ensure the core function i.e. provision of health care is executed successfully.

All these inefficiencies are not as a result of OMs, instead OMs even improvise by borrowing supplies from other clinics as their intention is to carry out their duties no matter what the challenges in the clinic environment are. This study showed that OMs are not a stumbling block towards implementation of strengthening interventions and implementation of programmes. These managers are faced with unfavourable work environments which are full of challenges, and they even sacrifice their own financial resources (Petty Cash, buying or paying for maintenance and usage of own cars). The studies which advocate that OMs should not be punished for inefficiencies and failures at PHC level are supported.

Rather than focusing on how the service delivery component of the health system can be strengthened, which other studies have done, this present study found that all components of the health system can be strengthened at the PHC level through the application of a systems approach.

Proper PHC management training and a strengthening strategy must be put in place in order to address all the identified significant problems within all the seven components in the PHC environment. The focus should not be on chasing targets and dodging taking responsibility, but rather instilling a mindset that their role is systemic-wide and achievement of targets is attainable if all other management functions are executed effectively.

7.9. RECOMMENDATIONS ON SIGNIFICANCE OF RESEARCH FINDINGS

This study prioritised implementation research and provided answers to the research questions including the provision of possible strategies that could address the research problem. The study managed to show that some of the strategies that can be implemented to help OMs to better execute their management functions are practical in nature and do not require financial budget but rather expansion of the scope of work for Oms. This includes giving them power, expanding their roles and involving them in making certain key management decisions, reviewing decision-making authority and partially involve them in the decisions which are currently centralised at sub-district level, as these are linked to and cause many challenges and inadequacies which require OMs inputs and resolution. OMs should be allowed to plan, monitor and control some of these tasks, even if the sub-district PHC Office and other sub-district staff managers are leading.

The study also showed that there should be a form of re-organisation and relinquishing of some management functions e.g. keeping Petty Cash at sub-district offices and expecting PHC facilities to claim every time when a need arises as it is impractical and ineffective, even when it is known and there is proof that primary health care facilities need the cash almost on a daily basis as OMs end up utilising own money without claiming it back. OMs can be trained to monitor and report on petty-cash spending every month to save them from unfairly incurring this financial burden.

It was further revealed that the approach to strengthen the weak health system at primary health care level in UMkhanyakude rural district should be the systemic approach since the challenges which were identified to be hindering success and preventing OMs from successfully executing their management duties are found within all the seven components of management system. These management components are finance, human resources, information and data, supply chain, service delivery, infrastructure as well as guidance and leadership. The challenges identified have linkages and are interconnected and lead to further problems and challenges to other management components. This means for overall system strengthening, leaving some challenges unresolved will not be enough to strengthen the weak health system, improve health outcomes and therefore MGD and SDG goals will not be met without implementation of systemic strengthening approaches.

The study added by supporting literature in showing that ineffective human resource management systems at primary health care level should be addressed with immediate effect as they lead to delays in recruiting and filling vacant positions which impacts negatively to an already lean staff complement within the primary health care sector. This leads to remaining staff members having to take on additional roles to help in those unfilled positions.

The study managed to take into consideration the experiences of those responsible for implementation at PHC level, and examining all the barriers that lead to governance failure as these were found to help improve health outcomes and the standard of health care, governance at the clinical level.

7.10. CONCLUSION

Operational managers by virtue of their positions are involved in governance and leadership, management of human resources, finances, information and data, supply chain, service delivery, and infrastructure. But they are not involved in making critical decisions pertaining to these management systems as most of the decisions are executed at the sub-district level. All what OMs do is to send all requests, communication, forms etc., for processing and approval to the sub-district office. This renders their positions to resemble a mere post office. Operational managers are not a barrier to the

implementation of strengthening interventions and the execution of management functions, but they are prevented from being fully involved in the execution of key decisions such as the development of operational plans as their plans are constantly changed without providing them with valid reasons. They are also not permitted to play any role in budget planning and monitoring; monitoring of expenditure; workforce planning; recruitment and selection of their staff; succession planning; management of procurement, or the management of infrastructure maintenance. Most of the challenges they face originate from their exclusion from making these critical decisions. This was evident from the success of all the functions they do perform at the PHC level, and the strategies they perform to mitigate challenges and improvise, to try help to try aide in the functions they are not permitted to play a role. The challenges faced by OMs have presented them with an environment that is not conducive for them to manage, where such an environment influences the success or effectiveness of their management.

The study findings further demonstrated that implementation of health management systems at the PHC level is weak, with all identified seven management systems shown to have challenges, but this is not as result of OMs being barriers to implementation and execution. They are not involved as the environment is not enabling them to make key management decisions as most of these are centralised at the sub-district level. They are faced with a variety of unresolved systemic challenges but currently they are sacrificing much to try to get operations running because they are blamed for non-implementation, poor quality service delivery and poor health outcome. The main challenges identified are centralised decision making; shortage of staff with shortage of clinical nurse practitioners being a key challenge as it directly affects OMs by consuming 80% of their time that could be used to perform management functions. Other challenges are unavailability of critical resources like medical and other supplies, equipment, petty cash, vehicles, and photocopiers. This is due to the dysfunctional supply chain management function, which is centralised at the sub-district level. The results endorsed the need to continue with implementation of management strengthening interventions which should be aimed at supporting and strengthening the role that is played by OMs as they are placed at the forefront and at the entrance of the health system. These local managers lead execution of management systems and implementation of service delivery and management strengthening interventions as result their role should be reviewed to include planning function and allow them to perform of key management decisions. All the management functions pertaining to primary healthcare operations should be relinquished from sub-district to the PHC level. Operational managers should be provided with all resources they need (especially petty cash and transport) so that they can successfully carry out all their management functions and stop utilising their monies and their cars; focus executing their management functions and stop standing in for clinical nurse practitioners; stop borrowing from other clinics; stop forsaking their leave days; and stop working during spare time and weekends. These managers must be supported as they have not received any management training and most lack information technology

and computer literacy skills. PHC Supervisors must be provided with official transport so that they will be able to provide adequate support and supervision to OMs which is developmental and not fault-finding and demeaning.

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Annexures

Annexure A

Permission to Conduct Research: Gatekeeper's Letter

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

Physical Address: 330 Langalibalele Street Pietermaritburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email:
www.kznhealth.gov.za

DIRECTORATE:
Health Research & Knowledge Management

HRKM Ref: 492/17
NHRD Ref: KZ_201712_002

Date: 15 December 2017
Dear Mrs ZF Kubheka
UKZN

Approval of research

1. The research proposal titled '**Implementation of health management systems in Department of Health primary health care facilities in UMkhanyakude District, KwaZulu Natal'** was reviewed by the KwaZulu-Natal Department of Health.

   The proposal is hereby **approved** for research to be undertaken at all hospitals and clinics within UMkhanyakude District.

2. You are requested to take note of the following:
   a. Make the necessary arrangement with the identified facility before commencing with your research project.
   b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.

3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

[redacted]

Dr E Lutge

Chairperson, Health Research Committee

Date: 19/12/17

Fighting Disease, Fighting Poverty, Giving Hope

Annexure B

Invitation to Participate in Study and Informed Consent Form

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL
For research with human participants

Information Sheet and Consent to Participate in Research

Date:

Greetings,

My name is Zamanguni Kubheka from University of KwaZulu Natal, School Of management, IT & Governance, email - Kubhekaz1@ukzn.ac.za; Tel- 031 -260 2646 / 082 859 4076

You are being invited to participate in the study that involves research on how Operational Managers have been implementing health management systems in primary health care facilities in Department of health in UMkhanyakude district.
The aim and purpose of this research is to evaluate the role that have been played by operational managers on implementation (leading, managing end executing) of health management systems at primary health care level of operation.

The study is expected to include 61 participants in total. This includes 56 Operational Managers of primary health care facilities in all sub-districts within UMkhanyakude District and 5 Chief Executive Officers from the five sub-districts. It will involve the following procedures conducting open-ended interviews and /or focus group discussion. The duration of your participation if you choose to participate and remain in the study is expected to be 30 minutes. The study is not funded by any organisation.

The study does not involve any risks or discomfort. The study will provide no direct benefits benefits to participants. The study will contribute by adding to the body of knowledge by providing evidence on how to formulate a framework to strengthen the roles and functions of operational managers placed at PHC level can be developed. The findings of the study will contribute towards formulation of relevant and effective (evidence based) interventions aimed towards strengthening management in primary health care facilities. The management strengthening strategies in the District Health Plans will address identified core problems faced by Operational Managers in primary health care facilities.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (approval number: HSS/2107/017D).

In the event of any problems or concerns/questions you may contact the researcher at (provide contact details) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban 4000 KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557- Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at

any time with no negative consequence. There will be no monetary gain from participating in the study. Your anonymity will be maintained by the researcher and the School of Management, I.T. & Governance and your responses will not be used for any purposes outside of this study.

All data, both electronic and hard copy, will be securely stored during the study and archived for 5 years. After this time, all data will be destroyed.

If you have any questions or concerns about participating in the study, please contact me or my research supervisor at the numbers listed above.

Sincerely

(Zamanguni Fortunate Kubheka)

CONSENT TO PARTICIPATE

I.....have been informed about the study entitled "**Implementation of health management systems in Department of Health primary health care facilities in UMkhanyakude District**", KwaZulu Natal, by Zamanguni F. Kubheka.

I understand the purpose is to evaluate the role that has been played by operational managers on implementation (leading, managing end executing) of health management systems at primary health care level of operation.

I have been given an opportunity to ask questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if injury occurs to me as a result of study-related procedures.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher on tel - 031 260 2646 / 082 859 4076, e-mail - Kubhekaz1@ukzn.ac.za

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X 54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

I hereby provide consent to:

Audio-record my interview / focus group discussion	YES / NO
Video-record my interview / focus group discussion	YES / NO
Use of my photographs for research purposes	YES / NO

_____ _____
Signature of Participant **Date**

_____ _____
Signature of Witness **Date**
(Where applicable)

Signature of Translator (Where applicable)	**Date**

Annexure C

Research Instrument: Interview Guide

Key Informant Interview Guide: Operational Managers

Implementation of health management systems in Department of Health primary health care facilities - in UMkhanyakude District, KwaZulu Natal.

Introduction: Read this in conjunction with the consent form

My name is Zamanguni F. Kubheka, from the University of KwaZulu Natal, School of Management IT and Governance. I am not from the area nor do I work in the area.

We are conducting this study to explore how you, as operational managers, have been implementing health management systems in primary health care (PHC) facilities of UMkhanyakude district.

The aim is to assess and understand the role that you have played on implementation (planning, organizing, leading and controlling) of health management systems at primary health care level of operation. Basically we want to understand how you have executed your management duties.

The study will help us better understand challenges, enablers for success, strengths and weaknesses of PHC operational management, and suggest evidence-based strategies for improving and strengthening management systems at primary health care level. The findings might help in formulating and proposing a strengthening framework for Operational Managers to improve health management systems and functions at primary health care level in order to have effective health system and improve health outcomes.

Some questions that I will be asking you are personal, you are not forced to answer these questions, but it will be very helpful for my study for me to know this.

This information will be kept confidential. Nothing you say will be personally attributed to you in any reports that result from this interview.

All of the reports will be written in a manner that no individual comment can be attributed to a particular person. None of the questions are of a personal or sensitive nature, but if you feel that there is a question you would not like to answer, you are free to do so.

Are you willing to answer my questions? If yes please sign the consent form.

Do you have any questions before we begin?

1. Back ground

Before we begin with our discussion, please could you introduce yourself and your position / title in this PHC?
(Your name will not be used in the write up of this data. If you feel uncomfortable, you do not have to tell me your name)

i. How long have you been working in this facility?

ii. How long have you been working as an Operational Manager?

iii. How many staff in your clinic?

iv. How many staff directly report to you?

v. Who are they?

vi. Who do you report to?

vii. What is you level of education? Your qualifications / professional training

viii. Have you received any management training since you started working as an Operational Manager and Dept of Health?

If so, which trainings have you received?

2. Key Research Questions

2.1 How have you been involved in management of workforce / HR in this facility?

2.1.1 How are you involved in recruitment & selection of staff?

2.1.2 How are you involved in managing retirement / resignation / leaving of staff?

2.1.3 How are you involved in performance management, setting of performance agreements, performance review and rating? If so, please explain

2.1.4 How are you involved in provision of benefits and compensation for staff? (Rewards, benefits, bonuses

2.1.5 How are you involved in promotion of staff?

2.1.6 How are you involved in the training, development and mentoring of staff? (Do you formulate staff training plans, do you provide some training, or you schedule training of staff and send them for training)

2.1.7 How are you involved in motivation of staff?

2.1.8 How are you involved in disciplining staff , ensuring that they adhere to legal requirements, SOPs, policies, procedures; firing of staff, issuing of warnings

2.1.9 How are you involved in management of leave?

2.1.10 How have you been involved in managing overtime and payment?

2.1.11 How have you been involved in maintaining good & safe working conditions/

2.1.12 How have you been involved in maintaining good working relations between employees at PHC level?

2.2 How have you been involved in management of finances?

2.2.1 How have you been involved in financial planning, setting of budgets? (identifying things to be bought).

2.2.2 How have you been involved in management of budget? (controlling expenditure, management of implementation of budget).

2.2.3 How have you been involved in managing cash flow; Petty cash etc?

2.2.4 How are you involved in financial reporting (monthly/weekly/yearly)?

2.2.5 What else do you do in terms of managing finances?

2.3 How have you been involved in management of medical supplies and equipment?

2.3.1 How have you been involved in procurement / ordering of stock/medical supplies / stationery/ equipment? (selection of suppliers, paying of suppliers)

2.3.2 How have you been involved in storage of stock/medical supplies / equipment?

2.3.3 How have you been involved in managing warehouse?

2.3.4 How have you been involved in managing inventory (ensuring enough & safe medical supplies)

2.3.5 How have you been involved in managing disbursement of medicine to patients?

2.3.6 How have you been involved in management of infrastructure / maintenance

2.3.7 What else do you do in managing medical supplies and equipment

2.4 How have you been involved in management of data / information?

2.4.1 Is your PHC meeting the set targets? Is your performance meeting set standards?

2.4.2 How have you been involved in setting of targets?

2.4.3 How have you been involved in managing capturing of data

2.4.4 How have you been involved in reporting? Who do you send reports to?

2.4.5 How often do you send your reports? (weekly/ monthly/ quarterly)?

2.4.6 What other activities of pertaining to management of data have you been involved in? Talk me through them, what is your role?

2.5 How have you been involved in management of service delivery?

2.5.1 What health care programs are offered in this facility?

2.5.2 What has been your involvement in management of health care programs / service delivery?

2.5.3 Which programs do you manage or supervise?

2.5.4 What have been your involvement in improving / strengthening service delivery?

2.5.5 What other activities do you do concerning service delivery or implementation of health care programs

2.6 How have you been involved in planning, leadership and governance

2.6.1 How have you been involved in formulation of strategic plans / operational plans/ business plans/ implementation plans / other strategies (mission, vision/goals)

2.6.2 How have you been involved in setting of objectives / targets / timeframes?

2.6.3 How have you been involved in ensuring implementation of strategies?

2.6.4 How have you been involved in formulation of & allocation of duties, tasks and activities aimed at implementing plans or strategies?

2.6.5 How have you been involved in allocation of resources to ensure implementation of strategies?

2.6.6 How have you been involved in reviewing implementation of strategies / plans?

2.6.7 How have you been involved in formulating remedial action when you see that plans are not working

2.6.8 What has been your involvement in planning, organising and leading all activities taking place at the clinic? (list those activities)

2.6.9 What meetings do you attend external to the clinic?

2.6.10 What meeting do you attend internal to the clinic? Which meetings do you chair?

2.6.11 Which committees are you involved in?

2.6.12 How have you been involved in leading & providing direction to the staff?

2.6.13 How are you involved in supervision of staff ?

2.6.14 Tell me more about decision-making & problem solving, What do you do & what do you escalate?

2.7 Beside the six management components that we talked about, what other management functions / activities have you been involved in? How have you been involved?

2.8 What barriers / challenges have you faced when managing at PHC level (talk about the six components / building blocks of the health system?

2.8.1 HR

2.8.2 Finance

2.8.3 Medical Supplies / equipment / infrastructure

2.8.4 Data / Information

2.8.5 Service delivery

2.8.6 Planning & Leadership & Governance

2.8.7 Beside the six management challenges, what are other major challenges / difficulties you are facing when carrying out management functions?

2.8.8 How have challenges affected your carrying of management functions and service delivery?

2.9 How have you managed to successfully carry out your management duties?

2.9.1 What strategies or things you have done to try solve problems to be able to better execute your management duties?

(Try to talk in relation to all six components)

2.9.2 What have you done to overcome the challenges?

2.10 What strategies do you feel should be implemented to help you better execute your management duties at PHC level?

2.10.1 What would you recommend can be done to help improve management at PHC level?

(Talk about strategies to improve each of the sic components)

2.10.2 Do you get any support to help you implement or carry out your management duties or to tackle your challenges?

-If so, where do you get it?

-If not, who do you think should support Operational Managers?

-What kind of support you think, is needed by Operational Managers?

2.11 What else do you want to share with me with regards to your experience as a manager for this PHC or on implementation of health management systems?

……***Thank you for your time***……..

Annexure D

Sample Field Research Transcript

Transcript – [redacted]

Int = Interviewer

Part = Participant

The purpose of interview was explained by the Interviewer to the participant who is an Operational Manager for [redacted] clinic. It was also explained that the responses given by the participant will be kept confidential and won't be shared to other parties.

1. **Background Information**

Int: We will first start with background information then we will move to talk about the key questions. Please tell me your name.
Part: My name is [redacted]
Int: How long have you been working in this facility?
Part: In this facility I have been working for [redacted].
Int: And how long have you been working as an Operational Manager?
Part: I started in [redacted]
Int: Previously you were working as what?
Part: I was working as a CNP ie. Clinical Nurse Practitioner (or you can say Midwife Specialist).
Int: Ok. This clinic is very big, it's like it is a hospital. Tell me how many staff members are employed in this clinic?
Part: Yes it's very big, like I still have to count. But I think they are about 38 or 39, even though I am not exactly sure about the number.
Int: Ok. Are there any unfilled vacancies in your staff-compliment?
Part: Yes, there are unfilled vacancies. Midwife Specialist post that I was occupying is still vacant, it has not been filled since I vacated it, because I took over when there was an Operational Manager (OM) occupying OM position.
Int: Oh ok
Part: There is also a vacant post of Professional Nurse (PN) who retired in April this year, and it hasn't been filled till today. There are other old vacant posts that became vacant long-time ago, but those ones were frozen because they said they were not filling in any old vacant posts. They said they will only fill the two vacant posts (the one that was occupied by me as Midwife Specialist and the one for Professional Nurse).
Int: Why were the other posts frozen?
Part: Because of financial constraints. They said if some staff member leaves, the clinic need to advertise and fill that vacant post as soon as possible because if the clinics take long to fill them they become frozen.
Int: Why don't clinics advertise immediately?
Part: No, I am not sure, maybe because of issue of finances or budget constraints that's what they say. Just like the ones that we motivated for this time. We motivated for these posts in September, but we heard that now they are not going to advertise posts because government they say, they should take staff from where there is less workload and deploy people where there is more workload.
Int: Is there or are there any facilities with less workload and more staff?
Part: Not at the moment, most of the facilities have a shortage of staff. With us it is terrible this time, hhayi it is worse. We have two Professional Nurses who are on study leave. The one is doing Advance Midwifery in [redacted]. I think in [redacted] hospital (what is it?……I am not sure but it is a hospital in [redacted], ja I think it is [redacted] hospital).
Int: Ok, and the other one?

Part: The other one is doing PHC training in [redacted]. So the one in [redacted] is not even coming back soon, she left in [redacted] this year (on the 1st of [redacted] she was starting), so she will be coming back next year in [redacted] at the end of contract. So there is no way where you can say she will come this month and work or after three months, no the whole year she will be away.
Int: And does the one in [redacted] come to help?
Part: The one who is in [redacted] sometimes when she is not in the block, she is working here, but in [redacted] she is going on leave. So shortage is going to be there.
Int: Wow this seems to be tough. And out of the [redacted] staff members how many report direct to you?
Part: All of them. And I am not counting the ones who are on contracts in this [redacted], like I am not counting EPWP.
Int: All [redacted]?
Part: Yes all of them.
Int: So the structure is flat?
Part: Yes. It's me (OM), then below it is CNPs, its Enrolled Nurses and further other staff, and all of them report to the OM.
Int: Why is it like that?
Part: I can say they say because it is this type of facility, like because it is a Primary Health care facility, the person that everybody should report to is the Operational Manager because you are the overseer of everything that is happening in your facility.
Int: So this [redacted] excludes EPWPs?
Part: Yes
Int: How many do you have?
Part: Three
Int: Ok. And how many CCGs do you have in your facility?
Part: We have [redacted] CCGs, and they are also all reporting to me.
Int: They don't have a Supervisor?
Part: No, and currently they say there shouldn't be someone from the hospital who is going to supervise CCGs. On a weekly basis CCGs come to the clinic, and I have to supervise them.
Int: Wow, you are supervising quite a huge number.
Part: Yes. So it is that [redacted] CCGs and [redacted] staff members, in total it is like a staff of [redacted], and I have to make sure that everything is going smoothly. Also there are changes now with the CCGs, at first they were having [redacted] Supervisors among them, but now there are no Supervisors among them they all report direct to me now.
Int: Mmm that is a lot. And who do you report to?
Part: [redacted] who is PHC Manager.
Int: Ok. What about [redacted] the PHC Supervisor, do you also report to him? I am asking because some Operational Managers in this sub-district are saying they report to Sir Nxumalo and some are saying they report to [redacted]. Please tell me how does this reporting arrangement works in this district?
Part: [redacted] is our Supervisor. So we report to [redacted] and then [redacted] who is a PHC manager and Nursing Manager ([redacted]).
Int: So you report to all three of them?
Part: Yes
Int: And how does this reporting arrangement works? Is it easy? Is it not confusing? Please tell me more about this experience
Part: It is not too confusing because sometimes you find that I want to report to the PHC Supervisor and PHC Supervisor is not there, then you go directly to the PHC Manager, if the Manager is not there I go directly to Nursing Manager. And they make sure that whatever we

discussed with another is shared amongst them so that they are on par with everything that is happening. There are things that I can discuss with the Supervisor and they can be solved amongst us instantly between the two of us, and there are those that Supervisor has to take to the Manager and has to take to the Nursing Manager and then it goes to the CEO.
Int: Wow it seems to be working perfect. So tell me about the qualifications that you have.
Part: I have done a four year Diploma in General Nursing, Community, Psychiatry and Midwifery
Int: Does this Diploma included all the four components you have just mentioned?
Part: Yes
Int: Ok. What qualification have you done?
Part: I have done Diploma in Primary Health care, Diploma in Advanced Midwifery and then there are those other short courses like computer
Int: And what was your area of interest
Part: It is Midwifery
Int: Why if I may ask?
Part: I was the one who was always having complications, like I always had complicated cases. So whenever they say there is someone who is in labour, definitely there will be a complication. So I decided, no I don't like Midwifery but I know I am going to be a hazard if I don't study more, so I went on and did advanced Midwifery and eventually I grew to love it. That is my area, you know when you talk of a mother and child, I know it in and out. Even if there is an emergency at night I come, if there is breach delivery they call me, if there is compound presentation they will call me.
Int: Do you have another Midwife here in this clinic?
Part: No we don't have a Midwife nobody filled in my position when I was promoted to being an Operational Manager.
Int: What other qualifications do you have?
Part: Nursing Administration Diploma
Int: Ok. So were you funded by the Department of Health or you did all these qualifications on your own?
Part: With Primary Health Care diploma, I was funded by the Department and so is Advanced Midwifery. Nursing Administration I did it on my own.
Int: And General Nursing?
Part: General Nursing I was trained by Department of Health but in the [redacted].
Int: Oh, so I see there are so many staff members with your qualifications who are coming from [redacted]? Did you come as a group around the same time?
Part: When we came, we came from different areas. Like me, I studied at [redacted] and then I came to [redacted] posts were frozen after we completed the course, then we applied in [redacted] and they took us.
Int: Ok I see. So tell me since you became Operational Manager, have you attended any management training, like training that is not programmes related?
Part: Mmmmm, no, no, no except those programme related training. No management training.
Int: And have you attended any induction or orientation programme to induct you on your new role?
Part: No, I have orientated myself because the Operational Manager who was here before me, I was working hand-in hand with her, so I know most of the things because I was always standing in for her when she was not available.
Int: Oh nice, great initiative on your side. So now we are moving to the next set of questions where we will be talking about your role in management of human resources or work-force.

2.1 Role of Operational Manager in management of Human Resources

Int: Please tell me what is your involvement in recruitment and selection of staff? What role do you normally play there?

Part: No I cannot say I have done anything because there is no one who has been employed since I became an Operational Manager.

Int: But previously, was the OM involved?

Part: She was involved, but selection is done at the hospital, but they will call her only to be part of the panel.

Int: Is that a standard procedure?

Part: Yes

Int: Ok. In terms of workforce planning, managing your staff resignation or retirement, including knowing who is about to resign and then start planning for that to ensure you fill the position immediately, how involved are you? Please take me through the role do you play?

Part: My role is to inform the PHC Supervisor, then the Supervisor will take it further to the PHC Manager, then they will discuss it there at the hospital level, they will then motivate for the post, because they say if you are going to resign or retire you need to inform them in writing within three months.

Int: Ok. Now tell me about your role and involvement performance management.

Part: I am the one who is supposed to make sure that each and every employee is having a job description, ensure that that we sit down and draw performance agreement with them. Then half yearly reviews are also done by me.

Int: Ok. What is your role in training and development?

Part: With training and development, I select staff if there is a post for training, then I know who is due to go for training. Like the one which I am talking about there is one who is doing Primary Health care, I check when did she come to the clinic, when did she start working in the facility, and then I give her forms to sign for a study leave, and then I send to the hospital. Then final selection is done there by the hospital.

Int: Ok

Part: So my role is to select and recommend staff from my facility to go for training and send the names. If there are others in other facilities who have more years than my staff that I have selected, then they will select those other staff members. So sometimes I send names but they are not selected by the hospital

Int: So the final decision is dependent on the hospital.

Part: Yes

Int: Ok. Is there any other training(s) that you conduct yourself?

Part: Yes, I do in-service training among the staff.

Int: Oh lovely. Now since you said performance management is your whole key function you play the key role there, let say during performance rating, you identified that one of your staff member is doing very well and they need to be given a bonus or reward. I am talking about verbal or monetary rewards or non-monetary rewards. Do you play any role there? If so, please explain.

Part: Yes I am fully involved.

Int: Ok, tell me more, how do you go about doing it? How do you go about rewarding them?

Part: Sometimes I give them the medals or certificates. I normally have functions here in the clinic.

Int: Ok, and do you play any role in promotion of your staff?

Part: We no longer do promotions, everyone have to apply if there is a higher post. You apply then you go through the interview process.

Int: And what role do you play in motivation of staff?

Part: I motivate them. We have those meetings, like we have staff meetings maybe on monthly basis but sometimes we don't sit on those meeting. We encourage staff to verbalise issue. Like if I am seeing a gap, then I try to talk to them so that we can try a close those gaps. So if we see that we need to have something like a function or birthday parties, we do all those things together including the rewards functions.

Int: If it happens that someone is not doing well (maybe not following procedures / guidelines or ones behaviour is bad) how do discipline that person? Are you involved and do you play any role in disciplining your staff members?

Part: I do disciplinary hearings. Sometimes I call that person and we sit (both of us) and we discuss the problem and then I just do verbal counselling. If it continues, we sign and then I issue verbal warning.

Int: What about written warning? Do you issue those?

Part: I have never had to go to those steps, because normally after issuing verbal it usually stops, and then everything is smooth.

Int: But is issuing of written warnings something that you have authority to do as OM?

Part: Yes I am authorised to issue written warning if needed to.

Int: And do you have authority to fire a staff member if situations force you too?

Part: No, if I have to fire somebody then I will have to inform and involve sub-district HR because further procedures to discipline and fire a staff member have to be followed.

Int: Ok. What about management of leave? What role do you play there?

Part: We have a leave register to control leave. Like absenteeism, we monitor it and if we see that somebody is mis-using sick leave, we call that person and discuss and make him or her aware that I am watching their sick-leave pattern. With annual leave, we have a leave-roster. We know who is going on leave in which month. But also we approve according to categories, I cannot let same categories go on leave in the same month.

Int: And is your leave approval final? Like can sub-district change what you have approved?

Part: No they cannot change it. Nobody else can change it, it is discussion between me and the staff members and I can change it if I feel that maybe the approved leave is no longer appropriate to take because of staff shortage then I discuss with that staff member.

Int: Ok. And on management and payment of overtime, do you play any role there? If so, please explain the role that you play.

Part: Yes it is my role, I play a bigger role. I am the one who is responsible to see that members are getting their monies if they have worked overtime. Fortunately for us we are not doing overtime because we are a 24 hour clinic, but we pay for working on Sundays, public holidays and night duty. So I am signing for them, if they work night duty I sign. If they work on Sunday, I sign.

Int: And with regards to Health and Safety, ensuring that the environment is safe and healthy for everyone including patients, staff and everyone who comes to the clinic, are you involved in ensuring that health and safety is maintained?

Part: We have Health and Safety Officer, I have appointed one of the Professional Nurses as Health & Safety Officer, so everything that is safety of staff members and patients, she is the one who is the overseer.

Int: Is that Professional Nurse trained on Health and Safety?

Part: Not really, but we know, we follow Health and Safety policy.

Int: Oh ok, and did you receive any kind of Health and Safety training as an Operational Manager?

Part: No. We follow the Health & Safety policy, like if needle-stick injury occurs, we just follow the guide on how to deal with and resolve it.

Int: Ok. We are now moving along to talk about your role and involvement in management of finances.

2.2. OM's role or involvement in management of finances

Int: How are you involved in setting of budgets? Are you responsible for setting budgets for your clinic? If so, please explain in detail the role that you play.

Part: With regards to budget setting, I am not involved in allocating the budget for my clinic, budget is allocated at the hospital, then they will tell you that your clinic has been allocated this much. But in terms of using it and all that, I am responsible to make sure that procurement of medication, equipment and all those things happens.

Int: How do you do it? I am trying to find out how and where do they base budget allocations from?

Part: In hospital, it is their responsibility. As Operational Managers we just make Procurement Plans and we sent that. We say that "by this quarter we will be ordering this and this and this, and then we replenish and we send replenishment forms or NSI and then they will order those things and then they will send to us.

Int: And when the hospital or sub-district sets or allocates the budget to the clinics, is it according to what you have requested in the procurement plan? Like where do they base the budgets allocations from?

Part: No the budget is allocated according to your staff, the things that you need for that year or how much you have spent on the previous year, and then they will add if they have to add.

Int: Ok and you said you do the NSI and replenishment forms to order?

Part: Yes.

Int: So where and how do you order. Like do you select suppliers to supply you with the things that you need?

Part: No we do not select suppliers, we are not involved in selection of suppliers. Like for medication we are using PPSD in Durban. We order directly from them (PPSD) because they are having a contract with Department of Health to supply primary healthcare facilities with medicine. But the hospital is having contracts with other suppliers, but for us we are having same supplier (i.e. PPSD).

Int: How do you order from PPSD?

Part: We first check the stock that we have, then we estimate the stock we will need in the period of two months, then we order we send to the hospital, the Pharmacist checks and then fax to PPSD because we don't have a faxing machine in our facility that is why the hospital has to fax for us.

Int: Oh I see.

Part: So when the stock arrive they do not send to the hospital, they deliver directly to us in the clinics.

Int: And how is this direct dealing with the supplier (PPSD) works? Is it effective?

Part: It is working very well, but sometimes we do have those challenges where PPSD do not have stock when we order, then if they don't have it from PPSD, we order from the hospital.

Int: Oh but for all other things other than stationery, you order from the hospital / sub-district?

Part: Yes

Int: And where do you send your orders for equipment stationery and other things?

Part: Orders for equipment, stationery and consumables like bandages and surgical and cleaning materials, we send orders straight to the Stores department [redacted] Hospital.

Int: Ok. What role do you play in management and monitoring of budget?

Part: We attend Cash Flow meetings?

Int: How often do you attend those Cash Flow meetings?

Part: It is normally twice a month, but sometimes it is dependent on when the CEO is available.

Int: And what normally happens during Cash Flow meetings? Just take me through everything that happens there.

Part: We discuss previous month's expenditure (maybe from begging of the month to the 15th, and then from 15th to the 30th).

Int: What else happens?

Part: We also discuss where to reduce spending or expenditure, they tell us about non-spending, they tell us how much have we spent.

Int: Ok. What else?

Part: And the they also approve the things that we have ordered.

Int: Do you take your orders with you to Cash Flow meetings?

Part: Yes we take the orders with us, but the ones that we take with us are not approved on that same meeting, only those that we have sent previously or prior the meeting.

Int: Oh I see. And tell me about your involvement and the role that you play in management of Petty Cash.

Part: No we do not have Petty Cash.

Int: What do you use to buy small things?

Part: We order. For everything we order from the hospital.

Int: And how is the ordering process? How can you rate it?

Part: Ja I can say sometimes it is slow. Because I can have a broken tap, then I will have to ask Maintenance (from the hospital) to come and fix it. Maybe they will come and say that no we don't have a tap that is available. Then they will have to go to the CEO and then CEO is the

one who is going to authorise Petty Cash from the hospital. Then they will be given money to go and buy that tap at Build It, and sometime it can take longer.

Int: In management of the stock that you store here at the clinic, what role do you play there?

Part: I am having people who are doing stock inside the facility. Like in Pharmacy, I have allocated somebody who will make sure that medication is issued to the nurses who are working in the consulting rooms.

Int: Did you allocate to a Pharmacy Assistant?

Part: No it is not a Pharmacy Assistant, but it is a nurse and Enrolled Nurse trained in everything that is happening at the Pharmacy from issuing, ordering and all. Then my role is to check that everything is in order, and on monthly basis they do physical count and then I have to ensure that everything balances according to physical count and the stock-card are corresponding.

Int: Ok. Now we are moving to the role that you play in management of data.

2.3. Role of OM in management of medical supplies and equipment

2.4 Role of OM in management of data and information

Int: Does your facility meets targets?

Part: In some areas, not all.

Int: Would you say your clinic is one of the best performing facilities in UMkhanyakude District?

Part: I can say that, because every time when there is someone who wants certain clinic data they will send that person to [redacted] clinic.

Int: Oh wow

Part: We are one of the busy clinics, but they know that at least with meeting the targets we are trying. Although we are very short-staffed but we make sure that those in priority areas, we must make sure that everything goes smooth.

Int: Are you involved in setting of targets?

Part: Yes, jah. And on quarterly basis we meet in hospital, we discuss we see where we are not performing well, and then we come back make sure that in those areas where we are lacking, we try to improve.

Int: So what I am trying to find out is, those targets that are set it is something that you are confident that as a facility you will be able to achieve based on the resources that you have?

Part: Yes because I am the one who is responsible to set targets for my clinic. If I am saying I can achieve 70% on this one, they cannot change to 80% because I know if they put 80% it will be too much for me in terms of the resources that I have.

Int: Great. And with Data Capturing, collation and product of statistics, what role do you play there? Are you involved?

Part: My role because I am having two Data Capturers, so my role is to supervise, make sure that everything that they are doing is excellent. I monitor their workload on a weekly basis, maybe or sometimes if I see that ..just like now it is month end, I have to make sure that all files are being captured and there are no files that they don't know where are they.

Int: Ok

Part: So I do supervision to verify. I do verification of data and all that.

Int: And are you involved in any data audits?

Part: Yes. We do it on a monthly basis but sometimes we have Nerve Centre meetings. We do nerve centre on weekly basis, but with nerve centre it is only those targeted data elements, not everything.

Int: Ok So what I am also trying to find out is, let us say you are on leave, are the staff able to do everything or they wait for you to come back?

Part: No I don't have to come back from leave, they do not wait for me, and everybody knows his or her work. They know exactly what they are expected to do.

Int: Oh I see

Part: You see the clinicians, they know that on daily basis they have to fill daily tally sheet. After they finish seeing the patient, they have to move data from tick register to the tally sheet, then give to the Data Capturer. Data Capturer knows what to do and how to capture data.

Int: Ok. And verification of data? Do you do it? If so, how often?

Part: No, it is impossible for me to do verification daily, like I am supposed to be doing it on daily basis but sometimes you find that I am not even in the clinic for the whole week, then I am unable to verify on daily basis. It depends sometimes I do it on a weekly basis, sometimes not even on a weekly basis, it even takes more than that to do it.

Int: Is there any other person who can do data verification or it is only you?

Part: No, there is supposed to be a Deputy who is doing it, but with shortage even myself I can't do it on time.

Int: Which Deputy are you referring to?

Part: Deputy Operational Manager, like senior person from clinicians is supposed to be doing that, but with shortage of staff I cannot say she can manage to do that because everybody is in the consulting room. Sometimes I find myself in the consulting room.

Int: Oh this is bad. And tell me with regards to reports that are produced here, which reports do you produce and where and when do you send them?

Part: Monthly stats (where we send the whole clinic monthly summary and we send HTS, we send TB stats, we send the other reports from the CCGs.

Int: What is HTS?

Part: It is HIV Testing report

Int: Ok, what else?

Part: On the Nerve Centre report it is selected data elements on weekly basis.

Int: And do you do any quarterly reports?

Part: Quarterly we attend in hospital.

Int: Or so you don't do any quarterly report?

Part: No we don't produce any quarterly reports because they have our monthly reports and they build up quarterly reports from that. What I do on monthly basis, I just check from our monthly against the targets and then we discuss with staff and then sign.

Int: Oh nice

Part: So once the hospital has produced the quarterly report, I check it out so that I can produce and provide the narrative on why we did not meet the set targets.

Int: Ok. Is there anything else that you are involved in with regards to data or information management which maybe I did not ask or we did not discuss?

Part: Sometimes I plan around what is happening with our data. Like let's say we didn't meet a certain target, then we sit down and plan what are we going to do to achieve that target? Like we have a team of continuous quality improvement. So in that team, that is where we discuss. Like if I can make an example, we have seen that we are not meeting the target on TB screening, we are supposed to be at 90% but sometimes we flow around 69% or 70% but we are never at 80% or 90%, so that is where we are struggling. So with the team that I am having, we try and identify why are we not meeting the target?

Int: So that's TB testing?

Part: No not testing, screening, just to screen people who are coming into the facility for TB. Then we know that… mmmm

Int: Oh so you have to screen new people?

Part: Everybody who is coming to the facility?

Int: Even the old ones who are coming to pick medication?

Part: Except those who are on TB treatment, we cannot screen those.

Int: Why is it not easy to achieve the TB screening target?

Part: No we have seen that the problem is necessarily not that we don't screen them or reach target, sometimes it is with recording and accuracy, and sometimes it's those patients that send people to collect their medication, because we do enter them into headcount but now they are not here, they have somebody to collect their medication. And also those that are on CCMDD

Int: What is the problem with those on CCMDD?

Part: Those that are on CCMDD they don't come. They don't come for screening, they just come through the door, they go straight there, and collect their medication then they are out.

Int: Isn't the CCMDD collection point supposed to be outside the clinic?

Part: It should be outside, but with us we do not have a pick-up point outside the facility, because of the things that are needed by Pharmacy Director to authorise a place to be a pick-up point.

Int: What are the things that are needed?

Part: They want a secured place with burglar guards and air-conditioners and all those things. So people in this area they do not have facilities like that. And even if you do have, they will want tax numbers with tax clearance certificates and what-what, so it didn't work.

Int: So now it is inside here?

Part: It is inside here in this facility but we have to allocate the nurse still. If it was outside Pharmacy Direct will employ somebody to work there. Like in the cities they have Clicks, and people are collecting their medication at Clicks and no nurse from the clinic need to go there. So we are reducing the staff that we do not have to stay there and issue medication. So CCMDD is also a challenge because we do not have a pick-up point.

Int: Ok. So now we are moving to talk about your role and involvement in management of Service Delivery.

2.5 Role of Operational Manager in management of Service Delivery

Int: According to your job description, how much percentage of your time should go towards management and how much percentage should go to patient care?

Part: 80% of my time should be dedicated to management and 20% percent should be on patient care or service delivery. But in reality I won't even say it is 20% in management and 80% in patient care because I think I am spending more time with the patients.

Int: Really? Like how much time?

Part: I can say I spend 90% with the patients because with shortage I cannot sit in the office and do paper-work while the patients are waiting.

Int: What is the cause for this?

Part: The cause of this is the shortage of staff, we have a shortage of clinical staff. It is unfilled vacancies. If vacancies were filled, I will be spending maybe 100% of my time in the office doing management duties, but with the current situation I cannot.

Int: Mmmm I see. Do you have any issue with the programmes that are being offered in the clinic?

Part: With many programmes that are being implemented now, they take more time for staff to implement or do them, and patients have to wait longer than they are supposed to be waiting, waiting time or time spent in the clinic is long.

Int: Please explain more on this point.

Part: Like if I can make an example, if a pregnant woman come you cannot spend less than 30 minutes with a pregnant woman, because of the things that you have to do to ensure that you are giving proper and quality of care. Filling of the chart it takes forever there are lot of things that you fill there; examination of that woman it takes forever, and it is even worse if that woman is HIV positive because you have lot of charts to fill.

Int: So you are saying filling-in of registers, chars or patient files is a challenge?

Part: Yes the number of registers, the patients file that you have to fill

Int: Please tell me more about your involvement in management of health care programmes and provision of service delivery or health care.

Part: I am more involved on implementation of programmes and less involved in management.

Int: OK. And in terms of supervising the programmes?

Part: I am the one who is responsible for supervising all the programmes. Though I have champions in other programmes, but I am directly involved in supervision because sometimes you find that you have a champion for chronic, and you find that the champion is not working during the day, but working night duty so you have to be the one who is involved to make sure that everything is going smoothly.

Int: Oh I see

Part: Yes, sometimes I have to fill in for the champions when they are on leave.

Int: What is your role in terms of strengthening service delivery? Are you involved? If so please explain more.

Part: I can say I am responsible for making sure that priority areas are met. Like all those programmes that need to be……like when I see that there is a gap, I am the one who is responsible to make sure that everything is done. For example, like now just like when you

were coming, I've noticed that last week there was no one who was inserted IUCD. I have trained people here in my facility to insert, I am the one who is the champion for insertion of IUCD. So sometimes I find that they see this as something that is time consuming. If there is someone who wants to be inserted IUCD, they complain "ey this person is going to take lot of time and there are patients who are waiting they will be complaining". So they will say "come back when there is OM, she is going to insert it".

Int: Who is they? Who are you referring to?

Part: The nurses

Int: Ok

Part: So if the person come, I don't want the person to go home without getting the service she has come for. So I end up living the office and go there to insert it. Especially if it is something that we have not done and we have not met the target.

Int: Oh so smart of you.

Part: Ja, at least they say we need to insert two per week but in fact they were saying every Professional Nurse has to insert two per week, meaning if I am having 6 Professional Nurses then I have to meet the target by inserting twelve IUCD per week. But that is too much for my clinic because I know it is impossible, then I set target to be two IUCD insertions at least per week. Then if I see that previous week we have not inserted any one, I have to make sure that this week I cover for the previous week so that we meet the target

Int: Ok. What else are you doing with regards to service delivery that we did not talk about? Something where you feel you play a big role but you have not told me about your involvement.

Part: I can say in data capturing I play a bigger role. Sometimes the Data Capturer finds it difficult to capture data in some of the files because they are not familiar with the medical terms, so I have to go and sit with the Data Capturer to explain here you put this here you put this so that they can capture correct information. Especially with TB, it's the new thing that they are capturing in TB files so I have to sit next to them, show them that, "when they ask this code, they mean this" because they cannot link codes with diagnosis and they are not trained on that.

Int: Do you think if they can be trained, they can improve and be able to do it on their own?

Part: It can improve but sometimes it lacks with us the clinicians, because as Data Capturers know that if they say A15 and you have written the correct thing there like "TB Pulmonary with SMEAR positive", they can feed that. But if you write another code and you classify it wrongly then they can feed / capture it as it is from the chart.

Int: Sso both need training?

Part: Yes both the clinicians and Data Capturers have to write things correctly so that the Data Capturer can feed / capture the correct information because Data Capturer does not know if you have written A15 and you say its "extra pulmonary" that these things can never give you the correct thing because if its extra pulmonary it can never be 15A. But sometimes clinicians they don't even know that themselves.

Int: Why are they (clinicians) also not trained?

Part: They are not trained. Previously they were training Staff Nurses to do TB and manage TB programmes, so now they are shifting that to professional Nurse whereas Professional Nurses are have never been trained. It's only now that they are going to take Professional Nurse and train them on TB. So every time they (Data Capturers) are capturing TB file I have to be there and see that no "this code was wrong from the beginning it was not supposed to be this code" ,"if it's this code it's supposed to be this diagnosis". And we find that it is very difficult when you have to outcome the patient because with that TB TIER if you have written the wrong thing from the beginning, it won't tell you that this thing is wrong but when time come to outcome the patient and the patient has completed treatment "it will tell you that no you cannot say that this it treatment completed" whereas you said the code is this

Int: Mmmmmm so much work?

Part: Yes. Then you have to start afresh and look for that file, start afresh critique, critique, file and then you make sure that you come up with correct things and you change everything on the system so that it is all correct.

Int: mmm. So data takes lot of your time?

Part: Yes, yes

Int: Ok we are now moving to the next sub-question

2.6 The role of OM in planning, leadership and governance

Int: What role do you play with regards to governance and planning? Does the facility have any plans? If so, what plans do you have?

Part: I am heavily involved. Yes we have plans for mmmm, like Quality Improvement Plans for programmes that are not performing well. And we do have our targets for the facility.

Int: In which plan are your targets?

Part: They are in the Operational Plan. With Strategic Plan I would say we do that together with the hospital, like we adopt what the hospital is doing and then we align ours with the hospital one

Int: Ok.

Part: So I am involved in target setting and formulation of Operational Plan and Strategic Plan.

Int: How have you been involved in ensuring that there is implementation of the plans? How do you get your staff to implement what is on the plans?

Part: I do in-service training with staff. Sometimes I allocate somebody to be in charge of the tasks. I also involve staff members when we are developing the plans so that they can feel they are part of the plan and the process.

Int: Great. Then with regards to allocation of duties tasks that are aimed at implementing the operational plans or strategies, how are you involved and what role do you play?

Part: With allocation I don't do it myself, I choose somebody to do allocation, and we do daily allocation. We allocate people according to experience, knowledge and competencies of that programme. Like I cannot just take Junior Nurse and allocate for programme that I know she does not know the programme well.

Int: Ok I see

Part: I delegate according to level of knowledge of the person. Like in IMCI I allocate someone who is trained in managing children.

Int: Ok I see.

Part: Yes in a way I am also empowering them.

Int: Oh Ok. So tell me about your role and involvement in allocation of resources

Part: ***Laughing***....Like in Human Resources, equipment I make available where I can. And it is difficult with the system and things being centralised at the hospital / sub-district.

Int: And what about reviewing of strategies and plans, how have you been involved in that?

Part: Mmmmm with the ones that we do inside our facility, I am responsible for reviewing.

Int: How often do you do your reviews?

Part: Sometimes it depends, if we see that we have planned for this and it is not happening or working then we review immediately. But normally we review on a yearly basis or quarterly basis. It also depends on what our monthly results are telling us. We say "oh this one is not working then we need to change". So we don't wait if we see a problem.

Int: What role do you play in formulation of remedial actions, like if you see that plans are not working and something needs to be done? Do you play any role there?

Part: We do interventions as we see that things are not working, we do not wait until late. For example, if I see that this thing is not working and we discuss with staff on our morning meetings, then we try and brainstorm on what we can do to achieve what we desire. So I cannot say that we will wait for the whole month until we come up with an intervention. If we identify that something is not working during nerve centre meeting, then we come up with a new plan that this we can make it work like this.

Int: Which meetings do you attend which are external, not DOH ones?

Part: I attend Sukumasakhe (Operation Sukuma Sakhe), and sometimes Schools Meetings

Int: Any more external meetings?

Part: Nothing else because we no longer have partners anymore, we used to have MatCh but nothing now.

Int: Ok. Then what internal meetings do you attend?

Part: Weekly Nerve Centre meetings here in the clinic, and also Nerve Centre meetings in the hospital (also supposed to be weekly) but sometimes we don't attend, sometimes I send someone to attend on my behalf and sometimes I don't even send somebody, it depends if I have someone to send.

Int: Is there a need for these nerve centre meetings held at hospitals?

Part: Yes there is, because sometimes if you just send the numbers, they don't have the narratives, so they want you to be there so that you can narrate and explain what is happening in your clinic, why is it happening that way and why are you not doing well or this and that.

Int: Ok. Any other meetings?

Part: Ja we do have Staff Meetings.

Int: Ok, what else?

Part: We also have Data Validation Meetings in our facility and also in hospital. In hospital we normally have it every second week of the month, In our clinic we have it first week of the month after we have completed Monthly Summary report and we send monthly summary on the 3rd of every month.

Int: Are there any other meetings?

Part: Yes, Clinic Committee Meeting.

Int: Is it internal or external?

Part: It's internal.

Int: How often does Clinic Committee Meeting sits?

Part: Mmmm every 2nd month, we no longer sit on monthly basis because of financial constraints, because some members are coming from far and they don't have money and they are no longer getting an allowances, so they do not have to travel to the clinic every month. Also because we cater food for them, so to control our budget we now do it 6 times in a year instead of 12 times.

Int: What other meetings?

Part: Cash flow meetings

Int: Ok,

2.7 OMs role beside the six management components that we talked about, what other management functions / activities have you been involved in?

Int: Beside the things that I have asked, is there anything else that you have been involved with and we did not talk about? Something where you feel you play a bigger role but you have not told me about it.

Part: No nothing that I know of

Int: OK. Now we are moving along to challenges.

2.8 Barriers or challenges that have been faced by OM when managing or executing duties at PHC level.

Int: What are the key challenges that you are facing as OM?

Part: Staff shortage. And with staff shortage it goes with staff - attitude because when people are overworked they are not friendly with patients, I can say. Sometimes we get lot of complaints because somebody is working alone, and have to see 100 patients in one day.

Int: Isn't there a ratio (staff ratio in relation to patients that they see or serve)?

Part: There is a ratio but with us it is not working.

Int: But now, how does the ratio work with the current staff that you have?

Part: They are supposed to allocate staff according to the number of patients that each clinician should see, but with is it not working, because there are people who are on leave, on training and some have retired but headcount continues to grow, so we don't chase any patients away

and say "now I have seen my target for the day". Like nurse patient ratio says "each Professional Nurse should be seeing 35 – 40 patients a day" but with us it is more.

Int: Mm I see. What else would you say is a challenge? Something that prevents you from executing your management functions.

Part: I can say like shortage importantly.

Int: Ok

Part: And sometimes lack of resources, like work equipment. We don't have fax, we don't have photocopying machine (we do have it but it has been broken since…. I don't know when). Computers also a challenge, we don't have computers to do admin work, I use my own laptop.

Int: Have you reported the photocopying machine?

Part: It's been reported, they took it for repairs, but it came back the same.

Int: Mmmm so what is the problem?

Part: The problem is the government is not buying anything now because of budget constraints. So they have to keep on fixing. Even if goes for fixing and come back not working, they do not do follow up from the person who was fixing it. Like the printer that we have there, it has been broken since April and we are in December now.

Int: So what are using to photocopy, fax and print?

Part: We are using Library or Education Centre, and then sometimes if we need to make photocopies, we take photocopy papers and we send to the hospital. But for those things that we need to use urgently we send somebody to the Library or Education Centre.

Int: They don't charge you?

Part: It depends

Int: And who pays?

Part: I pay from my own pocket.

Int: And you claim the money back?

Part: No

Int: Why not?

Part: Who can I claim it from? We are not allowed to claim back. We use our own money. Like, let me make an example with something simple "when we don't have photocopy papers, if they are finished and you are still waiting for the supply from the hospital, we buy ream of papers on our own. Sometimes the staff will contribute money because we need it, then we go and buy and we work. We don't claim back. The ink, if the machine is working and the ink is finished we still waiting for supply, we contribute, we buy and we use. Toilet paper, if it's finished, we know we will wait for three to four months before they can deliver the stock. In that period you can borrow from other clinics, but sometimes even those other clinics don't have, then you buy because you cannot tell the patients that there is no toilet paper. What do you expect them to use?

Int: Mmmmm

Part: So there is a need for Petty Cash because we use our own money. I don't know how we can generate Petty Cash because the patients do not pay for health services.

Int: I see

Part: Last time when I was in hospital I said when they condemns / do away with old furniture and equipment, you sell it in hospital, but you do not give us back the money instead you put it in your revenue income from all the facilities, And they said but where are you going to keep that money in the clinic because you don't have account in your clinic.

Int: Even Petty Cash money?

Part: Maybe they think we will be mis-using it I don't know. But you know really sometimes the lights are down and fuse are finished, they are not working and you send someone to buy using your own money, because they prefer that if anything is finished, they say you must write to them, then it takes a month before they can approve it in Cash Flow meeting.

Int: Mmmm approval takes long too.

Part: Ja, so I can say one of the other challenge is the "long procurement processes". The only thing that does not give us a problem when we procure is medicine because we do it directly with the supplier. Otherwise anything that we send to hospital we wait months and months. Like now I am still waiting for the Photocopier, like we said we no longer want to buy things like photocopiers and printers, but rather we rent because if we buy once it is broken, it stays

here not working but with rental one, you do not stay a day without having these things getting fixed by Nashua because once you report, they come and fix.

Int: Ok

Part: But now we have sent the requisition for a rental of a photocopying machine and they approved rental for 3 years. We sent this in August, but till now we are still waiting because after following up when will Nashua deliver our rental photocopier, we discovered that Stores Department lost our requisition that was approved by Cash Flow meeting, so it was not sent to Nashua. It was found somewhere in the batch of papers, it was never sent to Nashua. So this is also another problem we are facing. Stores Department either loose our approved requisitions or they do not follow up with the suppliers as to "when are they delivering to the clinics.

Int: Oh yes I can see it is a big challenge.

Part: Yes and sometimes even if they do send, they do not do follow- up.

Int: I see

Part: If we were doing Stores duties here directly, it would have been better. They need to relinquish some of the procurement processes from the hospital to the clinics.

Int: Who is monitoring Finance Officers and Supply Chain Management Officers at the hospital?

Part: It is the CEO. Like the CEO monitors work of Finance Manager and then Finance Manager is the one who is responsible for managing lower level staff like Supply Chain Management Officers and Finance Officers, so it means the problem is there at lower level.

Int: Why are you saying that?

Part: Because if you report there to Finance Manager, he goes there himself to check what is happening, why clinic so and so have not received something that they ordered and he is able to find the reasons and try to resolve the problem.

Int: What else who you say are challenges

Part: Mmmmmmmmm let me think more

Int: Ok let us now talk about things you have done to successfully managed to carry out management duties

2.9 How have you managed to successfully carry out your management duties (BEST PRACTICES)?

Int: So what are you doing to try to implement your duties or mitigate around to overcome the challenges you are facing? Here we are trying to identify the BEST Practices that can help other Oms in other facilities.

Part: I would say it is borrowing things that we need from other clinics and also using own money to buy things (e.g. to photocopy, buying lights etc) because we do not have petty cash, sadly we do not claim our own money back.

Int: Ok, what else

Part: I also Work during my own spare time, I am spending more time here, I am supposed to be working eight hours, five days a week, but I find myself at 12 midnight here still working. You know I work from morning until six or seven o'clock, I knock off maybe at half past seven and they will say here is an emergency come and assist, then I will come and assist.

Int: So you come even if you not working at night?

Part: Yes I do, sometimes I will spend two to three hours at night because I will be waiting for an ambulance because, I cannot leave the patient alone. Sometimes I will have to escort the patient to the hospital because of the condition. Sometimes they send Basic Ambulance Assistants to pick the patients, and when they come they will say "no no we cannot take this patient, he needs someone senior or needs advance life support", then because of time I will say no we cannot wait for an hour for someone who is coming from Manguzi or someone who is coming from Mtuba. So I will go with them, stay in the hospital after they have taken over the patient, I will wait for the paramedics to bring me back.

Int: Mmmmm, you do a lot of work here.

Part: Ja sometimes it is those situations because I cannot say, the ambulance is here, take the patients when I can see that those people will not know how to manage the patient on the way. Especially with the pre-term babies, I do not trust anyone, I would rather take the baby, myself to the hospital so that I know if the baby stops breathing on the way I know how to resuscitate the baby until we arrive at the hospital.

Int: Mmm ok

Part: Sometimes I come to work and say "you know today I want to make sure that all my staff files and admin work are all up-to date", but then I will find out that somebody is off-sick, so I have to be in the consulting room the whole day until the next person who is releasing me comes at 6pm comes and relieve me. Then I will "no say I cannot go home without finishing my work". Like it's month end tomorrow and data should be completed by the end of the day, Saturday or Sunday I will come together with Data Capturers and make show that we finalise reports and everything and by Monday we send everything. So we do work extra hours just to meet deadlines and complete work, but we are not receiving any compensation for that.

It's better with Data Capturers because if they work extra hours sometimes I say "oh today it's quite, one of you can take time off to make up for extra time worked, but today no it's busy you will knock-off at six even though they are supposed to knock off at 4pm. Even now you will find that there is one working that side but they were supposed to knock-off at 4pm

Int: ok

2.10 What strategies do you feel should be implemented to help you better execute your management duties at PHC level?

Int: Now tell me about what strategies you think should be done to help you better execute your management duties or to solve all the challenges that you are facing at primary health care level?

Part: Like I have told you before, I think relinquishing procurement processes from the hospital to the primary health care facilities will help a lot

Int: ok What else who you recommend as a strategy?

Part: I would say employing more staff, like filling in of all the vacant positions would help.

Int: Ok, how many vacancies need to be filled?

Part: According to WISEN of this clinic and Head Count, in this clinic we are supposed to be having 25 Professional Nurses (PNs) because our clinic is a 24-hour clinic. But what we are doing, we only allocate one Professional Nurse at night with Assistant Nurse, because when the facility is working 24 hours it is supposed to be working with a similar staff during the day and during the night. But you find that at night everybody is being seen by this one Professional Nurse, whether there is someone who is in labour and wants to deliver, this PN must attend to

this person. Like now since we are in festive season, that PN will have a woman in labour, then they will call her, please come see this person who has been stabbed. Now the PN is in a dilemma on which one to attend first, but – ke a pregnatnt woman is always a priority, so she will have to check the pregnant woman first on how far she is, then go and attend to the stabbed person. Sometimes she will allocate the Junior Nurse to attend the stabbed person, arrest bleeding while she is busy with the pregnant woman.

Part: Mmmm this sounds to be so strenuous

Int: It is strenuous, too strenuous especially the 25th and the 1st of the month especially the 1st. During these days, you see wonders, it is blood everywhere, car accidents, stabbed persons, it is a problem.

Part: Mmmm

SUPPORT TO OMs

Int: Would you say you are getting support to implement or carry out your management duties ot to tackle challenges that you are facing? If so, where are you getting it

Part: No I cannot say I am getting any support because if I was getting support I would be doing my work during working or office hours and not after hours.

Int: I see. What kind of support do you need, like when you say you are not getting any support?

Part: If the management can make sure that the staff is enough and then also in terms of making sure resources like work material is available, I can say it's fine.

Int: Ok. Who would you say needs to support you? Where are you expecting to get support.

Part: I am not sure …..(***laughing***)…… because our departments does not have money. But if we can have support from organisations like MATCH like we used to have before it can work. Because that time we had MATCH and them, it really helped, if we said we have run short if TIG registers, they will make sure that they go and print those registers and bring them to us

Int: Ok

Part: Ja

Int: I am also interested to know more about PHC Supervisors and their supervisory visits? Are they helping you?

Part: When they come here they check programmes if we are meeting targets. Personally I would not say their visits are helping us. Like I will say if when they come and identify problems and then provide solutions or help to resolve those problems it will help. But they come, identify problems and leave. I don't know whether they take those problems and take them to the CEO or Nursing Manager, they would write the report and leave the report with me. But the next month they come again, still there is no change and no solutions or help is provided.

Int: Mmmm

Part: They will tell you "oh your immunisation coverage has dropped and you have to do awareness and what what". I will ask myself how and why? They want me to go do awareness using what because I do not have a car? Do I have to go to the community and ask people to come whereas I know when they come they will not be attended by someone? I cannot go and mobilise community and increase our PHC utilisation rate knowing very well that when people come in numbers there is no staff to see them. Hhe who is going to see them? It is a challenge.

Int: I see

Part: There is something that we do and I see that sometimes it helps us, with the patients that are on chronic medication, we supply them with two months treatment so that they do not have to come every month to reduces work load, but we felt that sometimes it does not make that much difference because you will give them that two months' supply of chronic medication, but they will come for minor ailments. So you feel deafeted

Int: But at least you try.

Part: yes we are trying shame

Int: Do you love you job? Like do you enjoy working here as an OM?

Part: yes I love it, I love it a lot even though there are challenges.

Int: If given a chance, would you like to work in a hospital?

Part: Oh no I will never work in the hospital, never. I have never worked in the hospital you know? You know the two years that I was allocated when I was doing my Advanced

Midwifery, it was hectic for me. I am not used being like dependent on somebody else. You know in the clinic you do everything. Here you think on your own, "like you know ok this patient I must treat and manage like this" and I will call the patient to come back and review and see if it has helped the patient. But in hospital even for panado you have to ask the Doctor "Doc this patient is having a headache, what can we do?", though personally I know because I have been working in the PHC for a long time, I know everything about treating the patients, I can prescribe medication up to schedules higher. But in hospital even schedule zero you don't prescribe it is only the Doctor, nurses are not allowed.

Int: Oh I see

Part: So this job allows me to multi-task, it allows me to work independently and to think out of the box, not to be limited.

Int: So what can you say in closing?

Part: If they can provide all the resources and everything that we need, everything will be fine

Int: Mmm. If you do not have anything more to share, we are done thank you very much for your time. I really enjoyed talking with you.

……..***Thank you again***…….

Annexure E

Language Editing Certificate

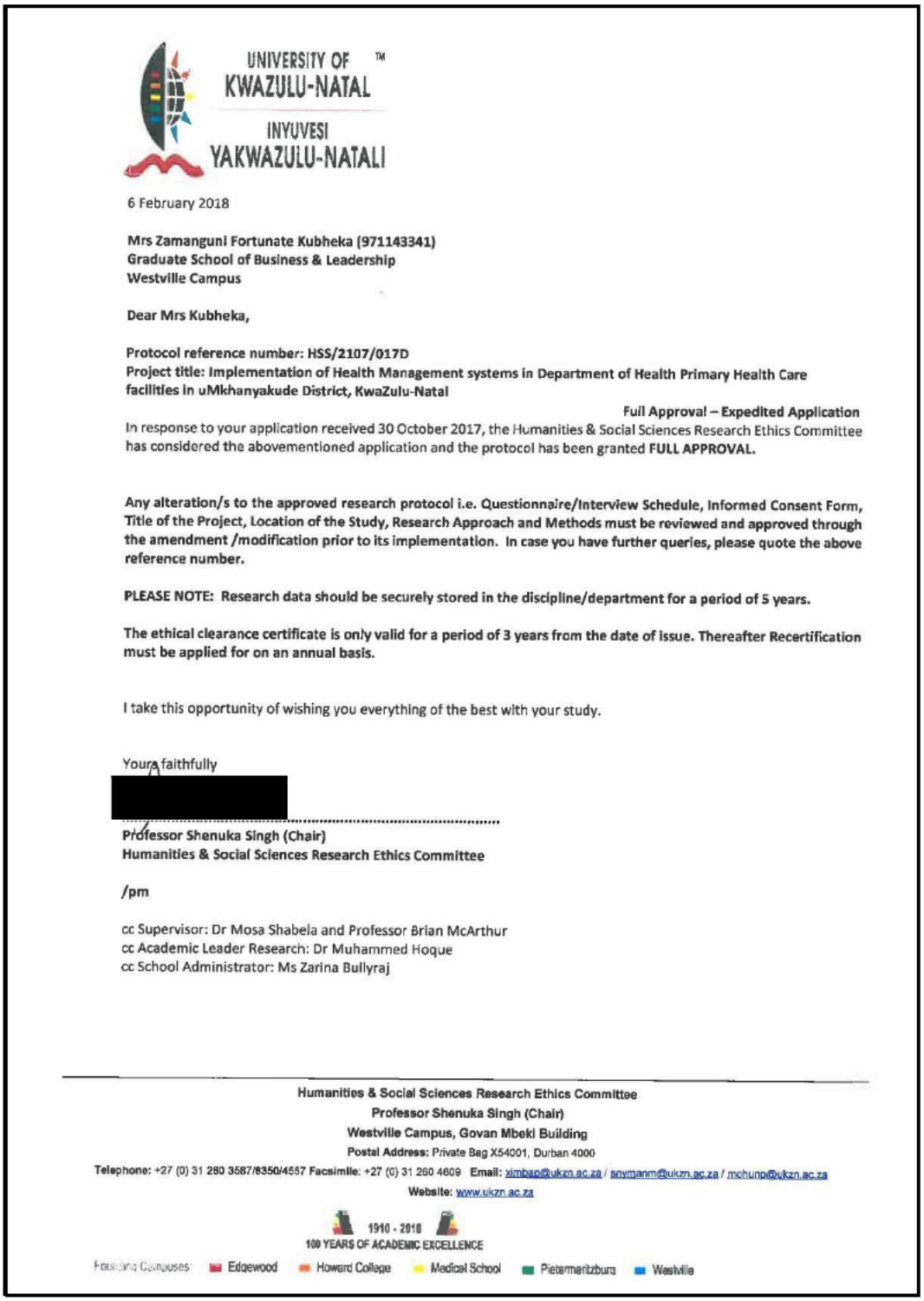
We the undersigned, do solemnly declare that we have abided by the University of KwaZulu-Natal's policy on language editing. The dissertation was professionally edited for proper English language, grammar, punctuation, spelling, and overall academic style. All original electronic forms of the text have been retained should they be required.

GARY STUART DAVID LEONARD
UKZN Higher Degrees Certified Language Editor
Commissioner of Oaths V3358
10 February 2022

ZAMANGUNI FORTUNATE KUBHEKA
Student No. 971143341
10 February 2022

Annexure F

UKZN Ethical Clearance and Research Protocol Letter



UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

6 February 2018

Mrs Zamanguni Fortunate Kubheka (971143341)
Graduate School of Business & Leadership
Westville Campus

Dear Mrs Kubheka,

Protocol reference number: HSS/2107/017D
Project title: Implementation of Health Management systems in Department of Health Primary Health Care facilities in uMkhanyakude District, KwaZulu-Natal

Full Approval – Expedited Application

In response to your application received 30 October 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

[redacted]

Professor Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Dr Mosa Shabela and Professor Brian McArthur
cc Academic Leader Research: Dr Muhammed Hoque
cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee
Professor Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za