

**THE DYNAMICS OF COMPLIANCE WITH THE NATIONAL
CORE STANDARDS FOR HEALTH ESTABLISHMENTS IN
SOUTH AFRICA: A CASE STUDY OF TWO TERTIARY
HOSPITALS IN GAUTENG PROVINCE**

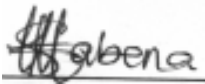
Sphiwe Yomvula Mabena

**A thesis submitted to the Faculty of Health Sciences, University of the
Witwatersrand, Johannesburg, in fulfillment of the requirement for the
degree of Doctor of Philosophy**

Johannesburg, 2022

DECLARATION

I Sphiwe Yomvula Mabena declare, in accordance with rule G28 that this thesis is my own work. It is being submitted for the degree of Doctor of Philosophy at the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.



Signed at Johannesburg

On the 21st _____ day of June 2022 _____

DEDICATION

I wish to convey my sincere gratitude to the following persons who have walked with me with their honest encouragement and support during this study. I give my greatest thanks to:

- The Lord Almighty for the good health and wisdom during the intense and interesting period of my study;
- My family for their moral support and understanding in affording me an opportunity and their time to accomplish this task. A special gratitude goes to my husband Mei Moses Skhosana, my two daughters Dianah Delisile Skhosana, Lethokuhle Skhosana and my son Sbongiseni Walter Skhosana. My mother Linah Nomadlozi Kabini for making sure that my little one is well taken care of during this intense period, my sister Julia Fanezi Mabena for overwhelming support when I needed it
- To my friends for affording me the space and moral support to go on with this study
- My supervisors Dr Sue Armstrong and Dr Prudence Ditlopo for their expert guidance, encouragement and willingness to walk through the journey with me and with focus to the end of this study. It was not an easy journey, but you kept me through;
- To all research participants at the two tertiary hospitals in Gauteng who sacrificed their time to be involved in this study.

ABSTRACT

South Africa has made efforts to improve quality within the healthcare institutions by formulating policies and implementing strategies that are intended to improve health outcomes and strengthen the health system. The National Department of Health (NDoH) developed National Core Standards (NCS) which are intended to set the benchmark for quality care against which delivery of services at all health facilities can be monitored (NDoH, 2011). In order to focus attention on the implementation of the NCS, the department of health selected six key priority areas (KPAs) which health care institutions are required to comply with to fast track quality improvement.

Audits have shown marked differences in terms of compliance to these NCS and the KPA's between hospitals classified in the same categories as one another and therefore, ostensibly having access to similar resources.

This study was conducted at two tertiary hospitals in Gauteng – the one that achieved the highest level of compliance in an audit and the one that achieved the lowest level of compliance in an attempt to understand the dynamics that influence compliance and therefore make recommendations to improve compliance.

An exploratory case study method was used with multiple methods of data collection. This included a document review of the DoH policies and other related documents related to compliance to the NCS; semi structured interviews of staff members in the two selected hospitals solicit views and opinions about the process of the implementation of the six KPAs of the NCS and a qualitative social network analysis (SNA) to explore the relationships and connections between the actors responsible for the implementation of the NCS in the two tertiary hospitals in Gauteng using “net-map” tools. Integration of all three phases of the study was done using Walt and Gilson's policy framework (1994) to develop actionable recommendations to improve the implementation of the six KPAs of the NCS in the best and worst performing hospitals in Gauteng province.

The results of the study showed that design of the assessment tool, structural issues at the hospitals, leadership and governance, human resource allocation, training and procurement of goods and services all had impact on the implementation of the NCS and

related policies. It was clear from the findings of this study that there were overlapping elements in the provision and implementation of the NCS policy.

It was clear from this study, and many other studies, that policy in itself cannot resolve the problems in the health services and can also not improve quality of care unless it is implemented within a well-planned national strategy to address many issues hampering its implementation.

Keywords: Compliance, National Core Standards, South Africa

ACKNOWLEDGEMENTS

This PhD was a journey that was filled with both good and frustrating memories, but it all came out to the fulfilment of this thesis. The beginning of wisdom is to fear God thus I drew my strength from God who kept me through even when I felt that I can no longer hold on.

My sincere gratitude conveyed to my supervisors Dr Sue Armstrong and Dr Prudence Ditlopo. A special dedication to Dr Sue Armstrong by holding a knife on its sharp edge to pull me through personally and academically and never gave up on me. I could have not made it if it was not your support, dedication to make this work, holding me by hand to teach me to walk in this journey and your commitment. One thing I know for sure, I could not have made it without your guidance, constructive feedback and your expert opinion. Dr Sue, you are the best supervisor one could ever ask for; your efforts never went unnoticed and keep on lighting the candles in the field of scientific knowledge. Also thanking my co-supervisor Dr Prudence Ditlopo for your input in this thesis and constructive feedback to make this study a success.

I would like to thank the two tertiary hospitals in Gauteng for allowing me an opportunity to conduct the study. I would also like to convey gratitude to the study participants for sacrificing their time to be part of the study without any form of compensation.

Mom, if it wasn't for your support, I could have not made it, you took in my daughter as your own with sleepless nights. I will forever cherish your presence in my life. My little daughter Lethokuhle, your presence gave me the reason to pull through, thank you for allowing me an opportunity to finish my studies. My elder daughter Dianah and son S bongiseni, thank you so much for understanding and allowing me space to pursue my studies.

TABLE OF CONTENTS

| | |
|---|------|
| TITLE PAGE..... | i |
| DECLARATION | ii |
| DEDICATION..... | iii |
| ABSTRACT..... | iv |
| ACKNOWLEDGEMENTS | vi |
| TABLE OF CONTENTS | vii |
| DEFINITION OF TERMS | xv |
| LIST OF TABLES..... | xvi |
| LIST OF FIGURES | xvii |
| CHAPTER ONE: INTRODUCTION AND BACKGROUND | 1 |
| 1.1 INTRODUCTION..... | 1 |
| 1.2 BACKGROUND OF THE STUDY | 1 |
| 1.2.1 International Efforts to Improve Quality of Health Care | 1 |
| 1.2.2 Historical Background to Efforts to Improve Quality in South Africa | 4 |
| 1.3. PROBLEM STATEMENT | 10 |
| 1.4. RESEARCH QUESTION..... | 11 |
| 1.5. STUDY JUSTIFICATION | 11 |
| 1.6. AIM OF THE STUDY | 11 |
| 1.7. OBJECTIVES..... | 12 |
| 1.8. SIGNIFICANCE OF THE STUDY..... | 12 |
| 1.9. RESEARCH FRAMEWORK..... | 12 |
| 1.10 OUTLINE OF THE THESIS..... | 14 |
| CHAPTER TWO: LITERATURE REVIEW..... | 17 |
| 2.1 INTRODUCTION..... | 17 |
| 2.2 THE CONCEPT OF QUALITY HEALTH CARE..... | 17 |
| 2.3 GLOBAL PERSPECTIVE OF HEALTHCARE QUALITY | 20 |
| 2.4 OVERVIEW OF HEALTHCARE QUALITY IN AFRICA..... | 23 |
| 2.5 OVERVIEW OF THE SOUTH AFRICAN HEALTHCARE SYSTEM..... | 25 |
| 2.6 BARRIERS AND ENABLERS FOR COMPLIANCE WITH STANDARDS | 27 |
| 2.6.1 Human Resource Issues | 28 |

| | |
|---|----|
| 2.6.2 Human Resource Management Issues | 30 |
| 2.6.3 Resources and Facilities | 32 |
| 2.6.4 Leadership and Management | 33 |
| 2.6.5 Policy Implementation Challenges | 36 |
| 2.6.6 Inadequate Healthcare Financing | 39 |
| 2.6.7 Information Management..... | 39 |
| 2.6.8 Increased Disease Burden..... | 40 |
| 2.7 HOW COMPLIANCE WITH NATIONAL CORE STANDARDS CAN BE ENHANCED | 41 |
| 2.7.1 Involvement of Primary Healthcare Facilities Managers' in Decision-Making | 41 |
| 2.7.2 Implementation of Effective and Functional Support Systems..... | 42 |
| 2.7.3 Improvement of Internal Communication Practices | 43 |
| 2.7.4 Strengthening Governance and Leadership Capacity | 44 |
| 2.8 CONCLUSION | 45 |
| CHAPTER THREE: METHODOLOGY | 46 |
| 3.1 INTRODUCTION..... | 46 |
| 3.2 RESEARCH PHILOSOPHY | 46 |
| 3.3 RESEARCH DESIGN | 47 |
| 3.5 STUDY POPULATION | 49 |
| 3.6 STUDY SAMPLE | 50 |
| 3.7 DATA COLLECTION..... | 51 |
| 3.7.1 Phase 1: Document Review..... | 53 |
| 3.7.1.1 Sampling of document review | 53 |
| 3.7.1.2 Data collection of document review | 56 |
| 3.7.2 Phase 2: Semi-Structured Interviews..... | 56 |
| 3.7.2.1 Sample of the semi-structured interview | 56 |
| Table 3. 5: Key informants for the semi-structured interviews | 58 |
| 3.7.2.2 Pretesting of the semi structured tool | 59 |
| 3.7.2.2 Data collection of the semi structured interview..... | 59 |
| 3.7.3 Phase 3: Social Network Analysis..... | 60 |
| 3.7.3.1 Preparing the mapping..... | 61 |
| 3.7.3.2 Actor selection during the mapping process..... | 61 |
| 3.7.3.3 Drawing of links | 62 |
| 3.7.3.4. Power as the towers of influence | 63 |

| | |
|---|----|
| 3.7.4 Integration of results | 64 |
| 3.8 DATA ANALYSIS | 64 |
| 3.8.1 Phase 1: Analysis of Data from Document Review | 64 |
| 3.8.2 Phase 2: Analysis of Semi-Structured Interview Data | 65 |
| 3.8.3 Phase 3: Analysis of Data from SNA | 66 |
| 3.8.4 Analysis of Data during Integration Process | 69 |
| 3.9 TRUSTWORTHINESS | 70 |
| 3.10 REFLEXIBILITY | 69 |
| 3.11 ETHICAL CONSIDERATIONS | 71 |
| 3.11.1 Permission to Conduct the Study | 71 |
| 3.11.2 Informed Consent and Voluntary Participation | 71 |
| 3.11.3 Anonymity and Confidentiality | 72 |
| 3.11.4 Beneficence | 72 |
| 3.11.5 Reporting of Findings | 72 |
| 3.12 CONCLUSION | 73 |
| CHAPTER FOUR | 74 |
| PHASE 1: FINDINGS FROM DOCUMENT REVIEW | 74 |
| 4.1 INTRODUCTION | 74 |
| 4.2 CONTEXT | 74 |
| 4.2.1 Macro Context of the Policy | 74 |
| 4.2.2 Policy Context | 75 |
| 4.2.3 Legal Context | 77 |
| 4.2.4 Micro Context | 77 |
| 4.3 ACTORS | 80 |
| 4.3.1 Government | 80 |
| 4.3.2 Healthcare Personnel | 80 |
| 4.3.3 The Public | 80 |
| 4.3.4 The Office of Health Standards Compliance (OHSC) | 81 |
| 4.4 POLICY CONTENT AS GUIDING DOCUMENT FOR IMPLEMENTATION OF QUALITY STANDARDS | 81 |
| 4.4.1 Aim of Healthcare Policy | 81 |
| 4.4.2 Principles Influencing the Development of the NCS | 82 |
| 4.4.3 Six Key Priority Areas (KPA) | 83 |

| | |
|--|-----|
| 4.4.4 Structure of the National Core Standards | 84 |
| 4.5 NORMS AND STANDARDS | 88 |
| 4.6 NATIONAL HEALTH INSURANCE (NHI) | 89 |
| 4.7 IMPLEMENTATION OF HEALTH QUALITY STANDARDS..... | 94 |
| 4.7.1 Auditing of Health Facilities..... | 94 |
| 4.7.2 Inspections | 94 |
| 4.7.3 Measuring Compliance | 95 |
| 4.7.4 The Assessment Tool and Measures..... | 96 |
| 4.7.5 Rating of the Measures..... | 96 |
| 4.8 CONCLUSION | 97 |
| CHAPTER FIVE | 99 |
| PHASE TWO: SEMI STRUCTURED INTERVIEWS..... | 99 |
| FINDINGS AND DISCUSSION | 99 |
| 5.1 INTRODUCTION..... | 99 |
| 5.2 DEMOGRAPHIC DATA..... | 101 |
| 5.2.1 Age Range | 101 |
| 5.2.2 Gender | 101 |
| 5.2.3 Experience in Healthcare Services | 103 |
| 5.2.4 Highest Academic Qualifications..... | 103 |
| 5.3 PRESENTATION OF THEMES..... | 104 |
| 5.3.1 Understanding of KPAs and NCS | 107 |
| 5.3.1.1 Knowledge of the six KPAs of the NCS policy | 107 |
| 5.3.2 Implementation of the NCS and the Six KPAs | 109 |
| 5.3.2.1 General responses on six KPAs of the NCS | 109 |
| 5.3.2.1 Perceptions on the values and staff attitudes..... | 111 |
| 5.3.2.2 Monitoring the waiting times..... | 113 |
| 5.3.2.3 Cleanliness as the first law of health..... | 114 |
| 5.2.3.4 Drug stock and procurement of equipment..... | 115 |
| 5.2.3.5 Infection prevention and control..... | 116 |
| 5.2.3.6 Patient safety and security | 118 |
| 5.3.3 Barriers to Compliance with the NCS..... | 118 |
| 5.3.3.1 Structure of the assessment tool | 119 |
| 5.3.3.2 Inadequate staff in implementing the policy..... | 120 |

| | |
|---|-----|
| 5.3.3.3 Lack of adequate training and knowledge | 123 |
| 5.3.3.4 Inequitable distribution of resources and shortage..... | 126 |
| 5.3.3.5 Lack of adequate support from hospital management and provincial Department of Health | 128 |
| 5.3.4 Enablers of Compliance with NCS | 130 |
| 5.3.4.1 Improved communication to guide policy implementation and compliance | 131 |
| 5.3.4.2 Involvement of all stakeholders | 132 |
| 5.3.4.3 Involvement and support of the leadership..... | 134 |
| 5.4 CONCLUSION | 141 |
| CHAPTER SIX: FINDINGS FROM SOCIAL NETWORK ANALYSIS (SNA) | 142 |
| 6.1 INTRODUCTION..... | 142 |
| 6.2. FINDINGS DURING DATA COLLECTION | 143 |
| 6.2.1. Findings during the Mapping Process at Hospital A..... | 143 |
| 6.2.2. Findings during the Mapping Process at Hospital B | 144 |
| 6.3. ANALYSIS OF THE FINDINGS..... | 146 |
| 6.3.1 Structural Characteristics..... | 147 |
| 6.3.1.1. Size of the network | 147 |
| 6.3.1.2. Network density..... | 148 |
| 6.3.1.3. Openness..... | 151 |
| 6.3.1.4. Reachability of actors..... | 152 |
| 6.3.1.5. Measure of centrality | 154 |
| 6.3.1.6. Star..... | 155 |
| 6.3.1.7. Bridge..... | 155 |
| 6.4 NATURE OF THE LINKS: CHARACTERISING THE RELATIONSHIPS AND TIES BETWEEN THE ACTORS | 157 |
| 6.4.1 Strength of Relationships between Individuals..... | 157 |
| 6.3.2 Reciprocity: Actor Perception of a Relationship | 159 |
| 6.3.3 Clarity of Expectations | 160 |
| 6.3.4 Multiplexity..... | 161 |
| 6.4 TRANSACTIONAL CONTENT | 162 |
| 6.4.1 Expression of Affect..... | 162 |
| 6.4.2 Influence Attempt..... | 163 |
| 6.4.3 Exchange of Information..... | 166 |

| | |
|---|-----|
| 6.4.4 Exchange of Goods and Services..... | 167 |
| 6.5 DISCUSSION..... | 170 |
| 6.5.1. Role of Actors in Supporting Organisational Goal | 170 |
| 6.5.2 SNA as a Means for Organisational Strategy..... | 171 |
| CHAPTER SEVEN: INTEGRATION OF RESULTS OF THE STUDY..... | 173 |
| 7.1. INTRODUCTION..... | 173 |
| 7.2. SUMMARY OF METHODS OF THE THREE PHASES OF THE STUDY USED IN RELATION TO THE WALT AND GILSON FRAMEWORK | 175 |
| 7.2.1. The Document Reviews..... | 176 |
| 7.2.2. Semi-Structured Interviews..... | 176 |
| 7.2.3. Social Network Analysis | 176 |
| 7.3. SUMMARY OF THE FINDINGS OF THE THREE PHASES OF THE STUDY | 177 |
| 7.3.1. Content of the NCS Policy | 177 |
| 7.3.1.1. Key components | 177 |
| 7.3.1.2 Major challenges related to the implementation of the NCS policy..... | 178 |
| 7.3.2. Context of the Policy Implementation at the Healthcare Establishment..... | 180 |
| 7.3.2.1 Political conditions on policy implementation | 181 |
| 7.3.2.2 Impact of policy on the health sector reform..... | 181 |
| 7.3.3. Processes in policy implementation | 184 |
| 7.3.3.1. Internal challenges of policy implementation..... | 178 |
| 7.3.3.2. External challenges to policy implementation | 187 |
| 7.3.4 Actors in policy implementation | 188 |
| 7.4. RECOMMENDATIONS OF THE STUDY | 189 |
| 7.4.1. Recommendations for Healthcare Practice | 189 |
| 7.4.2 Recommendations for the Healthcare Education | 190 |
| 7.4.3. Recommendations for Future Research | 191 |
| 7.5 LIMITATIONS OF THE STUDY..... | 191 |
| 7.6 CONCLUSION | 191 |
| REFERENCES | 193 |
| ANNEXURES | 215 |
| ANNEXURE A: INFORMATION LETTER – QUALITY MANAGER..... | 215 |
| ANNEXURE B: INFORMATION LETTER – MANAGERS | 217 |
| ANNEXURE C: INFORMATION LETTER – PHARMACIST | 219 |

| | |
|--|-----|
| ANNEXURE D: INFORMATION LETTER – FRONTLINE STAFF..... | 221 |
| ANNEXURE E: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR QUALITY MANAGER..... | 223 |
| ANNEXURE F: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR MANAGERS..... | 225 |
| ANNEXURE G: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR PHARMACIST ... | 227 |
| ANNEXURE H: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR FRONTLINE NURSES, SHOP STEWARDS AND REPRESENTATIVES OF THE HOSPITAL POLICY DEVELOPMENT COMMITTEE..... | 229 |
| ANNEXURE I: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS – QUALITY MANAGER | 231 |
| ANNEXURE J: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS - MANAGERS..... | 233 |
| ANNEXURE K: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS – FRONTLINE STAFF | 235 |
| ANNEXURE L: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS - PHARMACIST..... | 237 |
| ANNEXURE M: CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION | 239 |
| ANNEXURE N: DOCUMENT REVIEW – APPROXIMATELY 60 DAYS TO COMPLETE THE REVIEW..... | 240 |
| ANNEXURE O: SOCIAL NETWORK ANALYSIS – STEPS/PROCEDURE ON HOW TO CONDUCT SNA | 243 |
| ANNEXURE P: ETHIC CLEARANCE CERTIFICATE - WITS | 244 |
| ANNEXURE Q: PERMISSION LETTER HOSPITAL | 245 |
| ANNEXURE R: PERMISSION LETTER HOSPITAL | 246 |
| ANNEXURE S: SSI PPT | 247 |
| ANNEXURE T: SNA PPT..... | 254 |

LIST OF ACRONYMS

| | |
|------|---|
| KPAs | Key Priority Areas |
| OHSC | Office of the Health Standards Compliance |
| NDoH | National Department of Health |
| NCS | National Core Standards |
| WHO | World Health Organisation |

DEFINITION OF TERMS

Worst performing hospital – the tertiary hospital in Gauteng Province with the lowest score from the latest audit results on the compliance of the six KPAs of the NCS

Best performing hospital – the tertiary hospital in the Gauteng Province with the highest score from the latest audit results on the compliance of the six KPAs of the NCS

LIST OF TABLES

| | |
|--|------|
| Table 1: Summary Quality of healthcare reforms in South Africa..... | 6 |
| Table 3. 1: Brief Overview of two tertiary hospital in Gauteng selected for the study | 49 |
| Table 3. 2: Sample size..... | 51 |
| Table 3. 3: Summary of the research methodologies..... | 52 |
| Table 3. 4: List of Policies and Related Documents Reviewed | 55 |
| Table 3. 5: Key informants for the semi-structured interviews..... | 57 |
| Table 4. 1. Risk Ratings in the NCS (2011)..... | 97 |
| Table 5. 1: List of interview participants | 100 |
| Table 5. 2: Consolidated demographic presentation of data | 102 |
| Table 5. 3: Overview of the interview questions | 105 |
| Table 5. 4: Illustration of the a priori codes..... | 106 |
| Table 5. 5: Summary of findings from semi structured interviews similarities..... | 106 |
| Table 5. 6: Summary of findings from semi structured interviews differences..... | 139 |
| Table 6. 1: Summary comparison of findings of hospital A and B | 1687 |

LIST OF FIGURES

| | |
|---|-----|
| Figure 1: The Walt and Gilson's Theoretical Framework..... | 13 |
| Figure 2. 1: Elements of healthcare quality, WHO (2018) | 19 |
| Figure 2. 2: Elements of the National Quality Policy and Strategy, SAHR (2018) | 21 |
| Figure 2. 3: Contrasting understandings of policy implementation | 37 |
| Figure 3. 1: SNA using Net-Map | 63 |
| Figure 3. 2: Pattern of the links that is used to display nature of the links according to Bodin, O.et.al 2020..... | 67 |
| Figure 3. 3: Illustration calculation of the network density | 68 |
| Figure 6. 1: SNA of Hospital A | 144 |
| Figure 6. 2: SNA of Hospital B | 144 |
| Figure 6. 3: Hospital A network density in addressing staff attitude | 149 |
| Figure 6. 4: Hospital A network density in addressing availability of medicines | 149 |
| Figure 6. 5: Hospital B network density | 150 |
| Figure 6. 6: Hospital B network density senior management | 150 |
| Figure 6. 7: Graphic representation of reachability of actors hospital A | 153 |
| Figure 6. 8: Graphic representation of reachability of actors hospital B | 153 |
| Figure 6. 9: Measure of centrality hospital A and B..... | 155 |
| Figure 6. 10: Member of multiple cluster as bridge hospital A..... | 156 |
| Figure 6. 11: Member of multiple cluster as bridge hospital B..... | 156 |
| Figure 6. 12: Strength of relation of actors hospital A | 158 |
| Figure 6. 13: Strength of relation of actors hospital B | 158 |
| Figure 6. 14: Multiplexity in hospital B..... | 162 |
| Figure 6. 15: Mapping process hospital A | 162 |
| Figure 6. 16: Mapping process hospital B | 162 |
| Figure 7. 1: Adapted from Walt and Gilson's Health Policy Triangle (1994)..... | 174 |

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This chapter gives the background to the study, the problem statement, aim of the study, research objectives and research questions. Furthermore, the significance of the study is highlighted, the chapter organisation of the dissertation is provided as well as the conclusion for this chapter. Lastly, it introduces the reader to the literature review chapter.

1.2 BACKGROUND OF THE STUDY

1.2.1 International Efforts to Improve Quality of Health Care

Quality of healthcare has been widely recognised in developing countries as the major driver towards the improvement of the health outcomes and health service delivery (World Health Organisation, 2007). Quality of health is defined by Allen-Duck et.al. (2017:1) as *“the assessment and provision of effective and safe care, reflected in a culture of excellence, resulting in the attainment of optimal or desired health.”* Reasons why health care providers do not comply to evidence based guidelines leading to ineffective care may be due to a lack of knowledge of guidelines or to the lack of compliance regardless of knowledge (WHO, 2018).

Failure to comply with the set quality standards undermines acceptance and implementation of the regulations (Brousseau & Fares, 2000). Compliance means conformance to a specification, standard or law that has been clearly defined, but other meanings of the term include a willingness to follow the prescribed specifications or even a tendency to give in to others. (Your Dictionary.com, 2022). Considering these definitions, it is clear that by just setting a standard, however clear, or well intentioned, does not necessarily mean it will be followed even if it is regulated.

In most countries, alongside the economy, quality of healthcare is a major political issue. Quality care requires the adequate provision of health care which will result in improved,

and desired, health outcomes (WHO, 2007). Health outcomes and patient satisfaction are the most important parameters for judging the quality of healthcare services provided. The elements considered by the WHO (2015) to be necessary to achieve quality care are safety, effective, timeliness, efficiency, equitability and people centredness.

Policies are known to play an important part in improving compliance with poor compliance commonly being related to poorly constructed, vague policies which are, as a result, ambiguous and open to interpretation and a lack of standardized implementation (Neyer & Zurn, 2001 & Falkner et al, 2008). It is also important to understand why staff members do not comply with guidelines and to provide simple, standardized guidance to improve compliance (Carthey et.al, 2011).

Strong national policies assist in building a culture of quality (Moyakhe, 2014). To succeed in policy implementation efforts will depend on identifying the barriers to compliance. Thus, in order to improve compliance, there should be health policy and procedures that promote standardisation of operational activities and provide clarity on critical issues relating to health and safety as well as the health regulatory frameworks (DoH, 2012).

Enormous efforts have resulted in progress towards attaining population health goals globally. The efforts to strengthen health systems include the development of policies and plans that will improve access to essential medicine, the reduction of financial obstacles in accessing healthcare services and comprehensive resource planning in order to address human resource shortage. However, progress is still unequal in poor, rural hard to reach population, low and middle-income countries (LMIC) and especially in Sub Saharan Africa where there is a gap in access, but they have compared access to health services enjoyed by wealthier countries (WHO, 2014).

A new development agenda “Transforming our world: 2030 Agenda for Sustainable Development” was adopted by the United Nation (UN) general assembly in 2015. This agenda comprised a broader range of sustainable developmental goals (SDG) which included economic, social and environmental objectives with the aim to enhance global

cooperation in addressing gaps such as the shortage of human resources, and equitable distribution of resources to the previously disadvantaged while also ensuring the use of these services does not expose the user financial hardship especially in lower middle-income countries (LMIC). The 2030 agenda for SDG recognises an urgent need to place quality of care in the hands of national, regional and global role players in the attempt to promote health for all (WHO, 2018).

Internationally many countries have implemented systems to monitor compliance to standards in an attempt to improve quality of the healthcare services. Each specific country where systems to monitor compliance has been implemented, there is a legislative framework which regulates the quality of health services in order to provide for more powers of enforcement. In the United Kingdom these powers conferred on the regulator have enabled them to use both civil and criminal legal measures to enforce compliance. The Health and Social Care Act (2008) in the United Kingdom established a single regulator for this purpose. The Care Quality Commission (CQC) is responsible for licensing healthcare establishments. This in turn requires them to monitor and assess compliance against a set of national minimum standards (Care Quality Commission, 2012).

An attempt to measure and compare the quality of care internationally is the Healthcare Access and Quality (HAQ) Collaborators Index (2018). A ranking system is used, and countries assessed on a scale of 0 to 100. The Netherlands holds the highest score of 96.1 with the best performance on access, ranking first on timeliness and rank in the middle on affordability (HAQ, 2018). In Western Africa, the scores of three countries namely Guinea, Liberia and Sierra Leone were negatively impacted by disease outbreaks including Ebola (WHO, 2018). In Sierra Leone this challenge was caused by a shortage of human resources, unpreparedness for disease surveillance, poor infrastructure of health facilities and a weak supply chain for essential medicines (Velenyi, 2016). These three countries came up with measures that emphasized universal access to quality healthcare services to prevent future outbreaks by placing infection control and prevention as the key priority. Liberia developed the investment plan for building a

resilient health system with the aim of restoring gains lost during the outbreaks, dealing with pre-existing vulnerabilities, and improving the confidence of the communities in health systems and health security (WHO, 2018). According to Mbunge (2020) during Covid-19 outbreak, South African healthcare system was affected by lack of resources such as personal protective equipment in dealing with the epidemic. As such, there was increased mortality rate due to poor infection control measures, mental health problems and substance abuse were on the rise. There was also a resurgence of non-communicable disease. Furthermore, human resource shortages escalated as some healthcare workers died of Covid-19. The healthcare system in South African is overwhelmed with COVID-19 pandemic in addition to the existing challenges in healthcare service delivery.

In research, Covid 19 presented a unique opportunity for researchers in all disciplines to broaden the scope of research as Covid had affected many spheres of life including disruption of global economies, quality of life and preparedness of future outbreaks. Thus, there are some potential opportunities for researchers in broader social sciences discipline to explore the phenomenon .

1.2.2 Historical Background to Efforts to Improve Quality in South Africa

The National Department of Health (NDOH) in South Africa has modelled a great deal of their work on quality improvement on that of the CQC (NDOH, 2011). The importance of improving quality is recognized as it is known that a decline in the quality of health care results in a loss of confidence and trust in the health care system. This loss of confidence and trust is particularly felt when medical errors occur, and delays are experienced in receiving care (Maphumulo & Bhengu, 2019).

Historically, public healthcare facilities in South Africa are known to fall short of the expectations of the public as a result of prolonged waiting times, inadequate infection control practices, ageing and poorly maintained infrastructure, and poor-quality healthcare service delivery (Young, 2016). In an attempt to address such issues, the

Department of Health in South Africa developed a set of National Core Standards (NCS) in order to provide benchmarks for health establishments to strive for (NCS, 2011). Compliance to the quality standards has however been poor, and this study seeks to explore the reasons behind this phenomenon.

South Africa has made efforts to improve quality within the healthcare institutions by formulating policies and implementing strategies that are intended to improve health outcomes and strengthen the health system (Moyakhe, 2014). The National Department of Health (NDoH) developed the National Core Standards (NCS) which are intended to set the benchmark for quality care against which the delivery of services at all health facilities can be monitored and to provide a framework for national certification of public health establishments (NDoH, 2011).

South Africa like any other African country is faced with quality healthcare challenges such as the shortage of human resources, and poor supply chain management of medicines availability, leadership and management, increased disease burden, information management, inadequate financing and policy implementation issues. The government attempted to tackle these challenges through policy development that was intended to bridge the gaps in healthcare quality caused by the apartheid era and to address injustices in order to reach the goal of universal health coverage. In 1994, South Africa transitioned peacefully from what was known as a “bad neighbourhood” due to apartheid practices which compromised the global cooperation with neighbourhood countries in dealing with healthcare issues and reversed discriminatory practices in an attempt to bring about improvement in global economies (Coleman, 2013). Global cooperation affected one of the initiatives adopted by the NDoH to improve quality which was the ideal clinic initiative that was developed in 2013 to reduce deficiencies at the primary healthcare (PHC) and further developed the ideal hospital framework to prepare for national health insurance (NHI) (Hunter, 2014). Implementation however has been slow.

Table 1 below gives the background and milestones of the healthcare policy development and reforms intended to improve the quality of the health services.

Table 1: Summary quality of healthcare reforms in South Africa

| Year | Key Initiatives and Milestones | References |
|-------------|--|---|
| 2001 | Quality Assurance Directorate of the NDoH launched a set of norms and standards, the first policy on Quality Health Care was published | National Department of Health, 2001. Policy on quality in health care for South Africa. Pretoria: Government Printers |
| 2007 | Quality Health Care policy was revised | National Department of Health, 2007. Policy on quality in health care for South Africa. Pretoria: Government Printers |
| 2008 | The NCS were developed and piloted by the Office of the Health Standards Compliance (OHSC) Office of the Health Standard Compliance was established as a cluster within NDoH | National Department of Health, 2007. National Core Standards for Health Establishments in South Africa. Pretoria: National Department of Health. |
| 2010 | | |
| 2011 | 10-Point Plan for Improvement of the Health Sector and the Negotiated Service Delivery Agreement was developed | National Department of Health. (2010). National Strategic Plan 2010/11-2012/13. Pretoria: National Department of Health. |
| 2012 | The NCS policy came into effect for implementation by the health establishments in South Africa | National Department of Health 2012. The national health care facilities baseline audit. National Summary Report, Health e-News, in R. Visser, R. Bhana & F. Monticelli (eds.), National Department of Health, Pretoria, South Africa. |
| 2013 | The Green Paper on NHI was released by NDoH | South Africa National Health Act, 2003: Policy on National Health Insurance, 2011. Pretoria. Government Printers Government Notice No. 657. |

| | | |
|-------------|---|---|
| | Quality Improvement Guide that sought to define quality and how it should be tested, implemented, and sustained was developed by NDoH | National Department of Health, 2013. Regulating the quality of health services: Benchmarking of approaches, institutions and systems, Towards the establishment of an office of health Standards. Republic of South Africa, Pretoria. |
| | National Health Amendment Act was promulgated in 2013, giving birth to the Office of the Health Standards Compliance (OHSC) as an independent body | National Health Amendment Act, 2013 No. 12 of 2013 |
| 2013 | Ideal Clinic Initiative Framework developed 2013, revised 2021 | South African National Department of Health. Ideal Clinic Initiative Framework. Pretoria: NDoH; 2013. URL: www.health.gov.za |
| 2017 | NHI White paper was signed by the then Health Minister of Health, Dr Aaron Motsoaledi on the 28 June 2017 | South African National Department of Health NDoH; 2017. White paper: National Health Insurance Policy. Towards Universal Health Coverage. Pretoria |
| 2018 | Norms and Standards has emanated from the NCS policy and being gazetted on the 2 February 2018 | Government Gazette No 41419, Volume 632, 2 February 2018. Norms and standards regulations |
| 2018 | Ideal Hospital Realization and Maintenance Framework Manual developed 2018 | National Department of Health. 2018. Ideal Hospital Realisation and Maintenance Framework Manual 2018. https://www.idealhealthfacility.org.za . |
| 2019 | Draft enforcement policy was issued for public comment to set out the approach to be followed by OHSC in enforcing compliance to the prescribed norms and standards by the health establishment | Government Gazette No 42337, Volume 478, 29 March 2019. Enforcement Policy. |

All these key milestones were intended to ensure that the country had a common definition of quality of care to guide all health establishments, managers and staff at all levels as stipulated in the NCS policy (NDoH, 2011). The NCS policy consists of seven major areas which are: patient rights; patient safety, clinical governance and clinical care; clinical support services; public health; leadership and governance; operational management and facilities and infrastructure (NDoH, 2011). In order to focus attention on the implementation of the NCS, the South African Department of Health selected six key priority areas (KPAs) which health care institutions are required to comply with to fast-track quality improvement (National Health Consultative Forum, 2010). These six KPAs include 1. Positive and caring attitudes of staff; 2. Cleanliness of the facility; 3. Improvement in waiting times; 4. Improve patient safety and security; 5. Infection prevention and control; 6. Availability of medicines and supplies. (DoH, 2012).

Some of the factors that facilitate successful quality audits are practical measures to collect data from medical records which should include the use of electronic record systems and an increased reliance on information technology (NDoH, 2018).

In 2013, the Office of the Health Standards Compliance (OHSC) was established in South Africa to oversee all activities related to the compliance of the core standards including constantly monitoring of facilities, audits and providing feedback to facilities on their performance results (NDoH, 2013). Prior to this, an audit demonstrated that only thirty-two (32) of the three hundred and ninety-four (394) hospitals in the country complied with the infection control guidelines and only one (1) met the accepted standards for cleanliness, infection control and prevention, staff attitude, patient safety and waiting times (Visser et al, 2012).

The NCS policy states that is the responsibility of the healthcare managers to oversee the performance of the healthcare services in line with the KPAs stipulated (NCS, 2011:37). The tools for monitoring compliance and assessment of health facilities are

designed to fit all level of care (OHSC, 2017/18). The tools were designed to have functional areas for clinics, community health centres and hospitals.

The results of the health audits conducted by the OHSC in 2016 and 2017 exposed a lack of compliance as of the 923 health facilities that were inspected (which included all levels of care) only 152 were compliant with the set standards which often included conditions for review (OHSC, 2016/17). Reports revealed that leadership and corporate governance together with patient safety and security were the lowest in the ranking of standards during inspection. It is important to understand the systemic factors that influence the dynamics of compliance to the NCS at facility level (Maphumulo, 2019).

The Lancet Commission report (2019) blames gaps in ethical leadership, management, and governance for the poor quality of care in the country. The authors of this report state that there is evidence of mismanagement, inefficiencies and incompetencies at various levels of the health services and that fraud and corruption are threats to equitable access. They also believe there are weaknesses in the regulatory bodies of health professionals and that the barriers to effective community participation negatively influences accountability to the community.

While it was not possible to address the numerous issues identified, it should be noted that one of the recommendations of the inspection report (OHSC, 2017/18) was that there should be a qualitative research study to establish issues that creates barriers to successful implementation of the NCS by healthcare entities. This study attempts to respond to concerns of the OHSC report and find answers to the root cause of non-compliance to the set NCS and system failure. The findings of this study will be used to provide recommendations for improving compliance and performance within the Gauteng province and other provinces.

1.3. PROBLEM STATEMENT

Compliance to the NCS in the South African health sector has been poor with the compliance rates ranging from 42% to 62% in the various provinces (OHSC, 2017/18). While the Gauteng provincial health establishments were among the provinces who scored above national average (62% against the national average of 50%) there was still a wide range of compliance rates between the various hospitals in the province (OHSC, 2017/18). The NCS represent the minimum requirement for a hospital to provide for delivery of safe and cost-effective quality healthcare services and therefore, it is of great concern that compliance is low and variable despite the different levels of hospitals ostensibly having similar resources available to them (DoH, 2012). Attempts have been made to focus attention on what are known as the six priority areas (KPAs) of the NCS however, compliance still is poor (National Healthcare Facilities Baseline Audit, 2012).

To date, attempts to improve compliance to the standards have been reactionary due to the fact that hospitals with low scores are criticised and their management expected to resolve issues rather than looking at the systemic issues (NDoH, 2012).

The unpublished internal audit results of the Gauteng Province revealed a noticeable gap in compliance at the health establishments of the same level, such as between different tertiary hospitals. The results made it possible to identify the best performing (or more correctly the better performing) and worst performing health care institutions in the various groupings, compared to one another. Understanding how the processes, context and actors operate in both best performing and worst performing hospitals will assist in understanding the dynamics that influence compliance to the NCS and should therefore assist stakeholders to build on the success factors in the best performing hospitals and develop remedial strategies for the worst-performing hospitals.

The purpose of this study was to investigate dynamics that influence compliance with the six key priority areas (KPAs) of the National Core Standards (NCS) at the best- performing and worst - performing hospitals in Gauteng province. The focal point of this study was

two purposively selected tertiary hospitals in order to ascertain how the policies either support or constrain compliance to the NCS. This study was guided by Walt and Gilson's Policy Analysis Framework (1994).

1.4. RESEARCH QUESTION

What are the dynamics that influence compliance with the six key priority areas (KPAs) of the National Core Standards (NCS) at the (better) performing and worst-performing tertiary hospitals in the Gauteng province?

1.5. STUDY JUSTIFICATION

South Africa has made many attempts since 2011 to address gaps in quality of health care and the poor compliance and set benchmarks for measuring such standards to achieve desired outcomes. Problems still exist and while this study is limited to two tertiary hospitals in Gauteng the researcher believes that the findings will benefit health care systems on a broader and systemic scale as it attempts to examine in-depth and underlying factors influencing compliance and non-compliance rather than being reactionary and dealing with specific areas of non-conformance as has been done in the past. This study strives to examine systemic issues relating to the impact of policy on the actors within the health care system and their ability to perform according to the regulated standards.

1.6. AIM OF THE STUDY

The aim of this study is to investigate the dynamics that influence compliance with the six key priority areas (KPAs) of the National Core Standards (NCS) in two tertiary hospitals in Gauteng province.

The findings of the study will contribute to strengthening compliance to the implementation of the six KPAs of the NCS in Gauteng province

1.7. OBJECTIVES

. The specific objectives are:

- To analyse the NCS policy and related documents to establish the context and content of the policies;
- To explore the process of the implementation of the six KPAs of the NCS in the best and worst performing tertiary hospitals in Gauteng province;
- To identify enablers and barriers influencing compliance with the six KPAs of the NCS in the best and worst performing tertiary hospitals in Gauteng province;
- To describe relationships between the actors responsible for the implementation of the six KPAs in the best and worst performing tertiary hospitals in Gauteng;
- To provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng province.

1.8. SIGNIFICANCE OF THE STUDY

This study will contribute knowledge to policy implementation research, as there is a dearth of policy implementation studies focusing on quality improvement. Further, the study will provide policy makers and role players in health policy implementation with the remedial actions to improve compliance in the worst performing and the best performing tertiary hospital to serve as a benchmark for improving compliance.

1.9. RESEARCH FRAMEWORK

According to Walt et al. (2008) policy analysis explains the interaction of institutions' failures or successes to put strategies in place for the implementation of respective policies. Therefore, policy analysis can be utilised to identify the gaps in implementing standards and compliance to the six KPAs in Gauteng province. Walt and Gilson (1994) propose a policy triangle framework that helps to systematically identify the different factors that affect the health policy design and implementation.

According to Walt and Gilson (1994), it is not only resources that are important but also the content of a policy, the processes used to develop it and implement it, the context in which the policy is implemented, and the people (actors) involved that collectively determine whether a policy is successful or not, and that all these aspects are inter-related.

Walt and Gilson policy framework (1994) proposed a health policy triangle (as depicted in Figure 1) in order to help think systematically about all the different factors that may affect the health policy. Hussey et.al. (2004) are of the view that the policy formulation falls in the process corner of the framework and is influenced by the actors (individuals, groups and organisations), content and context and further reiterates that the health policy is a process of negotiating and bargaining in order to satisfy the various interests and build a coalition of support.

However, it varies according to the nature of the policy and the organisational structure in which it is made. The content of the policy relating to the NCS and the six KPA's is the same for all institutions. Within the health policy triangle, the context, processes and actors may, however, differ greatly and could explain the reasons why the level of compliance varies in tertiary hospitals in Gauteng.

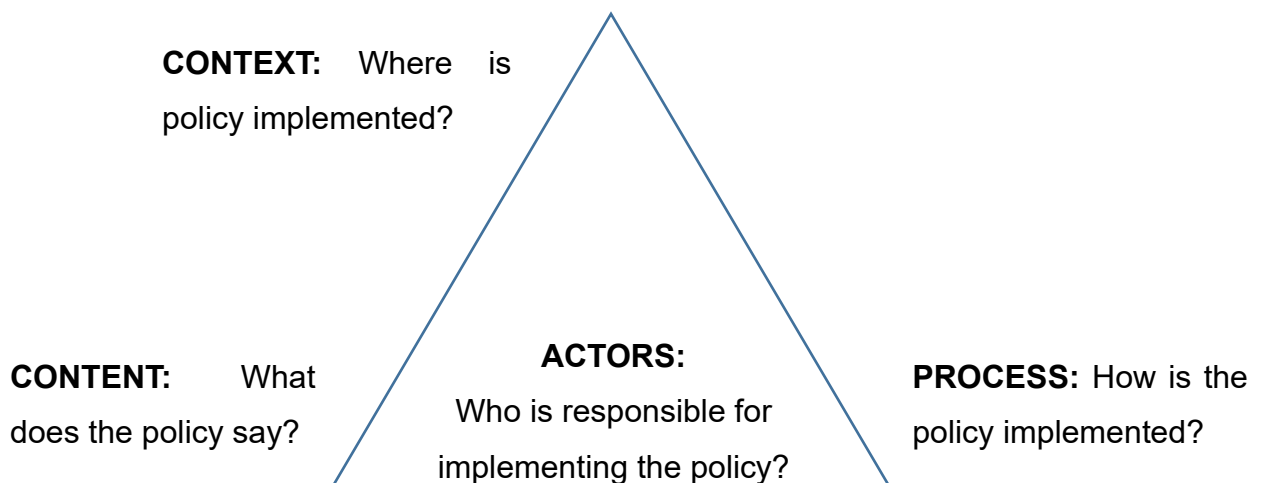


Figure 1: The Walt and Gilson's Theoretical Framework (1994)

The context refers to the systematic factors in the environment such as the economic, political, and social context within the country's national borders or international environment. The context factors can be in the form of structural factors that encompass the political system, demographic features and the type of the country's economy. The content is the constituent of a specific policy which details the subjects and topics covered in the health policy. Process is the way in which policies are initiated, formulated, negotiated, communicated, implemented and evaluated (Anderson & Hussey, 2006).

Like any other public initiatives, the six KPA's can be affected by factors such as weak regulations, regulation capacity, monitoring systems. However, it varies according to the nature of the policy and the organisational structure in which it is made. According to Walt et al. (2008:308) there is a gap on healthy policy analysis in low- and middle-income countries which include absence of explicit conceptual frameworks. Available frameworks are derived mainly from the western discourse and policy analysis is growing in lower income countries. The rationale is that there is a need for an analysis of the policy plan and implementation in the context of South Africa on the six KPAs in order to learn and provide a model for implementation framework.

Although there are different players in the development of health policy, the state functions as the provider of health service, the purchaser as well as the researcher, trainer and evaluator. According to a study by Onoka, Hanson and Hanefeld (2015:1114) the interests of actors shape policy content as their interests can determine an effective implementation of a policy or interventions or vice versa. Therefore, the Walt and Gilson's (1994) policy triangle served as a theoretical framework for this study.

1.10 OUTLINE OF THE THESIS

The dissertation report consists of seven chapters that are outlined as follows:

Chapter 2: Literature review

This chapter highlights global and local literature specific to healthcare service provision and compliance to quality standards inherent to health establishments.

Chapter 3: Research methodology

This chapter outlines the research strategies that are employed in this three-phase research project. The methodologies for each of these phases are discussed in detail including the study setting, study sample, and data collection procedures followed.

The presentation of results

The results are discussed based on the three phases of the study and in line with the research objectives. There are thus three chapters reporting on the study findings **(Chapters 4-6)**.

Chapter 4 describes Phase 1 of the study based on the document review and analysis of the NCS policy and related documents to establish the context and content of these documents. Summative content analysis according to guidelines by Hsieh and Shannon (2005) was used.

Chapter 5 describes Phase 2 of the study and the findings based on the semi-structured interviews which were analysed using thematic content analysis according to guidelines by Braun and Clarke (2006). This phase assisted the researcher to understand the process of the implementation of the six KPAs of the NCS as well as to identify enablers and barriers influencing compliance with the six KPAs of the NCS in the best and worst performing hospitals in Gauteng.

Chapter 6 describes Phase 3 of the study and the findings based on the social network analysis (SNA). Within the SNA, much attention was paid to identifying and understanding the roles of actors in the implementation of the six KPAs. In order to better describe the relationships between these actors, a simplified network analysis was used consisting of a Net-Map method (2007).

Chapter 7 Discussion, conclusions and recommendations

This chapter provides an integration of the results of all three phases of the study and synthesis of the study findings in relation to Walt and Gilson (1994) theoretical framework. Practical recommendations are made with respect to practice, education, and research. This is followed by a discussion on the strengths and limitations of the study.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of the literature related to the dynamics of compliance with the standards for health establishments. Modern healthcare occurs in a high-risk environment due to its complexity resulting in adverse events including those caused by human error. This is despite the existence of the well documented preventive strategies. Instead of viewing adverse events as a challenge which needs to be overcome, a culture of blame has arisen which does not create a quality working environment (Rodziewicz et al, 2021). Literature related to the concept of quality in health care, efforts to improve the quality of care, and responses to these efforts is examined in an attempt to understand why and when health care personnel comply to set standards for health care quality.

2.2 THE CONCEPT OF QUALITY HEALTH CARE

The definition of healthcare quality that is mostly used is the one developed by the Institute of Medicine (IOM) (McIntyre & Ataguba, 2018). The institute defined quality healthcare as “the degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (IOM, 2013:1). It was further stated by the IOM (2013) that the quality of health services should be efficient, effective, patient-centred, equitable, and timely. According to the United Kingdom (UK) National Health Services (NHS), quality healthcare relates to three areas, which are patient safety, clinical effectiveness, and patient experience (McIntyre & Ataguba, 2018).

The definition of quality in healthcare has evolved from when it was first defined by Donabedian (1966) as a relationship between structure, process and outcomes, and Schuster et al. (1988) who considered good healthcare quality to mean the provision of appropriate services to patients in a manner that is technically competent, with shared decision making, good communication, and cultural sensitivity to definitions that are patient centred. The United Nation (UN) declaration for universal health coverage was

adopted in September 2019 as reaffirmation for global commitment and collaboration of all stakeholders to improve quality of healthcare services for all (WHO, 2020). The services should fulfil the needs of the patients and satisfy the providers. Hannawa et.al. (2021) argued that quality of health care is a collaborative effort between the healthcare workers and healthcare users as the value of quality is viewed differently, healthcare workers' view of quality is based on motivation, communications and knowledge while healthcare users' view of quality is based on respect, being given enough time, kind and polite healthcare workers that demonstrates courtesy and sympathy.

The World Health Organization (WHO, 2018:13) defined high quality healthcare services as “providing the right care, at the right time, responding to the service users' needs and preferences, while minimising harm and resource waste”. The definitions provided in this section imply that the quality of healthcare can be measured, and its ultimate aim is improvement in health as opposed to simply increasing service inputs or enhancing system processes. Quality healthcare results in an increase in the likelihood of desired health outcomes. WHO (2018) provided seven measurable characteristics of quality healthcare as efficiency, integration of care, equity, timeliness, people-centeredness, safety, and effectiveness as shown in Figure 2.1.



Figure 2. 1: Elements of healthcare quality, WHO (2018)

While several quality elements have been suggested over the years, health bodies are increasingly acknowledging that quality health services globally should be effective, safe, and people-centred. In addition, health services should be timely, equitable, integrated, and efficient, as shown in Figure 2.1 (WHO, 2018). The elements are briefly explained below.

- **Effectiveness** – Is about doing the right things including setting targets that will achieve the overall good, or effect. This implies that healthcare should be guided by evidence-based guidelines and clinical pathways offered on the basis of scientific knowledge and evidence-based guidelines. There should be adherence to clinical pathways by the care team (Burhans & Alligood, 2010).
- **Safety** – authors (Lawati et al, 2018:1) refer back to the World Health Organization’s (2009:1) definition which states, “the prevention of errors and adverse effects to patients associated with health care” and “to do no harm to patients.” This too implies that health care establishments should have clear guidelines for the prevention of medical errors.

- **People-centeredness** – The New South Wales (NSW) Health Department (2020) state that this involves putting the patient first – at the centre of the service. Support should be tailored to meeting people’s needs. This implies the members of the healthcare team should listen to the questions and concerns of patients and develop a plan to meet these needs.
- **Timeliness** – “Doing things right” is important but so is it important to do it at the appropriate time. Delays in providing and receiving services should be kept to a minimum. Situations that require urgent attention should be taken note of and acted upon as quickly as possible (Allen-Duck et al., 2017).
- **Equity** – The quality of care provided to patients should be the same irrespective of personal characteristics such as socio-economic status, race, gender, ethnicity, or geographical location (WHO, 2018).
- **Integration** – The care received by a patient across facilities should be coordinated (WHO, 2018).
- **Efficient** – Doing the right thing at the right time is important and efficiency means this should be done with the minimum use of resources. It is the ratio of the output to the inputs of any system (good input to output ratio). This implies there should be no wastage of resources (Burches & Burches, 2020).

Quality healthcare is the basis for achieving universal health coverage since access without quality is meaningless (WHO, 2018). Poor quality healthcare is harmful to people and also wastes precious resources that can be invested in other sectors of the economy to improve the lives of citizens (Allen-Duck, Robinson, & Stewart, 2017). Countries spend billions of dollars on dealing with the outcomes of poor-quality healthcare. This money could be used in education, infrastructure, and social services.

2.3 GLOBAL PERSPECTIVE OF HEALTHCARE QUALITY

The World Health Organization (WHO, 2018:8), as the mother body of the global healthcare systems, has established a framework of integrated people-centred health services that presents a vision in which “all people have access to health services that

are provided in a way that responds to their preferences that are coordinated around their needs and which are safe, effective, timely, efficient and of acceptable quality”. The development, refinement and execution of a National Quality Policy and Strategy (NQPS) is a priority for countries as they look to systematically improve the performance of their health care systems (WHO, 2018).

In response to the global push towards Universal Health Coverage (UHC), stakeholder expectations and increasing recognition of the role of quality initiatives in building strong, resilient health systems, a number of countries are embarking on journeys to develop and refine their national policy and strategy for quality of care (WHO, 2018). WHO has structured eight elements of the NQPS to act as a catalyst to address quality concerns and these elements are outlined in the Figure 2.2:



Figure 2. 2: Elements of the National Quality Policy and Strategy, SAHR (2018)

According to SAHR (2018), quality improvement is key to the success of any national health system and leadership and the provision of support structures are essential components to achieving quality. In addition, other drivers of quality improvement are the

ability to measure quality and the engagement of staff in the process. Value for the money spent are also important. A commitment to on-going learning, informed practice, and clearly defined responsibilities for all role-players are additional requirements for quality improvement (SAHR, 2018).

Poor quality healthcare services are impeding progress in achieving health for all, attention to be given to providing flexible and appropriate access to healthcare services based on the need of the healthcare user (Vecchio et. al, 2018). Currently, there is a prevalence of inaccurate diagnosis, unnecessary or inappropriate treatment, medication errors, unsafe or inadequate clinical practices at the healthcare facilities, as well as providers without adequate training in all countries. The situation is more pronounced in low and middle-income countries. In these countries, about 10% of patients who are hospitalised can expect to acquire an infection during their tenure in hospital, compared to 7% in high-income countries (Delloite, 2017). This is despite the fact that the acquisition of hospital infections can easily be prevented through better hygiene, improved infection control practices, and appropriate use of antimicrobials. According to WHO (2018), almost 40% of healthcare facilities in low and middle-income countries do not have adequate water and 20% have poor sanitation, which impacts negatively on the quality of care.

There have been significant cost implications of poor-quality health for health systems and communities across the world. Costs related to medical errors globally have been estimated at US\$42 million every year and this does not include healthcare costs, foregone productivity, and lost wages (Organisation for Economic Cooperation and Development (OECD), 2017). In high-income countries, about 15% of hospital expenditure is utilised on correcting avoidable complications of care and harm to patients (OECD, 2017). The broader social and economic costs of harm to patients resulting from long-term impairment, disability, and lost productivity run into trillions of dollars each year. Close to 20% of health resources are utilised in ways that do not generate much health improvement (OECD, 2017). The absence of quality healthcare services negatively impacts on efforts to achieve universal health coverage. The foundation of a nation's

human capital is based on good health and therefore, no country can afford unsafe or low-quality healthcare (Leslie et al., 2017).

2.4 OVERVIEW OF HEALTHCARE QUALITY IN AFRICA

Over the years, healthcare systems in Africa have suffered from man-made issues that include financial, human resources, institutional, technical, and political developments (Abubakar, Basiru, & Oluyemi, 2018). In Nigeria, for example, broken-down healthcare systems have resulted in approximately 5000 people leaving the country every month to seek treatment in other countries, known as medical tourism (Oleribe, et al., 2019).

According to Danhoundo et al (2018) serious concerns about the quality of health care services and health outcomes in sub-Saharan Africa have been raised. These include bottlenecks in the health system leading to drug shortages, disrespect of patients and a tendency to concentrate on providing services that attract fees from donor organizations. These authors cite a lack of social accountability as the source of these problems.

A number of African countries implemented initiatives to enhance the quality of healthcare through the establishment of quality standards. According to SAHR (2018), a review of country case studies of countries that had developed National Quality Strategies since 2010, Ghana, Ethiopia, and Nigeria, had all done so. They highlighted key lessons which included building on earlier lessons learned, linkages to existing policies, leadership and local ownership, extensive stakeholder engagement, capacity development and funding for sustainability.

Tanzania focused on Kaizen (an approach, named after the Japanese word for “improvement”, with activities involving all employees to continuously improve all functions and quality process methodology and techniques, but without a strategic framework (Khamis & Njau, 2016). In 2003, the government of Tanzania through the Ministry of Health and Social Welfare recognized the importance of improving quality of care through different approaches such as the Health Quality Improvement Framework

with the overall objective of improving quality of healthcare services and wellbeing of their citizens (Khamis & Njau, 2016).

Despite the efforts that the government of Tanzania has made to improve quality of care, health care service provision remained constrained by a number of challenges, including intrinsic and extrinsic factors. The extrinsic factors included poor infrastructure, unavailability of medical supplies/equipment, and poor staffing level while intrinsic factors include motivation for health care workers and workplace training. Based on these constraints, the Ministry of Health and Social Welfare in Tanzania embarked on another effort by implementing policy changes under a Health Sector Reform Strategy. The key strategy was the decentralisation of the health services, which empowers local authorities to be independent and autonomous. Despite all efforts and reform, quality of healthcare in Tanzania remained a challenge and scored low, one of the reasons being insufficient human resources, especially in rural areas (Khamis & Njau, 2016).

In Ethiopia, the government established a roadmap, which focused on introduction of community-based health insurance, primary healthcare coverage, expansion of human resources, and development of online learning platforms through a National Healthcare Quality Strategy (NHQS) in 2016 (Magee, et al., 2019). The Ethiopian framework emphasises patient-centred health care that is safe, effective and accessible, as well as multiple inputs to improve performance. Strategy was communicated by training managers on context specific quality improvement (QI) methods. Key structural changes made include creation of a formal Quality Unit within the Ministry of Health to oversee the development of quality agenda through coordinated quality planning, QI, and quality control (Magee, et al., 2019). Quality teams were developed for each facility in both private and public healthcare, including community structures to enable delivering, improving and maintaining high levels of quality. Quality expertise of the dedicated personnel was built to drive the quality agenda.

Ethiopia achieved significant improvements in priority areas such as maternal and child health, malnutrition, communicable and chronic diseases, as well as in quality of

emergency and surgical services (Magee, et al., 2019). The strategy was designed in line with the WHO guidelines and previous challenges were taken into consideration to improve quality of the Ethiopian healthcare. As part of the quality improvement approach, Hospital Management Initiative was started in 2006 as a pioneering initiative to introduce a standardised based quality approach. This subsequently progressed to Ethiopian Hospitals Reform Implementation Guidelines (EHRIG) incorporating the concepts of blueprint for hospitals, the health care financing strategy and the Business Process Reengineering (BPR) (Magee, et al., 2019).

2.5 OVERVIEW OF THE SOUTH AFRICAN HEALTHCARE SYSTEM

Section 27 of the Constitution of South Africa states that all people have the right to access to healthcare. However, despite this, Harris et al (2011) demonstrated that inequities remain, mainly as a result of inequitable resource allocation. Numerous efforts have been made by the government since 1994 to realize this right but challenges remain to access which is inextricably linked to quality care, or the lack of it.

The goals that have been set are commendable but, as Maphumulo and Bhengu (2019) point out, services offered by public health institutions are not meeting the basic standards of care and patient expectations as indicated in many media reports and audits. At first glance this situation may not appear to be serious as the Global Health Index (2019) ranks South Africa highest among African countries. Several studies, however, indicate that there is cause for concern, with Mogakwe (2019) referring to the health system as “ruined and in serious need of repair”, Coovadia et al (2009) as “dysfunctional”, Pillay-van Wyk et al. (2016) referring to a “complete failure” of the health care system and Malakoane (2020) asserting that the health service is yielding poor health outcomes. Coovadia et al (2009) also point out that if assessing quality in terms of health outcomes, South Africa is considered to be worse than those of many countries in the low-income group. The public has therefore lost trust in the healthcare system.

These observations were also made in other South African studies such as those conducted by Balabanova, et al (2010), Benatar (2013), and Muhwava et al (2018). Research conducted by Abaerei, Ncayiyana and Levin (2017) in Gauteng established that 75% of the sampled participants said they had stopped using public healthcare services because of the deteriorating quality of such services. Substantial inequalities still exist between and within provinces and due to slow progress in restructuring the healthcare system (Manyisa & van Aswegen, 2017).

It is important to understand the historical context as it provides insight about past inequities. As highlighted in the introduction 'bad neighbourhood' has impacted on the quality of care provided to South African citizens because there were sanctions where the country could not get necessary support from other countries to reverse past inequities and emigration of health personnel had aggravated the shortage of human resources and healthcare services were strained as the healthcare system were already burdened (George, Atujuna and Gow, 2013). To be fair, the government inherited a fragmented and inequitable health system in 1994 where fourteen (14) separate health departments existed as a result of racial segregation and the creation of "Bantustans" or ethnic homelands (Coovadia et al., 2009; Maphumulo & Bhengu, 2019) and professional bodies were similarly divided. Gender and racial discrimination, vast income inequalities, and a migrant labour system have characterised the country's troubled past, and this has had a serious negative impact on health services (Coovadia et al., 2009; Maphumulo & Bhengu, 2019).

After the apartheid period, the government attempted to transform the public health system into an integrated, comprehensive national service, by making major changes in health policy and legislation in order to ensure that health institutions comply in the delivery of quality care (Manyisa & van Aswegen, 2017). Many systemic problems however remain with 71% of the South African population depending on the public health sector for their healthcare needs, but less than 50% of the total expenditure on health being utilized by the public sector. The inequities between the public and the private sector are still obvious today with Rensburg (2021) stating that the private sector is largely

funded through the contributions made by the 27% of the population who contribute to medical aid schemes. He further states that the majority of South Africans cannot afford the exorbitant cost of private healthcare”. Furthermore, systemic problems like nepotism and corruption delayed government efforts to revive past inequities. As such, poor leadership resulted in the state being “captured” and skills were not recognised as nepotism took its toll to collapse the system. Munzhedzi (2016) argued that the process of implementing the good intentions of the government failed as corruption illegitimated the process thus, even today South Africa is still recovering from the impact of state capture due to poor leadership.

The results of poor-quality healthcare include increased medico legal hazards, burden of healthcare professional and loss of confidence in the healthcare sector (NDoH, 2018) and there are still significant differences in disease and mortality rates between races, reflecting racial differences in access to basic household living conditions and other determinants of health (Abaerei et al., 2017).

2.6 BARRIERS AND ENABLERS FOR COMPLIANCE WITH STANDARDS

Several studies done by (Oleribe et al, 2019; Busse et al, 2019; WHO, 2018) indicated that barriers to quality health care include poor human resources, budgetary or financial constraints or poor management thereof, poor leadership and poor governance which are thought to account for more than two-thirds of the perceived problems in health care in Africa. Maphumulo and Bhengu (2019) agreed that these factors are responsible for the poor quality of care but add that migration, increased consumer demands and the increased disease burden have exacerbated the problems. Malakoane et.al, (2020), on the other hand pointed to problems of poor communication, a lack of resources and poor maintenance of structures and equipment although these latter issues could be related back to the issues raised by the other authors. A healthcare system that has enhanced quality is characterised by efficiency in service delivery, fewer errors, and minimum delays in care delivery, lower cost, and increased market share.

2.6.1 Human Resource Issues

A skilled, motivated, and adequately supported pool of employees is crucial for the successful implementation of quality standards in the healthcare sector (WHO, 2018).

While an assumption is often made that health workers have a desire to provide best care for their patients, there is evidence that the very barriers to quality health care are the same issues that demotivate health care staff. Mumbauer et al, (2021) identified that the most significant factors impacting on health workers' ability to care are a heavy workload, poor workplace culture, insufficient equipment and infrequent training opportunities. This indicates that it is not only the availability of staff that is important, but also their level of motivation (Mumbauer et al, 2021).

Intrinsic motivation remains an important construct in determining a person's work ethic, but extrinsic motivation can either reflect external control or true self-regulation (Badubi 2017). Intrinsic motivation is the act of doing something without any obvious external rewards. It is done because it's enjoyable and interesting, rather than because of an outside incentive or pressure to do it, such as a reward or deadline and further as surety of job security (Badubi 2017).

While an extrinsically motivated individual will work in order to gain an external reward such as a salary or to avoid getting into trouble, the task is made difficult by the systems and environments that they operate in (Sutton and Barto, 2018).

There are several countries that face significant shortages in both the quality and quantity of health personnel. WHO (2016) estimated the global shortage of doctors to be 2.5 million and that of nurses and midwives at 9 million. The shortage of allied health professionals was estimated to be 6 million. Due to these shortages, there is often absence, or poor delivery, of basic care. Poorer countries experience the most severe shortages of healthcare workers. In the developed economies, there is often a

concentration of healthcare workers in the cities, which results in poorer quality care in rural and remote areas.

Deloitte (2019) shared the view that the quality of healthcare is largely dependent upon having the right healthcare workers with the right skills in the right place. However, efforts to achieve this requirement are being hampered by an ageing workforce, rising demand for healthcare services, and the reduction in working hours for physicians. These factors fuel shortages of appropriately skilled workers in both high-income and low-income countries. Despite the growth of clinical professions in the NHS in the UK in the past five years, they still cannot keep up with the demand. The NHS currently has close to 42 000 vacancies for nurses, midwives, and allied health professionals (Victoria State Government, 2018). This has increased the pressure on existing staff which in turn has a potential impact on the quality of care as well as employee health and retention.

Since 1994, the South African health sector has been affected by the poor distribution of health personnel as well as poor skills among several healthcare staff (Coovadia et al. 2009). This has compromised the health department's ability to deliver key programmes, particularly for HIV, maternal health, mental health, child health, and tuberculosis. The human resource crisis is particularly serious at the district level and has been on-going despite the spending of 60% of the health budget on human resource, as such the population is outpacing the available human resource thus South Africa needs more drastic response in dealing with human resource shortages (Barke and Abdul-Kareem, 2019). Human resource shortages have been worsened by a number of unfortunate policy decisions that include the offer of voluntary retirement packages to public sector employees in the mid-1990s (Barke and Abdul-Kareem, 2019).

World Bank figures indicated that in 2015, the nurse to population rate in South Africa was 5.1 to 10 000 of the population as compared to 10.6 in Australia, 8.8 in the United Kingdom and 9.1 in Cuba. While the situation in 2015 was less than optimum, the nurse-to-population ratio in South Africa is declining – a situation made considerably worse by the changes in the nursing education system that have not allowed for adequate growth

(Armstrong et al, 2019). According to the South African Nursing Council, in 2020 there was one nurse for every 213 patients in the country, but there is an inequitable distribution of nurses in the private and public sectors. These statistics are an indication of an acute shortage of nurses and doctors in public healthcare. A new study published recently in *The Lancet*, indicates that a policy that maintains a minimum nurse-patient ratio not only saves lives, but also prevents readmissions, shortens stays in hospital and reduces costs.

The South African government developed the national human resources strategy in 2010 which was aimed to cover up to 2030 in terms of human resources plan (Maphumulo & Bhengu, 2019). However, concrete proposals and actions to address the human resource crisis, particularly at primary and community levels have not been forthcoming. Some positive policies such as increased uptake by medical schools and the introduction of mid-level health workers in the form of clinical associates have unfortunately been very slow in improving the situation as the number of those graduating has been too low to fill in the gap. According to Barke and Abdul-Kareem (2019) doctors and other healthcare professionals in South Africa leave South Africa in search of overseas jobs as they complained about inadequate preparation for and support during deployment. The human resource shortages therefore pose a huge challenge to the ability of healthcare establishments to comply with quality standards and provide good quality healthcare.

2.6.2 Human Resource Management Issues

The reluctance to strengthen the management of human resources was cited by Van Reyneveld et al. (2020) as one of the key challenges of the South African healthcare system. During the apartheid era, the majority of senior management positions throughout the system were held by whites males and public sector managerial competence was centralised and highly variable. In preparation for the fourth industrial revolution concerted efforts were made to incorporate black women in top management positions to create employment equity but thus far South Africa has failed to close the gap of misrepresentation of Black women according to Matotoka and Odeku (2021). Improvement of the public service human resource requires government stewardships

with the mix of skills and political support. There are also serious shortages of supervision, support, and training (Coovadia et al., 2009; Van Reyneveld et.al, 2020).

According to Mbandlwa et.al. (2020), there has not been sufficient political will and leadership to deal with poor performance in the public sector. There has also been a stubborn tendency to keep senior employees and leaders in their positions, thereby rewarding loyalty instead of the ability to deliver. There is no climate of accountability for senior managers, apart from financial accountability, which is enforced through the Public Finance Management Act, PFMA (1999). This has made cost-containment the dominant practice in the public health system.

Lack of competence within the public sector has become so pervasive that it is an issue that is now very difficult to address (Maphumulo & Bhengu, 2019). There is limited capacity at every level in the healthcare sector as well as other sectors of the government. According to Jojo (2019), this situation can also be attributed to the country's disastrous education system that has resulted in most learners coming out of secondary and sometimes tertiary education with very low literacy, numeracy, and problem-solving skills. The government has consistently been refusing to face up to the failure of the education system and come up with radical measures to address the situation.

The government should be determined to solve the capacity problem in order to have a more efficient public sector. The public sector culture should also be changed from one that is oriented towards security of employment and reward for loyalty, to one focused on accountability and delivery of services to the public, in which competence and performance are required and rewarded (Jojo, 2019). Only then can the ability to comply with quality standards for health be possible. Orgill et al (2019) argue that in order to comply with issues of compliance, managers in districts must be recognised as leaders of change, not only as implementers who are at the receiving end of dissemination strategies from those at the top. They further acknowledge that district managers are the integral intermediaries between those at the coal face and national policies, managing long chains of dissemination and natural (often unpredictable) diffusion”

2.6.3 Resources and Facilities

Kruk et.al. (2018) pointed out that the availability of resources has an impact on the ability to adhere to quality standards. High quality outputs are determined by the availability of high-quality inputs. Operating with low quality facilities and equipment diminishes the productivity of healthcare workers. There is an increasing realisation by managers and policy makers that financial resources are the most important factor that is affecting the quality of healthcare services (Kruk et.al., 2018). According to Maphumulo and Bhengu (2019), members of the public have always been raising concerns about the shortage of equipment in hospitals. Such shortages have resulted in fatal delays in urgent surgery. Backlogs in work result in extended delays for patients who are awaiting treatment. Cancer patients, for example, are affected by shortages in oncology doctors as well as equipment. There are also long lists of patients awaiting diagnosis and surgery due to human resource and equipment shortages (Maphumulo and Bhengu, 2019). These long waiting times for medical intervention have the potential to expose patients to the development of complications or even the loss of life. Times LIVE (2018:5) described public hospitals as “a death trap for the poor”.

Mokoena (2017) conducted a study which established that the shortages in material resources, equipment, and supplies have resulted in patients staying for longer times in hospitals before their problems can be addressed. The participants in the study by Mokoena (2017) highlighted that the scan machine in the particular hospital was not functional and patients had to be referred to other hospitals for investigation, leading to delayed diagnosis and treatment. Manyisa and Van Aswegen (2017) also pointed out that shortages in administrative equipment and skilled personnel that are being experienced by most public hospitals in the country have an adverse effect on the quality of care being offered to the public. The Presidential Summit on Health (2018) also noted that the health facilities infrastructure in South Africa is sub-standard and ageing, with unsafe facilities.

Maphumulo and Bhengu (2019) posited that there is an unequal distribution of resources in the South African healthcare sector. According to the NDoH (2016), 84% of the South

African population depends on the public health sector for their healthcare needs. Only 16% of the population are members of medical aid schemes, and these are attended to by the private sector. The 16% who are members of medical aid schemes utilise more than 50% of the total expenditure allocated for healthcare, while the remaining 84% of the citizens are dependent on the under-resourced public sector. In addition, close to 80% of the country's medical specialists serve the same 16% private sector population (Maphumulo and Bhengu, 2019). This means that the public sector suffers greatly from the shortage of human and other resources and the ability of hospitals and clinics to comply with the NCS is therefore compromised.

According to WHO (2018), the quality of healthcare facilities is assessed first on the availability of basics such as safe waste disposal, good sanitation, reliable electricity, and clean water. A 2019 WASH NORM survey conducted in Nigeria found that less than 26.5% of the healthcare facilities had reliable electricity, sanitation, and water (UNICEF, 2020). Estimates by WHO (2018) indicate that 40% of healthcare facilities in low and middle-income countries do not have reliable water and 20% do not have adequate sanitation. However, South Africa was not part of the countries represented in Africa in assessing the status of the availability of these basic services.

2.6.4 Leadership and Management

Oleribe et al. (2019) cited one of the leading challenges to quality healthcare as poor leadership and management. Figueroa et al. (2019) had similar findings as they stated that the selection and development of leaders who are prepared and trained for leading in increasingly complex health systems is one of the major challenges in the coming decades and further indicated that the primary reasons for incompetent leadership arise from the presence of managers who are unfamiliar with leadership techniques and capabilities. Study conducted by Oleribe et al. (2018) highlighted corruption in healthcare systems, lack of political will, poor management of resources, and poor integration of healthcare programmes as some of the major management and leadership challenges affecting the quality of healthcare.

These findings are similar to those of Ghiasipour et al. (2017), who cited issues related to the poor role of government in health policy and poor oversight of the health system as the major leadership challenges. Such findings imply that poor leadership based on uneducated leadership who are not capable of analysing and understanding and able to deal with complex healthcare challenges could result in increased healthcare costs, reduced effectiveness and efficiency, and demotivation among employees, which leads to reduced patient satisfaction and poor health outcomes.

On the other hand, appropriate leadership can cultivate an organisational culture that is committed to delivering quality, minimising conflicts, enhancing team efficiency and productivity, improving employee satisfaction, and advancing the performance of the healthcare system (Oleribe, et al., 2019). Mogakwe (2020) mentioned effective management as a crucial enabler of compliance with quality standards from the perspective of policymakers, managers and providers. Research, innovation, education and funding are the key elements to achieve Sustainable Development Goals (SDG) and thus leadership and governance is recognized worldwide as a crucial entry point in strengthening health systems and attaining the SDG (Sweileh, 2020). Bach (2018) highlighted the need for managers to initiate changes in structures and financing for health systems so that they are aligned with the concern for human dimensions of every health system. Such managers depend on their own decisions on ways of meeting local-level needs within the frameworks of policy and resources as opposed to simply administering instructions from the political and bureaucratic principals. The WHO Report (2008) also regarded leadership reforms as one of the primary reforms required to transform health systems so that they are in a better position to deal with the current range of health challenges.

According to Edwards and Saltman (2017), public hospital managers lack the ultimate power to make decisions while private hospitals responsibility to make decision lies with senior management. National policies are extremely prescriptive and do not offer adequate flexibility for adaption to local circumstances. Compared to private sector

leadership, leadership in the public sector occurs within a political context, in conditions of high accountability and transparency, and is directed by several goals that are often ambiguous and contested (Basson, 2018). These leaders therefore require leadership and political analysis skills and may be called upon to manage across organisational boundaries rather than just within them. Thus, public managers need to take active roles in policy management processes as opposed to just being administrators.

In South Africa, leadership crisis can be traced back to the beginning of democracy. Among other things, the democratic government was tasked with transforming the public service by eliminating all discriminatory policies and practices in the employment line through the implementation of the Employment Equity Bill (Ebrahim, 2018). The aim of the affirmative action policies in the public sector was to enhance the abilities of the previously disadvantaged.

However, affirmative action policies led to the loss of institutional memory and the greater part of the problems in the healthcare system are related to the appointment of inexperienced managers in senior positions (Archibong & Adejumo, 2013). Maphumulo and Bhengu (2019) asserted that affirmative action in South Africa resulted in poor-quality service delivery as it is characterised by affiliation and nepotism as opposed to merit and skills. Most managers in South Africa are elevated to higher positions because of their length of service in the institution rather than their skill.

This results in a wide gap between the management team and clinical outcomes, thus transformational leadership should be considered (Golele and Rachidi, 2017). Corruption, together with lack of accountability among Department of Health officials has also resulted in government failure in fulfilling its constitutional mandate to deliver quality healthcare (Naher et.al. 2020).

From the views in this section, it can be noted that efficient and effective leadership is crucial for successful compliance with NCS. The fact that the healthcare sector has leadership skills and competency deficits makes it difficult to comply with health

standards, resulting in poor quality health outcomes. This highlights the need for leadership development in the healthcare sector.

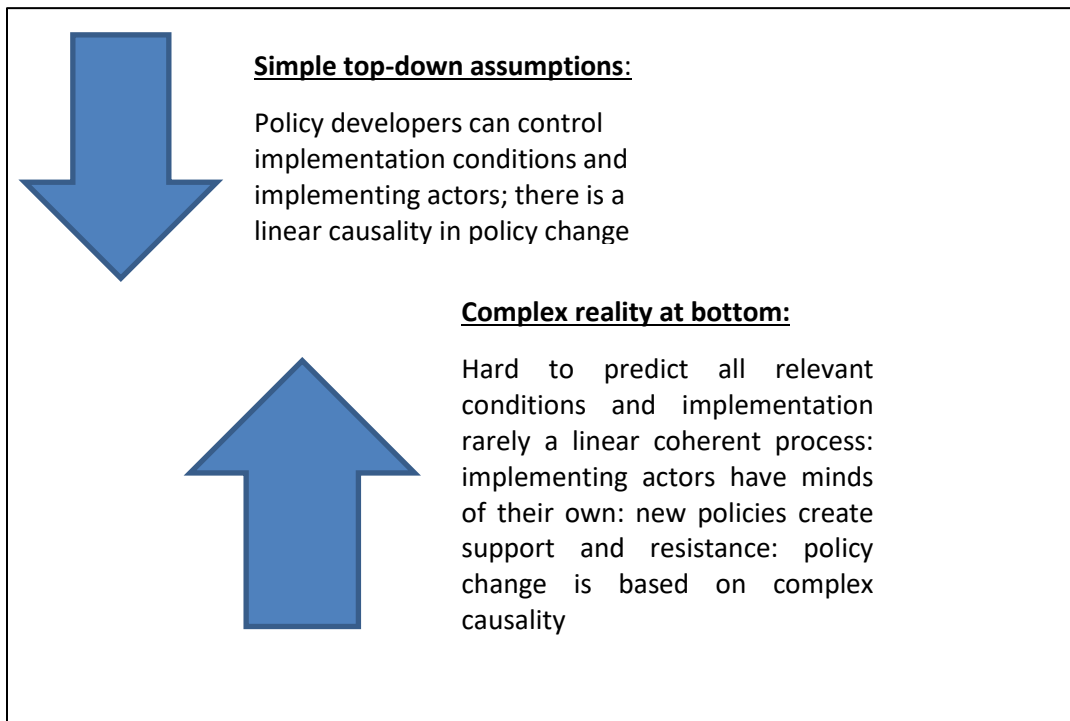
2.6.5 Policy Implementation Challenges

The findings of the study by Oleribe et al. (2019) identified policy implementation challenges as one of the primary weaknesses of the health system in the country. According to Bullock and Lavis (2019), policy implementation involves translating the goals and objectives of a policy into an action. The current experience of the implementation of health policy in South Africa has shown that new policies have produced unexpected and sometimes negative results due to insufficient understanding of policy goals, lack of enforcement of existing policies, resource constraints and lack of consultation and involvement of other actors (Muthathi and Rispel, 2020). These negative outcomes include imposing barriers to access instead of removing resistance to equity promotion of the health management action weakening the quality of care instead of enhancing the efficient use of resources (Kruk, 2018).

A number of studies have highlighted the complexity that surrounds policy implementation in South Africa. According to Oliver et.al. (2019), existing policies and new policies always interact in ways that are unpredictable, even when the goals of the policy are widely acceptable. The user-fees removal in 1994 and 1996 for example, was intended to minimise access barriers and was implemented in parallel with several other health systems and policies. However, the policy came to be viewed by the majority of health personnel as an additional burden as there are already limited resources and thus this created resistance to further change (Michel et.al., 2019).

Manor and Duckett (2017) pointed out that there is a strong influence by political leaders on how policies are actually implemented. This scenario worsens the problems experienced by health workers as well as patients and the community. Manzoor et.al. (2017) cited that successful implementation of the policy through political influence can be achieved and effective if working collaboratively with health stakeholders and down

delegation to be done to oversee policy implementation as leaders has credit to influence their followers. Such credibility shows that the common “command and control” approach to the implementation of the policies in the public sector is flawed. As such it is no wonder public policy fails as often as there are many obstacles such as task of policy that are too hard to accomplish, corruption, incompetence and political motivation and thus, things do not turn out as it was expected to be (Mueller, 2020). Figure 2.3 illustrates how the complex realities at the bottom of the implementation level contradict the inherent assumptions of the top-down approach.



Source: Gilson and Daire (2011)

Figure 2. 3: Contrasting understandings of policy implementation

Figure 2.3 indicates that the top-bottom approach to policy implementation results in an incoherent process as there is no mutual understanding between leadership at the top and policy implementers at the bottom. Mueller (2020) highlighted the need to have policy

implementation approaches that take note of the complex realities shown in Figure 2.3. This entails considerable local-level decision making that is responsive to complex local circumstances, problems, and needs. Healthcare in particular requires dynamic interventions based on local decision making in order to alter the behaviour of people in conditions of greater uncertainty. Therefore, there cannot be any standardisation and routinisation of effective healthcare interventions, for instance, through clinical procedures. The majority of interventions require interaction with the broader community regarding the circumstances that give rise to health needs and cross-sectional action to deal with primary causes of health problems and further acceptability to be considered when designing and evaluating health interventions (Sekhon et.al, 2017). Furthermore, when the primary healthcare services have improved quality interventions and compliance to quality standards, burden at hospitals of all levels of healthcare service will be minimised.

However, there is still a need for central guidance and direction in order to establish the vision and goals for new policies and setting clear boundaries within which implementation can occur (Terwindt et.al, 2016). This scenario enables flexible local-level decision making that is essential for adapting policies to local circumstances through paying attention to and working together with local actors. Therefore, instead of the command-and-control leadership, those at provincial and national levels should adopt approaches to policy implementation that enable and support distributed leadership, that is, leadership across the health system. Experience with public sector innovation and quality improvement internationally indicates that there is value in combining top-down and bottom-up processes in decision making. Figueroa et.al (2019) noted that even though there are some types of health challenges, such as political economy or public health emergencies that may call for command-and-control management, effective leadership increasingly depends on mediation to deal with present and future complex health challenges. Yaya et.al (2020) affirm that Covid-19 affected and crippled many countries in the world including the most developed countries. Decisions to help fight Covid-19 were from the most senior leadership of each countries using a command-and-control approach. Many African countries have adopted some international policy trends

such as border closures, strict migration measures, imposition of quarantines, and enforcement of stay-at-home orders.

2.6.6 Inadequate Healthcare Financing

Another major challenge that faces healthcare in Africa is inadequate financing (Oleribe et.al, 2018). Studies conducted by Kruk (2018) established that the majority of African countries face a chronic problem of scarcity of funds for healthcare. Even the richest countries do not find it easy to keep up with increasing healthcare costs. In order to address gaps of healthcare inequalities, South Africa has adopted social protection policies where out-of-pocket payments for healthcare services had been abolished (Setshegetso, 2020). According to Traore (2021), healthcare expenditure in Sub Saharan Africa (SSA), is only a small fraction of the US\$3.2 trillion spent on healthcare in an average high-income country like USA in 2015. Further the commitments of leadership to improve healthcare financing by signing of several declarations by African heads of state, poor health indices are still prevalent and thus recommended that healthcare spending should be increased to meet global standards.

In addition to inadequate budgetary allocations that were highlighted, increasing healthcare costs, lack of financial autonomy, and financial unsustainability were cited as the other financial challenges impacting on the quality of healthcare in most countries (Oleribe et al. (2018), Sturmberg & Bircher, 2019). All the findings from these studies imply that the inadequate financing of healthcare by the majority of African governments leaves households to bear the burden of healthcare services and this pushes some households into poverty. Inadequate financing is also causing employee drop-out, resignations, and early retirement due to demotivation.

2.6.7 Information Management

According to the Presidential Summit on Health (2018), the current health information systems within the South Africa public health sector and between the private and public health sectors are fragmented, with no integrated electronic health record. This situation

presents a major challenge to effective stewardship of the health system. Currently, there are 42 health information systems; however, there is a need for only one platform whereby information can be exchanged between the disparate systems. This can be achieved through the development of interoperability standards that are adhered to. Information systems also need appropriate frameworks of governance to ensure the protection and good management of information (Presidential Health Summit, 2018).

The existence of fragmented information systems also had a negative impact on record-keeping. According to Kama (2017), lack of proper recording-keeping results in unwarranted delays in providing patient care. There are sometimes cases where patients' folders are missing or lost, and healthcare workers simply leave the patients to wait instead of informing them. In worst cases, the patient's medical history is lost, and this can create further complications such as incorrect diagnosis or even death.

2.6.8 Increased Disease Burden

South Africa, like all developing countries, faces high burden of disease and appears to be failing to fight it (Maphumulo and Bhengu, 2019). In Africa, particularly in sub-Saharan Africa, HIV and AIDS have had devastating effects on the healthcare systems to the extent that the systems are not able to cope with the demands of high-quality delivery. Several inadequacies and deficiencies resulting from the fragmentation of the healthcare system, together with socio-economic and racial issues, have resulted in further spreading of diseases in South Africa, including HIV and AIDS (Gona et.al., 2020). The country is presently facing a multiple burden of diseases, with HIV and AIDS coinciding with a high burden of tuberculosis, high maternal and child mortality, increased levels of injuries arising from violence, and an increased burden of non-communicable diseases such as cancer, chronic respiratory conditions, diabetes, and cardiovascular diseases (Achwoka et al., 2019).

Healthcare associated infections are regarded as another major source of morbidity and mortality in the South African public sector (Dramowski & Whitelaw, 2017). It is estimated that one out of seven patients entering hospitals in South Africa is at the risk of contracting health care associated infections due to poor infection prevention and control measures that include poor hand-washing methods and poor waste management (Dramowski and Whitelaw, 2017). Health care associated infections are also caused by overcrowding in hospitals, inadequate environmental cleaning, lack of isolation facilities, high patient-to-staff ratios, ageing infrastructure, inadequate disinfection of medical equipment, and transfers of patients with drug-resistant infections between hospitals between hospitals (Dramowski and Whitelaw, 2017). Healthcare associated infections result in patients staying longer in hospitals, increased healthcare costs, and sometimes the death of patients (Dramowski and Whitelaw, 2017).

2.7 HOW COMPLIANCE WITH NATIONAL CORE STANDARDS CAN BE ENHANCED

In order to ensure improvement in the quality of healthcare, there is need for both systems of monitoring and support to healthcare workers (Aggarwal et.al., 2019). There should be establishment of deliberative programmes driven by dedicated agencies. Furthermore, initiatives to enhance healthcare quality need to be driven from the front, by the health service and political leaders who are able to share the vision and motivate healthcare personnel to have the biggest possible impact on the health of the communities they serve (Mueller, 2020).

2.7.1 Involvement of Primary Healthcare Facilities Managers in Decision-Making

Mogakwe et al. (2019) highlighted the need for involving and consulting managers of primary healthcare establishments in making decisions that pertain to their establishments. Employee involvement in decision making was also regarded by Tian and Zhai (2019) as a good practice that results in a highly favourable and positive impact on the implementation of policies. One of the major challenges that negatively affects

compliance with quality standards as noted in this chapter is the top-down approach to policy implementation that characterises the South African public sector. Mogakwe et al. (2019) advocated for the seeking of the views of employees and managers in issues that affect their work as well as empowering employees to make decisions to a certain extent. Employees will develop a strong sense of self-worth and feeling of belonging, which results in their commitment to the successful implementation of policies. According to Tian and Zhai (2019), involvement in decision-making creates an enabling environment for creativity and growth as employees who view themselves as stakeholders are driven to offer their best in the organisation and strive to comply with quality standards.

2.7.2 Implementation of Effective and Functional Support Systems

Support from leadership was suggested by Mogakwe et al. (2019) as one of the solutions to enhance compliance with quality standards. Non-compliance with quality standards was also attributed to lack of leadership commitment and support in this chapter. In a study conducted by Mogakwe et al. (2019), primary healthcare clinical managers emphasised the need for support from senior management, including guidance and assistance to comply with quality standards. Rosen et.al. (2018) also regarded support from senior management as of paramount importance for enabling healthcare personnel to function more efficiently. According to Sanusi and Johl (2021), the implementation of policies for enhancing the quality of health requires the commitment and support of top management. Top management should create an implementation climate that is favourable for compliance with quality standards.

In the study conducted by Mogakwe et al. (2019), the participants pointed out that they expected management to assist and support them on how to draft standard operating procedures and quality improvement plans. Macht & Davis (2018) proposed that managers should make compliance with quality standards part of the organisational culture, whereby senior management engage with employees, customers of healthcare services and stakeholders to embed best practice initiatives and compliance measures. Yasser (2020) suggested that the achievement of compliance with quality standards for

healthcare relies on everyday practise of staff values and supportive management that is committed. The author further stated that supportive management can influence the commitment of clinical managers to comply with quality standards. The Policy on Quality in Health Care for South African NDOH (2007) and the Clinical Audit Criteria and Guidance Working Group (2008) also stipulated that senior managers in healthcare sector can assist in improving compliance with quality standards through supportive behaviour by identifying weaknesses in the public healthcare system and by adjusting for compliance where necessary.

2.7.3 Improvement of Internal Communication Practices

Compliance with the NCS and other quality standards can also be enhanced through the improvement in internal communication in the healthcare system. A study conducted by Mogakwe et al. (2019) in primary healthcare clinics in Gauteng established the existence of poor internal communication practices such as limited time for conducting staff meetings and feedback sessions, impacting negatively on the ability of the establishments to comply with quality standards. Recommendations were to improve internal communication by granting adequate time for staff interaction through meetings and feedback sessions to enable health workers to collaborate in identifying and addressing problems together. Booyens (2008) supported that through effective communication, information can be exchanged, and suggestions can be made on ways of improving the situation. Provision of feedback on the general performance of the establishment in complying with NCS also helps employees to identify the areas that need to be improved.

Chili and Matsiliza (2021) proposed the engaging every individual when conducting both regular and scheduled team meetings as they provide employees with a platform for discussion issues of non-compliance with quality standards and other issues that affect the effectiveness of operations in the establishments. According to Rosell et al. (2019), team meetings are essential as part of formal communication in order to engage all employees in a process of building professional competence and assist to identify areas that need improvements. Buljac-Samardzic (2020) also emphasised the importance of

regular team meetings and enhanced communication in encouraging a favourable environment for effective teamwork as well as in dealing with inter-professional conflict. The authors added that enhanced communication promotes positive interpersonal relationships and encourages greater levels of innovation, which are crucial for compliance with quality standards.

2.7.4 Strengthening Governance and Leadership Capacity

The Presidential Health Summit (2018) highlighted the need to approach leadership and governance with a multi-level governance framework where issues of governance are not just sitting within the departments of health alone. Governance should focus on the role of the government in health and its relation to other actors whose activities have an impact on health. The government should therefore oversee and guide the entire health system, private and public, to ensure that the interest of the public is protected. According to the Presidential Health Summit (2018), the following are the health system governance issues that need to be addressed: establishment of systems of accountability to with the aim of regulating power, enabling the responsible governance, and maintaining a consistent path.

In order to strengthen leadership capacity in the health sector, emphasis should be put on leadership development programmes. According to Armstrong and Taylor (2014), training programmes for leaders play a pivotal role in ensuring that managers are equipped with the required skills and competences to execute their mandate. Norzalian et al (2016) pointed out that decision-making and interpretation skills for leaders can be enhanced through exposure to continuous learning as well as the experience of complex situations. Leadership development programmes should therefore incorporate exposure to complex situations and stress that cultivate dense experiences.

In order to strengthen leadership capacity in the healthcare sector, training and monitoring of performance needed to prevent corruption at source and segregating responsibilities in the supply chain (Presidential Health Summit, 2018). An anti-corruption forum needs

to be established in the healthcare system, whose task is to detect, report, and conduct investigations on corrupt activities as well as ensure that action is taken against corrupt individuals. Kekae (2017) suggested the need for management levels in the public sector as well as political leaders to act as role model in dealing with corruption. Leadership in government and government institutions cannot continue to claim that they subscribe to the practice of clean governance when they do not have the political will and support deal with issues of corruption (Kekae, 2017).

2.8 CONCLUSION

This chapter presented a review of the literature related to the dynamics of compliance with the standards for health establishments. Literature related to the concept of quality in health care, efforts to improve the quality of care and responses to these efforts, was examined in an attempt to understand why and when health care personnel comply to set standards for health care quality. The upcoming chapter presents the methodology that was used in conducting this study.

CHAPTER THREE: METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the research methodology that was used to conduct this study. The chapter begins by highlighting and explaining the research philosophy that underpinned the study and goes on to discuss the type of research design and the reason for its selection. The population, sampling strategy, data collection tools, and data analysis techniques are also highlighted and explained in this chapter. Thereafter, the research participants, the research instruments, the sampling procedures as well as the data collection strategies are described. Details on the data management and quality control, data analysis and ethical considerations are also presented. Finally, the steps that will be taken to ensure the quality of research findings and the ethical considerations are highlighted.

3.2 RESEARCH PHILOSOPHY

The research philosophy that underpinned this study was interpretivism. According to Saunders et al. (2016), research philosophy is concerned with how knowledge is developed, its nature, and source. It is the belief about how data relating to the research problem should be collected, analysed and utilised. Saunders et al. (2016) outlined five types of research philosophy, which are positivism, interpretivism, critical realism, pragmatism, and post-modernism. Interpretivism was found to be the suitable philosophy on which this study could be based.

Interpretivist research aims at creating new, richer understandings and interpretations of social contexts and worlds. In terms of organisations, this involves looking at the organisation from the view of various groups of people (Saunders et al., 2016). For this study, interpretivism was found to be appropriate since the main aim of the study was to

understand the dynamics of compliance with the NCS for health establishments in South Africa. Such understanding requires the researcher to obtain the views and experiences of the research subjects on the implementation of the NCS in their health establishments. Interpretivist research makes use of data collection methods that are flexible and allow for an in-depth analysis of the research problem (Babbie, 2012). Data collection methods such as interviews, and document analysis provided an opportunity to explore the implementation of NCS as well as the challenges that the research participants are facing in the implementation process. Thus, the interpretivist philosophy will be useful in the attempt to understand the detailed dynamics of compliance with the NCS.

3.3 RESEARCH DESIGN

An exploratory qualitative case study design was used to conduct this study. Yin (2009) noted that case study methodologies are desirable methods in understanding “how” and “why” a programme has, or has not, worked. With regards to exploratory research, Kelemen and Rumens (2008) indicate that its main aim is to obtain new insights into a research problem. Exploratory research is also applied when there is little research that has been conducted in the study area (Polit and Beck, 2010). Therefore, an exploratory qualitative case study design was considered in this study because there is limited existing research on compliance with health quality standards in South Africa and this study was expected to generate new insights into the extent to which health establishments are complying with such standards as well as the challenges that they are facing during the implementation process. In this study, the qualitative research methodology was chosen as it is ideal to give the opinions and views of the participants. The participants were able to provide first-hand information about how their hospitals were complying with the NCS since they were experiencing the situation in their day-to-day operations. The findings from this study were to lay the groundwork for further research in the area.

3.4 STUDY SITES

The study was conducted in two tertiary hospitals in the Gauteng Province. Gauteng is the smallest yet most populous of all the nine provinces in South Africa, with a population of 15.5 million (26.0% of the total population) in 2020 (StatsSA, 2020). There are 40 public hospitals in Gauteng province. The selection of the two public tertiary hospitals that participated in the study was based on their performance in the most recent quality audit of the six KPAs of the NCS. The worst performing and the best performing tertiary hospitals were included in this study in order to make a meaningful comparison of the issues impacting on the implementation of the NSCs. The table below is the summary of the brief overview of two tertiary hospitals selected for the study in Gauteng.

Table 3. 1: Brief overview of two tertiary hospital in Gauteng selected for the study

| Demographics | Hospital A | Hospital B |
|---------------------|---|---|
| Location | City of Tshwane, affiliated with the University of Pretoria as a training institution for the Faculty of Health Sciences. | City of Johannesburg, affiliated with the University of the Witwatersrand as a training institution for the Faculty of Health Sciences. |
| Population | Serving population of approximately 1 million (804313). Serving the medium to low-income segment of the population | Serving population of approximately 1 million. Serving the medium to low-income segment of the population. |
| Units | <p>29 in-patient wards, the majority of which are medical wards 5 Surgical wards 3 of which are Orthopaedic wards, Gynae & Obstetric, Psychiatric unit 15 functional speciality(OPD) clinics including:</p> <ul style="list-style-type: none"> • Dermatology • Neurology Gynaecology • Endoscopy • Breast • TB • Urology • Rheumatology • Diabetic • Oncology • ENT • Neurosurgery OPD • Orthopaedic OPD, Surgical OPD and HIV clinic | <p>21 in-patient wards, the majority of which are medical wards (11 including 2 Admission wards), 6 Surgical wards 2 of which are Orthopaedic wards, Psychiatric unit, Step down unit, Theatre complex comprising of 12 theatres, 9 functional speciality clinics including:</p> <ul style="list-style-type: none"> • Stoma unit • Renal dialysis unit • Pain clinic • Endoscopy unit • Breast clinic • TB focal point and • HIV clinic |
| Bed occupancy | 719 functional beds | 652 functional beds |
| Staff | The total number of staff is 2247 Inclusive of Doctors, nurses and support staff. This number is subject to change depending on appointments, resignations, and retirements. | The total number of staff is 1886 Inclusive of Doctors, nurses and support staff. This number is subject to change depending on appointments, resignations, and retirements. |

3.5 STUDY POPULATION

A population is defined by Wiid and Diggins (2013) as the whole group of objects or elements from which the researcher will draw information. According to Polit and Beck (2010), the population encompasses all the units of analysis about which specific conclusions will be made. For this study, the population included all employees at the selected hospitals who are directly involved in the implementation of the NCS. These were quality assurance managers, infection control managers, pharmacists and frontline staff which included nurses and other supporting staff responsible for the implementation of the NCS.

3.6 STUDY SAMPLE

Mack et al. (2010:16) assert that a study's research objectives and the features of the study population determine which and how many people to select. Physiognomies can be size and diversity characteristics. Gay (2009:103) states that in research, sampling can be identified as a process of selecting a group of subjects in such a way that the sampled subjects are symbolic to the characteristics of the entire population under the study.

Purposive sampling was used to select the 15 study participants comprising of one (1) QA manager, infection control coordinator one (1), pharmacist one (1), one (1) NCS champion, three (3) participants in the cluster management, five (5) operational managers and three (3) frontline staff of each hospital. Since the tertiary institutions have one quality assurance manager, one infection control manager, and one chief pharmacist each of these members were included in the sample for phases 2 and 3 for both hospitals. With the purposive sampling techniques, sample elements are selected using the judgement of the researcher about the elements that are likely to provide information relevant to answer the research problem (Bhattacharjee, 2012). The nature of the research questions required the selection of research subjects who possessed adequate knowledge of the implementation of the NCS in the two hospitals.

Table 3.2 provides a summary of the study participants at each of the two tertiary hospitals.

Table 3. 2: Sample size

| Position | Number of Participants |
|---|-------------------------------|
| Quality Assurance Manager | 1 |
| Managers (infection control, NCS champion & cluster managers) | 5 |
| Pharmacist | 1 |
| Frontline staff (operational managers, nurses & supporting staff) | 8 |
| TOTAL | 15 per hospital |

3.7 DATA COLLECTION

Data collection was done in three phases using both primary and secondary data. Secondary data for this study was collected through a review of literature relating to healthcare quality standards as well as the analysis of documents that relate to the NCS. From the literature review, in-depth insights on the level of compliance with healthcare quality standards worldwide and the challenges that hinder such compliance were obtained.

Multiple data tools were used to collect data comprising of:

- a. A document review tool (Annexure N).
- b. A semi structured interview guide (Annexure E - H); and
- c. A social network analysis tool (Annexure O).

Table 3.3 below gives a summary of the research methodologies.

Table 3. 3: Summary of the research methodologies

| Phases | Objective | Sample | Data collection | Data analysis |
|--------------------------|--|--|--|--|
| Phase 1 | <ul style="list-style-type: none"> To analyse the NCS policy and related documents to establish the context and content of the policies. | <ul style="list-style-type: none"> NCS policy; HST report (2018); National health Amendment Act No 12 of 2013; OHSC annual reports; Gauteng Department of Health annual report and other related documents. | <ul style="list-style-type: none"> Document review according to guidelines of CDC (2009) | <ul style="list-style-type: none"> Summative content analysis according to guidelines by Hsieh and Shannon (2005) |
| Phase 2 | <ul style="list-style-type: none"> To understand the process of the implementation of the six KPAs of the NCS in the best and worst performing hospitals in Gauteng To identify enablers and barriers that influence compliance with the six KPAs of the NCS in the best and worst performing hospitals in Gauteng | <ul style="list-style-type: none"> Purposive sampling was used to select participants responsible for the implementation of the KPAs who are: quality assurance managers, infection control managers, pharmacists and frontline staff, and Participants responsible for compliance in implementing 6 KPAs of the NCS <ul style="list-style-type: none"> Quality assurance manager, Infection control managers, pharmacists & frontline staff | <ul style="list-style-type: none"> Semi-structured interviews using a semi-structured interview guide | <ul style="list-style-type: none"> Thematic content analysis according to guidelines of Braun and Clarke (2006) A priori codes |
| Phase 3 | <ul style="list-style-type: none"> To describe relationships between the actors responsible for the implementation of the six KPAs in the best and worst performing hospitals in Gauteng | <ul style="list-style-type: none"> Purposive sampling was used to select participants responsible for the implementation of the KPAs who are: quality assurance managers, infection control managers, pharmacists and frontline staff, and Participants responsible for compliance in implementing 6 KPAs of the NCS | <ul style="list-style-type: none"> A qualitative social network analysis Participatory mapping of the social network relationships: who advises, helps, funds, interacts | <ul style="list-style-type: none"> Develop network using net-map method (2007) |
| Integrative phase | <ul style="list-style-type: none"> To provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng Province. | <ul style="list-style-type: none"> Data collected from document review, SNA and semi-structured interviews | <ul style="list-style-type: none"> Triangulation of data from three phases by means of an iterative process with supervisors | <ul style="list-style-type: none"> Integration through connecting, building, merging of data and weaving narratives for analysis and for comparison |

3.7.1 Phase 1: Document Review

The CDC (2009) noted that the review of documents enables the researchers to gather data from both internal and external documents. Document review is a way of collecting data by reviewing existing documents. The documents may be internal to a program or organisation, hard copy or electronic and may include reports, program logs and performance ratings. Reviewing existing documents helps to understand the history, philosophy, and operation of the program being evaluated and the organisation in which it operates and to determine if implementation of the program reflects program plans (CDC, 2009). According to the CDC (2009), the review of program documents may reveal a difference between formal statements of program purpose and the actual program implementation.

Document analysis has been found to be an effective and efficient way of collecting data because documents are practical and manageable sources. It is easy to access documents that relate to healthcare quality standards, and this presents a cost- and time-efficient way of collecting information (Bowen, 2009). Document analysis was also used to assist with formulating questions that were asked during interviews in order to obtain a clear understanding of the research problem. Information obtained from the documents provided a clear understanding of the policies and practices that underpinned the NCS.

3.7.1.1 Selection of documents for review

A retrospective review of Department of Health policies and related documents (Table 3.4) on quality of care was done in order to establish the context and content of these documents. The NCS were analysed to obtain a clear understanding of their background, their purpose, and the domains and sub-domains that are addressed by the standards. OHSC reports were analysed to check assessment and compliance criteria used to determine if they were in line with the content and context of the NCS policy. The Health

Systems Trust (HST) report (2018) on the progress of the NCS policy implementation was also reviewed. Document review took about 60 days to complete.

All documents were accessed through the internet search which was undertaken from July 2019 to November 2019. Seven electronic databases were searched namely: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Council for Health Service Accreditation of Southern Africa (COHSASA), Department of Health (DoH), The South African Medical Journal (SAMJ), Office of Health Standards Compliance (OHSC), World Health Organization (WHO), Academia and Health Systems Trust (HST). The search terms used were “quality standards”, “compliance”, and “national core standards (NCS). Thirty-five (35) documents were accessed during the search and of these, 16 documents were selected for review. Documents were excluded if they did not address the purpose, content and the context intended for this study.

The review of the documents was intended to cover the South African context whereas the literature review covered international perspectives for comparison purposes. Thus, the purpose of the study the document review focused on the dynamics of compliance with the six KPAs of the NCS which included quality reports and related documents and were limited to the South African context.

After identifying, locating and accessing the document, each document was systemically reviewed according to the review template guide (Annexure N). Documents were selected on the basis of their availability, in terms of mode of communication, whether they were printed or digital copies and therefore accessibility. The review date was also assessed to examine the relevance of documents and the appropriateness for inclusion.

Table 3.4 below presents the list of documents that was reviewed.

Table 3. 4: List of Policies and Related Documents Reviewed

| | Name of Document | Source | Electronic | | Hard Copy | | Policy area |
|----|---|--------------------------------|------------|----|-----------|----|--------------------|
| | | | Yes | No | Yes | No | |
| 1 | Policy on Quality in Health Care for South Africa | www.doh.gov.za | √ pdf | - | √ | - | Policy |
| 2 | National Core Standards Regulation (R67 Of 2 February 2018) | OHSC | √ pdf | - | √ | - | Regulation |
| 3 | “Towards Quality Care for Patients” National Core Standards for Health Establishments in South Africa National Department of Health 2011 | www.doh.gov.za | √ pdf | - | √ | - | Policy |
| 4 | National Health Insurance Healthcare for all South Africans: Understanding National Health Insurance | www.doh.gov.za | √ | - | √ | - | Policy |
| 5 | Chapter 9: Development of a National Strategic Framework for a High-Quality Health System in South Africa – Health Systems Trust 2018 | HST | √ | - | √ | - | Report |
| 6 | The National Health Act No 61 of 2003 Note: Refers to the “Towards Universal Health Coverage” | | √ pdf | - | √ | - | Act |
| 7 | Norms and Standards: Volume 632, 2 February 2018 | www.gpwonlin e.co.za | √ pdf | - | √ | - | Regulation |
| 8 | Handbook for National Quality Policy and Strategy: A Practical Approach for developing policy and strategy to improve quality of care. Geneva: WHO; 2018. | WHO | √ pdf | - | √ | - | Policy |
| 9 | South African Medical Journal April 1994; 84:193-194. – The South African Pilot Hospital Accreditation Programme: Part II, The development of standards | www.cohsasa. co.za | √ pdf | - | √ | - | Publication |
| 10 | OHSC Annual report 2017/18 | OHSC | √ pdf | - | √ | - | Report |
| 11 | Fast Track to Quality: The Six Most Critical Areas for Patient- Centred Care. DoH 2011 | DoH | √ pdf | - | √ | - | Abridged policy |
| 12 | World Health Organization. Quality of Care: A Process for Making Strategic Choices in Health Systems. Geneva: WHO; 2006. | WHO | √ pdf | - | √ | - | Guideline |
| 13 | Enforcement policy no 478: 29 March 2019 | www.gpwonlin e.co.za | √ pdf | - | √ | - | Government Gazette |
| 14 | OHSC Annual Inspection Report 2016/17 | OHSC | √ pdf | - | √ | - | Report |
| 15 | OHSC Inspections Strategy 2019/20 | OHSC | √ pdf | - | √ | - | Strategy |
| 16 | Gauteng Department of Health Annual Report | Provincialgove rnment.co.za | √ pdf | | – | √ | Report |

3.7.1.2 Data collection of document review

The frequency of reports and policy were assessed in line with the content and context in order to establish relevancy as reports and policy have timelines for reviews and whether they were made available to the end users or concerned organisations in the form of feedback after an audit was completed to cater for corrective measures if standards were not met. The content of policy was reviewed to check if it clearly spelled out the roles, responsibilities and identified areas of performance that need improvement. In the case of documents such as the strategic plan and reports, the sections that outlined quality standards performance were reviewed to assess the manner in which policy is implemented. The inclusion criteria were limited to publications of the audit reports and policy documents that address compliance to the quality standards, and regulations that govern compliance to quality standards. Analysis of data will be discussed later in this chapter.

3.7.2 Phase 2: Semi-Structured Interviews

A semi-structured interview is defined as “a qualitative research method that involves asking predetermined set of open questions with the privilege for the researcher to use probe in order to explore, deepen understanding and clarify answers to questions.” (Wilson, 2014:18). This kind of an interview provides an opportunity to obtain answers to the research question and open enough to give the interviewee a chance to make statements which might give meaning to the research problem (De Jonckheere and Vaughn, 2019).

3.7.2.1 Sample of the semi-structured interview

Semi-structured interviews were conducted with a total of 15 participants in each hospital who were directly involved in the implementation of the NCS. These included those who were quality assurance managers, infection control managers, pharmacists and frontline staff. The latter included nurses and other supporting staff responsible for the

implementation of the NCS. Table 3.5 below highlights the key informants of the semi-structured interviews.

Table 3. 5: Key informants for the semi-structured interviews

| | Title: Hospital A | Title: Hospital B | Number of staff/hospital | Hospital department |
|---------------------------------|---|---|---------------------------------|--|
| Quality improvement team | <ul style="list-style-type: none"> ✚ Quality Assurance Manager ✚ Complaint officer ✚ IPC coordinator | <ul style="list-style-type: none"> ✚ Quality Assurance Manager ✚ NCS champion ✚ IPC coordinator | 3 | Quality Assurance |
| Hospital management | Cluster managers <ul style="list-style-type: none"> ✚ Poly clinic ✚ Wellness clinic ✚ Stoma clinic | Cluster managers <ul style="list-style-type: none"> ✚ Poly clinic ✚ Wellness clinic ✚ TB focal clinic | 3 | Hospital departments |
| Pharmacist | ✚ X 1 pharmacist | X 1 pharmacist | 1 | Pharmacy |
| Frontline staff | Operational managers <ul style="list-style-type: none"> ✚ Casualty X2 ✚ Admissions X1 ✚ Out-patient X2 ✚ Nurses X3 | Operational managers <ul style="list-style-type: none"> ✚ Casualty X2 ✚ Admissions X1 ✚ Out-patient X2 ✚ Nurses X3 | 8 | Casualty/Inpatient admissions/Outpatient - |
| Total: 15 per hospital | | | | |

3.7.2.2 Pretesting of the semi structured tool

A pretesting of the tool was conducted with the aim of testing the ability of the interview questions to solicit relevant information for the study. Tavakoli (2012) defines a pilot study as small-scale version of the proposed study that is conducted using the materials, methods, and procedures of the intended study. The aim of the pilot study is to test the appropriateness of the research design. The semi-structured interview tool was pretested prior to data collection at a tertiary hospital that did not form part of this study. The pilot took two days per appointment of each participant as interviews were conducted with a total of four key informant as guided by the list of key informants of this study. Each instrument for the semi-structured interviews was tested through interviewing the quality assurance manager, a professional nurse in the outpatient department, an infection control coordinator and a pharmacist. The pre-test of the semi-structured interview indicated that there were too many questions resulting in a time-consuming interview. As a result, the questions were adapted and rephrased for relevance to test participants accordingly.

3.7.2.2 Data collection of the semi structured interview

Interviews were chosen as one of the data collection methods because they provide more detailed information that could not be obtained through other data collection methods such as surveys (Boyce & Neale, 2006). The participants had the opportunity to express their views and perceptions as well as experiences with the implementation of the NCS in detail because of the use of open-ended questions. Since the interview guide did not provide predetermined responses to select from, there was an opportunity to probe for additional explanations and this provided a rich pool of information that assisted in understanding most of the issues that surround compliance with the NCS. The interviews were collected in a relaxed atmosphere and the interviewer assured the participants that their participation was worthwhile and that their anonymity and confidentiality would be ensured.

Face to face semi-structured interviews were conducted over a period of 45 days at the respective hospitals with each taking approximately 15-20 minutes using a predetermined questionnaire as attached in annexure E-H. The information pertaining to the study was gathered by probing the respondents and allowing them to give their views with regards to the NCS policy and its implementation. Interview questions were carefully crafted and presented in simple terms so that the participants would fully understand and therefore provide relevant responses. Questions that invaded the privacy of individuals were avoided. The responses from participants were recorded through notetaking and audio-recording. During the interviews, caution was taken by the interviewer not to influence the participants' responses in any way. Upon completion of each interview, data was summarised using field notes whilst the responses were still fresh in the interviewer's mind. Table 3.5 above presents participants of the semi-structured interview.

3.7.3 Phase 3: Social Network Analysis

Social network analysis in health policy has been used by scholars to examine the collaboration, sharing of information and planning as well as service delivery. SNA is also used to assess whether the service contributes to the changes intended for the purpose of learning and providing interventions (Moreno, 1994). A social network is defined by the connection among social actors such as people or organisations (Moreno, 1994). Individual attributes can determine the behaviour as well as the effects of individual relations (Valente, 2010; Rogers, 2003).

Schiffer (2007) argues that the toolbox can assist in improving understanding of any situation where several people, groups and organizations interact to achieve common or conflicting goals. Net-Map merges characteristics of two existing methods which are social network analysis and the power mapping tool. Using a participatory approach, the interviewer asked questions and the interviewees constructed a network map of the actors involved in the implementation of the six KPAs of the NCS and that characterized the different links between the actors. Finally, the interviewees assessed the goal orientation of the different actors.

This study espoused SNA as being useful in analysing relationships and connectedness amongst actors involved in the dynamics of compliance with the six KPAs of the NCS. In this study, SNA was used to further explore measures that identify key actors that are involved in the policy implementation in an organization through functional ties and linkages. SNA was conducted by allowing the purposively selected participants to identify key people who were responsible for the implementation of the NCS in the two tertiary hospitals in Gauteng using net-map to explore connections and relationships. Annexure O served as a guide for conducting SNA and the steps that were followed.

3.7.3.1 Preparing the mapping

To understand the relationships and connections of the actors for this study, key informants who were involved in the implementation of the six KPAs of the NCS were asked questions using the predefined questionnaire (Annexure O) and were required to build a model of the network. This was done to determine which actors are involved in a given network, how they are linked to each other, how influential they are, what their goals are and how these goals can/are being achieved in terms of compliance to the NCS. The researcher provided the staff with the materials to be used during the process. A white board was provided with different colours of marking pens to draw relationship arrows, multi-colour nodes to name the actors and different colours play dough shaped to make a tower of influence.

3.7.3.2 Actor selection during the mapping process

Health systems research aims to understand health governance in a context characterized by a multitude of diverse actors (Hoffman and Cole, 2018). Due to limitation of the COVID-19 protocols, participants in the quality assurance department were given free choice to nominate any person with whom they interact with in making sure that implementation of the six KPAs of the NCS is put into practice as guided by the policy. The members in the SNA group which included the quality assurance manager, the complaints officer, the NCS champion and four marshals who are used to do walk-about

at the hospital, participants were allowed to have a dialogue with each other and agree on the actors to be involved in the SNA mapping exercise.

Listing of the actors was done by the members of the SNA group who participated in the mapping process as agreed amongst each other during the dialogue by labelling in multi-coloured stickers as actor cards and identification of each actor was done by using different colours nodes. Actor cards were created by means of a label for each actor according to job title and were placed next to each node. Seven and six actors respectively were identified from Hospital A and B. This technique was proven to be effective but not perfect as other key informants of the study were not part of the mapping process because of the limitations of social distancing that were in place at the time according to the COVID-19 protocols and lockdown regulations in South Africa.

3.7.3.3 Drawing of links

SNA has shown that it can be used to help understand the nature of relations between actors within a system and how these relationships can influence the structure of the system (Borgatti et al. 2009). Schiffer (2007) further affirms that to broaden team members' understanding of the complex field in which they are working, network mapping can be incorporated to give team members a tool that will allow them to easily discuss and strategically use to enable the understanding and solving problems.

The members in the SNA group were asked on how was the nominated individual linked to other actors in the process of the NCS implementation with further probes on the formal lines of command; flows of funding; provision of advice; flow of information. The group was asked to indicate by drawing arrows between actor cards and further demonstrate on the mapping if two actors exchange something (e.g., information) by drawing double headed arrows.

SNA group was further instructed that if actors exchange more than one activity such as the provision of funding and information, to add different coloured arrow heads to existing links. The core actors were shown to be highly connected with each other while the

peripheral actors had loose links. After drawing the links between the various actors, the next step was to determine the degree of influence that the actors had on the policy and its implementation through the network value that determines the value of giving and sharing, connectivity and interdependence including open and transparent communication according to Holley (2013).

3.7.3.4. Power as the towers of influence

SNA can be a valuable tool to uncover the most influential players in a system (Valente & Pumpuang 2007). Ultimately, for this study the Net-Map tool provides an influence network map of the governance situation as qualitative data about the perceived power and influence of the actors. Interviewees were directed to add “influence towers,” made of play dough pieces of different colours next to actor cards and to transfer abstract concepts of power and influence up to a five-dimensional form of tower of influence. This exercise demonstrated that the higher the tower, the higher the influence in implementing the six KPAs of the NCS and the lower the tower, the less influential the actor. The interviewees were given the opportunity to adjust towers before noting the final height of the tower on the Net-Map. Below are the pictures that were captured during the SNA exercise.

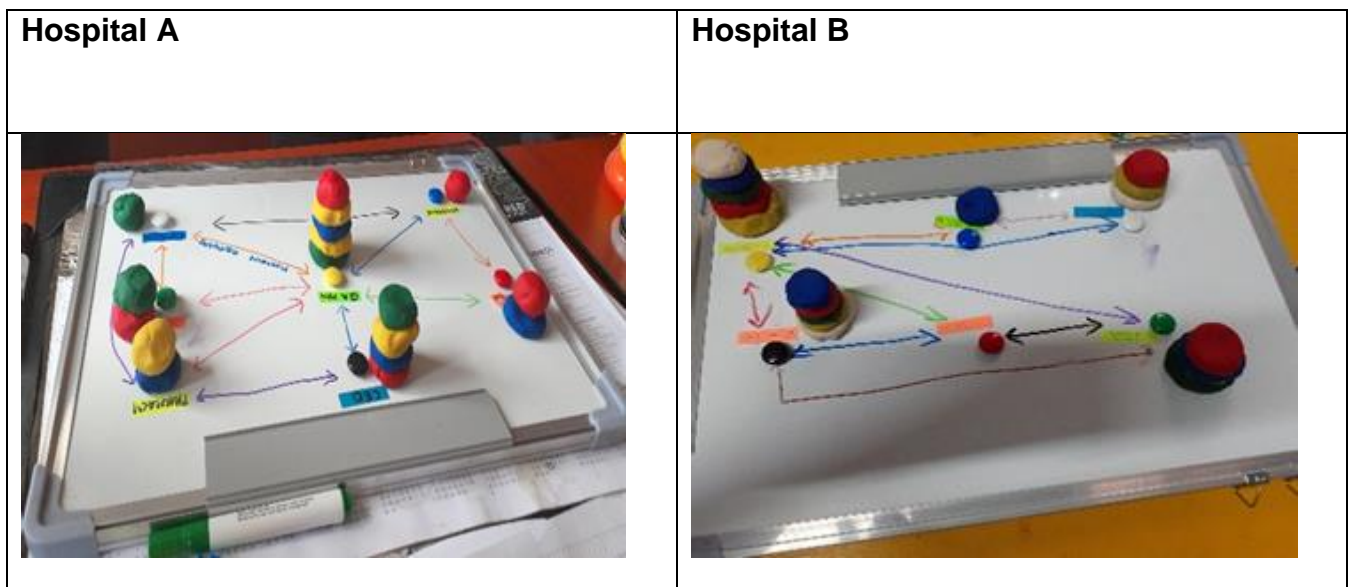


Figure 3. 1: SNA using Net-Map

3.7.4 Integration of results

Rychetnik et.al. (2004) defines expert opinion as the views of professionals who have expertise in a particular form of practice or field of inquiry, such as clinical practice or research methodology. Rychetnik et.al. (2004) further reiterates that expert opinion may refer to one person's views or to the consensus view of a group of experts. Opinion can be identified as a means by which research is judged and interpreted rather than as a weaker form of evidence (Ross et al., 2009). The researcher's two supervisors who were experts in the fields of health policy and quality assurance respectively assisted the researcher to integrate the results by means of an iterative process.

The results of the semi-structured interviews and the social networking analysis from each of the two hospitals were initially summarised on PowerPoint slides by the researcher. By reviewing the differences between the best- and the worst-performing hospitals, the group were able to make conclusions regarding each aspect. An example of the slides is included as annexure S (SSI) and annexure T (SNA). Once this was done, the concluding statement from each slide were reviewed and the findings developed according to the Walt and Gilson (1994) model, which in turn led to the recommendations which are shown in chapter 7

3.8 DATA ANALYSIS

3.8.1 Phase 1: Analysis of Data from Document Review

Data from the document review was analysed using summative content analysis according to the guidelines by Hsieh and Shannon (2005). The first step was the identification and quantifying of certain words or content in the text with the purpose of understanding the contextual use of the words or content. The second step involved reading thoroughly through each document with the aim of understanding the main points that were raised. The third step was done by going through each document again, taking note of elements of the content that were central to the research questions in this study.

After identifying all the relevant documents, the researcher systematically read each document line by line to extract relevant dominant and sub-themes aligned to Walt and Gilson policy analysis framework to address the purpose of phase one of the study.

The texts that were relevant for answering the research questions were extracted from each document. The texts were then coded, and themes were extracted from the coded texts. The themes were combined with those identified from interviews to come up with a detailed report on the results.

3.8.2 Phase 2: Analysis of Semi-Structured Interview Data

Data collected through interviews was analysed using a thematic analysis style referred to as template analysis. Through thematic analysis, it is possible to examine the perspectives of the different participants, highlighting similarities and differences, and generating unanticipated insights. Brooks, et.al. (2015) define template analysis as the use of hierarchical coding that balances a relatively high degree of the structure in the process of analysing textual data with the flexibility to adapt such data to the need of the study. They further reiterate that the key point in thematic analysis is to develop a coding template based on the sub-set of data that will then be revised and refined. Saldana (2021) defines a priori codes as the process of coding qualitative data whereby the researcher develops the codes ahead of time based on theoretical framework, the interview questions or pre-existing knowledge. Thus, in this study, a priori codes were based on the questions asked and were used as the themes for the analysis. This was due to the semi-structured nature of the interview guide and the style of questioning used by the researcher. The a priori codes were therefore: understanding of the KPA's, (perceptions of) the process of implementation of the NCS and the six KPA's, barriers to compliance with the NCS's and enablers of compliance.

The process of data analysis began with the verbatim transcription of the audios that were recorded during the interviews. The notes from the transcription of audio recordings were compared with the field notes that had been taken down during the interviews. Transcription was followed by coding. Coding is defined by Flick (2013) as the process of

highlighting sentences or phrases and assigning labels or codes to describe their content. Through the coding process, sections of data that relate to similar aspects of the research problem were identified.

The coded data was grouped into themes or a priori codes that relate to the same aspect of the research problem. Refining involves going through the themes and a priori codes by checking whether the themes or priori codes are an accurate reflection of the meanings that are evident in the data sets. Themes that did not have adequate data to support them were collapsed into other themes or priori codes while those that are found to be too diverse were broken down into separate themes or priori codes. Each theme or priori codes was then analysed and supported by the responses from the interviews. The final step was to produce the report, detailing the findings from the data.

3.8.3 Phase 3: Analysis of Data from SNA

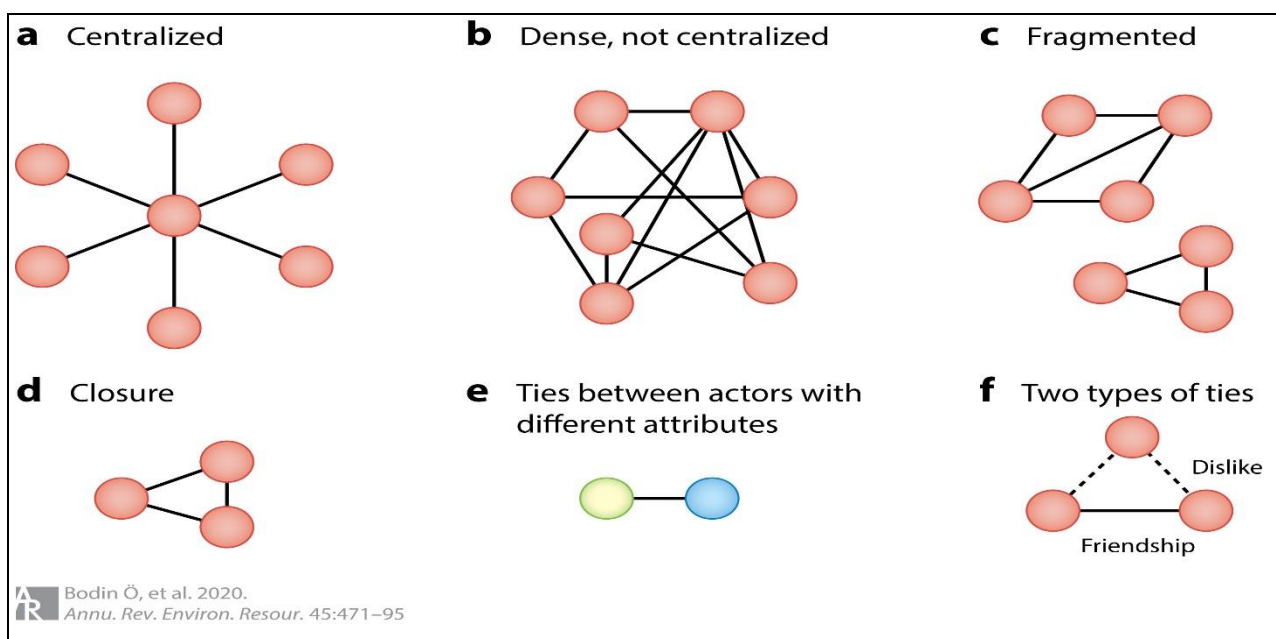
Schiffer (2007) argues that it is better to understand how different stakeholders influence decision making and what determines their influence in order to make governance structures work. Based on the collection and analysis of the data that records social relations and links of the actors; participatory visualisation of network actors was done with the participants by observing the mapping of actors, pattern of the links and the tower of influence of each actor to describe and explain the level of power in influencing the implementation of the six KPAs of the NCS.

The Centre for Public Research and Leadership (2017) defines a bounded network as a network with clear boundaries with the participants being known while the unbounded network as a network with fuzzy boundaries and the participants are not all known. The first step of analysis was to identify the network effectiveness with participants by diagnosing if the network was bounded or unbounded and further analysis of data was given topics and sub-topics according to network properties as cited by Tichy et.al. (1979). Graphic imaginary was used according to the Net-map method (2007) to display

patterning of the links and a computational model drawing was developed to describe and explain the patterns according to Bodin et.al, (2020).

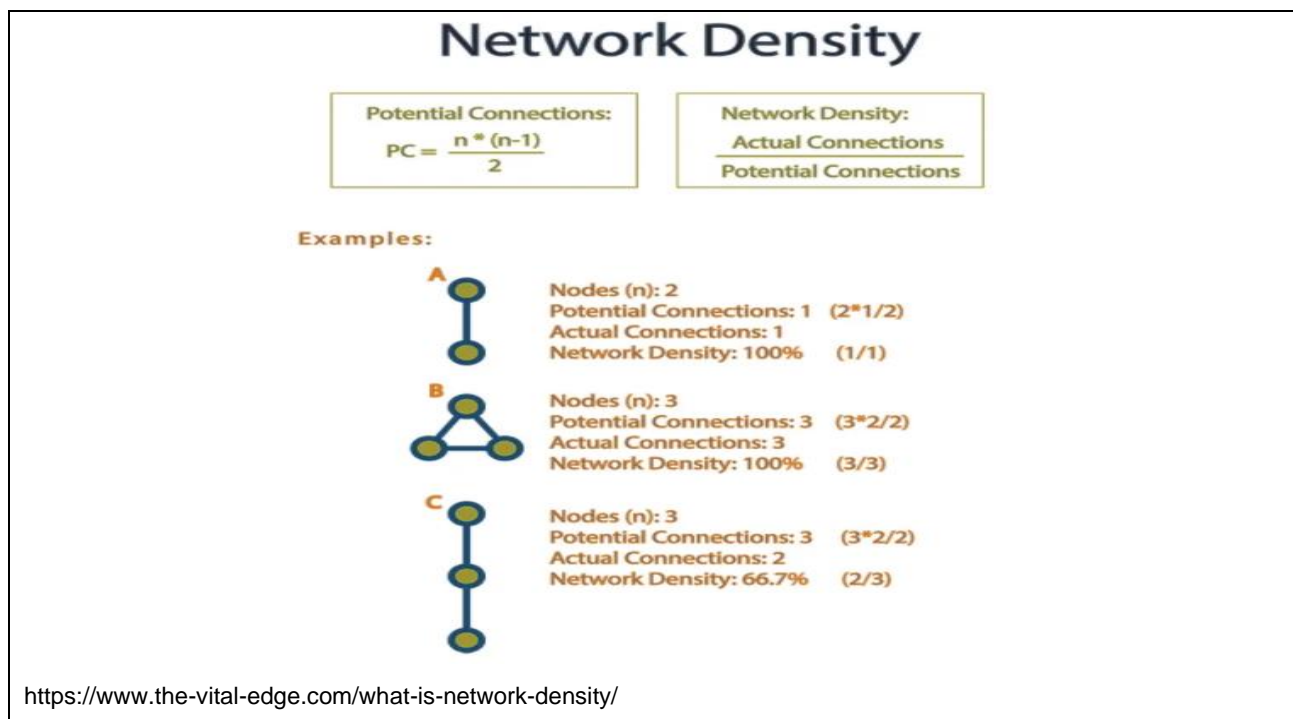
Schiffers (2007) cited three goals that aid the analysis of SNA data as (1) visual analysis of data with participants through short feedback and allowing participants to visually and intuitively interpret the network they have drawn, (2) map to be transformed into computer graphics for visual analysis by non-participant and (3) based on the number of network, if it is small it can be entered into visualisation program and shared with the readers who were not involved in the mapping process. The degree of interaction and cohesiveness of the actors was explored to identify the number of connections individual actors have and displayed by means of visual graphical form from the pictures taken during the net mapping process. Bodin et.al. (2020) explains network graphic representation characteristics as (a) represent centralized network, (b) is a network representation that is less centralised (dense), (c) fragmented network representation into two isolated subgroups, while (d) captures network closure where two actors are tied to third common tie and forms direct tie between them. Figure 3.2 below displays patterns of the links that are used to display the nature of links according to Bodin et.al. (2020).

Figure 3. 2: Pattern of the links that is used to display nature of the links according to Bodin et.al (2020).



The position of actors in the measures of these network was assessed and further explained in according to Tichy, et.al. (1979). Tichy, et.al. (1979) table on the network properties were remodified to follow the sequence during analysis. Structural characteristic included size of the network to measure the number of individuals participating in the network. Density (connectedness) of actors was analysed in order to assess the number of actual links in the network as a ratio of possible links in the network. The table below demonstrate calculation of network density.

Figure 3. 3: Illustration calculation of the network density



Openness relates to the number of actual external links of a social unit as a ratio of the number of possible external links, thus the external actors that influence implementation of the six KPAs of the NCS were assessed. Reachability refers to the average number of links between any two individuals in the network. Thus, to further explain the relationship of actors in this study, the degree of centrality was assessed if it corresponds with the ties of each actor in the network, the most prominent actor that was connected to other actors was identified. A star refers to an individual with the highest number of nominations and thus the star in the network was identified. Also, the actors who are member of the multiple

clusters in the network and linking other actors were explored to identify the bridge in the network.

These was followed by analysis of the nature of the links that involve intensity to understand the strength of the relationship, reciprocity to assess the degree to which a relation is commonly perceived and agreed to by all parties to the relation, clarity of expectations were explored to assess the degree to which every pair of individuals has clearly defined expectations about each other behaviour in the relation and multiplexity formed part of the nature of the links in order to assess degree at which pairs of individual are linked by multiple relation to deepen knowledge on the understanding of the SNA.

Lastly, the transactional content was analysed in order to assess if the actors have expression of affect with personal relation rather than work relation. Influence attempt was further explored in relation to the power of influence by checking the level of tower of each actor and further discussion with the participants was done on why the towers are not the same level and to note who was the most influential actors that aid implementation of the six KPAs of the NCS. Furthermore, actors who forge communication among other actors by exchanging information and exchanging good and services were explored.

In analysis the mapping, measures of the network embeddedness were developed by drawing the maps that depicted the position of actors as illustrated in the mapping process of the SNA by the participants.

The next step was to determine whether the actors support the goals of the policy by discussing network functions, operations and benefits to get the meaning of the network in facilitating the implementation of the NCS, the sources of influence.

3.8.4 Analysis of Data during Integration Process

As explained above in section 3.7.4., the data from the three phases were integrated by means of an iterative process by the researcher and the two supervisors, using the Walt

and Gilson (1994) framework to guide the process of analysis by connecting, building, merging and weaving narratives for analysis and for comparison.

3.9 TRUSTWORTHINESS

In qualitative research, validity and reliability are ensured by examining the trustworthiness of the findings (Anney, 2014). Trustworthiness is concerned with rigor or accuracy of the research findings. The notion of trustworthiness was coined by Lincoln and Guba (1982) as a substitute for validity and reliability. Trustworthiness contains four aspects, which are credibility, transferability, dependability, confirmability and elimination of bias. This study combined the use of document analysis with interviews and social networking analysis in order to produce credible evidence. This triangulation of different methods of data collection assisted in reducing potential bias (Bowen, 2009).

3.10 REFLEXIBILITY

Reflecting on my position for this study, I am a healthcare professional who worked for both public and non-government organizations with extensive experience in the healthcare services. I had been providing direct service delivery in primary healthcare as a nurse clinician and have knowledge on the realities facing healthcare professionals at the healthcare facilities. I had worked for the Gauteng Department of Health being familiar with one of the tertiary hospitals where I used to do clinical accompaniment for the nursing students but had never worked at either of the tertiary hospital where the study was conducted thus I had no personal relationship with the participants.

However, after ethics approval to conduct the study, QA managers in each hospital introduced me as a primary researcher to all the hospital departments and asked for their cooperation in providing the true picture of what is happening at the hospital in order to assist in improving or strengthening the services provided to the patients. I had never met participants prior to this study as such the participants felt comfortable to express themselves to unfamiliar person without fear of being intimidated or victimized. The advantage was that I am familiar with the public services practices and policies and

environment in which these policies are implemented. The disadvantage was that I may not be up to date with the public healthcare practices and not familiar with the tertiary hospital environment. I used unpublished results from the central office of Gauteng Department of Health to select two tertiary hospitals as the case studies for this study.

3.11 ETHICAL CONSIDERATIONS

In the process of conducting this study, the need to protect research subjects through the application of suitable ethical principles was considered to be of high importance.

3.11.1 Permission to Conduct the Study

The collection of data from the two tertiary hospitals was done only after receiving ethical clearance from the Human Research Ethics Committee (HREC) Medical of the University of the Witwatersrand (M180366) in annexure P, and written permission from the Gauteng Department of Health Research committee and from the two tertiary hospitals in annexure Q and R.

3.11.2 Informed Consent and Voluntary Participation

The process of obtaining participants for the study ensured that the participants gave their consent to participate voluntarily. No participant was coerced to accept the invitation to participate. The participants were provided with adequate information about the study for them to make informed decisions. Letters explaining the aim of the study and the expectations on participants were sent to participants before they could be interviewed (Annexure A-D). The participants who agreed to participate were asked to sign consent forms (Annexure I-L). The consent to audio-record the interviews was requested from the participants and consent forms signed to that effect (Annexure M). The participants were also informed that they had the right to withdraw their participation at any time even after signing the consent forms.

3.11.3 Anonymity and Confidentiality

To preserve the anonymity of participants, their names were not revealed during the data collection, analysis, and the reporting process. The participants' responses were identified by letters of the alphabet and a number to indicate the hospital. As the study took place in two tertiary hospitals they were designated as A and B and aligned with the participant response, for example A1. The confidentiality of the information provided by participants was also ensured in this study. Lockable cabinets were used to store hard copies of information and only the researcher has access to these cabinets. Electronic data was stored in encrypted devices and protected by passwords. Both hard copies and electronic data will be kept for a period of two years after publication, after which they will be destroyed.

3.11.4 Beneficence

One of the ethical principles in conducting research involving human beings is the duty of the researcher to ensure that the research is conducted in a manner that minimises harm to participants and maximises the benefits that they derive (Polit & Beck, 2010). This study did not expose the participants to any physical harm. In order to protect participants from emotional and psychological harm, no compromising questions were asked to the participants. Questions that were gender-insensitive, ethnic-insensitive and those that invade the privacy of individuals were avoided. There were no direct benefits to the participants. However, the study proposes practical recommendations which, if implemented, could enhance compliance with health quality standards in hospitals, thereby improving the lives of healthcare staff and patients.

3.11.5 Reporting of Findings

The researcher did not manipulate the responses of the participants or influence the results and outcome of the study in any way. Care was taken to ensure that the findings of the study reflected the views and perceptions of the participants as opposed to the views of the researcher.

3.12 CONCLUSION

This chapter discussed the methods that were used during the process of conducting this research. The chapter began by highlighting and explaining the research philosophy that underpinned the study and went on to discuss the research design and the reasons for its selection. The population, sampling of participants, data collection tools, and data analysis techniques were also highlighted and explained in this chapter. Finally, the steps that were taken to ensure the quality of the research findings and that the research were also highlighted.

CHAPTER FOUR

PHASE 1: FINDINGS FROM DOCUMENT REVIEW

4.1 INTRODUCTION

A review of Department of Health (DoH) policies and related documents was done to analyse the NCS policy to establish the context and content of the policies together with the norms and standards which emanated from the NCS policy. The NCS and norms and standards were analysed to obtain a clear understanding of their background, their purpose, and the domains and sub-domains that are addressed by the standards. OHSC reports were analysed to check assessment and compliance criteria used and to determine if they are in line with the content and context of policy. The Health Systems Trust (HST) reports on the progress of the NCS policy implementation were also reviewed.

4.2 CONTEXT

The development of policies addressing the quality of healthcare in South Africa comes within a context that is discussed in this section. The macro, policy, legislative, and micro contexts are explained.

4.2.1 Macro Context of the Policy

Macro policy context is explained as measures that require government action Caldwell and Mays (2012). . The development of the NCS was driven by a universally accepted and understood need to improve quality of healthcare. This need was recognized by both citizens and the government in South Africa (NDoH, 2013) and throughout the world in the aftermath of the Second World War. Developed countries including Canada, the United States of America, France, Australia and the United Kingdom introduced universal health insurance schemes as a means to improving access to health care. While there

are on-going debates around the world on the approach to finance healthcare, there is consensus that there is a need for quality health services (NDoH, 2013).

Whittaker et al (2011) believed that, up until that time, quality programmes in South Africa were uncoordinated and fragmented in both the public and the private sectors across the public and private health sectors. The absence of an orchestrated and planned quality initiative limits the effectiveness of the health services. Whittaker et al (2011) explain that this recognition led to the development of a strategic framework to address policy related issues, to create effective service delivery mechanisms and to provide for a way to monitor quality in health care. Despite now having a clear agenda for healthcare quality, as well as spending a great deal on quality initiatives, there continues to be shortcomings in the healthcare system in South Africa putting the lives and health of people at risk and resulting in waning confidence on the part of health care users. The other result of this situation is the significant increase in the number of medico-legal claims which is a burden to both healthcare services and healthcare professionals.

Poor quality healthcare has resulted in duplication efforts, patient-safety hazards, unsafe working areas, and labour grievances. The quadruple disease burden and the inequities that exist between the private and public health sectors in South Africa has increased quality challenges such as under and over-utilisation of services, inadequate referral procedures, and limited resources.

4.2.2 Policy Context

The development and reform of health policy in South Africa spans two decades and demonstrates an overall commitment by government to improve the quality of the health system (Stewart & Wolvaardt, 2019). Moat et.al (2013) refer to policy context as the background against which policy decisions are made, policy processes take place and the stakeholders or actors engage with the policy. The past 20 years have witnessed the introduction of several regulations and policies aimed at assuring and improving quality in both the private and the public sectors. The first policy on Quality Health Care was published in 2001 and subsequently revised in 2007. The policy aimed at integrating the

goals for quality assurance and providing for evidence base for decision making related to the effective utilisation of the healthcare service. Specifically, this policy introduced quality assurance measures, effective interventions and mechanisms for monitoring quality in the private and public healthcare sectors. To achieve this, the Quality Assurance Directorate of the NDoH launched a set of norms and standards in 2001 (Whittaker et al., 2011) which was followed by the publication of national regulations and provincial policies which enabled the licensing of private and public hospitals. However, these policies lacked details in terms of implementation plans (Whittaker et al, 2011)

To re-emphasise its commitment to giving priority to quality in health systems, the NDoH developed the 10-Point Plan for Improvement of the Health Sector and the Negotiated Service Delivery Agreement in 2010 (NDoH, 2013). The aim of these policies was to implement key quality assurance initiatives to improve patient satisfaction as well as to provide for the implementation of accreditation of health facilities. The National Core Standards (NCS) were developed by the Department of Health and piloted by the Office of the Health Standards Compliance (OHSC) in 2008. The NCS policy context is based on the NDoH 10-point plan and seeks to address issues that will improve life expectancy, reduce HIV/AIDS and tuberculosis, improve the health of mothers and children as well as to improve the effectiveness of the health system (NCS, 2011).

The national core standards are the basic requirements for quality and safe healthcare according to existing policies and guidelines of government. The NDoH went on to publish the Quality Improvement Guide in 2012 which built on earlier work to define how quality should be implemented, monitored and sustained. However, the potential translation of these guidelines into practice was limited by inadequate planning and monitoring of quality and this was worsened by a lack of awareness amongst health workers of the policies. The policies were also characterised by complicated interpretation and unclear roles and responsibilities of the various healthcare stakeholders. In 2013 the OHSC was established which was seen as an independent body whose mandate it was to ensure compliance with quality standards (NDoH, 2016).

All the health policies developed in South Africa are intended to be in keeping with the National Development Plan (NDP) 2030, whose goal is to promote a shift in quality of healthcare vision, underpinned by the objectives of universal coverage and reduced disease burden. The drive to provide for equal access has been seen to overshadow the quest to provide quality healthcare to health care users (NDoH, 2016).

4.2.3 Legal Context

The White Paper on the Transformation of the Health System in South Africa provided for the development of a unified health system with the goal of offering quality healthcare for all citizens using the primary healthcare approach (WHO:2017).

Enshrined in the South African Constitution is the right to quality healthcare. The Constitution provides a basis for several policies and legislation whose aim is to improve access, eliminate inequalities, and increase safety in the health system. The National Health Act, no 61 of 2003 (the Act) avails the principal legislative framework for a uniform and structured national healthcare system. It outlines the rights and responsibilities of healthcare users and healthcare providers and ensures wider participation by the community in healthcare delivery. The National Health Act, no 61 of 2003 also emphasizes the need for quality health services and allows for the development of structures to monitor the compliance of health establishments and agencies according to required standards (Rockville, 2008). The Act makes provision for the establishment of an Office of Health Standards Compliance (OHSC) as well as an Inspectorate of Health Establishments. The OHSC is tasked with setting standards and revising them as necessary, as well as monitoring compliance through the Inspectorate. They are required to report non-compliance and advise on strategies to improve quality.

4.2.4 Micro Context

Micro context of the policy is defined as policy implemented by an organisation in its local context, including its ability to fulfil the proposed mandate of policy and programme Caldwell and Mays (2012). The development of the NCS and other policies and regulations to improve healthcare in South Africa came in the context of a poorly

performing healthcare sector. Public sector healthcare remains of a poor standard and the situation is worsened by understaffing in health establishments, unprofessional and unethical conduct among healthcare personnel, poorly maintained equipment and infrastructure, as well as stifling bureaucracy (NDoH, 2013). After the 1994 democratic elections, one of the major priorities of the government was the expansion of access to healthcare. However, as the healthcare system in the country evolved, it became clear that the right of access to healthcare services was intimately connected with the quality of services provided. In other words, poor quality health services could be an impediment to access by discouraging citizens from making use of public facilities that are characterised by long waiting times, rude personnel, and unhygienic conditions. The government has therefore been making efforts through policies and legislation, to enhance the quality of healthcare in the country (NDoH, 2016).

Although the public health care system has been restructured to provide for national health, provincial health and district health care systems, which has attempted to create a more cost-effective system whilst improving access to public facilities, funding of the private and the public sectors is skewed with the private health sector being significantly better resourced.

According to the NDoH (2016), 84% of the South African population depends on the public health sector for their healthcare needs. Only 16% of the population are members of medical aid schemes, who mainly use the services provided in the private sector. The 16% who are members of medical aid schemes utilise more than 50% of the total expenditure of healthcare, while the remaining 84% of the citizens are dependent on the public sector, which is, in any event, under-resourced. In addition, close to 80% of the country's medical specialists serve the same 16% private sector population (NDoH, 2016).

Through media reports, patient complaints, and reports from surveys, the NDoH (2010) identified the following specific areas which patients felt that public healthcare services are furthest from what they expected, wanted, and deserved:

- **Caring staff and feeling of being cared for** - The NDoH (2010) pointed out that according to complaints received from patients as well as patient satisfaction surveys, healthcare staff are often seen as being rude and uncaring. Health care staff, on the other hand, complain of feeling demotivated and are concerned at the lack of recognition they believe they are given.
- **Cleanliness of facilities** - The NDoH (2010) also reported that hospitals and clinics were often found to be dirty, unhygienic and untidy. This situation is compounded by the inadequate supply, or sometimes complete absence, of cleaning materials and equipment. The impression of neglect is reinforced by a lack of maintenance (NDoH, 2010).
- **Waiting times to receive care** – Patients also complained of waiting for long hours before getting their files, seeing a nurse or doctor, or getting their medicines. Some reports even indicated that patients sometimes have to return to the facility the following day due to them not receiving attention on the day they attended with some patients having even died in queues before getting attention (NDoH, 2010).
- **Safety from accidental harm or medical errors** – Another common finding was that despite guidelines being available, procedures were commonly not implemented according to the guidelines. Although statistics do not exist indicating the exact number of patients harmed as a result of acts of commission or omission on the part of health care professionals' available reports of avoidable injuries or deaths, complaints received, and cases of professional malpractice or negligence all pointed to a huge problem (NDoH, 2010).
- **The risk of being infected in hospital** – One area that falls under the direct control of healthcare personnel is the prevention infections. Most hospitals were found not to be observing most basic rules and practices relating to hygiene. There was no prioritisation by management on issues regarding the application of professional knowledge and following of procedures. The problem is compounded by inadequate supplies of essential disinfectants and equipment as well as challenges with proper disposal of medical waste (NDoH, 2010).
- **Shortage of medicines** – The NDoH (2010) also noted a common problem relating to the shortage of medicines and supplies throughout the country.

Reasons for such shortages include supplier-related problems, failure to pay suppliers, or a failure to place orders with suppliers due to budgetary constraints, failure to distribute medications to health facilities, as well as failure to place orders timeously. As a result of the shortage of medicines, patients must sometimes return a later date to receive treatment, leading to inconveniences as well as the worsening of their condition.

4.3 ACTORS

Literature suggests that stakeholders should be included in the process of developing policies at all levels to assist in reducing policy implementation gaps (Wright, 2017). According to WHO (2007), quality improvement is about change so it is important to determine who the key stakeholders are as well as how they can be involved in the quality improvement initiatives. The key stakeholders and the roles they play in the South African health quality improvement initiatives are discussed in this section.

4.3.1 Government

The government, represented by the DoH, is the policymaker whose responsibility it is to establish the framework within which quality healthcare can be provided to citizens. The government is also responsible for making budgets and other plans that relate to expenditure in healthcare. The DoH is expected to work together with other stakeholders in developing policies that address the needs of the healthcare sector (Wright, 2017).

4.3.2 Healthcare Personnel

Healthcare personnel play an important role in the development and implementation of healthcare policies. As the implementers of the policies, consultations with this stakeholder group during the policy-making process are crucial (Lemke & Harries-Wai, 2015).

4.3.3 The Public

As consumers of healthcare services, the major concern of the public is on quality, cost, and access to healthcare. The public is a crucial source of information that assists in

building initiatives for quality improvement in the healthcare sector. Interaction with the broader community regarding the circumstances that give rise to health needs will assist in dealing with the primary causes of health problems (Mogakwe et al., 2019).

4.3.4 The Office of Health Standards Compliance (OHSC)

As explained earlier in this chapter, the OHSC was established by section 77(1) of the National Health Act, 2003, as part of National Government's initiatives, and were mandated with the responsibility of protecting and promoting the health and safety of healthcare users. The duties of the OHSC include monitoring and enforcing compliance to the prescribed standards as well as investigating complaints that relate to a failure to comply to the prescribed norms and standards (OHSC, 2018).

4.4 POLICY CONTENT AS GUIDING DOCUMENT FOR IMPLEMENTATION OF QUALITY STANDARDS

This section looks at the aim of health policy in relation to quality initiatives, the principles that influenced the development of the NCS, and the structure and content of the NCS and the six priority areas that were identified.

4.4.1 Aim of Healthcare Policy

The initiatives that have been implemented by the National Department of Health (NDoH) were aimed at further reforming the healthcare sector. Such initiatives focus on ensuring that private and public healthcare sectors deliver on key requirements and expectations to provide the appropriate healthcare timeously in the safest conditions. Achieving compliance with NCS is expected to avoid risk by ensuring the necessary structures and processes are in place thus reducing the impact of the risks (Newton, Mytton, Aggarwal, Runciman, & Fahlgren, 2010).

The NCS for health establishments in South Africa reflect the vision of the NDoH for the country's healthcare services and outline the things that need to be done in order to meet

the vision (Newton et al., 2010). The standards are tailored to suit the healthcare context in South Africa and reflect evidence based international best practice. The NCS reflect what is expected and needed for the delivery of safe, decent, and quality care. They are complemented by a set of measurement tools for assessing compliance with the standards (Newton et al., 2010). The primary objectives of the NCS are to:

- Provide a common definition of quality care that demonstrates what should be present in all the South African health establishments that provides guidance not only to healthcare workers and managers but also to the public.
- Establish a standard for assessing health establishments, identifying strengths and gaps, and
- Provide a framework for national certification of health establishments (Linegar et al., 2011).

Therefore, these NCS provide a road map on how to achieve quality healthcare services. This in turn will improve South Africa's poor health outcomes and re-establish patient and staff confidence in the public and private healthcare system (Matsoso, 2011).

4.4.2 Principles Influencing the Development of the NCS

A response was required to deal with the many concerns and to provide a benchmark to enable measurement against standards to guide managers to improve the quality of health care (NCS, 2011). In the light of these many challenges, a set of "Core Standards for Health Establishments" was launched in April 2008 which were subsequently piloted in a sample of health care institutions in both the private and the public sector between June 2008 and March 2010.

A set of principles was selected to guide the overall policy direction of the DoH, which according to NCS (2011:9) included universality, relevance, validity and reliability and logic which were defined in the document as follows:

- **“Universality** - Universality are common and generally applicable assessment measures at all healthcare setting and all levels from private to public institutions in the context of the health standards and philosophy.”
- **“Relevance** - Critical elements of care to providing quality care to all South African healthcare institutions are holistically taken on board in the established standards and assessment measures.”
- **“Validity and Reliability** - These are references to what can objectively and practically be measured during audits and healthcare centres.”
- **“Logic** - Logic refers to the tacit philosophy employed in the classification and arrangement of measures, norms and principles into the policies, systems, processes and procedures as well as the outputs.”

4.4.3 Six Key Priority Areas (KPAs)

It was decided to prioritize certain areas in order to address the issues which were commonly identified by patients which were stated in media reports, patient satisfaction surveys and through the complaints system. As a result, six KPAs were identified which would be prioritized and fast-tracked. They were part of the NCS and included:

- **Values and Attitudes** – this priority area advocates for caring staff in healthcare establishments. This involves listening to and caring about the concerns and opinions of patients in order to offer better care.
- **Cleanliness** – this priority area focuses on ensuring the cleanliness of healthcare facilities, which aids in disease prevention and control.
- **Waiting times** – this principle focuses on initiatives to reduce the waiting times of patients before they get their files, see the nurse or doctor and receive medication.
- **Availability of medicines and supplies** – the focus of this key priority area is on ensuring that medicines and supplies are available. All steps should be taken in the supply chain to ensure that patients are given their prescribed medicines on the same day.

- **Patient safety and security** – the aim of this KPA is to ensure that patients are not harmed through medical error or omissions by healthcare workers. Best practice should be followed when providing care to patients.
- **Infection prevention and control** – this KPA seeks to address the issue of the spread of infection in hospitals and other facilities (NCS, 2011).

4.4.4 Structure of the National Core Standards

The NCS are organised into seven domains based on a health systems approach and which delineate the intent or scope for assessment in areas of healthcare where safety or quality may be at risk (Whittaker et al., 2011). A domain is defined by the World Health Organization (WHO, 2011) as “an area where quality or safety might be at risk” (WHO, 2011). The first three domains are associated with the primary objectives of the health system. These are patients’ rights, clinical governance and clinical support services. The other four domains, which are public health, leadership, corporate governance, operational management and facilities and infrastructure, relate to the support systems that ensure the delivery of the former.

Table 4.1: Domains/structure of the NCS



Domain 1: Patients' rights

The patients' rights domain outlines the aspects that a clinic or hospital is expected to do to ensure that respect is offered to patients and their rights are upheld. These rights include obtaining access to the required care and respectful, informed, and dignified attention in an environment that is acceptable and hygienic. These rights are derived from the Batho Pele principles and the Patients' Rights Charter. In this sub domain the following aspects are listed, the right for "respect and dignity, availability of information to patients, physical access to healthcare establishments, medical device risk reduction, unrivalled healthcare capabilities to infection control and prevention, reduction of delay in care, continuity of care, emergency care and an effective complaints management" (NCS, 2011:18).

Domain 2: Patient Safety, Clinical Governance and Care

This domain, according to the NCS (2011) "strives to ensure quality nursing in clinical care, ethical practice in discharge of one duty, reduction of the unintended harm to

healthcare providers or users in identified situations of increased clinical risk” (NCS, 2011:22). The aim of this domain is to reduce and prevent adverse events. These adverse events include health care associated infections (HAI) which are known to result in both mortality and morbidity in the country (Dramowski & Whitelaw, 2017).

Governance in clinical care focuses on delivering on management and planning, financial management, procurement, human resource management, information management, corporate governance, quality improvement programmes, risk management, research governance, effective communication and management of public relations (Whittaker et al., 2012). This comes in the face of poor governance in the health care sector generally and is one of the critical factors needing attention if the quality of care is to be improved.

Domain 3: Clinical support services

This domain, according to the NCS (2011:26) covers “specific services critical in the provision of clinical care and incorporates the timely availability of medicines, an efficient diagnostics mechanism, therapeutic and necessary technologies in medical services. The domain also covers systems that monitor the efficiency of the care provided to patients” The NDoH (2013) noted that the South African public health system is plagued by operational inefficiencies that emanate from inadequate systems within the health establishments.

Domain 4: Public Health

According to the NCS (2011:30), “this domain covers how health facilities should work with NGOs and other health care providers along with local communities and relevant sectors, to promote health, prevent illness and reduce further complications; and ensure that integrated and quality care is provided for their whole community, including during disasters”. This follows the realisation that the successful delivery of quality healthcare is only possible when different stakeholders work together to achieve the quality objectives of the healthcare system. Whittaker et al. (2012) also cites related issues such as

population-based services and disaster preparedness and environmental control as key to providing for quality health care provision.

Domain 5: Leadership and Corporate Governance

This domain “covers the strategic direction provided by senior management, through proactive leadership, planning and risk management, supported by the hospital board, clinic committee as well the relevant supervisory support structures and includes the strategic functions of communication and quality improvement.”(NCS, 2011:34)

This domain recognizes the fact that lines of authority and accountability have a direct impact on the performance of an organisation. The NDoH (2013) pointed out that the South African health system is characterised by poor weak leadership and accountability.

Domain 6: Operational management

This domain “covers covers the day-to-day responsibilities involved in supporting and ensuring delivery of safe and effective patient care, including management of human resources, finances, assets and consumables, and of information and records.” (NCS, 2011:38).

Domain 7: Facilities and infrastructure

This domain, “covers the requirements for clean, safe and secure physical infrastructure (buildings, plant and machinery, equipment) and functional, well managed hotel services; and effective waste disposal ”(NCS, 2011:42). The term “physical infrastructure” refers to buildings, plant and machinery and utilities and equipment. A safe and secure environment is one where patients are actively protected from harm. This domain also includes hygiene and cleanliness and waste management, as well as the management of linen and laundry and food services.

The NCS have however been criticised for placing too much emphasis on structure measures but putting very little focus on process and output measures. Structure dwells

on inputs such as availability of equipment and supplies, infrastructure, human resources, and support systems while process measures focus on interventions or activities conducted within the organisation in providing care for patients or management of staff such as administration of treatment, education of patients, and clinical and equipment maintenance guidelines. The focus of outcomes is on the effect of the intervention a particular health problem.

4.5 NORMS AND STANDARDS

Norms and Standards emanated from the NCS policy and were gazetted on the 2 February 2018. This regulation is used to inspect health establishment in South Africa for compliance according to the measures provided in the tools developed by the OHSC (Norms and Standards policy, 2018). The norms and standards regulation is structured into seven chapters, but only those relevant to the KPAs will be reflected in Table 4.2 below.

Table 4.2: Summary of Provisions of Regulation No 67 of February 2018: Norms and standards regulations applicable to different categories of health establishments.

| Section | Sub-section | Requirement |
|---------------------------------------|---|--|
| Clinical Governance and Clinical Care | Clinical management | The health establishment must establish and maintain clinical management systems, structures and procedures that give effect to national policies and guidelines and must: <ul style="list-style-type: none"> • Ensure that clinical policies and guidelines for priority health conditions issued by the NDoH are available and communicated to health care personnel. • Establish and maintain systems, structures, and programmes to manage clinical risk |
| | Infection prevention and control programmes | The health establishment must maintain an environment, which minimizes the risk of disease outbreaks, the transmission of infection to users, health care personnel and visitors and must: <ul style="list-style-type: none"> • Ensure there are handwashing facilities • Provide isolation units • Ensure clean linen to meet needs of users • Ensure health care personnel are protected from acquiring infections through the use of personal protective equipment and prophylactic immunizations |

| | | |
|---------------------------|--------------------------------|---|
| Clinical support services | Medicines and medical supplies | The health establishment must comply with the provisions of the Pharmacy Act, 1974 and the Medicines and Related Substances Act, 1965 and must: <ul style="list-style-type: none"> • Implement and maintain a stock control system for medicine and medical supplies • Ensure the availability of medicines and medical supplies for the delivery of services |
| General Provisions | Adverse events | The health establishment must have a system to monitor and report all adverse events and must: <ul style="list-style-type: none"> • Have a register for all adverse events • Have systems in place to report adverse incidents to a structure in the health establishment or responsible authority that monitors these events. |
| | Waiting times | The health establishment must monitor waiting times against the National Core Standards for Health Establishments in South Africa |

4.6 NATIONAL HEALTH INSURANCE (NHI)

Historically South Africa was faced with inequalities in rendering healthcare services to all. The purpose of the NHI is to ensure that the population has access to quality health services without imposing financial hardship on households (NHI 2017:8). This is done by pooling funds so that goods and services can be purchased cost-effectively and so making personal health services more affordable. Part of the thinking behind this initiative is that a mechanism would be needed to measure quality to ensure that health services were of quality and equitable, hence the need for the NCS and the inspectorate (Maphumulo, 2020).

In 2011, government published the Green Paper on NHI (Government Gazette Volume 554. No 34523, 12 August 2011) was released for public comment by NDoH. Furthermore, expert opinion on NHI was sought from other countries with experience of similar insurance schemes.

Finally, after a number of discussions and consultations, the NHI White paper was signed by the then Health Minister of Health, Dr Aaron Motsoaledi on the 28 June 2017. For the purpose of this study, specific chapters of the NHI policy will be discussed including the interrelationship of the NCS and the NHI policy.

NHI policy consist of ten chapters including introductions and conclusions, thus the context, content and actors of the policy will be discussed including specific chapters that addresses policy implementation and six KPAs.

The aim of the NHI is to “transform the financing of healthcare in pursuit of financial risk protection, by eliminating fragmentation, ensuring technical and allocative efficiencies in how funds are collected, pooled and used to purchase services, thus creating a unified health system that will move closer to the goal of UHC and SDG 2030”. To fulfil the mandate of NHI, the Office of Health Standards Compliance (OHSC) is charged with overseeing the certification of health care providers and health establishments which will be provided should they meet the quality standards (NHI, 2017).

The context of the NHI: Where is NHI policy implemented?

Maphumulo (2019) asserts that studies and scientific evidence proves that comprehensive healthcare services can be delivered and that to be a reality it will require the health care system to be reorganized and strengthened. Several international frameworks guide UHC including those of the United Nations (UN) multisectoral systems and WHO frameworks. One such example is the Sustainable Developmental Goals (SDG) 2030, and specifically SDG 3 that aims at ensuring healthy lives and promoting wellbeing for all irrespective of age. UHC is an enabler for inclusive social protective systems (NHI 2017:6).

According to the NHI document (2017:1) the health care system will be “reorganized in the areas of strengthening Primary Health Care (PHC) including PHC re-engineering, hospital services, and EMS, improving leadership and governance in the health system through reforms to the management and governance of clinics, districts and hospitals. The provision of healthcare services will be through an integrated system involving accredited and contracted public and private providers” (NHI, 2017:1).

The Process of NHI: How Is the NHI Policy Implemented?

According to NHI policy document, its implementation is consistent with the global vision that health care should be a social investment. It is recognized that, in order to implement the NHI policy, new laws will be required, and it will be necessary to implement the policy in a consistent manner across all spheres of government. Interventions which will facilitate smooth implementation include strong referral systems, gatekeeping and the implementation of protocols and clinical guidelines (NHI, 2017).

The NHI derives its mandate from Section 27 of the Bill of Rights of the Constitution of the Republic of South Africa. The State is required to achieve the progressive realization of a right to health care within the resources available. Achieving UHC will contribute significantly towards the realization of the vision of a long and healthy life for South Africans (NHI, 2017).

Chapter 3 (52) of the NHI policy discusses structural challenges in the health system which consequently enable the health care system to effectively implement the six health systems building blocks. These building blocks include health care financing, information and research, service delivery, leadership and governance, the work force of the health care services and medical products and technologies (NHI 2017:12).

Chapter 3 (53) discusses **leadership and governance** and states that challenges remain despite the efforts made by government to inculcate the culture of good leadership and governance. It has been found that managers in the public sector often have insufficient knowledge and skills. Furthermore, the chapter highlights weak accountability mechanisms is exacerbated by a semi-federal public sector that resulted in weak accountability mechanisms (NHI 2017:12).

There are many service delivery challenges, partly due to the fact that despite efforts to introduce primary health care, the services remain hospi-centric (NHI 2017:12). Chapter 3 (55) refers to dissatisfaction amongst the users of health services with respect to acceptability of the health care services and patient experience (NHI, 2017).

NHI policy (2017), in line with the NCS, reiterates the importance on improving staff attitude, waiting times, cleanliness, drug stock outs, infection control, and safety and security of staff and patients. Efforts have been made to address these KPAs of quality standards, but challenges still continue to persist in the public sector.

Chapter 3 (56) highlights that quality challenges are aggravated by misalignment of resources with respect to private and public services, relative to the population they serve. As a result, the public sector remains overburdened and under-resourced (NHI 2017:12).

Poor leadership is highlighted on chapter 3 (57) as the cause of the suboptimal conditions of health service delivery. Also, increased patient load and public discontent with quality are the source of compromised quality of care which has in turn led to increasing numbers of medico legal claims (NHI 2017:13).

Health workforce challenges are discussed in chapter 3 (58) (59). Here too, the issues of poor access due to inequities is highlighted which is partly due to inequitable distribution of healthcare personnel. These regulations further reiterates that this maldistribution has contributed to transforming health into a commodity rather than a social investment (NHI 2017:13).

Chapter 3 (61) further states that other factors contributing to human resources shortages and attrition are related to poor job design, weak performance management systems, remuneration policies, employment relationships, uncongenial work environments, shortages of equipment, negative workforce cultures and sub-optimum human resource practices. The latter problem relates to a failure to plan and budget for the provision of accessible career paths, opportunities for staff development and training and development opportunities (NHI 2017:13).

According to NHI (2017:21), service coverage is referred in chapter 5 (102) as the extent to which “a range of quality health services necessary to address the health needs of the population are covered. Thus, NHI will cover comprehensive health care services” and it is the responsibility of the NHI benefits advisory committee (BAC) to develop services for all levels of care.

To expand access to hospital services, chapter 5 (120) (122) highlights that NHI will contract with accredited public and private providers at specialist and hospital level based on the need and services to be rendered will be based on appropriateness of the level of care and existing classification of hospitals which consists of district, regional, tertiary and quaternary (NHI 2017:26).

In an attempt to expand access to pharmaceutical services chapter 5 (127) states that private and retail pharmacies will be accredited and contracted to ensure equitable access to medicine and related pharmaceutical products (NHI 2017:27).

Implementation of Quality Improvement Initiatives according to NHI policy

According to chapter 6 (146), accreditation and contracting eligible health facilities will be based on meeting nationally approved standards. There are measures in place to meet these standards, health facilities must be certified by the OHSC as mandated to fulfil its obligations. Chapter 6 (150) reiterates the importance of uninterrupted support services and suggests that these be provided in-house rather than being outsourced (NHI 2017:31).

According to chapter 6 (152) of the NHI (2017:31) efforts to improve had variable results in meeting the NCS in public healthcare facilities with hospitals scoring much better than PHC facilities. Results of the inspections by the OHSC were used to compile and implement action plans to improve compliance.

Improving Leadership and Governance

Chapter 6 (171) (172) of the NHI (2017:34) discusses roles, functions and responsibilities of management and governance structures for the district, tertiary and specialized hospitals. The implementation of the NHI will bring about changes in the roles and responsibilities of managers and leaders as hospitals will be contracted to render quality health services in accordance with the norms and standards as determined by the OHSC.

Managers will need to improve accountability, quality of health services, performance and effectiveness. This in turn will require management competencies to be enhanced.

Hospital boards roles will be strengthened and will assist in providing an oversight function in an attempt to improve adherence to the NCS (NHI 2017:34).

4.7 IMPLEMENTATION OF HEALTH QUALITY STANDARDS

Policy implementation is an integral part of the policy process. According to Wright (2017), effective implementation is crucial for ensuring the success of health policies and legislation. A high-quality piece of legislation does not guarantee success and ineffective implementation results in policy failure, meaning that the intention to improve the quality of healthcare would have failed. It is therefore crucial to plan for effective implementation beginning in the development stage of the policy (Wright, 2017).

4.7.1 Auditing of Health Facilities

Many national organisations have recommended auditing in healthcare facilities with the aim of improving patient safety and quality of care. According to Mocke (2011:3), the process conducting a healthcare service delivery audit creates an important opportunity to build an awareness of areas within operational management that matter most.

The baseline audit conducted by the Health System Trust in 2011 indicated that audits were driven by top management at national level and while there was visible support for the process, results indicated many areas requiring improvement. Result of audits can, if used appropriately, provide a mechanism to motivate staff to improve performance as they are enabled to concentrate on shortcomings and priority problems.

4.7.2 Inspections

The OHSC set itself an inspection target of 18% (687 out of 3818) of public sector health establishments in 2019/2020 (OHSC, 2019). Various types of inspection are allowed for.

- **Routine inspections** – Every health establishment has to be inspected once in four years.

- **Additional inspections** – Inspectors, at any time, subject to section 82(1) of the Act, can carry out an additional inspection if they believe that (1) there is need for to establish whether non-compliance within the health establishment has been corrected; (2) there has been a contravention of the Act or any relevant regulations by the health establishment; (3) there are serious breaches of norms and standards, based on the indicators of risk; or (4) the findings by the ombudsman demonstrate that health care users and/or personnel are at severe risk.
- **Risk-based inspections** - These are triggered by the Early Warning System (EWS), targeted for critical or persistent non-compliance and Ombudsman findings (OHSC, 2019).

In fulfilling its role of monitoring health establishments, the OHSC conducted inspections on 696 public health establishments in 2019/2017 and 923 in 2017/2018 out of the 3186 public health establishments in the country (Stewart & Wolvaardt, 2019). The findings of these inspections showed that 38% of the inspected establishments complied with 50% or more of the standards. The findings also indicated that the performance score of hospitals for the Patient Safety, Clinical Governance, and Care domain was an average of 63%. The lowest average performance score for hospitals was in the Leadership and Corporate Governance domain with an average score of 44%. For the financial year 2018/2019, the OHSC conducted inspections on 730 healthcare establishments in different levels of healthcare, representing 19% of the 3186 public health establishments. These inspections were conducted before the availability of the regulatory standards and were referred to as mock inspections. The inspection tools used were based on the NCS (OHSC 2018/2019).

4.7.3 Measuring Compliance

Compliance with quality standards is critical for ensuring the protection of patients from life-threatening circumstances. Failure to comply with these quality standards undermines the objectives of quality healthcare and brings about client dissatisfaction, disregard for human dignity, as well as questionable quality of clinical care within the healthcare system

(NDoH, 2012). It is therefore imperative for healthcare establishments to comply with quality standards to improve health outcomes in the country. The Negotiated Service Delivery Agreement also places emphasis on the importance of compliance with quality standards (NDoH, 2012). Compliance assessments can be conducted by an external inspection team (currently the OHSC inspection team) or as part of an internal self-assessment process. These assessments assist in identifying gaps that need improvement. The process should result in a report with scores for the compliance level of each health establishment. There are three separate reports that should be availed for each health establishment, which are, by domain, functional area, and the six KPAs (NDoH, 2012).

4.7.4 The Assessment Tool and Measures

The assessment tool provides measures which are there for the purpose of gathering tangible evidence of compliance to the standards. Mensa et al. (2018) reiterated that measurement can be wasteful when it does not go together with improvement. Each domain has standards which in turn have criteria and measures and which are linked to “functional areas” which are designated and selected operational areas where service delivery takes place (NDoH, 2012). Examples of functional areas are a laboratory, a medical ward, an outpatient department, and accident and emergency unit, reception, radiology, blood services, financial management, occupational health services, chief executive officer or hospital manager and security services.

4.7.5 Rating of the Measures

According to NCS (2011:13), “the component measures for each of the standards were classified according to a risk rating approach and employed an adapted matrix used by the Australian Capital Territory Government in 2009. The component assesses the severity of the impact as well as the probability of a risk occurring in each case. In the context of the risk ratings, the respective measures are presented in three risk levels.”

The three levels are shown in table 4.1 below:

Table 4. 1. Risk Ratings in the NCS (2011)

| Type of measure | Explanation |
|-----------------|---|
| Vital | Intended for those measures considered to relate to the safety of staff and patients. These are considered important as failure to comply may result in harm or irreversible ill health or loss of life, or prolonged period of recovery. These measures are considered as non-negotiable and health establishments are required to meet these designated measures. |
| Essential | Considered critical to the provision of safe, decent quality care and are designed to provide an in-depth view of what is expected with available resources. |
| Developmental | Measures designed to be aspirational to providing optimum care. |

It should be noted that the risk rating for clinics that was developed by the OHSC two years ago only includes viral and essential measures. Vital and essential measures are weighted differently in determining compliance with higher compliance required for viral measures (NCS 2011).

4.8 CONCLUSION

A review of DoH policies and related documents was done in order to obtain supporting literature to establish the context and content of the policies and to understand the role of the actors in the development of the policy.

During the reviewing of the content and the context, it became clear that the actors had similar intentions with regard to addressing inequities emanating from previous discriminatory laws and practices. The motivation for the establishment of the NHI is specifically to provide for a more affordable and equitable health care system and the NCS have been specifically designed with the NHI in mind. In order to accredit health care facilities, and therefore to be able to provide NHI funding, there has to be a method of assessing quality and rewarding good care while motivating others to improve the

quality of health care. There is therefore good cohesion and integration of the policies reviewed. The problem that was identified in the document review that continues to plague government in South Africa is the implementation of the policy. Good policy does not equal good implementation and it was clear in reviewing the documents that the NCS policies and procedures were based on a best-case scenario rather than the reality of the situation in health care. Whereas it is easy to set standards, criteria and indicators through reviewing international best practice a more practical system would be to base the NCS on best equivalent provider standards. This however opens another debate as if one sets standards that are realistic in a resource constrained health care system, it becomes too easy to be complacent in providing sub-optimal care and it blunts any aspiration to improve. The fact remains in reviewing the documents, and in particular the results of the audits carried out that the health establishments in South Africa are not meeting the standards set and a review of the entire accreditation system may be called for. This would, in turn have implications for the planned NHI and may pose a setback for an already delayed but much needed policy.

The following chapter presents the findings of the semi-structured interviews held with staff members at the two selected hospitals.

CHAPTER FIVE

PHASE TWO: SEMI STRUCTURED INTERVIEWS

FINDINGS AND DISCUSSION

5.1 INTRODUCTION

In this chapter of the findings of the interviews conducted in phase two of the study are presented and discussed. The data was collected through interviews with selected employees from the two tertiary hospitals that were the focus of this study. This was done in fulfilment of the objectives:

- To explore the process of the implementation of the six KPAs of the NCS in the best and worst performing tertiary hospitals in Gauteng;
- To identify enablers and barriers that influence compliance with the six KPAs of the NCS in the best and worst performing tertiary hospitals in Gauteng

A total of 30 in depth interviews were conducted with 15 participants per hospital. At each hospital the following key informants were interviewed: the quality assurance manager (n=1), hospital managers (n=5), a pharmacist (n=1) and frontline staff (n=8). Analysis of data was done through thematic analysis, which involved going through the interview responses and identifying themes that relate to the research problem. Findings from literature were used to support the results of the primary data. The first section of the results focuses on the demographic characteristics of the participants while the second section presents the description and discussion on the identified themes. Table 5.1 highlights the list of participants of this study per hospital department in both hospitals.

Table 5. 1: List of interview participants

| | Hospital A | Hospital B | Number of staff | Hospital department |
|---------------------------------|--|--|-----------------|---------------------------------------|
| Quality improvement team | <ul style="list-style-type: none"> ✚ Quality Assurance Manager ✚ Complaint officer ✚ IPC coordinator | <ul style="list-style-type: none"> ✚ Quality Assurance Manager ✚ NCS champion ✚ IPC coordinator | 3 | Quality Assurance |
| Hospital management | Cluster managers <ul style="list-style-type: none"> ✚ Poly clinic ✚ Wellness clinic ✚ Stoma clinic | Cluster managers <ul style="list-style-type: none"> ✚ Poly clinic ✚ Wellness clinic ✚ TB focal clinic | 3 | Hospital clinics |
| Pharmacist | ✚ Pharmacist | Pharmacist | 1 | Pharmacy |
| Frontline staff | <ul style="list-style-type: none"> ✚ Operational managers Casualty x2 Admissions x1 Out-patient x2 ✚ Nurses Casualty x1 Admissions x1 Out-patient x1 | <ul style="list-style-type: none"> ✚ Operational managers Casualty x2 Admissions x1 Out-patient x2 ✚ Nurses Casualty x1 Admissions x1 Out-patient x1 | 8 | Casualty Admissions Out-patient |
| Total: 15/hospital | | | | |

5.2 DEMOGRAPHIC DATA

Information was collected on the age range, gender, experience in healthcare, and educational qualifications of the participants. The aim was to ensure that data was collected from a representative group of stakeholders. The demographic characteristics of the key informants are presented in table 5.2 below.

5.2.1 Age Range

The results for the age distribution of interview participants are shown in table 5.2. The results show that the age group of participants at hospital A and B ranged between thirty (30) and sixty-five (65) years, respectively. The age group forty (40) to forty-nine (49) years had the greatest number of participants with forty seven percent (47%) at hospital A and sixty percent (60%) at hospital B. The average age of the participants is forty-nine years (49). Participants between twenty (20) and twenty-nine (29) were not represented in this study.

5.2.2 Gender

The majority of participants were female which was to be expected since the majority of health professionals are women. Table 5.2 presents the summary of results relating to gender distribution of participants. The results indicate that the male sample represented thirteen percent (13%) in hospital A and thirty three percent (33%) in hospital B while females represented a larger proportion of eighty seven percent (87%) in hospital A and sixty seven percent (67%) in hospital B, respectively. An average of twenty-three percent (23%) males and seventy-seven (77%) females participated in the interviews. Based on this study findings, more females are represented than males in both hospital A and B.

Table 5. 2: Consolidated demographic presentation of data

| VARIABLE | | HOSPITAL A (N=15) | PERCENTAGE | HOSPITAL B (N=15) | PERCENTAGE |
|---------------------------------------|---------------|--------------------------|-------------------|--------------------------|-------------------|
| AGE | 20 - 29 years | 0 | 0 | 0 | 0 |
| | 30 – 39 years | 4 | 27% | 2 | 14% |
| | 40 – 49 years | 7 | 47% | 9 | 60% |
| | 50 – 59 years | 3 | 20% | 3 | 20% |
| | 60 - 65 years | 1 | 6% | 1 | 6% |
| GENDER | Male % | 2 | 13% | 5 | 33% |
| | Female % | 13 | 87% | 10 | 67% |
| EXPERIENCE | 1 - 4 years | 3 | 20% | 4 | 27% |
| | 5 - 9 years | 2 | 13% | 2 | 13% |
| | 10 – 14 years | 5 | 33% | 4 | 27% |
| | 15 – 19 years | 4 | 27% | 3 | 20% |
| | >20 years | 1 | 6% | 2 | 13% |
| HIGHEST ACADEMIC QUALIFICATION | Certificate | 0 | 0 | 0 | |
| | Diploma | 7 | 47% | 9 | 60% |
| | Degree | 5 | 33% | 4 | 27% |
| | Postgraduate | 3 | 20% | 2 | 13% |
| | Other | 0 | 0 | 0 | 0 |

5.2.3 Experience in Healthcare Services

The level of experience in healthcare was a crucial variable in this study. In order to have a good understanding of the dynamics of compliance with the six KPAs of the NCS, participants' experience, or length of service in the healthcare service was considered. Thirty-three percent (33%) or $n = 5$ of participants from hospital A had between ten (10) and fourteen (14) years of experience whereas twenty-seven percent (27% or $n = 4$) of participants from hospital B fell into this category. Six percent (6%) of participants had more than twenty (20) years of experience in hospital A and thirteen (13%) in hospital B. The mean years of experience in hospital A is 6.6 years and in hospital B is 6.8 years.

5.2.4 Highest Academic Qualifications

The highest academic qualifications that had been attained by the participants were also of interest in this study. An assumption of the researcher was that the higher the level of education, the better the participant's ability to understand the six KPAs of the NCS and dynamics of compliance as well as the context and the content of the NCS policy.

Results of this study reveal that in hospital A thirty-three percent (33%) of participants were in possession of a bachelors' degrees and twenty percent (20%) were in possession of a post-graduate qualification whereas in hospital B twenty-seven percent (27%) were in possession of a bachelors' degree and thirteen percent (13%) a post-graduate qualification. The remaining participants were all in possession of a diploma which contributed forty seven percent (47%) in hospital A and sixty percent (60%) in hospital B. Hospital A was therefore more highly qualified in terms of academic qualifications than hospital B.

5.3 PRESENTATION OF THEMES

As explained in chapter three, a priori codes, based on the questions asked were used as the themes for the analysis. This was due to the structured nature of the interview guide and the style of questioning used by the researcher. The a priori codes were therefore: understanding of the KPA's, (perceptions of) the process of implementation of the NCS and the six KPA's, barriers to compliance with the NCS's and enablers of compliance.

Table 5.3 below provides an overview of the interview questions that were asked during the interview to provide guidance during the discussion of the findings of this study.

Table 5. 3: Overview of the interview questions

| Question | Probe |
|--|--|
| <p>Please tell me what you know about the six KPAs and the NCS policy and what it entails?</p> | <p>What are the aims of the policy? Where did you get your information from? What are the intended or expected benefits of the NCS? How it is put into effect or practice. How do you think it will impact on your work and on nursing?</p> |
| <p>Who are the main driver(s) of the NCS policy implementation? Please explain.</p> | <p>Roles, responsibilities (of government, of regulating bodies e.g., OHSC, of managers & other)? Who are left out? How is the relationships and co-ordination between key players? What is your role in NCS policy implementation in this organization?</p> |
| <p>Do you think that there was a need for a NCS policy?</p> | <p>Was it relevant for the context? Did the context change over time? Did you hear/read about any current debates in public health facilities that influence NCS? Is there any impact in health system changes?</p> |
| <p>What account for the delays if (any) in aligning the NCS to daily operational activities?</p> | <p>In your opinion, what critical steps are required to implement the NCS to all healthcare services departments? e.g., Wards, Pharmacy, procurement & supply chain</p> |
| <p>NCS has now been implemented since 2012. How would you rate the overall implementation of the policy in this organization?</p> | <p>Please rate on provincial variation, interest group/alliances Was there any contestation of the rating?</p> |
| <p>What training, either formal or informal have you ever received related to the NCS policy implementation?</p> | <p>When was the training conducted? Did the training receive had an impact on daily routine of the NCS policy implementation? If yes, please explain how.</p> |
| <p>Please tell me what you think has influenced the successes and failures relating to the implementation of the NCS policy.</p> | <p>What do you think are the key factors that have contributed to these successes if any and enablers experienced by health care managers and other health care workers? Which actors (individuals or organisations) were responsible for these successes? What are the challenges experienced by health care managers and other healthcare professionals in the implementation of the NCS policy?</p> |
| <p>What is your opinion of the way the six KPAs were implemented, and do you have suggestions for how it could have been done better?</p> | |

The questions that were asked to appear in table 5.3 and the themes and categories that arose from the process during analysis appear in table 5.4.

Table 5. 4: Illustration of the a priori codes

| Themes | Categories |
|---|---|
| Understanding of KPAs and NCS | Knowledge of the six KPAs of the NCS policy Impact of the NCS policy on implementation |
| Implementation of the NCS and the six KPAs | General responses on six KPAs of the NCS Values and attitudes of staff Monitoring the waiting times Cleanliness as the first law of health Drug stock and procurement of equipment Infection prevention and control Patient safety and security |
| Barriers to compliance with the NCS | Structure of the assessment tool Inadequate staff for implementing the policy Lack of adequate training and knowledge Inequitable distribution of resources and shortages Lack of adequate support from hospital management and provincial department of health |
| Enablers of compliance with NCS | Improved communication to guide policy implementation and compliance Involvement of all stakeholders Involvement and support of the leadership |

5.3.1 Understanding of KPAs and NCS

This section presents the findings from the interview responses on the understanding of the six KPAs of the NCS in order to get insight of participants' knowledge of the six KPAs of the NCS.

5.3.1.1 Knowledge of the six KPAs of the NCS policy

There were mixed responses in relation to the question on what the participants knew about the six KPAs and the NCS policy and what it entails. Eleven (11) participants in hospital B answered the question, however, level of knowledge and understanding of the content and purpose of the NCSs and KPAs varied amongst them. Two (2) participants from this hospital indicated that they were aware of the NCSs but had no knowledge of the KPAs, and two (2) participants had not heard about either the NCSs or the KPAs. In hospital A, five (5) participants had knowledge of both the NCSs and the KPAs and were able explain the aim of the policy. Ten (10) participants at this hospital had some generalized knowledge of the NCSs but were unable to name any of the six KPAs. It therefore became evident that the level of understanding was better in hospital B than in hospital A.

Understanding and knowledge of the participants varied amongst individuals from both hospitals. Some of the responses were generalized, but nevertheless appropriate statements were, "*six ministerial priorities and guidelines of health sector in order to improve the service and also to standardised hospitals so not everyone to does his/her own things*" (Participant A₁, a quality manager) and, "*the NCS and six KPAs are measures that were put in place by the minister to ensure that hospitals and other health institutions are institutions can provide quality healthcare to patients*" (Participant A₃) These statements demonstrated that both participants have insight into the fact that six KPAs are a national priority driven by Minister of Health.

In hospital B where participants were able to give more detail, some specific statements were made such as the one by participant B5 who described the NCS as, *“a set of standards that were put in place to assist in improving the quality of healthcare in the various hospitals and other health institutions”*. Another participant (B8) said, *“the policy talks about availability of medicines, avoiding falls & put sign when it is wet, safety and security for patients to feel safe at all times, attitude to treat patient with dignity, adhering to Batho Pele principles and customer care, waiting times need to be minimised and managed, treat patients according to priorities and ensure that patients are treated well and get services they came for”*.

At hospital B, the majority of the participants only managed to identify three of six KPAs, mentioning cleanliness, values and attitudes, and waiting times. The participants' understanding of the NCS and the six KPAs was not far from the definitions that were provided in the policies that were analysed, while in hospital A only few participants were able to relate to the NCS.

The NCS policy states that the NCSs are a set of standards for defining quality healthcare and providing the details of what is expected to achieve quality healthcare (NDoH, 2013). The NCS provide the overall guide to quality care and also avail a set of measurement tools to assist managers and staff to understand whether they are in compliance with these standards and have systems in place to minimise risk of poor unsafe or poor-quality care. The DoH identified six priority areas for fast-track or immediate improvement based on serious concerns that were raised by the public and patients. The six KPAs are values and attitudes, cleanliness, waiting times, availability of medicines, patient safety and security, and infection prevention and control.

A participant from hospital A gave a possible reason for the lack of knowledge and understanding amongst hospital staff of the purpose of the NCS and the KPAs as she said *“.....things are usually put in place only in preparation for an audit. We even go to the extent of borrowing equipment and some medicines from other hospitals so that we are seen as compliant”* (Participant A6).

The findings of this section were of concern as Maphumulo and Bhengu, (2019) state that compliance with the NCS and successful implementation of the six KPAs begins with a clear understanding by all stakeholders, particularly the hospital staff that is actively involved in the implementation process. The fact that some participants were completely ignorant about the existence of the NCS is an indication that there are some weaknesses in the implementation process, and this is bound to affect the level of compliance with quality standards.

5.3.2 Implementation of the NCS and the Six KPAs

This section covers the findings from the participants' responses on the implementation of the six KPAs which included general responses, perceptions on the values and staff attitudes, monitoring of the waiting times, cleanliness of the health facilities, drug supply and procurement of stock, infection prevention and control and patient safety and security.

5.3.2.1 General responses on six KPAs of the NCS

The first category of responses was general in nature as participants reflected on the success or failure of the implementation of the NCS and the six KPAs. The interview responses showed mixed feelings on the success of the implementation of the NCS. The minority of participants in both hospital A and B felt that there was a great degree of success in the implementation while the majority felt that there is nothing much that has been achieved in terms of compliance with the NCS. The view of the majority of participants concurred with the views that were found in literature.

Of the positive responses, Participant B₉ stated: *“Yes, things are much better than before, targets are clarified. So, working with goals and working without set goals is not the same. We become service bound, as what is measured is improved. The NCS have definitely brought a change in our hospital and things are improving”*.

Participant A14 stated, *“Before, stock was not well managed but since NCS has been introduced there is an improved accountability and assets department is on board”*.

An example of the negative responses was that of participant B4, who said, *“the introduction of the NCS had not brought much change in the conditions of the hospital”*. The participant felt that it was just a change of policy without the accompanying changes that are needed to make the policy work.

Another negative response came from participant A4 who stated that: *“The changes are just changes by word of mouth. The way things are done in terms of resources is not according to the new changes. The budgets for staff establishments have remained the same. We still have the same financial constraints and excessive workloads. The quality standards cannot work in such a situation”*.

Participant A12 posited that the implementation process is not smooth as most staff members are not willing to assist the quality assurance (QA) unit in its efforts to ensure that the quality standards are implemented in the hospital. Without complimentary efforts from the entire hospital staff, the QA unit will find it difficult enforce quality standards. The participant also stated that there are no proper structures and staff for monitoring the standards and this makes it difficult to assess the levels of compliance with quality standards.

Participant A2 was of the view that the policy was still a long way from achieving the desired results as it is not receiving adequate support from management and staff and not all the KPAs are being given adequate attention. Participant A2 stated: *“To certain extent policy has not fully met all aspects because I feel like it is not adequately supported. Infection control is expected to meet certain criteria. Instead, patients’ complaints and occupational health and safety are given more attention and they are the programmes that are supported by CEO. There is no support to make sure that all aspects of policy are implemented. Infection control to be heard it should pass through quality assurance*

before getting attention of CEO.....there is not enough focus on strategies that are supposed to be implemented”.

Participant B2 opined that there was actually a need to go back to the drawing board and discuss how the policy can be effectively implemented. Participant B2 stated, “.....*the policies are there but are not being implemented accordingly to bring about the desired changes.quality improvement plans, for example, are just done to defend oneself and no one follows up to see if they are implemented or not.*” The NCS is therefore a very good policy but there are no structures and conditions for its successful implementation.

Participant A14 and B12 was of the view that there were no successes to mention in the implementation of the NCS. The participants stated that most activities were being done just for compliance purposes and for scoring high points rather than for real improvement of quality standards at the hospital.

Participant A14 said, “.....*things are usually put in place only in preparation for an audit. We even go to the extent of borrowing equipment and some medicines from other hospitals so that we are seen as compliant*”. This means that the hospital has so far not done much in terms actual compliance with the NCS.

“Honestly compliance is only for assessment but practically it is not happening as there is no formal training about policy itself even informal training is not happening” (Participant B12).

5.3.2.1 Perceptions on the values and staff attitudes

The majority of participants were of the view that there had not been any significant changes in the values and attitudes of healthcare staff towards their work and towards patients. The participants pointed out that there have still been several incidents in which patients are not treated with respect and some even dread visiting hospitals because of the treatment that they get from healthcare staff.

Participant A2 stated: *“There is lack of motivation to improve staff attitude. Rather staff is more demotivated and lack of support internally even from province. The easiest way to change people’s attitudes is just by talking to them to feel acknowledged and appreciated but is not happening. Because employees are demotivated, they transfer their frustrations to patients”*.

Participant B1 added that negative staff attitudes were also prevalent especially in the administration and retrieval of files. The participant said:

“You find that a patient’s file was not found yesterday but nobody come to me addressing the issue. Patients are not addressed and start becoming restless and at times they are addressed like small children boiling down to staff attitude. Some patients go with files home, then they are not addressed accordingly but insulted and punished for the behaviour and sometimes this patient is doing this purposefully due to previous experiences of lost files”.

Participant B1 also stated that the majority of healthcare staff still display negative attitudes towards patients and towards their work in general, mainly because working conditions have not improved. The responses show that the implementation of the NCS has not yet achieved the desired result of having a caring staff that will make patients have a feeling of being cared for.

However, Participant A8 was more optimistic, stating that there had been a marked improvement in staff attitudes from the time the NCS were implemented. This view was supported by Participant B15 who stated, *“Staff is changing its attitude and patients are being treated with utmost respect”*. These participants were of the view that patients will always have something negative to say about hospital staff even if they are treated in a respectful manner.

The NDoH (2010) states that healthcare staff is often rude and uncaring to patients as highlighted by patient complaints and patient satisfaction surveys. Patients complained that they feel they are not being treated well and in a caring manner. This is the reason

why the KPA of values and attitudes was included in the NCS, but seemingly, according to the participants in the study, with little success.

5.3.2.2 Monitoring the waiting times

The need to improve the waiting times for patients before receiving care was considered as one of the KPAs of the NCS after complaints that they are waiting for many hours before getting their files, seeing a nurse or doctor, or getting their medicines. Some reports even indicated that patients sometimes have to come back the following day to be provided with medical attention and some patients have even died in queues before getting attention (NDoH, 2010). The fact that there has not been significant improvement in waiting times at the hospitals under study indicates that the context which led to the development of the NCS has not changed much.

The majority of participants also felt that there had not been much improvement in waiting times at their hospitals. At times a patient spends the whole day at a hospital and may even be told to come back the following day.

According to Participant B₆, *“people are still having very difficult times when they visit public facilities. Long queues of patients waiting for medical attention are still being seen at the hospital”*.

This view was supported by Participant A₁₀ who said, *“In our hospital we have people that are put into place to monitor waiting times of patient to try to correct waiting times, but still there is not enough implementation of policy”*.

According to Participant B₁₃, even though waiting times are displayed in the hospitals for patients to be aware of the time within which they are supposed to be attended to, these times are not adhered to. No staff member is assigned to monitor waiting times to check if they are being adhered to. Participant B₆ said, *“There should always be someone who moves around asking patients how long they would have waited in order to see if waiting times are improving”*. However, due to the number of patients that visit the hospital

compared to the staff compliment at the hospital, it is not possible to have staff monitoring waiting times.

Maphumulo and Bhengu (2019) argued that these long waiting times for medical intervention have the potential to expose patients to the development of complications or even the loss of life. Times LIVE (2018:5) described public hospitals as “a death trap for the poor”.

5.3.2.3 Cleanliness as the first law of health

On the KPA of cleanliness, the majority of responses indicated that the participants were not happy with the current level of cleanliness at the two tertiary hospitals. The participants stated that the hospital is not cleaned as often as it is supposed to be due to a shortage of cleaners. They also pointed out that there has been an increase in the number of patients visiting the hospital and this increases the chances of the hospital getting dirty. This increasing number is however not matched by the number of available cleaners.

Participant B1 and B8 pointed out that cleanliness is still a significant problem in the hospital in which they work.

According to Participant B1, *“Cleaning is a problem. Every time you ask why the hospital is not clean, the answer will be that they are short-staffed. I am not happy about cleaning at all but there are measures in place starting tomorrow involving administration as is part of admin and cleaning manager”*.

Participant B8 stated that *“ When there is no cleaner, they just send someone to empty the bins but not cleaning the entire ward”*.

Participant A7 highlighted that their hospital was constantly facing shortages of cleaning materials and equipment, and this made it difficult to keep the cleanliness of the hospital to the expected standards. The responses in this study therefore indicate that the

implementation of the NCS has not yet reached the expected levels since the situation of cleanliness in hospitals has not improved significantly.

The focus of the NCS on the cleanliness of hospitals was driven by the realisation that hospitals and clinics that were found to be dirty, untidy, and unhygienic and cleaning materials and equipment are often not adequate or not available at all. The impression of neglect is reinforced by lack of maintenance (NDoH, 2010).

5.2.3.4 Drug stock and procurement of equipment

All the participants concurred with the view that the implementation of the NCS has not resulted in a significant improvement of the availability of medicines and other equipment that enhances the quality of healthcare in the hospitals. Participant B3 highlighted that it was still common in their hospital to go without particular drugs that are critical. Participant B12 said, *“Sometimes patients will have to go home without medication after being attended to by a doctor and come back on another day to collect the medication”*. According to Participant 4, patients sometimes have to come back several times to the hospital in order to get their medication.

Participant A5 stated that the availability of equipment was mainly affected by the tender process which is not flexible. Participant A5 said,

“When the tender process is closed, it is difficult to send equipment for repairs or service. This means that we may have to go without some necessary equipment for a long time and this compromises the quality of healthcare”

Participant A13 highlighted that the equipment situation had not improved because of budgetary constraints as reflected in the participant’s statement: *“Our budget is still not according to the level of care we render, and bed capacity is almost the same as with the previous level of care”*. Participant B8 added that the equipment situation in the hospital is worsened by delays in placing purchase orders due to the unavailability of funds.

Participant B₁₂ pointed out that *“we are the clinic at this hospital that operates until 16:00 but we get stacked with patients that need admission until we send them to casualty to sleep on the benches until the bed is available. Sometimes patients sleep on bench until morning or even rebooked for the next appointment, even if rebooked there is no guarantee that the bed will be available. There is no equipment”*.

The responses from participants however indicate that this KPA has so far not shown signs of improvement since the implementation of the NCS, and it would appear to be a systems issue that cannot be resolved at institutional level.

Shortage of medicines and supplies was established to be a common problem throughout the country (NDoH, 2010). The reasons cited for such shortages include supplier-related problems, lack of payment or placement of orders with suppliers due to budgetary constraints, failure to distribute drugs to health facilities, as well as failure to place orders in time. The KPA on the availability of medicines and supplies therefore came with the aim of ensuring that these essential elements of quality health care are available, thereby enhancing the quality of healthcare in the country.

5.2.3.5 Infection prevention and control

The majority of participants reported that the success in having effective infection prevention and control was very limited. According to Participant A₃, the current conditions in the hospitals have not improved significantly and patients are still exposed to hospital-acquired infections.

Participant B₆ particularly highlighted the problem of overcrowding at the hospital and said, *“There are too many patients that flood this hospital and the facilities have never been improved to accommodate the increased number of patients. With this overcrowding, we cannot prevent patients from infecting each other”*.

Participant B₁₀ added that the hygiene conditions at the hospital make it difficult to control and prevent the infection of patients at the hospital. *“Regular cleaning is not done because of staff shortages and removal of waste is also not done on a regular basis. Patients are therefore likely to get infections from the hospital”*.

Participant B₁₃ raised that *“structural issues to be addressed as we are using sluice room to conduct other activities that are not relevant to the purpose of the room”*.

Participant A₂ was of the opinion that there is lack of support in other areas of the NCS especially infection control as more focus is given to other priorities like waiting times and cleanliness. Thus, participant A₂ noted the concern that *“there is no support to make sure that all aspect of policy is implemented, there is no IPC committee at the hospital, there is not enough focus on strategies that is supposed to be implemented”*

It can therefore be noted that the KPA that relates to infection prevention and control has so far not been successfully implemented because of failure to address the infrastructure demands of the hospitals. Segnon (2014) reported the concerns that were raised by nurses about working in a healthcare establishment that has no adequate space and has hazardous environments with poor infection prevention and control practices. Patient safety is therefore compromised in such environments. Enhanced compliance with infection prevention and control practices is therefore mainly dictated by the availability of adequate infrastructure and a clean environment.

Mogakwe et al. (2020) cited that inappropriate and poorly designed infrastructure as a major barrier to infection and prevention control practices. Mogakwe et al. (2020), further asserted that space constraints at healthcare facilities lead to patient overcrowding, which increases the chances of patients contracting nosocomial infections.

5.2.3.6 Patient safety and security

In this section of the NCS, the implementation of standards on patient safety and security “strives to ensure quality in clinical care, ethical practice in discharge of one’s duty, reduction of unintended harm to healthcare providers and users in identified situations of increased clinical risk” (NCS, 2011). Further it sets out to ensure that patients are not harmed through medical error or omissions by healthcare workers.

In these KPA participants were less responsive in addressing the issues related to patient safety and security. It was mentioned only during the answering of the question “Have you heard of the NCS policy that was developed in 2011?” When probed on the issue of patient safety and security comments were made by 14 participants which accounts to 46% of the entire population in the study and it was clear that knowledge of the vital measure was lacking.

Participant A12 remarked that *“I can’t say exactly but it talks about safety, ramps for disabled people, putting of signage when the floor is wet and littering”*.

Aone (2007) is of the opinion that measuring the knowledge base of healthcare workers is a useful way of evaluating the performance of a healthcare establishment. Omission of this critical area points out that there are gaps in implementing all six KPAs according to prescribed standards.

5.3.3 Barriers to Compliance with the NCS

In this category, participants pointed out a number of barriers and challenges that are making it difficult for hospitals to comply with the NCS. According to the participants, meaningful compliance with quality standards for healthcare will not be achieved if these challenges are not addressed.

5.3.3.1 Structure of the assessment tool

Results from the review of policy documents indicated that an assessment tool is an important aspect in the implementation of quality standards. Mensa et al (2018) state that the measures in an assessment tool provide evidence for determining the level of performance. The participants cited the assessment tool as one of the barriers to the successful implementation of the NCS. According to the participants, the assessment tool that is used to assess the level of compliance with health standards does not take into account the different circumstances faced by different health institutions. Assessment questions are the same for all hospitals, but these institutions have different circumstances and at times different administrative procedures.

Participant A1 stated:

“There is nothing wrong with implementation but with the assessment. They need to bear in mind that hospitals are not the same and evaluation tools should not be one-size-fit-all. This is a tertiary and teaching hospital, and it should be assessed differently from other types of health establishments. In the mortuary, they ask questions about resuscitation, but this is not applicable in such an environment”.

These sentiments were also noted in Participant B1’s statement which reads:

“.....for example, assessors should be asking you about availability of linen but the question will be “do you have clean linen or is the area where you keep linen clean” or do you have this size of the needle. We used different things suitable for the care we are giving. The tool doesn’t have “Not Applicable”, so you are forced to say “Yes/No” if “No” it makes the facility to fail that aspect. The tool and questions are one-size-fits and all not according to level of care”.

Participant B15 echoed the above sentiments as he stated, *“Our hospital is not accommodating children, but the assessment tool needs that aspect. We therefore borrow syrups just for compliance and sometimes we even forget to return them, and they expire while those that accommodate children could have used it”.* This shows that the

results that are obtained in the assessments do not reflect the situation that is prevailing in the hospitals.

Participants highlighted the need for policy makers to ensure that the assessment of tertiary hospitals is not treated the same with regards to the assessment of healthcare establishments since they focus on different types of services. This means that the assessment tool should be amended so that it assesses the appropriate issues. Participant A1 stated that the assessment tool also has the problem of repeating questions, which does not add value to the quality assessment.

According to NDoH (2012), compliance assessments should assist in identifying the gaps that need improvement. The process should result in a report with scores for the compliance level of each health establishment. However, when the assessment tool fails to measure compliance according to the context that exists in the different types of healthcare establishments, the results will not make significant contributions towards the improvement of compliance in such healthcare establishments. Lack of understanding of functional areas of the assessment tool could negatively have an impact on implementation of the NCS and thus also affect compliance of such standards.

5.3.3.2 Inadequate staff in implementing the policy

According to WHO (2018), a skilled, motivated, and adequately supported pool of employees is crucial for the successful implementation of quality standards in the healthcare sector. The interview responses revealed staff shortages as one of the major barriers to compliance with the NCS. All the participants concurred that the hospitals do not have the ideal number of healthcare workers to ensure that the six KPAs are fully implemented. Covadia et al. (2009) also highlighted that the South African health sector has been affected by the poor distribution of health personnel as well as poor skills among several healthcare staff since 1994.

Participant B7 pointed out that there is a shortage of doctors and the number of patients that visit the hospital is huge. This means that doctors will hurriedly attend to patients so

that they can at least manage to clear the queue. This also means that the patients will not be provided with adequate care and the real problems that they will be facing may not be addressed.

“There is a shortage of doctors and there is always a backlog of patients. Patients have to queue for the few doctors that are available, and some may even fail to be attended to and will be told to come back the following day. With this shortage of doctors, it is not possible to stick to the waiting times that have been proposed in the NCS”.

According to the participants, the situation of staff shortages at the hospital is worsened by overcrowding. The number of patients that is visiting the tertiary hospital is increasing and the already small size of staff complement is not able to cope.

Participant B₁₁ stated:

“We are working extended hours due to the increasing number of patients. By the time we are supposed to knock off, the queue will still be long, and we are forced to extend our working hours. The catchment areas that come to tertiary hospitals even for minor ailments are increasing”.

Participant A₂ stated:

“The number of patients is always beyond our capacity as they come very early even without appointments. We are also not checking appointment cards and the list of booked patients, and this has resulted in an influx of patients which is difficult to control. It is therefore not possible to provide quality care to such large number of patients with the number of workers that are at this hospital”.

With this increased workload, it is not possible to adhere to the quality standards that are outlined in the NCS. Waiting times, for example, cannot be attained because a huge number of patients is being attended to by a small number of healthcare workers.

Cleanliness is also not possible because we have very few cleaners who have to go round the whole hospital regularly to clean due to the increased traffic.

The above responses therefore show that the staff complement in the hospitals does not allow for compliance with the NCS since KPAs such as waiting times, cleanliness, and values and attitudes require the adequate staffing of all units in the hospitals. Staff shortages have also been cited in literature as a major barrier to the implementation of any quality standards in the health sector. WHO (2016) highlighted that there are several countries that face significant shortages in both the quality and quantity of health personnel. Due to these shortages, there is often absence or poor delivery of basic care. Poorer countries experience the most severe shortages of healthcare workers.

Since 1994, the South African health sector has been affected by the poor distribution of health personnel as well as poor skills among several healthcare staff (Coovadia et al. 2009). This has compromised the department of health ability to deliver key programmes, particularly for HIV, maternal health, mental health, child health, and tuberculosis. The nurse-to-population ratio has substantially decreased from 149 public sector professionals per 100 000 population which sum to 1 nurse per 671 patients in 1998 to 110 per 100 000 population to the sum of 1 nurse per 909 patients in 2007 (Coovadia et al., 2009). In 2015, the ratio in the public health sector was 1 nurse per 807 patients and 1 doctor per 4024 patients. These statistics are an indication of an acute shortage of nurses and doctors in public healthcare. The successful implementation of the NCS was therefore supposed to be preceded by efforts to ensure that all health establishments are adequately staffed.

Sharma and Rani (2020) argue that it is difficult to answer on the number of nurses that can be sufficient to cover the hospital unit. According to the South African Nursing Council, in 2020 there was one nurse to cater for 213 patients in South Africa in both private and public sectors. Without the optimum nurse-to-patient or doctor-to-patient ratio, waiting times will continue to be long and staff attitudes will also remain the same due to exhaustion that results from work overload.

5.3.3.3 Lack of adequate training and knowledge

Lack of proper training was also cited by the participants in this study as one of the factors that had made it difficult for them to comply with the NCS. Although a handful of participants indicated that they had received some form of training, the majority of participants stated that they had not received any formal training on the implementation of the NCS. This lack of training means that most employees are not aware of what they are expected to do in terms of implementing the policy and its KPAs.

Some participants indicated that the only training they had received was from their previous employers. When they joined their current employers, they were just provided with a brief about the NCS.

“The only time when I was told about the NCS was on the first day of employment. People from the quality department did orientation on the NCS. Quality standards form part of the orientation programme” (Participant A8).

This type of training was considered by participants as inadequate because it is done hurriedly and there are several other things that one needs to learn on the orientation day.

Participant B6 stated, *“I got information on the NCS from the quality managers at our hospital and also second-hand information informally by the quality champion and not by our operational managers”*.

The few participants who received formal training felt that it was not adequate to equip them with the full knowledge to effectively implement the NCS in their hospitals. Participant B5 stated:

“Training is always in the hurry, you are given documents and expected to run/implement it: usually policy arrives late and expect results a month late. Information about training is done within a short notice which create a barrier for attending. Communication is not reaching hospitals at the same time as some information you catch along the way”.

Seventy percent(70%) of respondents at hospital A affirmed to that casual training is only done when there is assessment of the NCS, but when there is no assessment due there is no continuous in-service training and coaching on the standards. A representative of the eighty percent (80%) who had received training in hospital B stated that hit and run training is only done during induction of new staff but no further follow up of proper and full training on the NCS.

Participant A9 strongly asserts to this notion by stating that:

“When there is an assessment, we are told how to answer questions if we selected to participate and given pamphlet to read about the NCS without proper training”

Participant B13 commented that: *“I heard about the NCS from my previous employer and never done any training on the NCS at this hospital, I have been working here for 6 years”.*

Participant B6 further affirms that *“I know about the NCS because I am curious, I read about them on my own accord. I never received any formal training on the standards”.*

Participant A8 also stated that *“when there is training, you are told in last minutes and due to shortage of staff, you end up not attending the training because such trainings are done outside the hospital mostly at province”.*

Participants asserted that sometimes limited knowledge, skills and resources in implementing the NCS policy can have an impact on compliance.

Participant A3 complained that continuous training is needed to ensure that workers are always up to date with new developments in the implementation of the NCS. The participant pointed out that continuous training also benefits those who will be joining the hospital since they will be able to understand the quality practices and requirements.

According to Participant A10, “*Trainings are not conducted accordingly but are usually done before assessment. Lack of training has therefore negatively impacted on compliance in some areas*”. The response therefore shows that training is usually done only in preparation for an assessment.

The participants pointed out that they had no time to attend training workshops due to work pressure and hence, they were not on board with developments in the system. WHO (2006) also stated that the lack of appropriate training for health workers is resulting in them being unable to provide quality care that meets the standards. The majority of developing countries including South Africa have poor training and development of health workers in quality of care as well as limited opportunities regarding the continuation of in-service education workshops and sessions to upgrade skills and knowledge. This situation hampers the delivery of quality patient services. Flynn et al. (2016) assert that the inability of nurses to attend workshops and in-service training plays a major role in patient negligence and the occurrence of serious adverse events.

Compliance with quality standards for health therefore requires the constant training of health workers and support staff in order to equip them with the skills and knowledge necessary for delivering quality services. Without formal training of health workers on quality standards, the implementation of the NCS is therefore not likely to provide the desired results, meaning that the quality of healthcare in the country will remain the same. Training on quality standards and professional development has been found to be lacking in healthcare in the past. In a study conducted by Mogakwe et al. (2020) on the reasons for non-compliance with quality standards at primary healthcare clinics in Ekurhuleni, South Africa, lack of training was cited as one of the major reasons.

5.3.3.4 Inequitable distribution of resources and shortage

According to all participants, compliance with the NCS is seriously hampered by the shortage of financial and other resources. The participants indicated that the implementation of the NCS was not accompanied by efforts to ensure that the hospitals and clinics are well resourced so that the KPAs can easily be implemented.

Participant B15 stated, *“We really want to comply with quality standards but issues like the availability of resources is beyond our control”*.

Participant A14 highlighted that the hospital does not have the resources that can match the number of patients that are now coming for treatment. This was supported by Participant B10 who stated that there is overcrowding at the hospital and equipment and facilities are not enough for the growing number of patients. Participant B10 said:

“We are the clinic that operates until 16:00 but we get stacked with patients that need admission until we send them to casualty to sleep on the benches until the bed is available. Sometimes patients sleep on bench until morning or even rebooked for the next appointment, even if rebooked there is no guarantee that the bed will be available. There is no equipment in the hospital”.

Participant A13 lamented the shortage of equipment that is necessary for performing day to day care on patients. Servicing of such equipment also takes too long and sometimes patients are turned away because there is no equipment for such services as radiology (X-Rays and scans).

Participant B16 said:

“We have a serious shortage of Dynamaps (blood pressure machines) and it makes it difficult to treat patients. Servicing of equipment is also not done as they are mostly

out of tender or the service provider is no longer responsible. It is therefore not possible to comply with standards when you do not have enough resources”.

Participant A9 said the capacity of the hospital has also been overwhelmed by the COVID-19 pandemic and this has resulted in the shortage of most supplies and facilities as the number of patients has drastically increased.

Participant A9 said, “.....we have few ICU rooms but now, because of COVID-19, we need more ICU rooms so that we can accommodate all patients who need to be in the ICU....”

In a study conducted by Mogakwe et al. (2020), the shortage of medical equipment and failure to maintain the available equipment were cited as some of the reasons for non-compliance with quality standards at primary healthcare clinics. Awases et al. (2013), in a study in Namibia, also reported the unavailability of working medical equipment as one of the factors hampering delivery of the desired quality in public health institutions. According to Awases et al. (2013), dysfunctional and poorly maintained equipment and its inherent risks reduce the productivity of health workers, and this has a profound negative impact on the quality of care.

Maphumulo and Bhengu (2019) highlighted that members of the public have continuously been raising concerns about the shortage of equipment in hospitals. Such shortages have resulted in fatal delays in urgent surgery. Backlogs in work result in extended delays for patients who are awaiting treatment. Cancer patients, for example, are affected by shortages in oncology doctors as well as equipment. There are also long lists of patients awaiting diagnosis and surgery due to human resource and equipment shortages (Maphumulo & Bhengu, 2019). Mokoena (2017) identified that the lack of resources in healthcare establishments results in prolonged length of hospital stay and also a delay in resolving the patients' problems.

Manyisa and Van Aswegen (2017) also pointed out that shortages in administrative equipment and skilled personnel that are being experienced by most public hospitals in the country have an adverse effect on the quality of care being offered to the public. The Presidential Summit on Health (2018) also noted that the health facilities infrastructure in South Africa is sub-standard and ageing, with unsafe facilities. The shortage of resources in hospitals is therefore one of the major impediments in the implementation of quality standards. The successful implementation of the NCS heavily depends on the ability of leadership to address the issue of resources and ensure that all healthcare establishments are well resourced to enable health workers to be more productive and provide quality care.

Mosadeghrad (2014) pointed out that the availability of resources has an impact on the ability to adhere to quality standards. The lack of adequate resources has always characterised public hospitals in South Africa and the development of the NCS was done within this context. High quality outputs are determined by the availability of high-quality inputs. Operating with low quality facilities and equipment diminishes the productivity of healthcare workers.

5.3.3.5 Lack of adequate support from hospital management and provincial Department of Health

Results showed that eighty percent (80%) of the respondents in both hospital A and B raised a concern with the lack of adequate support from hospital management and the provincial Department of Health.

Participant A4 highlighted an example on one of the KPAs of the NCS, cleanliness and stated that:

“ When we request more cleaners our request go on deaf ears, some days we don’t even have a cleaner in the unit. One cleaner works in more than two wards per day which affect cleanliness at the hospital”.

Participant B6 reflected on a lack of support on budgeting for the replacement of hospital blood pressure monitors and ageing equipment as the processes are not supported by the tendering procedures that are used by the Department of Health to procure equipment and stated the following:

“We are stacked with equipment that is not functional but counted being available in number and that affects our work as no equipment is procured because on paper we have enough. Despite requests and motivations made but management is not assisting us, so working with one BP monitor affects the flow of patient, triaging of patient becomes difficult and patients wait longer”.

Another participant A1 commend that: *“we hardly have support visit from the provincial DoH and Office of the Health Standards Compliance (OHSC) for support and feedback so that we can work on recommendations for improvement”.*

In agreement with the latter participants (A1, A4 & B6) state that on critical decisions that affects the implementation of the policy, hospital management, provincial DoH and OHSC are delaying full implementation of the policy which results in non-compliance that paints a bad picture in a public health system. Healthcare workers are forced to work within the minimal resources and are at the same time explicitly expected to meet targets on implementing the six KPAs of the NCS.

The Canadian Nurses Association (CAN) (2010) also regarded support from senior management as of paramount importance for enabling healthcare personnel to function more efficiently. According to Helfrich et al. (2007), the implementation of policies for enhancing the quality of health requires the commitment and support of top management. Top management should create an implementation climate that is favourable for compliance with quality standards.

The Policy on Quality in Health Care for South African NDOH (2007) and the Clinical Audit Criteria and Guidance Working Group (2008) also stipulated that senior managers

in healthcare sector can assist in improving compliance with quality standards through supportive behaviour by identifying weaknesses in the primary healthcare system and by adjusting for compliance where necessary. Therefore, there are several roles that senior leadership in healthcare can play in order to ensure that all health establishments are in compliance with the NCS. Competent and effective leadership is required in order to ensure high levels of compliance with quality standards in healthcare.

Maphumulo and Bhengu (2019) also postulated that there is vast evidence proving that the healthcare quality in South Africa has been affected by several challenges that have resulted in poor healthcare quality. The challenges include inadequate human resources, budgetary constraints, and poor leadership and governance in healthcare (Oleribe, et al., 2019). These three challenges account for more than two-thirds of the perceived problems in the African healthcare sector (Oleribe, et al., 2019). According to the participants in both hospital A and B, the implementation of the NCS was undertaken without considerable steps being taken to address the challenges that have always characterised the healthcare system in the country. The participants' responses on the barriers to compliance with the NCS were discussed in this section under the categories of the assessment tool, staff shortages, lack of training, and lack of resources.

Support from leadership was also suggested by Mogakwe et al. (2019) as one of the solutions to enhance compliance with quality standards. In their study, Mogakwe et al. (2019) primary healthcare clinical managers emphasised the need for support from senior management, including guidance and assistance to comply with quality standards.

5.3.4 Enablers of Compliance with NCS

All the participants gave their views on the factors that can facilitate high levels of compliance with the NCS. These include communication, involvement of all stakeholders, and effective leadership. The interview responses are discussed in this section under the three themes.

5.3.4.1 Improved communication to guide policy implementation and compliance

The fact that a good number of the participants did not understand the NCS shows that there is a huge communication gap in the system. Improved communication will assist in making everyone have a clear vision of the goals and objectives of the new policy as well as the part that they are supposed to play to ensure the successful implementation of the policy.

Participant B₁₃ suggested that there should be effective dissemination of information to all staff members so that everyone is in the picture of the developments that will be taking place. It is also important for management to pay attention and listen to the concerns of employees so that they understand the challenges that are being faced on the ground. Participant A₁₅ said:

“Managers should escalate information concerning implementation of NCS policy. From time to time, they should come on the ground level and pay attention to challenges of human resource shortages, equipment that are not available or faulty, and other concerns that employees will be having”.

Some participants also felt that there should be a two-way communication between managers and staff. According to Participant B₆, the current situation in which employees are just given instructions without them airing out their views to management will not improve the compliance situation. Participant B₆ stated. *“....communication should be two-way, not just having managers giving us instructions on what to do. If they do not come to us who are on the ground and find out our problems, how do they expect to solve the issues that they do not know?”*

Participant A₈ highlighted the need for feedback. *“We also need detailed feedback on our performance as well as other grievances that we would have put across to management. Most of the time staff is in the dark on things that will be happening in the hospital”.*

Participant A₁₀ pointed out that there is a need to work together and communicate effectively as she stated, *“There is an element of working in silos as anyone for his/her*

business and responsibility shifting and blaming if things are not done accordingly. Inputs/suggestion or concerns are not taken into account".

Compliance with the NCS and other quality standards can therefore be enhanced through the improvement in internal communication in the healthcare system. Mogakwe et al. (2019) established that poor internal communication practices in clinics in one of the provinces in South Africa impacts on compliance to quality standards. They cited inadequate time for staff meetings as one example of this. The study recommended the increasing time for staff interaction to enable health workers to collaborate in identifying and addressing problems together.

Brown et al. (2009) also proposed conducting team meetings on a regular basis as a platform to discuss issues that affect the effectiveness of operations in the establishments. Effective internal communication is therefore needed to ensure compliance with the NCS. According to Booyens (2008), the introduction of a new system or policy should be preceded by clear communication with all the stakeholders, particularly those at the implementation level.

5.3.4.2 Involvement of all stakeholders

According to Quagraine (2010), employee involvement is a good practice that results in a highly favourable and positive impact on the implementation of policies. One of the critical enablers of compliance with the NCS cited by most of the participants was the involvement of all stakeholders, especially frontline staff, in decision making. This view was also supported by Mogakwe et al. (2019) who highlighted the need for involving and consulting managers of primary healthcare establishments in making decisions that pertain to their establishments.

According to Participant A4, policy development should be inclusive as people are more likely to comply when they are involved from the first stage. The problem with the NCS is that the majority of health workers only heard about them after they had already been adopted. There are a number of issues that the participants felt should have been

included in the policy but since it only came to them for implementation, these issues are already left out.

“I think they tried their best to include every hospital in the consultations but in the meetings sometimes ideas are not taken into consideration and shoved away. It is surprising because we saw the document prior and made recommendations but to our surprise the things that we said were still not there....”(Participant A4).

Participant A1 opined that the involvement of frontline staff in decision making can play a major role in making them take ownership of the policy and understand how quality can be improved. This view was supported by Participant B9 who said: *“But I think frontline workers should be involved as they understand the problem at the ground. Top managers or policy makers, they are almost outdated with what is happening currently. At top also they must use someone with healthcare background”*.

Mueller (2020) argued that the policy implementation in the public sector normally follows the command-and-control approach or top-bottom approach, which has proved to be flawed. According to Gilson and Daire (2011), such an approach to policy implementation results in an incoherent process as there is no mutual understanding between leadership at the top and policy implementers at the bottom. Primary healthcare in particular requires dynamic interventions based on local decision making in order to alter the behaviour of people in conditions of greater uncertainty.

Chapman (2004) pointed out that experience with public sector innovation and quality improvement internationally indicates that there is value in combining top-down and bottom-up processes in decision making. The successful implementation of the NCS is therefore influenced by the extent to which frontline employees and other hospital staff are involved in decision making regarding the policy.

5.3.4.3 Involvement and support of the leadership

Mosadeghrad (2014) mentioned effective management as a crucial enabler of compliance with quality standards from the perspective of policymakers, managers and providers. Effective leadership was regarded by five participants as a crucial ingredient for successful compliance with the NCS. This view was also supported in literature by a number of authors. Leadership and governance are recognised worldwide as crucial entry points in strengthening health systems and attaining the Millennium Development Goals (Gilson & Daire, 2011). The participants felt that there was a need for committed leaders in the healthcare sector in order to realise improved compliance with quality standards.

Participant B7 highlighted the need for top management to spearhead the change management process. According to the participant, the introduction of a new policy involves change management and for change management to succeed, management has to take a leading role. Participant B8 said:

“Policy implementation was done without proper change management professionals who should have been responsible for giving proper advice and driving the change process. The introduction of the new policy was supposed to have buy-in from the people on the ground so that they would take ownership of the policy. However, it just came as a directive that should be implemented and was therefore met with resistance”.

Participant A11 asserted that the role of top management is to have a clear vision of the policy and be able to communicate that vision to all stakeholders, including frontline staff. When everyone in the system shares the vision of the policy, it is easy to enforce compliance.

Participant B10 stated that the current situation with the NCS and its implementation does not reflect leadership that is in control of the situation as it is characterised by several problems that should have been anticipated. Participant A13 highlighted the need for top

management to ensure that there are adequate resources that can allow for smooth implementation of the policy.

The participants were also of the view that the policy development and implementation process should be headed by leaders who are knowledgeable in the area of quality as it relates to the health sector. This will assist them in focusing their decisions on the issues that are fundamental to the improvement of quality in the delivery of health services. Participant A6 stated, "*When the CEO understands quality issues and knows his role on quality assurance, then everything will flow, and people will offer support*". Leaders should therefore possess skills and competencies that relate to the areas that they are leading.

Below table 5.5 and 5.6 provides a summary of findings of the semi structured interviews with similarities and differences as a case for each hospital

Table 5.5 Summary of findings of the semi structured interviews similarities

| Similarities in the key findings | Hospital A | Hospital B |
|--|---|---|
| Policy context | The context of policy was viewed as not fit for the state of the tertiary hospital | The context of policy was viewed as not fit for the state of the tertiary hospitals |
| Compliance to the six KPAs of the NCS | Only complied for the assessment purposes | Only complied for the assessment purposes |
| Values and staff attitude | <p>Majority of participants were of the view that there had not been any significant changes in the values and attitudes of healthcare staff towards their work and towards patients.</p> <p>The responses showed that the implementation of the NCS has not yet achieved the desired result of having a caring staff that will make patients have a feeling of being cared for</p> | <p>Majority of participants were of the view that there had not been any significant changes in the values and attitudes of healthcare staff towards their work and towards patients.</p> <p>The responses showed that the implementation of the NCS has not yet achieved the desired result of having a caring staff that will make patients have a feeling of being cared for</p> |
| Waiting times | Waiting time frames are displayed to comply with the policy but not adhered to | Waiting time frames are displayed to comply with the policy but not adhered to |
| Cleanliness as the first law of health | Implementation of these KPA has not yet reached the expected levels since the situation of cleanliness in hospital has not improved significantly | Implementation of these KPA has not yet reached the expected levels since the situation of cleanliness in hospital has not improved significantly |
| Drug stock and procurement of equipment | This KPA has so far not shown sign of improvement since the implementation of the NCS and cited as a systemic issue that cannot be resolved at institutional level | No signs of improvement since the implementation of the NCS and cited as a systemic issue that cannot be resolved at institutional level |
| Inadequate staff in implementing the policy | All the participants concurred that the hospital do not have the ideal number of healthcare workers to ensure that the six KPAs are fully implemented | All the participants concurred that the hospital do not have the ideal number of healthcare workers to ensure that the six KPAs are fully implemented |
| Lack of adequate training and knowledge | A handful of participants indicated that they had received some form of training, the majority of | A handful of participants indicated that they had received some form of training, the majority of |

| | | |
|--|--|--|
| | participants had not received any formal training on the implementation of the NCS | participants had not received any formal training on the implementation of the NCS |
| Lack of adequate support from hospital management and provincial department of health | Eighty percent (80%) of the respondents concerned about the lack of adequate support from hospital management and the provincial Department of Health (DoH). Healthcare workers are forced to work within the minimal resources | Eighty percent (80%) of the respondents concerned about the lack of adequate support from hospital management and the provincial Department of Health (DoH). Healthcare workers are forced to work within the minimal resources |

Table 5.6 Summary of findings of the semi structured interviews differences

| Differences in key findings | Hospital A | Hospital B |
|--|--|---|
| Knowledge of the six KPAs of the NCS policy | <p>Minority of participant in hospital A had knowledge on the six KPAs of the NCS</p> <ul style="list-style-type: none"> ▪ 5 participants had knowledge of both the NCSs and the KPAs and were able explain the aim of the policy ▪ 10 participants had some generalized knowledge of the NCSs but were unable to name any of the six KPAs | <p>Majority of the participants managed to identify three of six KPAs, mentioning cleanliness, values, and attitudes, and waiting times</p> <ul style="list-style-type: none"> ▪ 11 participants answered the question which indicated varying knowledge and understanding of the content and purpose of the NCSs and KPA's ▪ 2 participants indicated awareness of the NCSs but no knowledge of the KPAs ▪ 2 participants not heard about either the NCSs or the KPAs |
| Impact of the NCS policy on implementation | <p>Good performance was not based on the knowledge of standards but for compliance during assessment rather than improving quality</p> <ul style="list-style-type: none"> ▪ Actors had generalised knowledge but compliance was good ▪ The participants stated that most activities were being done just for compliance purposes and for scoring high points rather than for real improvement of quality standards at the hospital | <p>Actors demonstrated knowledge but compliance was poor</p> <ul style="list-style-type: none"> ▪ Actors are knowledgeable about the policy, but compliance is poor ▪ Knowledge of policy does not necessarily mean the policy will be implemented |
| Monitoring the waiting times | <p>long queues at pharmacy were still issue of concern as there are many specialized clinics</p> <ul style="list-style-type: none"> ▪ The number of patients that visit the hospital compared to the staff compliment at the hospital, does not make it possible to have staff monitoring waiting times. | <p>long queues were at out-patient department and clinics for medical attention</p> <ul style="list-style-type: none"> ▪ Patient spends the whole day at a hospital and may even be told to come back the following day due to shortage of doctors and beds |

| | | |
|--|--|---|
| | <ul style="list-style-type: none"> ■ Long queues of patients waiting for medication | <ul style="list-style-type: none"> ■ Long queues of patients waiting for medical attention are still being seen at the hospital |
| Cleanliness as the first law of health | <p>Noted improvement of cleanliness as there are cleaning marshalls doing rounds however there is shortage of cleaning material which limit efforts to compliance</p> <ul style="list-style-type: none"> ■ Improvement in cleanliness was cited because of the quality marshalls that takes rounds at hospital as compared to before quality standards implementation ■ Hospital was constantly facing shortages of cleaning materials and equipment, and this made it difficult to keep the cleanliness of the hospital to the expected standards | <p>Keeping hospital clean was not possible as there were shortage of cleaners</p> <ul style="list-style-type: none"> ■ Increasing number of patients is cited as not matching the number of available cleaners to keep the hospital clean. ■ The hospital is not cleaned as often as it is supposed to be due to a shortage of cleaners |
| Drug stock and procurement of equipment | <p>Tender process was blame as contributing to poor allocation of resources</p> | <p>High volume of patients was cited as the contributing factor for the high demand of the resources available</p> |
| Infection prevention and control | <p>Lack of support of the infection prevention and control KPAs was a concern</p> <ul style="list-style-type: none"> ■ Patients are still exposed to hospital-acquired infections as conditions in the hospital have not improved significantly ■ Infection control not given priority and support like other areas of the KPAs of the NCS | <p>So far not been successfully implemented because of failure to address the infrastructure demands of the hospital</p> <ul style="list-style-type: none"> ■ Overcrowding at the hospital due to influx of patient facilities have never been improved to accommodate the increased number of patients thus infection control become impossible ■ Hygiene conditions had been seen to make difficult to control and prevent the infection ■ Structural issues not addressed as the staff use sluice room to conduct other activities that are not relevant to the purpose of the room |

| | | |
|---|--|--|
| <p>Inequitable distribution of resources and shortage</p> | <p>Capacity of the hospital had also been overwhelmed by the number of the specialised clinics as such resulted in the shortage of most supplies and resources</p> | <p>Overcrowding plays a key role in allocation of equipment and resources are not enough for the growing number of patients</p> |
| <p>Communication to guide policy implementation and compliance</p> | <p>Communication by the top management was highlighted as the key to clear the vision of the policy to all stakeholders, including frontline staff</p> <ul style="list-style-type: none"> ▪ There is two-way communication between managers and staff ▪ CEO actively involved and supportive | <p>Poor dissemination of information to all staff members</p> <ul style="list-style-type: none"> ▪ There is no two-way communication between managers and staff rather given instructions without them airing out their views to management ▪ CEO only engaged during the meetings |

5.4 CONCLUSION

This section of chapter five has presented and discussed the results from primary data collected through interviews with selected employees from the two tertiary hospitals that were the focus of this study. The first section of the results focused on the demographic characteristics of the research subjects while the second section presented the discussion on the identified themes. While the participants were drawn from two separate hospitals, (one that had obtained relatively good results in the compliance audit, and one that had fared particularly poorly) the issues they raised were remarkably similar from both hospitals.

The discussion in this section shows that the micro contextual issues that led to the development of the NCS has not changed much after years the standards have been put in place. Although a few participants highlighted some changes, the majority of participants were still not happy with the quality of service in the hospitals. The next chapter will discuss phase 3 of the study that presents the social network analysis (SNA) where it was hoped factors that account for the differences in compliance may be uncovered.

CHAPTER SIX: FINDINGS FROM SOCIAL NETWORK ANALYSIS (SNA)

6.1 INTRODUCTION

This chapter describes the findings of the SNA of this study. The objective for this last phase of the study was to describe relationships between the actors responsible for the implementation of the six KPAs in the best and worst performing tertiary hospitals in Gauteng. In these case study, Hospital A is the best performing and Hospital B the worst performing hospital.

A broad explanation of the SNA was given in the methodology chapter and further information will be discussed in this chapter to facilitate understanding of the findings. As explained in the methodology chapter, Borgatti et al. (2009) defines social network analysis as a distinctive set of methods used for mapping, measuring and analysing the social relationships between people, groups and organizations. In this study SNA was useful in analysing relationships and connectedness amongst actors involved in the implementation of the six KPAs of the NCS. SNA further explores measures that identify key actors who are involved in the policy implementation in an organization through functional ties and linkages. Network properties have positions that include a number of nodes a relation has and the extent at which the node is a bridge between the other nodes (Freeman, 1979).

In this chapter the researcher used a social network visualizer (SocNet version 2.5, which is distributed along with UCINET) to visualize graphs of the SNA. This chapter reports on the findings of the data collection process with the staff of the two tertiary hospitals. This will be followed by an analysis of the findings according to the network properties articulated by Tichy et.al. (1979) as illustrated in the table 6.1.

6.2. FINDINGS DURING DATA COLLECTION

As discussed in the methodology chapter, the researcher met with the members of staff of each hospital according to the persons they had identified as being responsible for the implementation of the six KPAs of the NCS. The degree of interaction and cohesiveness of the actors was explored to identify the number of connections individual actors have and are displayed in visual graphical form from the pictures taken during the net mapping process. The measure of centrality of the actors was explored through assessing the degree to which the relationship is guided by formal hierarchy or membership in the network. In this study, the formal hierarchy or membership in the network included the QA manager who is the driver of the implementation of the six KPAs in both hospital A and B together with the other members of the network who form part of the team responsible for the implementation of the quality standards.

The structure of the network was further explored by examining the connection between the networks in each of the tertiary hospitals and indicates the overall pattern of relationships between members of the group in each hospital. Colour coding indicates role players and to display connections of ties on the mapping. Pictures taken during the mapping process were used to analyse connection and ties of the actors. Links are drawn as explained by Bodin et.al. (2020) in the methodology chapter to show the ties if they are centralised, dense, fragmented and closed.

6.2.1. Findings during the Mapping Process at Hospital A

During the mapping process, which was accompanied by discussion and explanations which were recorded, in hospital A, the participants were specific in naming individual actors by title and level of responsibility e.g., operational managers. Hospital A actors have direct interaction and communication with each department that is relevant for the implementation of the six KPAs of the NCS, for example ensuring medicine availability and communication of stockouts to all units at the hospital.

Participant A4 stated, “*We work directly with our CEO as the pharmacy to make sure that stock is available and where there are stock-outs pharmacy informs the CEO and the matter is attended to urgently*”. Further the relationship mapping indicated that the actors who share the closest ties are the CEO and the pharmacy manager. In hospital A, the CEO as a senior manager was portrayed as being hands-on in facilitating the implementation and compliance of the six KPAs of the NCS and that he/she deals directly with the relevant department whenever there is an issue of concern. The CEO was seen to have an open-door policy which encouraged staff members to reach out to him/her if there are matters that need his/her attention. Participant A6 commented that” *Since our CEO arrived in this hospital, we have seen a huge improvement on the quality standards compliance as he is more supportive and involved*”. Figure 6.1 and 6.2 below illustrate the mapping process at hospital A and B



Figure 6.1: Hospital A

Figure 6.1: SNA of Hospital A

6.2.2. Findings during the Mapping Process at Hospital B

In hospital B, the key actors who influence the implementation of the six KPAs of the NCS were identified as the CEO of the hospital, members of the executive committee of the hospital (EXCO) which included all departmental managers of the hospital and CEO, the quality assurance manager, assistant directors of nursing, operational managers and the support staff of units at the hospital. Hospital B grouped the actors according to

department rather than individual key functions. At hospital B, participant B1 said “ The CEO, quality manager, infection control coordinator, EXCO as a whole, cleaning department and operational managers as the champions of quality in their units are the main drivers to make sure that implementation and compliance on the NCS happens in this hospital”.

Thus, in hospital B, implementation of the quality standards is monitored by the senior team who drives performance by the lower order staff with the senior staff playing a more supervisory role. Further in hospital B, quality standards such as staff attitude and availability of medicines were not mentioned individually like staff attitude and availability of medicine as it was done in hospital A. Participant B1 reiterated that “We interact with the CEO office rather than directly with the CEO and meet our CEO during EXCO meetings”. So, in hospital B, as much as there is interaction and connection with the CEO the interaction is only done directly once a month during formal monthly meetings. However, the QA manager frequently engages with the CEO’s office to address issues in implementing the six KPAs of the NCS. Analysis of findings will be further explored in section 6.3. below.

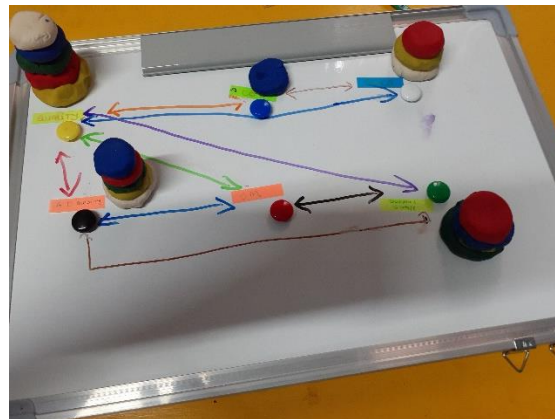


Figure 6.2: Hospital B

Figure 6.2: SNA of Hospital B

6.3. ANALYSIS OF THE FINDINGS

Tichy et al (1979) referred to three properties namely transactional content, nature of the links and structural characteristics. These properties have been reordered to facilitate reporting of the findings as shown in table 6.1 below.

Table 6.1. Network Properties (Modified from Tichy et al, 1979)

| Property | Types | Statements |
|---|--------------------------|---|
| Structural characteristics This refers to the overall pattern of relationships between members of the group | Size | Number of members participating in the network |
| | Density or connectedness | Number of actual links in the network as a ratio of the possible links |
| | Openness | Number of actual external links of a social unit as a ratio of the number of possible external links |
| | Reachability | Average number of links between any two individuals in the network |
| | Centrality | Degree to which relations are guided by the formal hierarchy |
| | Star | Individual with the highest number of nominations |
| | Bridge | Individual who is the member of multiple clusters in the network (linking) |
| Nature of links This refers to the characteristics of the links between pairs / members of the group | Intensity | Strength of relationships between individuals |
| | Reciprocity | Degree to which a relation is commonly perceived and agreed to by all parties to the relationship |
| | Clarity of expectations | Degree to which every pair of individuals has clearly defined expectations about each other behaviour in the relation |
| | Multiplexity | Degree at which pairs of individuals are linked by multiple relation |

| | | |
|--|--------------------------------|---|
| Transactional content This refers to what is exchanged by the members of the group | Expression of affect | Do the members like one another; are they friends? |
| | Influence attempt | Is there an exchange of power or influence among the members? |
| | Exchange of information | What information do members share with one another? |
| | Exchange of goods and services | Do members share resources with one another? |

6.3.1 Structural Characteristics

Prior to exploring the structural characteristics of the network, it was necessary to determine what type of network was applicable in this study.

According to Digital Promise (2020:4) “a bounded network is a network with a set number of network members (e.g., students in a classroom) whereas an unbounded network is a network that does not have set membership (e.g., weekly meetup group with an open invitation to anyone in the community)”.

In this study, the QA department and staff members associated with quality assurance were considered to be a bounded network as it has a set number of members (employees) and the participants, or key informants, were known to each other and identified by the researcher as belonging to that network before commencing the network analysis. The members were all involved in the implementation of the six KPAs of the NCS in the respective tertiary hospitals.

6.3.1.1. Size of the network

Seven actors who were part of the bounded network were identified in Hospital A during SNA mapping. They comprised the hospital CEO, nursing matrons, operational managers of the hospital units, a pharmacist, a quality assurance manager, nurses and a cleaning manager. Individual actors were named according to level of responsibility. In hospital B six actors who were part of the bounded network and who influenced the implementation

of the six KPAs of the NCS were identified as the CEO of the hospital, members of the executive committee of the hospital (EXCO) which included all departmental managers of the hospital and CEO, quality assurance manager, assistant directors of nursing, operational managers and the support staff of units at the hospital.

The size of the network influences the flow of communication, discerns information breakdown, may create bottlenecks and structural holes as well as indicating isolated individuals and teams. Although the size of the two networks (of Hospital A and B) were similar, it was seen that several other aspects related to structural characteristics differed which impacted on the flow of communication and bottlenecks.

In hospital A the support staff was considered to be isolated from the network that influences implementation of six KPAs of the NCS. This is supported by the participant A2 who stated that *“frontline staff are not taken into consideration when making decisions while we are expected to comply to the standards”*.

The size of the network influences the availability of opportunities to accelerate knowledge flowing across functional and organizational boundaries in implementing the six KPAs of the NCS. As much as hospital B had involved frontline staff, the network fused the key players as a team (EXCO) which could limit accountability on the part of individuals and thus create structural holes and bottlenecks.

6.3.1.2. Network density

Tichy et al (1979) defined the term as the number of actual links in the network as a ratio of the possible links and Borgatti (2003) essentially agrees by referring to density as the proportion of ties in the social network to all probable ties. The density of ties emerges as the property of the network as it displays the frequency of information flow between individuals. A dense network is the network in which the number of ties is close to maximum. The density of network is calculated by dividing the number of ties in the network by total possible connections.

Actual connections are connections that actually exist, in this case, the people who know each other, and potential connections are connections that might potentially exist between two nodes. In figure 6.3 below illustrate that in hospital A, the QA manager is connected to the nursing staff and the matron in addressing staff attitude at hospital A.

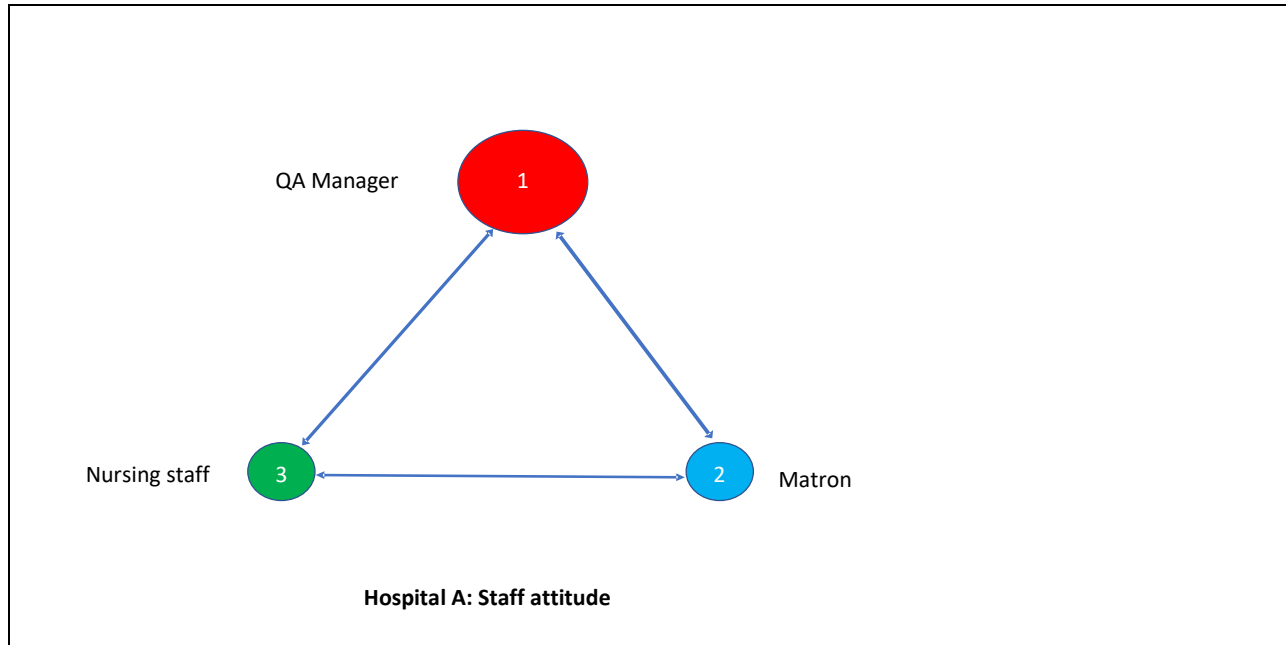


Figure 6.3: Hospital A network density in addressing staff attitude

Similarly, figure 6.4 below indicates that the QA manager is connected to the CEO and the pharmacy manager in making sure that there is availability of medicine. The density is 3/3 because there are three edges out of possible of three edges for each which make up to 100%, respectively.

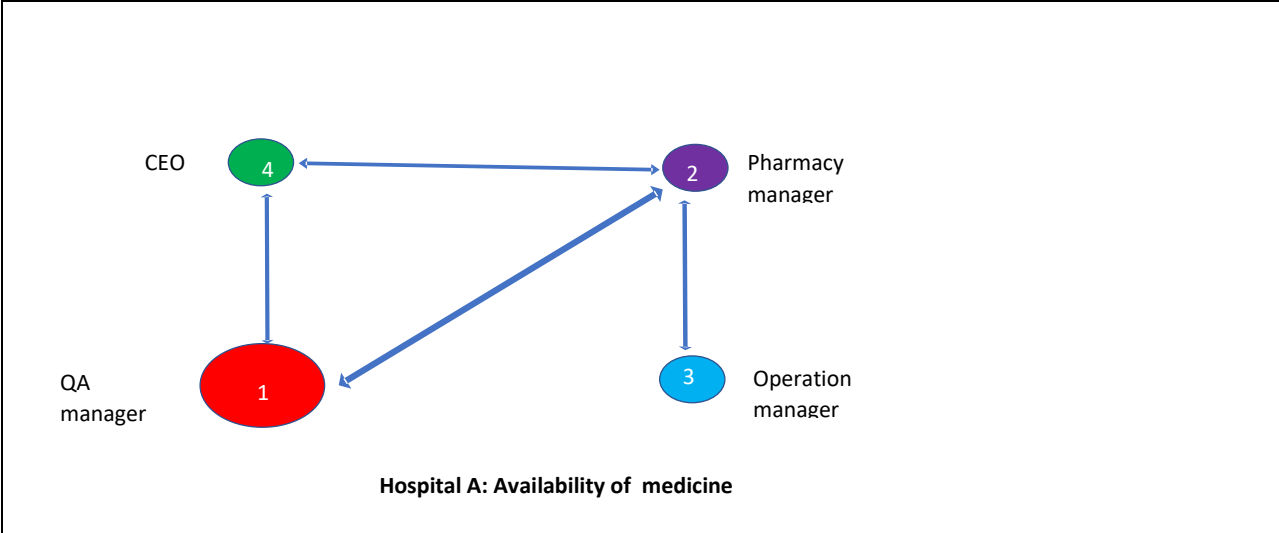


Figure 6.4: Hospital A network density

The density of the Hospital B network connection is analysed in figure 6.5 where the QA manager is connected to the assistant director nursing and the operational manager.

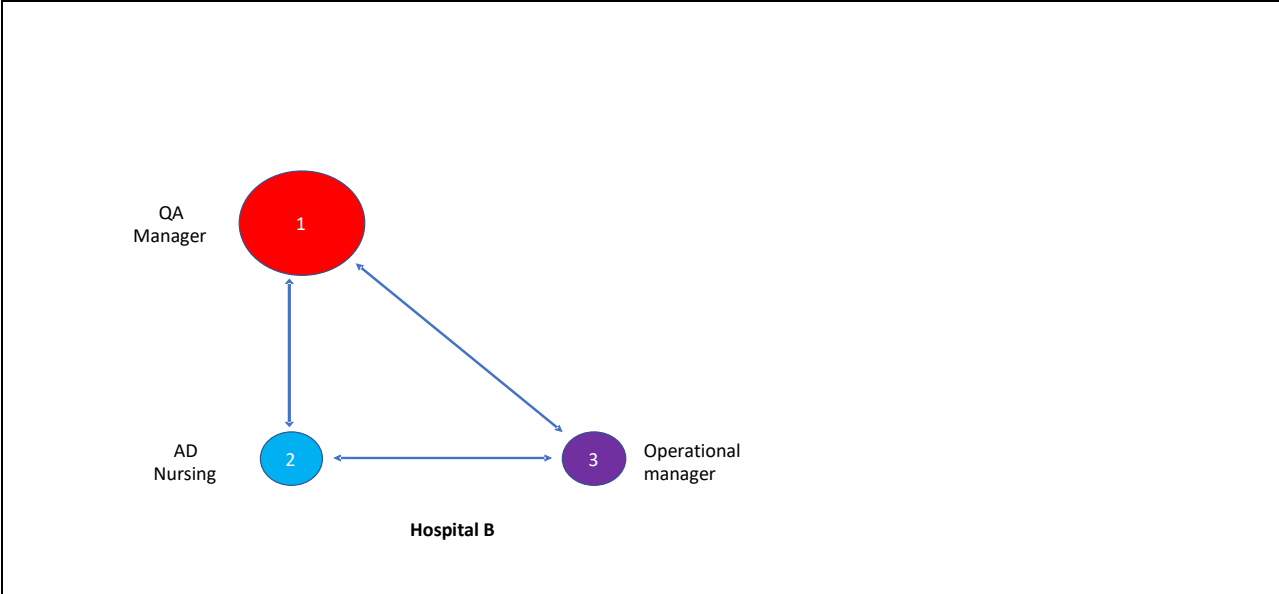


Figure 6.5: Hospital B network density

Further network density of the senior management was analysed and portrayed in figure 6.6 where QA manager is connected between the CEO and the EXCO. Thus, the density

is 3/3 (100%) in each illustration in hospital B because there are three edges out of possible of three edges, respectively.

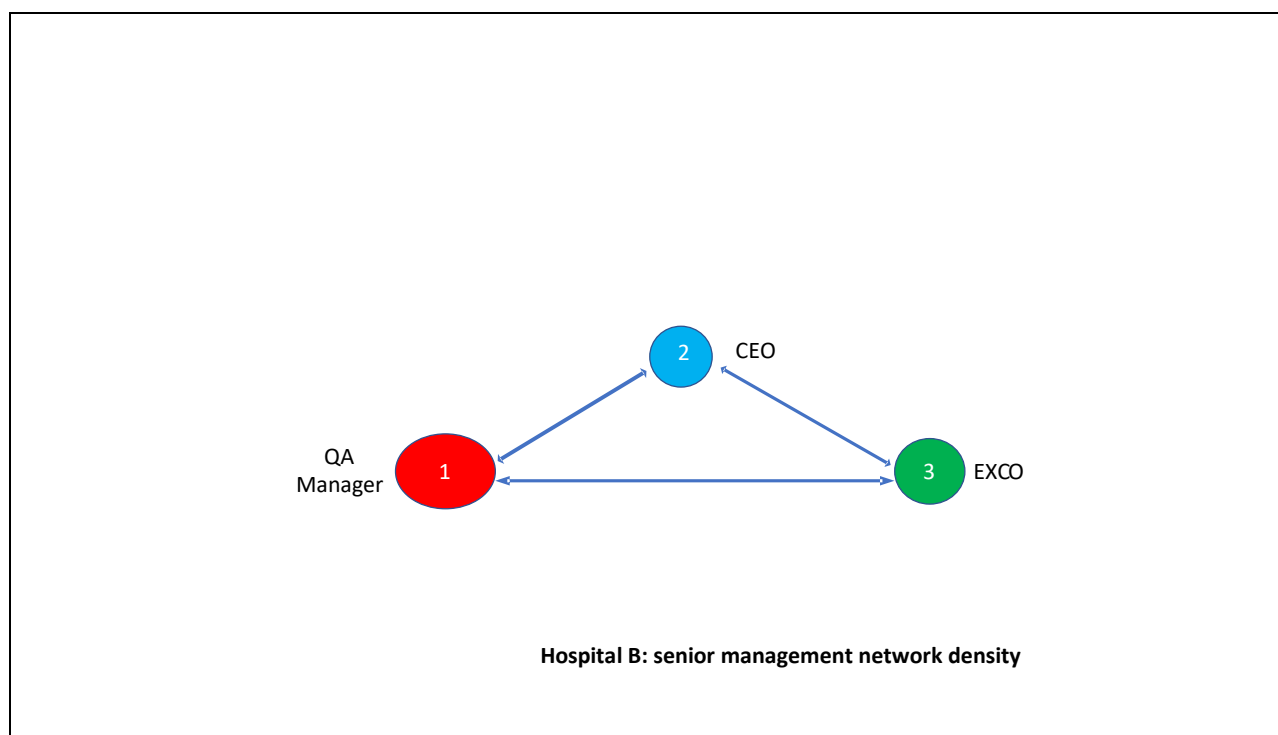


Figure 6.5: Hospital B network density of senior management

Both in hospital A and B, QA managers are seen frequently communicating with all stakeholders regarding implementation of the six KPAs of the NCS. A perfectly dense network is illustrated where the number of actual connections between nodes are exactly the same as the number of potential connections. Martino and Spoto (2006) points out that density is an indication of homogeneity of the group and actors' engagement with each other. Therefore, if individuals who have high density are not engaged in implementation of the six KPAs of the NCS, there might be high possibility of poor compliance and communication of such policy implementation will be low.

6.3.1.3. Openness

Tichy et al (1979) defines openness as the number of actual external links of a social unit as a ratio of the number of possible external links. As this is a bounded network, no external links were mentioned during the mapping process. Input of the external

stakeholder who might be relevant and beneficial in the implementation of the six KPAs of the NCS like suppliers, OHSC were not mentioned. Social networking become more appealing to a wider group like OHSC to guide the implementation and compliance of the NCS while openness in the social network further addresses the lack of diversity. In this study openness was limited to actors from various departments within hospital A and B. In hospital A, QA manager serves as a bridge to reach out to all departments. While in hospital B the QA manager acts as the key entry point to reach out to other departments like administration, pharmacy and nursing units in implementing the six KPAs of the NCS.

6.3.1.4. Reachability of actors

Tichy et al (1979) refers reachability as the average number of links between any two individuals in the network. During analysis of the mapping in both hospital A and B, it was identified that the QA manager interacts with all the members of the network in order to facilitate implementation of the six KPAs of the NCS and compliance of such norms and standards. The QA manager is linked with all other stakeholders either directly or indirectly in both hospitals and his/her removal from the network would result in non-compliance. The QA manager is known to staff members in all departments at both the hospitals and can be reached by all departments even though other departments like infection control were not part of the bounded network that was explored during the mapping process.

The QA manager is pivotal in communicating policy implementation and in monitoring compliance to the policy. There was two-way communication between the actors mapped and QA manager as all the arrows were bi-directional.

To implement six KPAs of the NCS and enhance compliance in hospital B communication is more on the hierarchical order than in hospital A. A shared leadership is noted in hospital B as responsibility is assigned according to level of authority across the network.

Specifically, in both hospital A and B it was noted that the QA managers were linked to more than two nodes (actors) in the network which makes QA managers reachable in

facilitating the implementing the six KPAs of the NCS. Figure 6.7 & 6.8 below represents the reachability amongst actors in both hospital A and B.

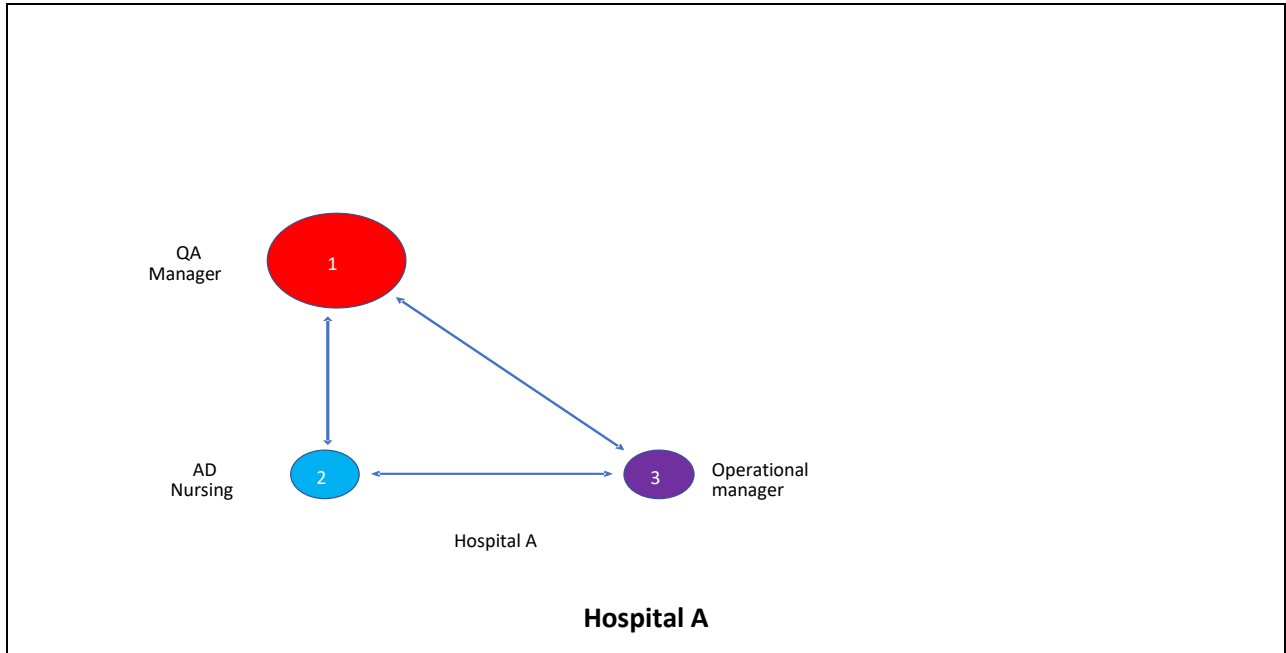


Figure 6.7: Graphic representation of reachability of actors

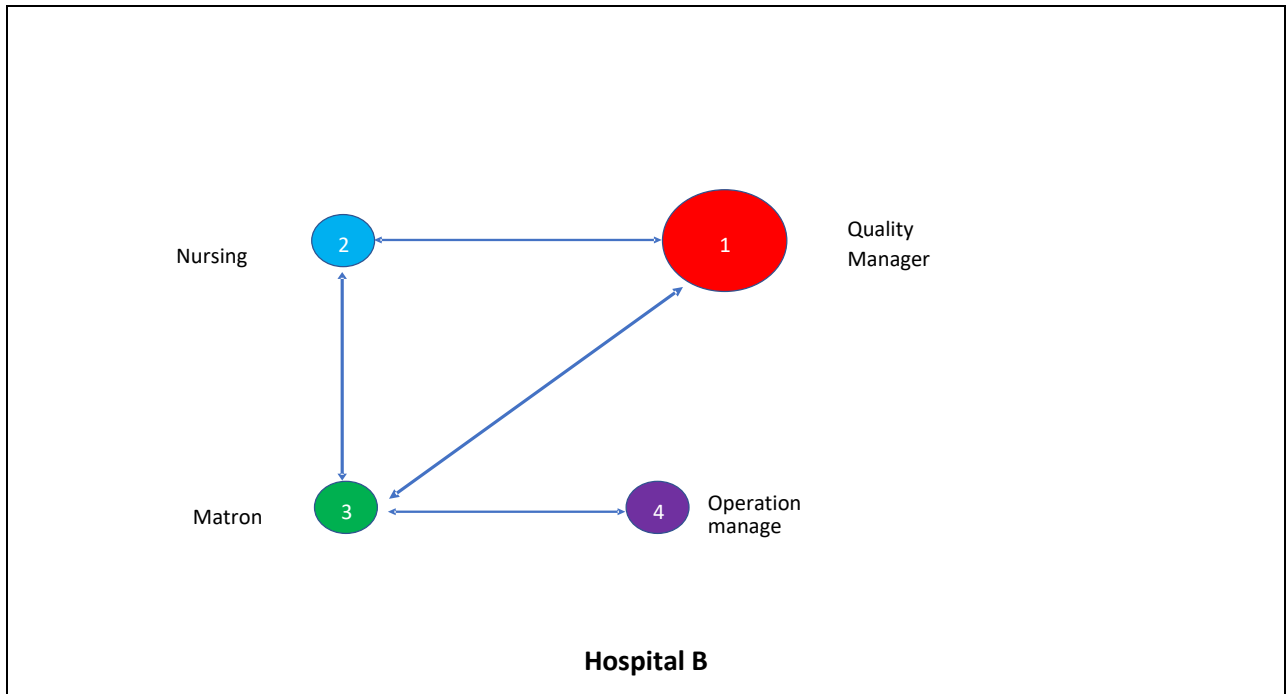


Figure 6.8: Graphic representation of reachability of actors

6.3.1.5. Measure of centrality

Centrality measures the importance of the actors within the network and shows which actors are in the centre (Borgatti & Cross, 2003) and according to Tichy et al (1979) is determined by the position in the formal hierarchy. In this study the QA manager, although not the most senior person in the hospital hierarchy, was clearly identified as the key stakeholder to facilitate implementation and compliance to the quality standards as set out by the policy, and therefore the most important person within the bounded network. The degree of centrality shows the actor's degree of direct ties with others in the network, generally the higher the number of ties the actor is having the more the actor becomes important and powerful. Centrality measures identify the most prominent actor within the network, this measure relates closely with the influence an actor is able to impose on other actors.

In hospital A nodes were directly linked and tied together as all nodes (actors) were able to connect directly to each other portraying QA manager at the centre linked to CEO, matron, operational managers, pharmacy and nursing. Although communication is not hierarchical in hospital A, QA manager has direct communication to all actors in the network in facilitating the implementation of the six KPAs of the NCS. Participant A6 affirmed that *“Relationship of QA manager & other departments is good as we do interact on daily basis with wards and pharmacy communicates if there are matters that affect pharmacy”*.

Hospital B was noted to communicate in hierarchical order to reach out to all the departments or units. In hospital B the nodes were tied indirectly to one another as connections are done hierarchically and flow of communication is done according to level of organogram but also accommodating direct communication to each actor. It was also noted in hospital B that the quality assurance department has a direct communication with all the actors. Participant B1 stated that *“Quality assurance department is the key to unlock implementation of the standards in this hospital as we are directly communicating to support staff if there is a complaint or non-compliance”*. The graphical representation

below in figure 6.9 depicts network measure of centrality characteristic for hospital A and B respectively.

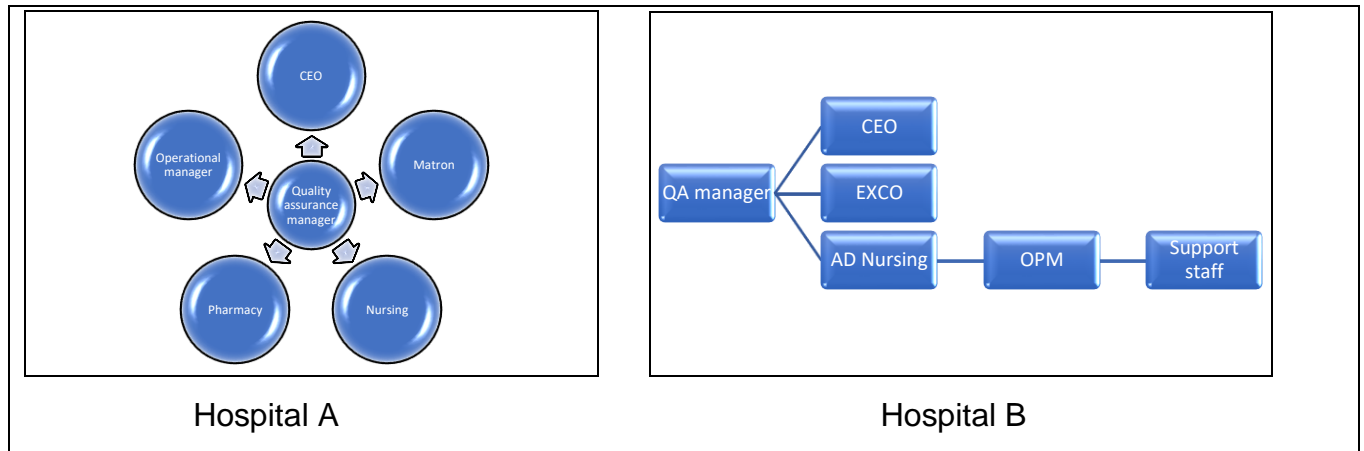


Figure 6. 9: Measure of centrality

6.3.1.6. Star

SNA is bound to the principle of sociometry as there is always a star or a point of centrality that can be either be an individual or an organisation. According to Tichy et.al. 1979, a star is defined as the Individual with the highest number of nominations. It further provides information about the actors in the network, thus an individual in the centre is called “a star” as they are the most popular individual in the network.

The quality assurance manager in hospital A was portrayed as the star as all nodes (actors) were connected to him/her with the highest nomination in the network. All actors had a tie with the quality assurance manager. In hospital B the quality assurance department is depicted as the star with the highest nominations amongst other actors in ensuring implementation and compliance to the six KPAs of the NCS, however the network was dense and not centralized. Figure 6.9 above demonstrate the QA managers’ position as the star with highest nominations and connections in both hospitals.

6.3.1.7. Bridge

Tichy et.al (1979) define the bridge as the individual who is the member of multiple clusters in the network. In hospital A, the position of being a member of multiple clusters

in the bounded network is occupied by the quality manager and the matron as shown in figure 6.10 below. QA manager's role is considered important in providing a bridge between other departments as explained by A1 who stated that *"There is no quality standards without full involvement of the quality assurance department"*. Figure 6.6a further depicts the matron as a bridge in facilitating the interaction between the QA manager and nursing staff and QA manager with operational manager.

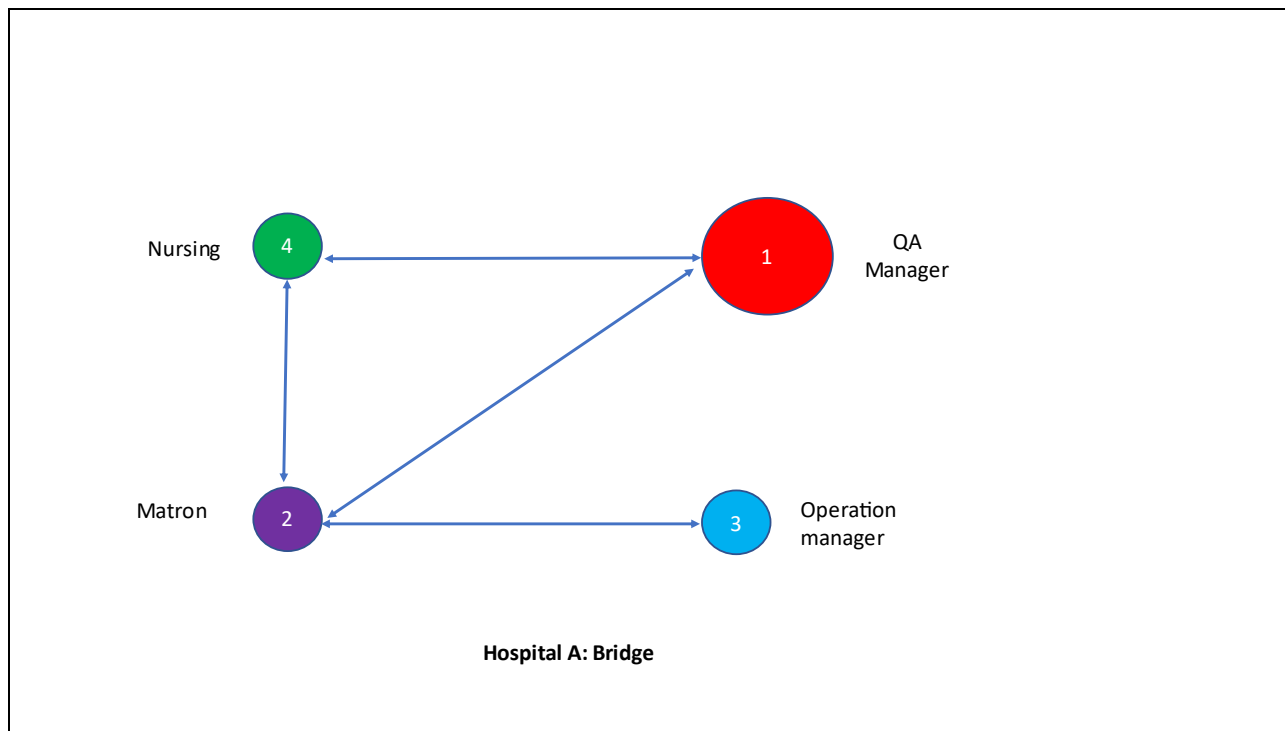


Figure 6.10: Member of multiple clusters as bridge

In hospital B, assistant director nursing appears in multiple clusters as represented in figure 6.11 below that the interaction between the QA manager and support staff is facilitated by the assistant director nursing and further act as a bridge between the operational manager and support staff. These supports the notion that in hospital B implementation of the six KPAs of the NCS are done in hierarchical order. To influence compliance of the quality standards, matrons were noted as brokering between the QA manager and the nursing and also between QA manager and operational managers in hospital A. The QA assurance manager could not form a bridge as there was a broken tie between the QA manager and the operational manager. In Hospital , assistant director

nursing was a bridge between the QA manager and the support staff and the operational managers and support staff in communicating the implementation of the quality standards. In hospital B there was no broken tie in the two clusters.

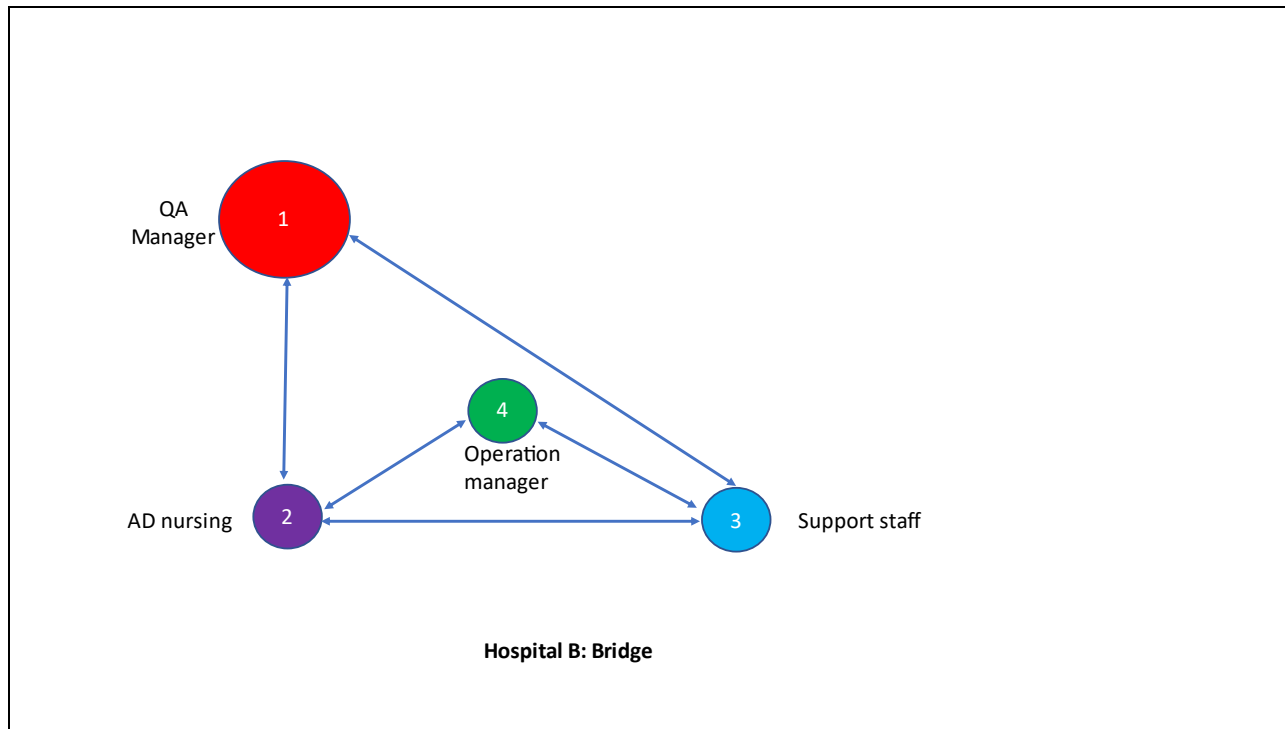


Figure 6.11: Member of multiple clusters as bridge

6.4 NATURE OF THE LINKS: CHARACTERISING THE RELATIONSHIPS AND TIES BETWEEN THE ACTORS

6.4.1 Strength of Relationships between Individuals

According to Tichy et.al. (1979) intensity refers to the strength of relationship between individuals. The tie becomes stronger if the distance between the ties is short and weaker if the distance between the ties is long. The shorter path of the tie increases closeness between the ties.

In figure 6.12 it can be seen that the quality assurance (QA) manager in hospital A has a close tie and relation with the CEO as they share the shortest path in a triangle, the CEO also has a close tie and relation with the pharmacy manager while QA manager and

pharmacy have the longest path in a triangle which signify a weak relation. Furthermore, the pharmacy and the operational manager share the shortest path which symbolise a strong tie and relation. A strong relation enables open and constant communication for the overall implementation of the six KPAs of the NCS. The QA manager in hospital A does not have a direct link with the operational manager and the relationship is therefore weak. In this manner, in terms of the relation regarding availability of medicine there is a weak relation as there is no tie attached. In figure 6.4 above the close triangle is a representation of a cohesive collaborative network with strong ties between the nursing staff and matrons at hospital A and an open triangle represents broken ties of communication between the actors. In dealing with availability of medicines within hospital A the pharmacy manager is interacting directly with the operational manager in advance when there are stock outs of certain medicines and a change in formulary.

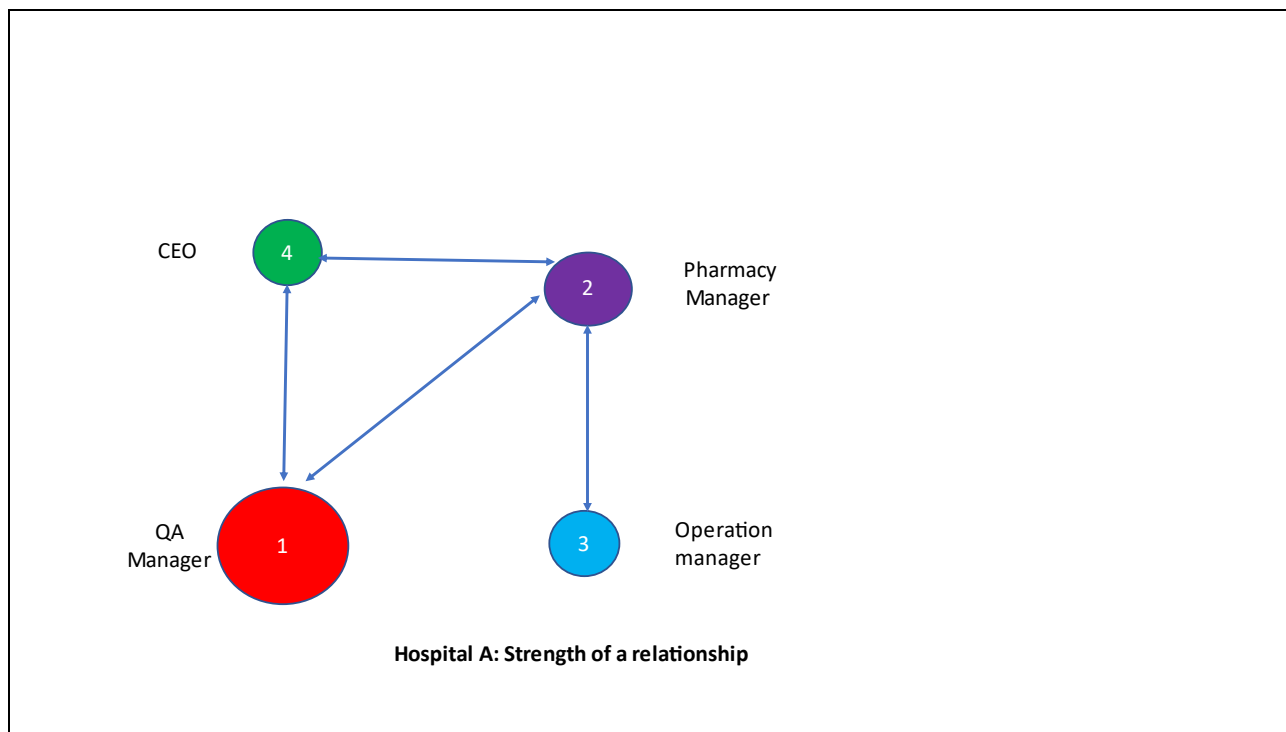


Figure 6.12: Strength of relation of actors of hospital A

In hospital B, the strength of relationships is displayed between the QA manager and both the CEO and between the CEO and EXCO as all these actors share the shortest path that signify strong tie and relation in implementing the six KPAs of the NCS.

Visually on the graph, the QA manager and the CEO share a short path which signify a close tie and strong relation. However, in this illustration the QA manager share the longest path with the EXCO which indicate a weak tie and relation. This has been supported by participant B1 when resonated during the mapping that “*We usually don’t communicate directly with the CEO but with the CEO office when there are matters that needs attention, but we meet with the CEO during EXCO meetings*”.

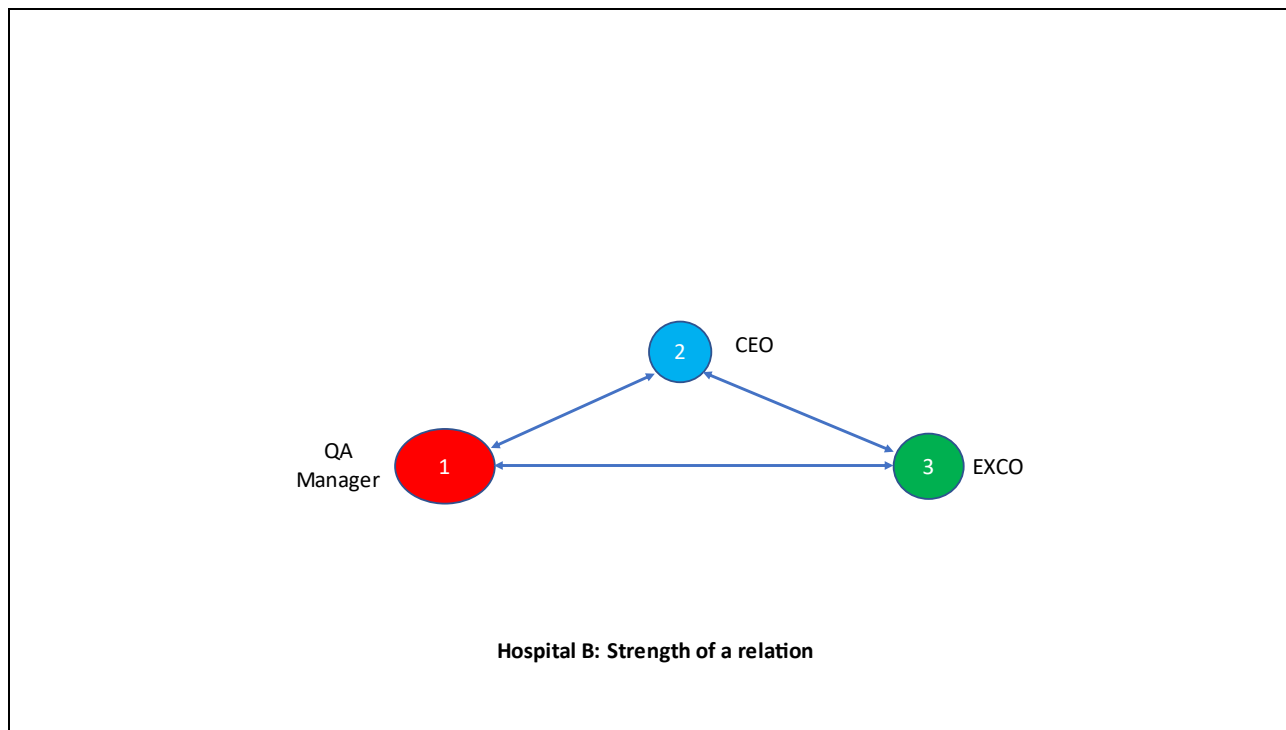


Figure 6.13: Strength of relation of actors

6.3.2 Reciprocity: Actor Perception of a Relationship

Network reciprocity is explained as the edges that determine which actor interacts with the other actor Lieberman (2005) et.al. Tichy et.al (1979) further defines network reciprocity as the degree to which a relation is commonly perceived and agreed to by all parties to the relationship. The degree of reciprocity corresponds to the count of the ties each actor has with other actors during information exchange, when giving advice, provision of funding and for command network which is normalised by the maximum number of stakeholders to which actor is affiliated. Findings of this study has revealed

that the QA manager in hospital A is the key actor perceived by other actors in the network to be responsible for the implementation of the quality standards and as such has a reciprocal relationship with the CEO and the pharmacy manager where communication is bi-directional in supporting the availability of medicine as displayed in figure 6.12 above. Figure 6.13 above shows the edges (actors) position and interaction that in hospital B there is a bi-directional communication between the CEO and the EXCO but that the QA manager reports to both the CEO and the EXCO (a bi-directional relationship) thus the QA manager is the key actor in facilitating the implementation of the quality standards. Both in hospital A and B, the QA manager give advice on the quality standards implementation and the CEO approves funding of resources to comply with such standards.

6.3.3 Clarity of Expectations

Clarity of expectation refers to the degree to which every pair of individuals has clearly defined expectations about each other's behaviour in the relation Tichy (1979) et.al. The expectations were measured more by what participants said than by the way in which they built the network. Decision making is a function that is applied to all the functions of management thus the QA manager plays a critical role in making effective decisions that are based on clarification of expectations, consideration of benefits and drawbacks of alternatives within an organisation's quest for improved performance and satisfactory deliverables.

The result of this study reveals that at hospital A there are clear descriptions of the activities of each actor mapped like the cleaning manager, pharmacy manager etc. where role clarification is clearly displayed according to the six KPAs of the quality standards. Availability of medicine as the responsibility of pharmacy manager, cleanliness of the hospital lies with the cleaning manager, staff attitude is addressed by the matrons and operational managers. In this case, clarity of expectations was based on the key function of each actor with the support of the QA manager.

In hospital B one participant (B1) stated that *“We usually don’t communicate directly with the CEO but with the CEO office when there are matters that needs attention, but we meet with the CEO during EXCO meetings”*.

This indicated that there was formal relationship that was based on hierarchical structure, but the roles and expectations were not clearly clarified. Lack of clarification of roles can result in a lack of accountability. However, existence of hierarchy facilitates routing of information through the network.

6.3.4 Multiplexity

Tichy et.al (1979) refers to multiplexity as the degree at which pairs of individuals are linked by multiple relation. In hospital A there was no graphical form that portrays a pair of actors linked to multiple relation. It was therefore not possible to unequivocally assess multiplexity as the nature of the relationship in either of the two hospitals.

It was however of interest to see that (as shown in Figure 6.14 below) in hospital B there are two isolated subgroups which form the network. The QA manager as the key point of entry in implementing the six KPAs of the NCS at hospital B and has been noted as part of the two subgroups that forms two closed triangles. It is noted that a pair of actors (the QA manager and assistant director nursing) are linked to the operational managers and support staff.

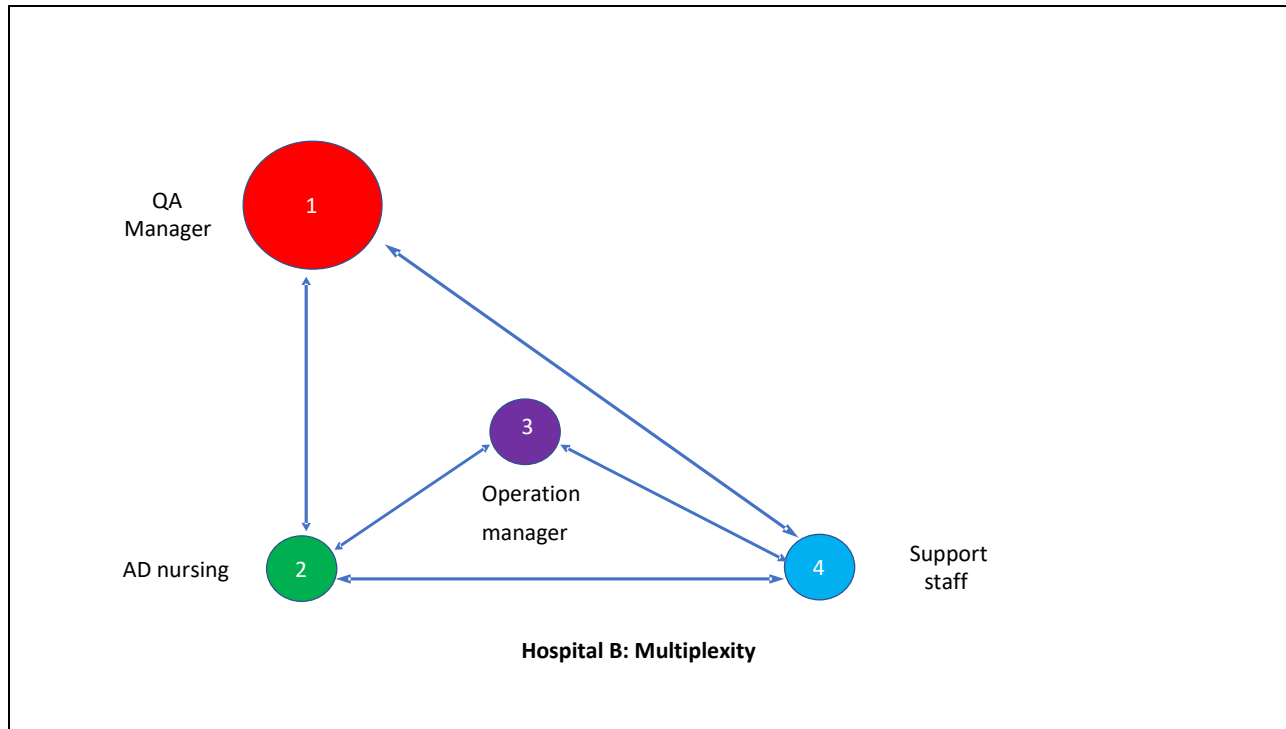


Figure 6.14: Multiplexity in hospital B

6.4 TRANSACTIONAL CONTENT

Tichy et.al (1979) refers to transactional content as what is exchanged by the members of the group such as friendship, power and influence, information and goods and services.

6.4.1 Expression of Affect

Based on the results of this study, there is no evidence showing whether the actors were friends or not, or if they liked each other. Rather the actors were colleagues in a given environment (QA department or hospital) working together in facilitating implementation of the six KPAs of the NCS in both hospital A and B.

6.4.2 Influence Attempt

According to Tichy et.al (1979) influence attempt refers to whether or not there is an exchange of power or influence among members. (Falbe & Yukl, 1992) state that power that is used by top management such as the CEO can influence organisational change as, in the change process, power and influence can equally lead to compliance and commitment to the change efforts. In this study influence of power was further explored and analysed according to the degree of power influence as displayed on the figure 6.15 and figure 6.16 below.

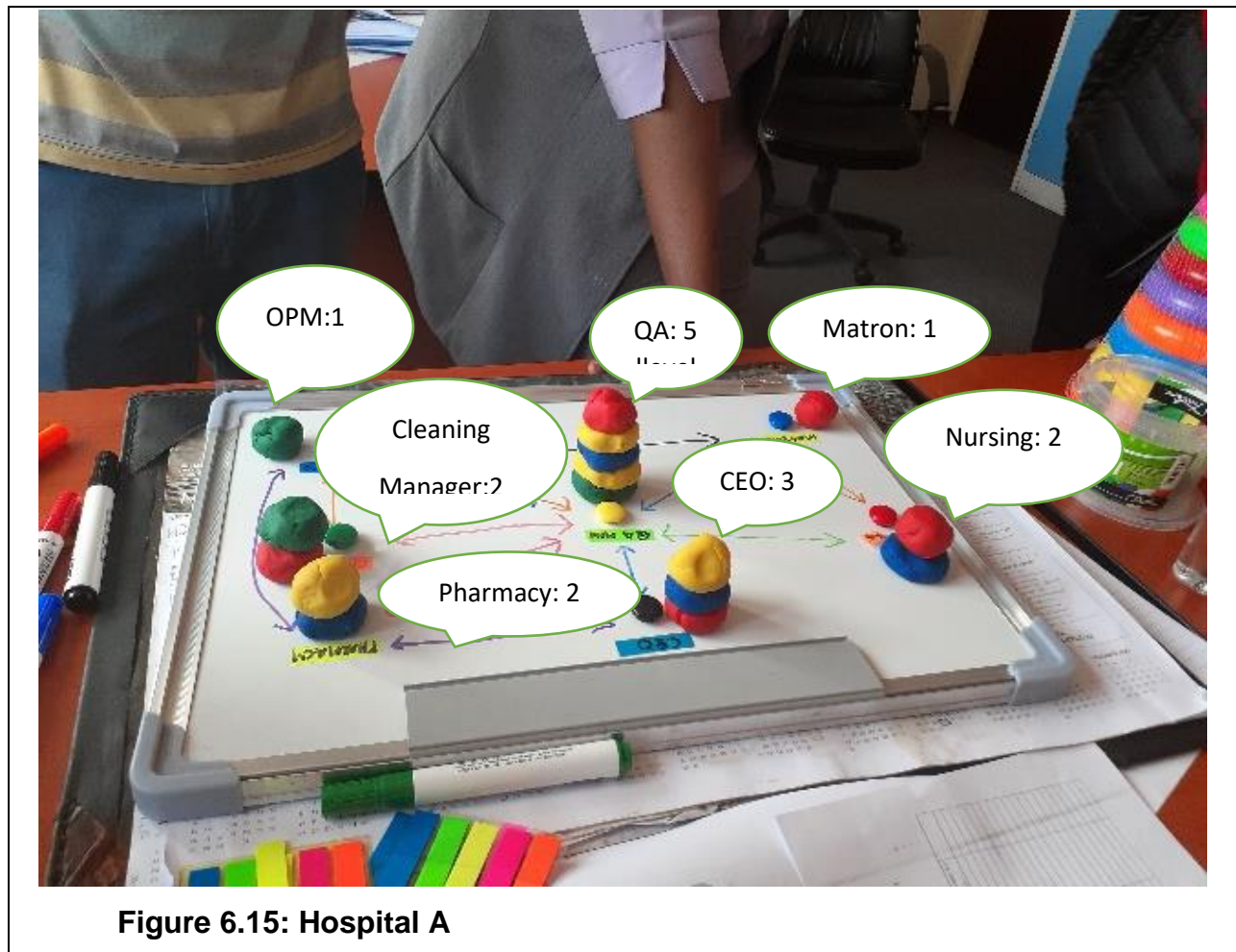


Figure 6.15: Mapping process in Hospital A

The QA manager in hospital A had five levels of the tower which demonstrates more influence and power in facilitating and communicating the implementation of the six KPAs

of the NCS as the tower of influence is higher than all other actors. The CEO's influence was assigned with three levels of tower meaning that he/she is the second in terms of the degree of influence with lesser influence following the QA manager in implementing the standards. Other actors were less influential as the cleaning manager, pharmacy manager and nursing staff were assigned with two level of towers which demonstrate that they have minimal power and influence. Furthermore, the matron and the operational managers were the least influential with allocation of only one level of tower. These further supports the notion that the QA manager is the key actor in influencing the implementation of the six KPAs of the NCS as compared to other actors in the network. Figure 6.15 above illustrate tower of influence of each actor in the network.

The illustration above in figure 6.15 indicates that in hospital A the CEO is supporting the quality assurance department on implementing the six KPAs of the NCS thus, influence compliance. Participant A2 affirmed that *“our CEO is hands on when it comes to quality standards implementation, and we have constant communication”*. These statements support the notion that the QA manager relationship with the CEO influences the degree of power he/she has as it creates more opportunities for compliance in the implementation of the set quality standards.

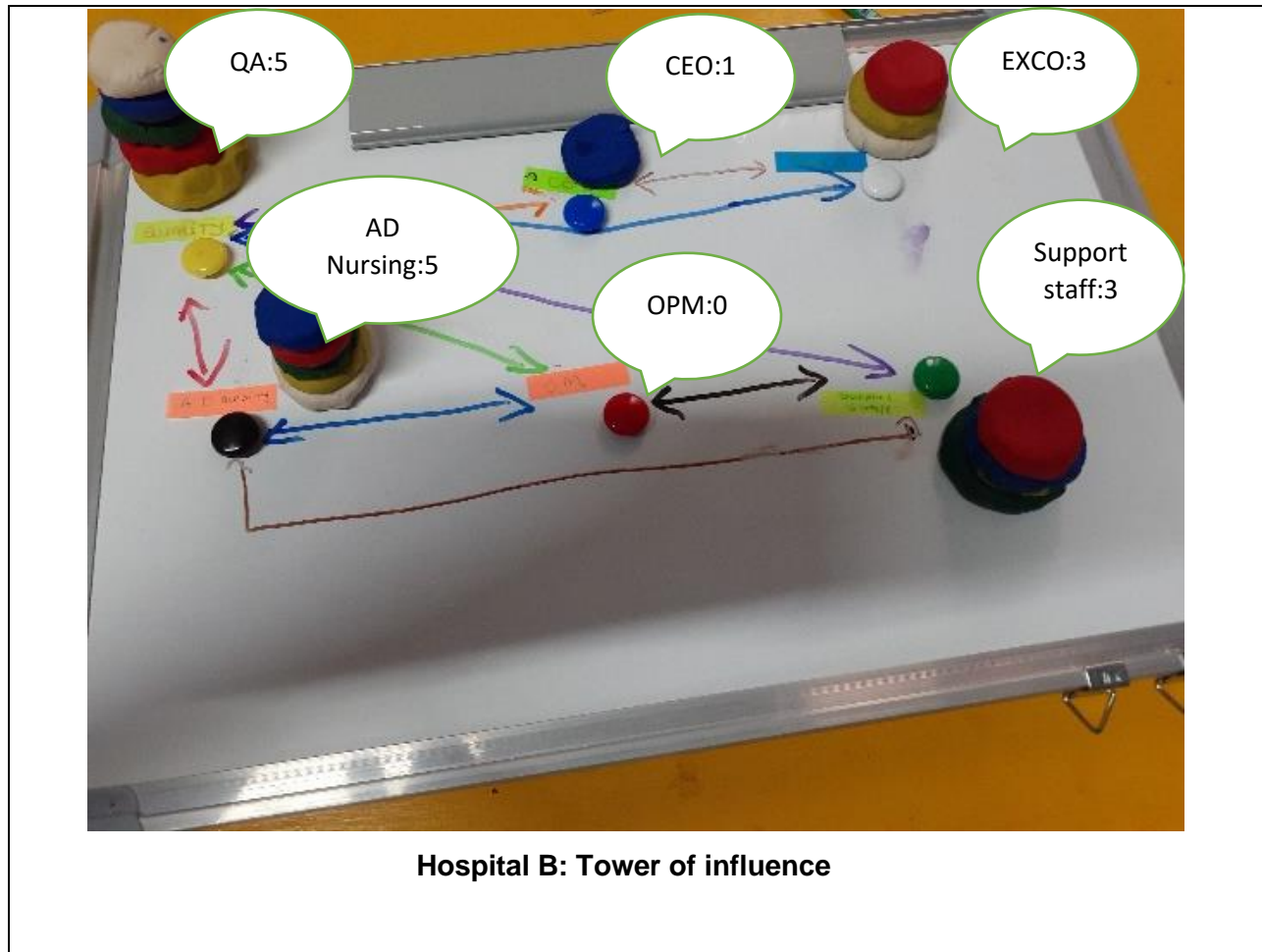


Figure 6. 16: Tower of influence in Hospital B

Hospital B depicted a picture as shown in figure 6.16 where the QA manager has a high influence in implementing the six KPAs of the NCS with five levels of tower together with the assistant director nursing (matrons) who have the same degree of influence. The CEO in hospital A is less influential as he/she was given only one level, as opposed to the support staff who have three levels of influence in the tower.

In hospital B the CEO interacts with the QA department during EXCO meetings that are held monthly. Participant B1 stated that *“in reality, we communicate with the CEO’s office not directly with the CEO and we only meet the CEO during EXCO meeting”*. This indicates that the CEO has less power or influence as there might be a delay in communicating matters that affects implementation of the NCS.

In addition, in hospital B the operational managers are displayed as not being influential at all in implementing the quality standards, so this becomes contradictory as operational managers in hospital B were said to be the champions in implementing the NCS in their own units. This denotes that operational manager being given the responsibility and accountability to be the champions of quality standards but rather not playing role on the assigned responsibility thus leads to non-compliance and poor implementation of such policy.

The power limitation model is related to a top-down approach to facilitate change. Often top management of the organisation initiates, leads and controls the process that aids the implementation process which is characterised by economic and technical rationality (Boonstra, 1997, Boonstra & Vink, 1996). French and Raven (1959) as cited by Elias (2008) assert that the manager may have great power that he/she can terminate the employee for non-compliance as the power holder has the maximum capability that he/she can exert power influence.

6.4.3 Exchange of Information

Exchange of information relates to what information members share with one another. In both hospitals the actors all stated that they have direct communication with the QA assurance manager and share information relevant to compliance with the six KPAs of the NCS. Participant B3 said, "*When we do walkabouts as quality marshalls and we identify that the passage or stairs is dirty, we are able to call the cleaner directly to clean the area*". All figures illustrated above have a bi-directional arrow which indicates that there is two-way communication among the actors. Hospital A's exchange of information is displayed in figure 6.4 where there is exchange of information between QA manager as the key actor and the pharmacy manager, and the pharmacy manager also communicates with operational managers about availability of medicine and stockouts.

Figure 6.14 above supports the notion of exchanging information with the support staff at hospital B as it displays direct interaction with the QA manager.

6.4.4 Exchange of Goods and Services

Exchange of goods and services relates to the resources the members share with one another. There was no information shared about the goods and services shared but participants did comment on the degree of influence the actors have over the allocation of resources.

In hospital A, the CEO has a voice in the allocation of resources as portrayed in figure 6.12 above where she/he has direct connection with the pharmacy.

In Hospital B the QA manager had a highest influence with regard to the exchange of goods and services with the assistant director nursing and the support staff. The CEO had less influence, but the EXCO was able to influence the allocation of resources.

Table 6 1: Summary comparison of findings of hospital A and B

| Property | Types | Hospital A | Hospital B |
|---|--------------------------|--|---|
| Structural characteristics This refers to the overall pattern of relationships between members of the group | Size | Seven actors (hospital CEO, nursing matrons, operational managers of the hospital units, a pharmacist, a quality assurance manager, nurses and a cleaning manager) | 6 actors (CEO of the hospital, EXCO), QA manager, AD nursing, operational managers and the support staff |
| | Density or connectedness | QA manager is connected to the nursing staff and the matron QA manager is connected to the CEO and the pharmacy manager QA manager is connected between the CEO and the EXCO 3/3 possible ties = 100% | QA manager is connected to the AD nursing and the operational manager (OPM) QA manager connected to nursing staff and matron QA manager connected to CEO and pharmacy 3/3 possible ties = 100% |
| | Openness | Bounded network 0 number of actual external links of a social unit 0 number of possible external links | Bounded network 0 number of actual external links of a social unit 0 number of possible external links |
| | Reachability | QA manager reachable by all actors | QA manager reachable by all actors |
| | Centrality | QA manager connected as the centre to all actors Ties and relation not hierarchical | QA manager as the entry Ties and relation are hierarchical |
| | Star | QA manager highest nomination | QA manager highest nomination |
| | Bridge | QA manager and the matron appear in multiple clusters | AD nursing appears in multiple clusters |
| Nature of links This refers to the characteristics of the links | Intensity | QA manager and CEO has a close tie and strong relation CEO has a close tie and strong relation with the pharmacy manager QA manager and pharmacy have the longest path in a triangle which signify weak relation. Pharmacy and | QA manager and CEO has a close tie and strong relation QA and EXCO has long tie and weak relation |

| | | | |
|--|--------------------------------|--|---|
| between pairs / members of the group | | the operational manager has a close tie and strong relation | |
| | Reciprocity | QA manager relation with other actors perceived and agreed by all actors | QA manager relation with other actors perceived and agreed by all actors |
| | Clarity of expectations | Expectations are clear | Expectations not clarified |
| | Multiplexity | No pair of actors linked to multiple relation | A pair (QA manager and AD nursing) linked to multiple relation |
| Transactional content This refers to what is exchanged by the members of the group | Expression of affect | No evidence of friendship Actors were colleagues | No evidence of friendship Actors were colleagues |
| | Influence attempt | QA manager had five levels of tower with highest influence CEO had five levels of tower with lower influence than QA manger Cleaning manager, pharmacy manager and nursing was assigned with two level of towers with minimal power and influence operational mangers were the least influential with allocation of only one level of tower | QA manager had five levels of tower with highest influence CEO had one level of tower with lower influence than QA manager support staff who had three levels of tower with higher influence than CEO Operational managers are displayed as not being influential at all |
| | Exchange of information | QA manager had two way and direct communication with all actors | QA manager had two way and direct communication with all actors |
| | Exchange of goods and services | CEO has a voice in the allocation of resources | QA manager had a highest influence with regard to the exchange of goods and services with AD nursing and support staff |

6.5 DISCUSSION

6.5.1. Role of Actors in Supporting Organisational Goal

An actor may become a strategic actor due to his/her formal role assigned to him/her. Denis et.al. (2009) identified “sense-maker in chief” as someone that is tasked with shaping the strategic change and conceptually influencing how meaning is made concerning organisational change. Balogun et.al (2005) further presents the “boundary shaker” as an individual tasked with the implementation of change across existing organisational boundaries. Moreover, an actor may also influence strategic issues due to his/her personal characteristics and competencies.

In this study, SNA has been used to analyse the role of actors in supporting the implementation of the six KPAs of the NCS. QA assurance managers have been seen as the key actors in supporting the organisational goal of compliance and implementation of the quality standards in both hospitals. During the mapping it has been noted that QA managers in both hospital A and B were portrayed as the key actors who are able to interact with all other actors. Thus, at hospital B it was further stated that during walkabouts when the quality marshals observe an area that needs cleaning services within the hospital and when there is non-compliance in the cleaning services, communication will occur directly to the cleaning manager who then sends the team to clean the identified area. The cleaning manager at hospital B was identified as the one who should make available cleaning materials and supervise the overall cleaning services of the hospital working together with the operational managers.

Interligi (2010) argues that compliance is a critical management function which attracts significant financial resources in supporting the organisational goal. Therefore, management can make it difficult for the organisation to close compliance gaps of the quality standards if not directly involved in addressing such gaps. Policy provides the legal mandate to promote standardisation of quality standards and implementation for

compliance. Thus, compliance with the quality standards is a strategic pillar of the organisation leadership. Results of this study support the notion that a single actor cannot support organisational goals, but rather a collaborative effort is needed to make the organisational goal more achievable.

6.5.2 SNA as a Means for Organisational Strategy

Hartley et.al.(1997) assert that actors who attempt to influence other actors in the public organisations face particular challenges due to the multiple and sometimes conflicting agendas and diffuse power bases among different actors. Scott (2002) defines power as the production in and through social relations of effects that shapes the capacities of actors to determine their circumstances and fate. Power dynamics influence implementation and compliance of the six KPAs of the NCS and determine how actors interact between each other and further influence the outcome of interactions in this case compliance.

Cohesiveness and collaboration between the members of the social network in implementing the six KPAs of the NCS were further explored through the SNA to assess if collaboration can assist in creating effective organisational strategy. Bodin et.al. (2020) refers close triangle as a representation of a cohesive collaborative network with strong ties between the actors while an open triangle represents broken ties of collaboration between the actors. Through SNA, this study revealed that informal relations rather than tightly prescribed formal reporting structures and work processes reduce functional boundaries and coordination.

This was evident at both hospital A and B where the QA assurance managers interacts directly with all the actors without actually following a formal chain of command in implementing the quality standards. In doing so, this forced actors to work together and appreciate unique skills and knowledge amongst one another and also reduced conflict amongst actors. This study further revealed that if expertise of the actors within the network is not taken into consideration, it can create bottlenecks in sharing

information that will form a barrier in improving compliance to the quality standards. Boundaries such as the hierarchy of the organisation, expectations of individual actors with regard to performance of tasks (job descriptions) can result in an overload of a specific role and workflow which can slow the network performance. SNA showed that in hospital B the CEO was less involved in quality standards implementation with limited collaboration while at hospital A the CEO was highly involved. Another critical boundary within the organisation is not functional but rather hierarchical as implementation of quality standards can be compromised if the senior executive is not demonstrating or sharing the same interest with the members of the team. Thus, information flow will be affected as there will be less interaction due to the chain of command that needs to be followed.

Failure of leadership can highly compromise organisational strategy in meeting policy and legal mandates. Thus, relationship and interaction of actors within the network is critical for organisation strategy. SNA can assist in diagnosing mishaps between the actors of the network. Given the strategic importance of the decisions that the management makes it provides insight into ways to improve effectiveness for organisational strategy and improve network connectivity.

6.6 CONCLUSION

The chapter discussed results of the social network analysis and discovered that relationship plays a vital role in healthcare system in order to implement the policy and enable compliance of the six KPAs of the NCS. The roles of the key actors in the relationships are found to comprise financial planning and management, infection prevention and control, ensuring the appropriate use of equipment and technologies, human resource management and decision making. This study identified cross cutting implementation successes and weaknesses at the two tertiary hospital in Gauteng.

CHAPTER SEVEN: INTEGRATION OF RESULTS OF THE STUDY

7.1. INTRODUCTION

This chapter draws from the previous results reported in chapters 4-6 of the study. The objective in this section was to provide recommendations drawn from semi structured interviews and social network analysis findings in order to improve implementation of the six KPAs of the NCS in Gauteng Province. In reviewing the content and the context, it became clear that the actors were similarly intended to address inequities emanating from previous discriminatory laws and practices. In order to integrate the findings of the three phases of this study, the researcher and supervisors compared the findings related to both hospital A and B to develop an understanding of how policy implementation is done in the best and worst performing hospitals.

The research question that guided this study was “What are the dynamics that influence compliance with the six key priority areas (KPAs) of the National Core Standards (NCS) at the best and worst performing hospitals in Gauteng?” The study was nested within Walt and Gilson’s (1994) health policy triangle that helps to systematically think about all the different factors that may affect the health policy as depicted in Figure 7.1 below:

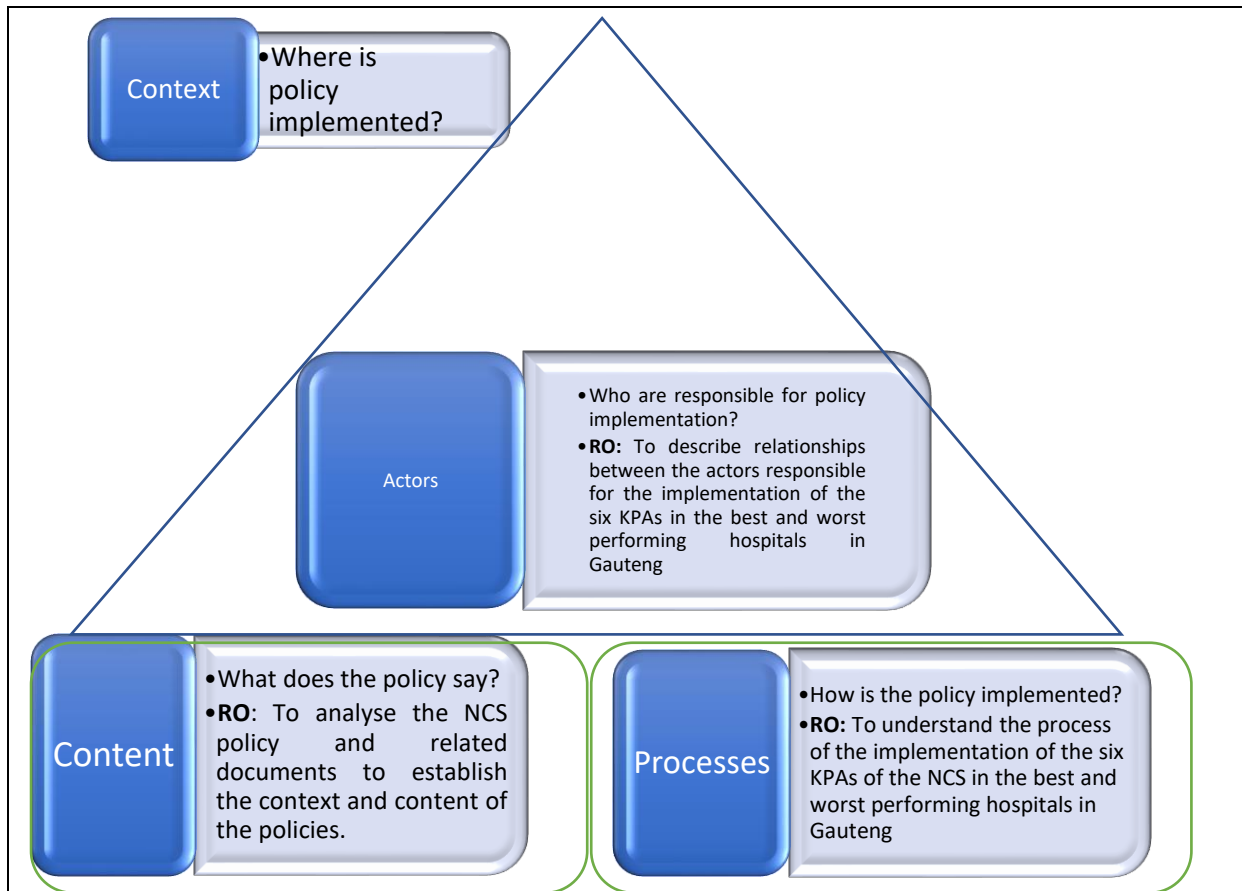


Figure 7. 1: Adapted from Walt and Gilson's Health Policy Triangle (1994)

In order to explore the context, content and process aspects of the framework, the study was divided into phases:

Phase 1: The objective was to analyse the NCS policy and related documents to establish the context and content of the policies. In order to meet this objective, a document analysis was done of the policies and procedures relating to the development and implementation of the National Core Standards (NCS), and specifically the six key priority areas within the NCS. This phase addressed the content aspect of the Walt and Gilson policy framework (1994) but also highlighted issues relating to context and processes mentioned in the documents.

Phase 2: The objectives were to understand the process of the implementation of the six KPAs of the NCS in the best and worst performing hospitals in Gauteng and to

identify enablers and barriers that influence compliance with the six KPAs of the NCS in the best and worst performing hospitals in Gauteng. In order to meet this objective, semi-structured interviews were held with key informants at both hospitals. This assisted in addressing both the context and the process aspects of the Walt and Gilson policy framework (1994).

Phase 3: The objective was to describe relationships between the actors responsible for the implementation of the six KPAs in the best and worst performing hospitals in Gauteng. In order to meet this objective, a qualitative social networking analysis was done which complemented the understanding of the context and the process of the Walt and Gilson policy framework (1994).

Phase 4: The objective was to provide recommendations on the improved implementation of the six KPAs of the NCS in the Gauteng Province and relates mainly to the actors in the framework as they are the people who are responsible for improved implementation. In order to do this the results of the first three phases were triangulated during an iterative process and organized according to the guiding policy framework of Walt and Gilson (1994). This chapter describes the findings of 3 phases of the study to provide critical analysis of the results.

7.2. SUMMARY OF METHODS OF THE THREE PHASES OF THE STUDY USED IN RELATION TO THE WALT AND GILSON FRAMEWORK (1994)

This chapter provides a summary of the findings of three phases of the study utilizing the Walt and Gilson policy framework (1994) to explore the dynamics of compliance in relation to the actors, content of the policy, processes and contextual factors that influence implementation. In particular, this framework was useful in conceptualising and organising facts around key policy design and implementation dynamics.

7.2.1. The Document Reviews

In this phase, a document review was undertaken of a total of sixteen (16) documents pertinent to the policies and guidelines relating to the six KPAs of the NCS. The inclusion criteria were limited to publications of the audit reports and policy documents that addressed compliance to the quality standards, and regulations that govern compliance to quality standards. The macro, micro, policy, and legal context of the NCS were analysed and the content of the policy document were also outlined. Finally, the implementation process of the NCS and NHI policy was discussed.

7.2.2. Semi-Structured Interviews

A total of 30 semi structured interviews were conducted with 15 participants per hospital. At each hospital the following key informants were interviewed: the quality assurance manager (n=1), hospital managers (n=5), a pharmacist (n=1) and frontline staff (n=8). Due to the structured nature of the interview guide and the style of questioning a priori codes were used as the themes for the analysis. These a priori codes were therefore: understanding of the KPA's, (perceptions of) the process of implementation of the NCS and the six KPA's, barriers to compliance with the NCS's and enablers of compliance.

7.2.3. Social Network Analysis

This phase of the study was undertaken in order to describe relationships between the actors responsible for the implementation of the six KPAs in the best and worst performing tertiary hospitals in Gauteng. Social networking analysis (SNA) was useful in analysing relationships and connectedness amongst actors involved in the implementation of the six KPAs of the NCS. The researcher met with the members of staff of each hospital according to the persons they had identified as being responsible for the implementation of the six KPAs of the NCS which is quality assurance manager. A mapping process was done according to Net-Map (2007) and the findings were analysed according to Tichy et.al (1979).

7.3. SUMMARY OF THE FINDINGS OF THE THREE PHASES OF THE STUDY

As highlighted in the introduction of this chapter, the research question for this study was “What are the dynamics that influence compliance with the six key priority areas (KPAs) of the National Core Standards (NCS) at the best and worst performing hospitals in Gauteng?” The results of the study showed that design of the assessment tool, structure issues at the hospitals, leadership and governance, human resource allocation, training and procurement of goods and services all had impact on the implementation of the NCS and related policies. Data was integrated within this framework, and it was clear that there were overlapping elements in the provision and implementation of the NCS policy.

7.3.1. Content of the NCS Policy

The Walt and Gilson policy framework (1994) includes an interrogation of the key components of the policy, the implementation plan and the gaps in content. The key components and the implementation plan, including problems with implementation are described based on the document review and input from participants. Participants did not identify gaps in content of the policy as such.

7.3.1.1. Key components

Prior to 1994 there was no policy relating to quality standards in South Africa. The NCS policy was enshrined from the National Health Act, 61 of 2003 and developed with an intent to emulate international efforts in order to improve quality of care for all. Due to the past inequalities in South Africa, redress was needed in relation to the provision of quality of health care post 1994 not only to improve the quality of health care but also to promote equal access of healthcare services to all. The NCS policy was established in 2008 as part of the implementation of the 10-point plan with the objective of establishing a benchmark to be used to assess the public health establishments, identify gaps and appraise strengths related to continuous improvement as well as to provide for a national certification framework of the health establishments.

Furthermore, the NCS policy was designed to develop a collective definition of the quality of care which should be accessed in all healthcare establishment in South Africa and to act as a guide to the public, health managers and staff members across all levels of care. Thus, within the provisions of the National Health Act, no 61 of 2003 the OHSC was established and tasked with the responsibility of overseeing the processes involved in the implementation of, and compliance to the NCS. In Walt and Gilson's policy framework (1994), the question asked in relation to content is, "What does the policy say?" It was clear from analysing the data that what the policy says and what is done (process) are not always the same in practice.

In order to fastrack implementation of the NCS policy, the then Minister of Health, Dr Aaron Motsoaledi, identified six KPAs from the seven domains of the NCS for quality improvement based on the concerns raised through surveys, complaints and media reports (NCS, 2011:2). These KPAs were values and attitudes, cleanliness, waiting times, availability of medicine, patient safety and security and lasty infection prevention and control.

7.3.1.2 Major challenges related to the implementation of the NCS policy

Results from the document analysis of this study revealed that there was inequitable distribution of resources between the private and the public health sector. It was therefore challenging to have a "one size fits all" approach as had been intended.

The policy was distributed in the form of hard copies and did not reach all the stakeholders responsible for implementation. Only healthcare managers of the health establishment received the policy. Although electronic copies were available, limited access to the internet and unavailability of Wi-Fi created a barrier to accessing the policy by all role players at the public health facilities.

Detailed criteria and measures, although developed, were not made available to the healthcare workers. As such the policy was characterised by a lack of clear

imperatives and requirements for implementation and monitoring of quality improvement interventions. Translation of NCS policy into practice was limited by inadequate planning and monitoring of quality standards and further worsened by lack of awareness of healthcare workers about quality-of-care policies.

Due to the inadequacies of compliance in the initial round of assessments, the six KPAs were selected to enable health care providers to focus on these priority areas. The structure of the NCS policy was explained in detail in chapter 4 which also explains where, and why, the six KPAs emanated.

With regard to values and attitudes, results of document review reports revealed that healthcare staff were often rude and uncaring towards patients while the healthcare workers blamed a lack of recognition for the efforts and demotivation as the reason for the poor attitude towards the patients.

The staff cited common shortages of cleaning materials and cleaning staff as the reason for non-compliance to cleanliness. The NDoH (2010) report further supported the notion that hospitals and clinics are untidy and unhygienic which was further escalated by unavailability of cleaning material and equipment. Thus, the provision of NCS policy for this KPA remains unmet.

The NCS policy further provides for the reasonable waiting times to receive the care at healthcare facilities. The results of document review pointed out that patients were still complaining of long waiting hours before issuing of files, seeing a clinician and receiving medication. Reports further revealed that patients were dying while waiting for the medical attention.

Findings from the document review and related reports on the patient safety and security revealed that guidelines and procedures were not implemented consistently thus, avoidable injuries and deaths of patients resulted in escalated medical errors and lawsuits against the health authorities.

With regards to the KPA of infection prevention and control at the healthcare facilities, results of the report revealed that basic rules of infection prevention and control are not followed as the management does not prioritize this issue.

Availability of medicine is another core element and thus the policy provides that the medication prescribed is to be issued on the same day. Reports pointed out that shortage of essential medicine still remained a challenge in the healthcare facilities countrywide with problems occurring both with the supplier and the health establishment. Patients seen by medical personnel were not receiving prescribed medication on the same day.

The literature survey conducted for this study revealed a significant number of healthcare management dynamics including performance skills associated with managers and roles of healthcare managers in meeting quality clinical standards in healthcare service settings. The literature findings further presented information on the scope, domains, six KPAs, and assessment measurement tools as outlined in the South Africa's NCS.

The NCS, NHI and norms and standards policies address the common past inequalities, structural challenges and barriers to universal health coverage. It was clear that while the NCS and KPAs were developed in an attempt to meet the SDG agenda of the World Health Organisation guidance, implementation remains problematic, and the factors impacting on compliance are multi-factorial. Content of the policy does not guarantee implementation.

7.3.2. Context of the Policy Implementation at the Healthcare Establishment

The NCS policy was designed as an effort to improve quality of healthcare provision for health establishments in both the private and the public sectors in South Africa. Walt and Gilson's policy framework (1994) relates to the political, socio-economic and health sector reforms i.e. questions about where the policy was implemented and

situation therein. Therefore, the results of the SSI and SNA informed the context of the health establishments of both the best and worst performing hospitals in Gauteng.

7.3.2.1 Political conditions on policy implementation

Due to political influence and pressure the policy was approved without consideration of structural and economic conditions of the health establishments. The two hospitals in review were originally used as regional hospitals but designated as tertiary hospitals due to political influence and without addressing the structural issues and human resource to cater for such change. The results of this study in both hospital A and B revealed that the policy was imposed on frontline staff without providing them with full knowledge of the content of the policy. Participants in hospital A, which was the best performing hospital, had generalised knowledge of the NCS policy without full knowledge of specific KPAs while in hospital B, which was the worst performing facility, participants were better in narrating the six KPAs of the NCS as compared to hospital A. The findings in hospital A revealed that good performance was not based on the knowledge of standards but on compliance during assessment rather than improving quality as such. They had prepared specifically to meet the standards and criteria at the time of the audit. In hospital B actors demonstrated knowledge but compliance was poor. It was therefore clear that the content of the policy may be good and useful, but knowledge of the policy, or lack of it, does not influence compliance. Unless structures and conditions are in place to support the staff in their endeavours to comply, such a policy cannot succeed in improving quality.

7.3.2.2 Impact of policy on the health sector reform

Public health structures do not enable policy implementation with a result that the NCS policy does not receive support from the implementors and managers. Participants were of the view that the change of policy needed accompanying resources to make the policy work. In both hospital A & B compliance to the policy was only done for assessment purposes. The context of policy was viewed as not fit for the state of both tertiary hospitals.

Further the six KPAs were explored and discussed in relation to the context of both health establishments. Despite being the “best performing hospital” in terms of the compliance scores, participants in hospital A raised a concern regarding staff attitudes and stated that there had been several incidents in which patients were not treated with respect and some patients even dread visiting hospitals because of the treatment that they get from healthcare staff. Participants in hospital B pointed out that the majority of healthcare staff still display negative attitudes towards patients and towards their work in general and blamed the poor working conditions for this phenomenon.

Due to structural barriers and shortages of human resources and limited equipment, monitoring of waiting times was cited as a continuing challenge in some areas at the two tertiary hospitals. Hospital A had long queues at pharmacy as there are many specialized clinics and one pharmacy to cater for all outpatient clinics while at hospital B long queues were at outpatient department clinics while patients were still waiting for medical attention. Waiting time frames are displayed to comply with the policy but not adhered to in either of the hospitals. The difference was where the bottlenecks appear to exist.

The intention of the NCS policy to improve cleanliness at the hospital are hampered by the shortage of cleaning material and staff. Hospital A noted an improvement in cleanliness as there were cleaning marshalls doing rounds. However, the shortage of cleaning material limited efforts to achieve compliance. Hospital B participants stated that keeping the hospital clean was not possible as there was shortage of cleaners. Responses in this study therefore indicate that the implementation of the NCS has not yet reached the expected levels since the situation of cleanliness at hospital has not improved significantly in both hospitals. In Hospital A the bigger problems seemed to be a lack of supplies whereas in Hospital B it was a lack of cleaning staff.

Regarding the drug stocks and procurement of equipment, tender processes adopted by the DoH to procure and fix equipment are not sufficiently flexible for smooth implementation of the NCS policy. In hospital A the tender process was blamed as contributing to poor allocation of resources while in hospital B the high volume of

patients was cited as the contributing factor for the high demand of the resources available. The responses from participants at both hospitals indicate that this KPA has so far not shown sign of improvement since the implementation of the NCS policy would appear to be a systems issue that cannot be resolved at institutional level.

Infection prevention and control was viewed as problematic due to lack of support from hospital managers and overcrowding at the hospitals. In hospital A the participant from the infection control section stated that infection control was not given priority and support like other areas of the KPAs of the NCS. In hospital B participants reported that structural issues that had not been addressed had resulted in the staff using the sluice room to conduct activities that were not relevant for the purpose of the room. It can therefore be noted that the KPA that relates to infection prevention and control has not so far been successfully implemented in either hospital. One due to lack of support from managers and the other due to lack of infrastructure.

The methods of governance varied significantly in the two hospitals which had a direct impact on the context of policy implementation. In hospital A, a participatory management approach was used with democratic lines of management while hospital B used authoritarian approach in implementing the NCS policy. The study revealed that there was a tendency to work in silos within different departments in both hospitals. QA managers are assigned full responsibility and accountability for the implementation of the NCS policy at both hospitals to the extent that it is seen as their responsibility rather than being shared by all staff members in the hospitals. Priorities of the senior executives of the hospitals influence the attention given to various standards whereas policy stipulates that all KPAs should be equally implemented, and as such implementation remains the responsibility of the leadership. Exchange of information was limited in both hospitals, although in different departments, where an open door policy was lacking so that staff members, including frontline staff, were unable to discuss matters that affect implementors of the policy.

7.3.3. Processes in policy implementation

Policy implementations serve as an integral part of policy process as ineffective implementation may result in policy failure despite the quality of the policy document. To understand processes of policy implementation Walt and Gilson policy framework (1994) ask the question “How is the policy implemented”. The objectives of the semi structure interviews of the study were to explore the process of the implementation the six KPAs of the NCS and to identify enablers and barriers that influence compliance with the six KPAs of the NCS in the best and worst performing tertiary hospitals in Gauteng.

In response to address quality gaps of the health establishment in South Africa, the NCS were established in 2008 and underwent a pilot test using the sample of both private and public. The pilot audit revealed that there was poor compliance thus KPAs were introduced to fast-track implementation and to focus effort to improve quality. All provinces were mandated to establish the quality assurance division however, the levels of responsibilities taken by provincial directorate varied amongst provinces. Institutionally, the QA managers in both hospitals were portrayed as the key drivers of policy implementation and compliance and therefore the implementation of the policy was dependent on their capabilities and motivation and also the level of accountability allocated to QA managers.

7.3.3.1. Internal challenges of the health establishment

This section highlights internal challenges facing the health establishment as such, lack of role clarification, lack of adequate training and mentoring on policy implementation, lack of influence and authority, lack of communication to enable policy implementation, inadequate distribution of resources and inadequate distribution of staff to implement policy was discussed.

- **Lack of role clarification and expectations**

Research participants highlighted that there was role ambiguity in relation to particular roles that relate to NCS policy implementation. It has been revealed that one of the major problems that are hardly ever raised in the management meetings is that of duplication of roles and ambiguous responsibilities that are faced and the existing problem of unclear reporting flow to senior management. The study discovered that a lack of role clarification and expectations lead to poor implementation which may jeopardise compliance. In hospital A the problem was not as evident as actors were clear on their roles and know what is expected of them in relation to their key functions while in hospital B actors are not assigned specific activities that aid implementation and compliance to the quality standards. A lack of clarification of roles results in a lack of accountability.

- **Lack of adequate training and mentoring on policy implementation**

Research participants alluded to a lack of staff training and capacity building on the quality standards content, intent and KPAs which consequently resulted in limited knowledge of the NCS and KPAs. As such compliance to the set standards becomes poor. There was no human resource development plan in place to address training needs and thus “hit and run” (informal) training is done only when there is an upcoming assessment. This lack of training means that most employees are not aware of what they are expected to do in terms of implementing the policy and its KPAs until shortly before an assessment. Participants who had received formal training felt that it was not adequate to equip them with the full knowledge to effectively implement the NCS in their hospitals.

- **Lack of influence and authority**

Results of the social network analysis exposed that influence and authority in implementing the NCS policy and compliance to frontline staff is at times undermined.

Further, the findings revealed that there is a negative perception from some staff members who at times respond to authority only when a manager show a high level of commitment in policy implementation and monitoring of activities for compliance. The study revealed that both in hospital A and B, the QA managers were the key actors in influencing the implementation of the six KPAs of the NCS as compared to other actors in the network. In hospital A, the CEO was supportive of the quality assurance manager with regard to the implementation of the six KPAs of the NCS which had a positive influence on compliance. In hospital B, the CEO is not supportive of the quality assurance manager and gives the assistant director more power to influence the implementation of the six KPAs of the NCS. Also, in hospital B the support staff were portrayed as playing a key role on influencing the implementation of the standards.

- **Lack of communication to enable policy implementation**

A failure of leadership to communicate details of requirements for compliance provides insufficient support for implementation of the NCS policy and its KPAs and there is therefore little buy-in from the people on the ground. In both hospitals the actors stated that they have direct communication with the QA assurance department and share relevant information in order to comply with the six KPAs of the NCS. In hospital A, the CEO exchanges information directly with the relevant actors while in hospital B the CEO only exchanges information with the executive during EXCO meetings.

- **Inadequate distribution of resources**

According to all participants, compliance with the NCS is seriously hampered by the shortage of financial and other resources. The participants indicated that the implementation of the NCS was not accompanied by efforts to ensure that the hospitals and clinics are well resourced so that the KPAs can easily be implemented. The shortage of human resources in hospitals is therefore one of the major impediments to the implementation of quality standards. As such even if the staff understand the quality standards and have the skills to implement them, the shortage

of staff and resources prevents such implementation. Capacity of the hospitals regularly exceeded due to high volume of patients using services.

- **Inadequate distribution of staff to implement policy**

The interview responses revealed staff shortages as one of the major barriers to compliance with the NCS in both hospital A and B. All the participants concurred that the hospitals do not have the ideal number of healthcare workers to ensure that the six KPAs are fully implemented. Increased workloads do not make it possible to adhere to the quality standards that are outlined. Responses show that the staff complement at the hospitals does not allow for compliance with the NCS since KPAs such as waiting times, cleanliness, and values and attitudes require the adequate staffing of all units in the hospitals.

7.3.3.2. External challenges to policy implementation

This section highlights reviews external challenges faced by the health establishment in both hospital A and B. Primary findings included discussion of the assessment tool and lack of adequate support from hospital management and provincial department of health.

- **Assessment tool**

Results from the review of policy documents indicated that an assessment tool is an important aspect in the implementation of quality standards. However, the participants were of the opinion that the assessment tool itself is one of the barriers to the successful implementation of the NCS. According to the participants, the assessment tool that is used to assess the level of compliance with health standards does not take into account the different circumstances faced by different health care institutions. Assessment questions are the same for all hospitals, but these institutions have different circumstances and at times different administrative procedures and thus a one size fits all approach was not, in their opinion, appropriate. The result is that the

assessments do not reflect the situation that is prevailing at the hospitals. The participants raised a concern that the tool does not have a “Not Applicable” option so in this case, a hospital would be rated as a “No” and therefore penalized. The audit report of 2017/18 stated that assessment tool provides for all levels of care as health establishments are not the same, but this does not allow for differences in health facilities within any one type of health care institution.

- **Lack of adequate support from hospital management and provincial department of health**

Research participants raised a concern with the lack of support from the provincial DoH and further added that there is a general lack of feedback from the province thus pointing to impediments in healthcare management efforts in meeting the six KPAs of the NCS. Feedback on critical decisions that affect implementation of the quality standards from the province is at times delayed such that the healthcare managers are forced to work within the minimal resources while at the same time expected to meet and exceed the standards. Results shows that eighty percent (80%) of the respondents in both hospital A and B raised a concern with the lack of adequate support from hospital management and the provincial Department of Health (DoH).

7.3.4 Actors in policy implementation

Actors as the implementors of the policy play a critical role in compliance and thus the relationship between the actors responsible for the implementation of the six KPAs of the NCS. In Walt and Gilson’s (1994) original work, emphasis was placed on “who influenced policy.” This study explored the actors involved in the implementation of the policy rather than the development thereof. The QA managers in both hospitals interact directly with all stakeholders responsible for policy implementation without following a specific chain of command and adapt their roles according to circumstances. This allows the integration of unique knowledge and skills of each actor which could promote work relationships and teamwork. Results further revealed that

the expertise of actors should be recognised in order to reduce bottlenecks and improve compliance of the standards. Leadership that is not supportive and does not share the same interest with all actors responsible for policy implementation compromises compliance to standards. Therefore, all staff members from the executive to the support staff play vital role in policy implementation and compliance as such strong relationships and open communication should be fostered.

The processes that have assisted implementation were open and good communication, involvement and support of leadership, involvement of all stakeholders however these enablers were only observed in few sections within the hospitals.

The researcher was left with the impression that the quality managers and many of the other stakeholders (the actors) interviewed and included in the SNA were keen to comply but felt overwhelmed by lack of knowledge and a lack of resources. The quality assessments were seen as yet another hurdle to overcome rather than being a means to improving quality for the patients they clearly care about.

7.4. RECOMMENDATIONS OF THE STUDY

The recommendations of this study focus on healthcare practice, education and future research.

7.4.1. Recommendations for Healthcare Practice

- The assessment tool needs to be reviewed to allow for a “not applicable” option so that it is seen as being fair to health care establishments with differing circumstances and resources.
- A culture of open communication amongst role players needs to be established to improve compliance.

- Leadership support and involvement needs to be prioritized in all healthcare establishments to enable a suitable environment for policy implementation of quality standards and compliance.
- Involvement of all stakeholders including frontline staff on issues affecting implementation and compliance should be encouraged.
- Senior managers in the province need to review governance processes and procedures at the hospitals and support institutional managers to have a participative management approach to quality assurance.
- Accountability needs to be assigned to implementors for non-compliance and corrective actions to be made.
- Urgent attention is needed relating to the shortages of staff and other resources in the province.

7.4.2 Recommendations for the Healthcare Education

- Attention needs to be given in prioritising the training of all role players in policy implementation.
- Quality assurance staff from various health establishments should be given the opportunity to conduct audits at other facilities to gain experience and understanding on how audits are done.
- Healthcare managers need to coordinate capacity building and training workshops to clinical, support and administrative staff on the NCS and its six KPAs, consequences for non-compliance and measures required for compliance.
- A quality assurance module needs to be included in the undergraduate programmes for all healthcare professionals and also in the post-graduate programmes.
- The Office of Health Standards Compliance (OHSC) needs to work with educators to design a specific in-service programme relating to quality audits and compliance issues.

7.4.3. Recommendations for Future Research

- The OHSC should conduct a study to assess the best and the poor performing facilities at each level of care to gain insight into compliance of quality standards using latest data.
- Social network analysis should be more widely used when conducting studies related to quality improvement as it highlights the importance of relationships and interaction of stakeholders in policy implementation which will lead to deeper understanding of problems in the healthcare sector.

7.5 LIMITATIONS OF THE STUDY

Although the best and the worst performing hospital were purposefully selected for this study, the results were limited to two tertiary hospitals in study and may not be applicable to other healthcare establishments. The two tertiary hospitals were not necessarily representative of compliance within the Gauteng province and other provinces. As the study was conducted at a time when Covid 19 restrictions were tight, the protocols may have limited interaction of participants and compromised selection of participants.

Qualitative social networking analysis is not widely used making it difficult to compare procedures with previous studies and to learn from prior experiences.

It is possible that social desirability bias crept into the social networking analysis as the SNA exercise was conducted with the quality managers present. Other participants may not have felt free to refute what was said by the quality managers.

7.6 CONCLUSION

The use of a combination of the different research methods in this study was helpful to integrate the findings in order to answer the research question which related to identifying the dynamics of compliance with the six KPAs of the NCS. This study

identified cross cutting implementation successes and weaknesses at the two tertiary hospital in Gauteng. For an example, common implementation challenges in both hospitals were shortage of staff, lack of support from senior management, lack of training and structural issues that were not addressed to enable smooth implementation of the policy. An important lesson derived from this study is that involvement of all stakeholders and support, accompanied by proper training plans, can improve compliance to quality standards to achieve intended purpose of the policy.

The NCS policy is totally dependent on human resources to make the policy work. Human resource management at both tertiary hospitals points to an overburdened staff. This could be a determinant of poor staff values and attitudes that continue to be a concern at the two case study hospitals. It might be difficult to identify how many staff are needed in a particular section at the hospital but staffing norms can be beneficial in remedying the situation by identifying the minimum number needed and cadres of staff needed in order to alleviate challenges associated with shortage of staff and this can further assist with the training needs.

It is clear from this, and many other studies, that policy in itself cannot resolve the problems in the health services and can also not improve quality of care unless it is implemented within a well-planned national strategy to address many issues hampering its implementation.

REFERENCES

- Abera Abaerei, A., Ncayiyana, J. and Levin, J., 2017. Health-care utilization and associated factors in Gauteng province, South Africa. *Global health action*, 10(1), p.1305765.
- Abduzzahraal-Hojjaj, A.P.Y., 2020. Public Managers and The Process of policy-making: Why do Public Managers Need to Understand Policy-Making? *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), pp.16881-16894.
- Abubakar, M., Basiru, S., Oluyemi, J., Abdulateef, R., Atolagbe, E., Adejoke, J. and Kadiri, K., 2018. Medical tourism in Nigeria: Challenges and remedies to health care system development. *International journal of development and management review*, 13(1).
- Achwoka, D., Waruru, A., Chen, T.H., Masamaro, K., Ngugi, E., Kimani, M., Mukui, I., Oyugi, J.O., Mutave, R., Achia, T. and Katana, A., 2019. Noncommunicable disease burden among HIV patients in care: a national retrospective longitudinal analysis of HIV-treatment outcomes in Kenya, 2003-2013. *BMC public health*, 19(1), pp.1-10.
- Aggarwal, A., Aeran, H. and Rathee, M., 2019. Quality management in healthcare: The pivotal desideratum. *Journal of Oral Biology and Craniofacial Research*, 9(2), pp.180-182.
- Ali, M., Tao, L., Shaikh, A.A. and Sajid, M., 2017. The political leadership and corporate governance: an analysis of leadership theories and its influence. *International Journal of Basic and Applied Sciences*, 6(3), pp.45-50.
- Allen-Duck, A., Robinson, J.C. and Stewart, M.W., 2017, October. Healthcare quality: A concept analysis. *Nursing forum* 52(4) pp. 377-386

- Anney, V. N. 2014. Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272-281.
- Archibong, U. and Adejumo, O., 2013. Affirmative action in South Africa: Are we creating new casualties?. *Journal of Psychological Issues in Organizational Culture*, 3(S1), pp.14-27.
- Armstrong, S.J., Geyer, N.M. and Bell, C.A., 2019. Capacity of South African nursing education institutions to meet healthcare demands: A looming disaster? *International Journal of Africa Nursing Sciences*, 10, pp.92-101.
- Babbie, E., 2012. *The Practice of Social Research*, 11th Edition, Wadsworth Publishing, Belmont.
- Badubi, R.M., 2017. Theories of motivation and their application in organizations: A risk analysis. *International Journal of Innovation and Economic Development*, 3(3), pp.44- 51.
- Balabanova, D., McKee, M., Mills, A., Walt, G. and Haines, A., 2010. What can global health institutions do to help strengthen health systems in low income countries?. *Health Research Policy and Systems*, 8(1), pp.1-11.
- Balogun, J., Gleadle, P., Hailey, V.H. and Willmott, H., 2005. Managing Change Across Boundaries: Boundary-Shaking Practices 1. *British Journal of Management*, 16(4), pp.261-278.
- Bason, C., 2018. Leading public sector innovation: Co-creating for a better society. Policy press.
- Bhattacharjee, A., 2012. *Social science research: Principles, methods, and practices*. University of South Florida.
- Bakre, O. and Abdul-Kareem, K., 2019. Upscaling the South African health sector through the integration of skilled migrants. *African Journal of Inter/Multidisciplinary Studies*, 1(1), pp.109-119.

- Benatar, S., 2013. The challenges of health disparities in South Africa. *SAMJ: South African Medical Journal*, 103(3), pp.154-155.
- Bodin, Ö., Mancilla García, M. and Robins, G., 2020. Reconciling conflict and cooperation in environmental governance: a social network perspective. *Annual Review of Environment and Resources*, 45, pp.471-495
- Booyens, SW, 2008. *Introduction to Health Services Management*. 3rd edition. Cape Town: Juta.
- Boonstra, J.J. and Vink, M.J., 1996. Technological and organizational innovation: A dilemma of fundamental change and participation. *European Journal of Work and Organizational Psychology*, 5(3), pp.351-375.
- Borgatti, S.P. and Cross, R., 2003. A relational view of information seeking and learning in social networks. *Management science*, 49(4), pp.432-445.
- Borgatti, S.P. and Foster, P.C., 2003. The network paradigm in organizational research: A review and typology. *Journal of management*, 29(6), pp.991-1013.
- Borgatti, S.P., Mehra, A., Brass, D.J. and Labianca, G., 2009. Network analysis in the social sciences. *science*, 323(5916), pp.892-895.
- Bowen, G.A., 2009. Document analysis as a qualitative research method. *Qualitative research journal*, 9 (2). 27-40
- Boyce, C. and Neale, P., 2006. *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input*.
- Broffman, L., Spurlock, M., Dulacki, K., Campbell, A., Rodriguez, F., Wright, B., McConnell, K.J., Warne, D. and Davis, M.M., 2017. Understanding treatment gaps for mental health, alcohol, and drug use in South Dakota: A qualitative study of rural perspectives. *The Journal of Rural Health*, 33(1), pp.71-81.

- Brooks, J., McCluskey, S., Turley, E. and King, N., 2015. The utility of template analysis in qualitative psychology research. *Qualitative research in psychology*, 12(2), pp.202-222.
- Brousseau, E., 2000. Incomplete contracts and governance structures: are incomplete contract theory and new institutional economics substitutes or complements? *Chapters*.
- Buljac-Samardzic, M., Doekhie, K.D. and van Wijngaarden, J.D., 2020. Interventions to improve team effectiveness within health care: a systematic review of the past decade. *Human resources for health*, 18(1), pp.1-42.
- Bullock, H.L. and Lavis, J.N., 2019. Understanding the supports needed for policy implementation: a comparative analysis of the placement of intermediaries across three mental health systems. *Health research policy and systems*, 17(1), pp.1-13.
- Burches, E. and Burches, M., 2020. Efficacy, effectiveness and efficiency in the health care: The need for an agreement to clarify its meaning. *Int. Arch. Public Health Community Med*, 4, p.35.
- Burhans, L.M. and Alligood, M.R., 2010. Quality nursing care in the words of nurses. *Journal of advanced nursing*, 66(8), pp.1689-1697.
- Busse R, Panteli D, Quentin W. 2019. An introduction to healthcare quality: defining and explaining its role in health systems. Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies. Copenhagen (Denmark): European Observatory on Health Systems and Policies (Health Policy Series, No.53.)1. Available from <https://www.ncbi.nlm.nih.gov/books/NBK549277/>

- Caldwell, S.E., Mays, N. Studying policy implementation using a macro, meso and micro frame analysis: the case of the Collaboration for Leadership in Applied Health Research & Care (CLAHRC) programme nationally and in North West London. *Health Res Policy Sys* 10, 32 (2012). <https://doi.org/10.1186/1478-4505-10-32>
- Carthey, J., Walker, S., Deelchand, V., Vincent, C. and Griffiths, W.H., 2011. Breaking the rules: understanding non-compliance with policies and guidelines. *Bmj*, 343.
- Centers for Disease Control and Prevention (CDC), 2009. Data collection methods for evaluation: Document review (No.18). Retrieved from website: <http://www.cdc.gov/healthyyouth/evaluation/pdf/brief18.pdf>
- Centre for Public Research and Leadership, 2017. Diffusion Levers Evaluation Toolkit: Network Weaving Progress. Social network analysis.
- Chili, P.B. and Matsiliza, N.S., 2021. The Impact of Quality Standards on the Business Performance of Small, Medium and Micro-Sized Enterprises in Kwazulu-Natal: Selected Cases in the Durban Metropolitan Area.
- Coleman, C 2013. Two decades of freedom: a 20-year review of South Africa. Goldman Sachs [http://www.goldmansachs.com/our-thinking/outlook/colin-coleman-south-africa/20-yrs-of-freedom .pdf](http://www.goldmansachs.com/our-thinking/outlook/colin-coleman-south-africa/20-yrs-of-freedom.pdf). Accessed 4 March 2022.
- Coovadia, H., Jewkes, R., Barron, P., Sanders, D. and McIntyre, D., 2009. The health and health system of South Africa: historical roots of current public health challenges. *The lancet*, 374(9692), pp.817-834.
- Danhoundo, G., Nasiri, K. and Wiktorowicz, M.E., 2018. Improving social accountability processes in the health sector in sub-Saharan Africa: a systematic review. *BMC Public Health*, 18(1), pp.1- 8.

- DeJonckheere, M. and Vaughn, L.M., 2019. Semistructured interviewing in primary care research: a balance of relationship and rigour. *Family medicine and community health*, 7(2).
- Delloite. (2017). *Moving from sick care to health care: A View from the Center*. Deloitte Center for Health Solutions.
- Delloitte. (2018). *Reaching the Unreached: Opportunities for Life Science Companies Within Asia Pacific*. Deloitte US-Global & Deloitte Southeast Asia. Delloitte. (2019). *2019 Global health care outlook: Shaping the future*. Delloitte.
- Denis, J.L., Lamothe, L., Langley, A., Breton, M., Gervais, J., Trottier, L.H., Contandriopoulos, D. and Dubois, C.A., 2009. The reciprocal dynamics of organizing and sense-making in the implementation of major public-sector reforms. *Canadian Public Administration*, 52(2), pp.225-248.
- Digital Promise, 2020. Accessed at <https://digitalpromise.org/wp-content/uploads/2018/09/SNA-Toolkit.pdf> on 26 June 2020
- Donabedian, A., 1966. Evaluating the quality of medical care. *The Milbank memorial fund quarterly*, 44(3), pp.166-206.
- Dramowski, A., Cotton, M.F. and Whitelaw, A., 2017. A framework for preventing healthcare-associated infection in neonates and children in South Africa. *South African Medical Journal*, 107(3), pp.192-195.
- Ebrahim, S., 2018. Reviewing the suitability of affirmative action and the inherent requirements of the job as grounds of justification to equal pay claims in terms of the employment equity Act 55 of 1998. *Potchefstroom Electronic Law Journal/Potchefstroom se Elektroniese Regsblad*, 21(1).

- Edwards, N. and Saltman, R.B., 2017. Re-thinking barriers to organizational change in public hospitals. *Israel Journal of Health Policy Research*, 6(1), pp.1-11.
- Elias, S., 2008. Fifty years of influence in the workplace: The evolution of the French and Raven power taxonomy. *Journal of Management History*.14. 267-283.
- Falbe, C.M. and Yukl, G., 1992. Consequences for managers of using single influence tactics and combinations of tactics. *Academy of Management journal*, 35(3), pp.638-652.
- Falkner, G. and Treib, O., 2008. Three worlds of compliance or four? The EU-15 compared to new member states. *JCMS: Journal of Common Market Studies*, 46(2), pp.293-313.
- Flick, U., 2013. *The Sage Handbook of Qualitative Data Analysis*. Washington DC: Sage
- Figuroa, C.A., Harrison, R., Chauhan, A. and Meyer, L., 2019. Priorities and challenges for health leadership and workforce management globally: a rapid review. *BMC health services research*, 19(1), pp.1-11.
- Freeman, L.C., 1978. Centrality in social networks conceptual clarification. *Social networks*, 1(3), pp.215-239.
- George, G., Atujuna, M. & Gow, J. (2013). Migration of South African health workers: the extent to which financial considerations influence internal flows and external movements. *BMC Health Serv Res* 13, 297 (2013). <https://doi.org/10.1186/1472-6963-13-297> Global Health Security (GHS) Index. 2019. Published 24 March 2020.
- Ghiasipour, M., Mosadeghrad, A.M., Arab, M. and Jaafari-pooyan, E., 2017. Leadership challenges in health care organizations: The case of Iranian hospitals. *Medical journal of the Islamic Republic of Iran*, 31, p.96.

- Gilson, L. and Daire, J., 2011. Leadership and governance within the South African health system. *South African health review*, 2011(1), pp.69-80.
- Golele, F. and Rachidi, M., 2017. The challenges of achieving gender equity in a government department: A case study of the department of health, Limpopo Province, South Africa. *Gender and Behaviour*, 15(3), pp.9584-9606.
- Gona, P.N., Gona, C.M., Ballout, S., Rao, S.R., Kimokoti, R., Mapoma, C.C. and Mokdad, A.H., 2020. Burden and changes in HIV/AIDS morbidity and mortality in Southern Africa Development Community Countries, 1990–2017. *BMC public health*, 20(1), pp.1-14.
- Harris, B., Goudge, J., Ataguba, J.E., McIntyre, D., Nxumalo, N., Jikwana, S. and Chersich, M., 2011. Inequities in access to health care in South Africa. *Journal of public health policy*, 32(1), pp.S102-S123.
- Hartley, J., Benington, J. and Binns, P., 1997. Researching the roles of internal-change agents in the management of organizational change. *British Journal of Management*, 8(1), pp.61-73.
- Hannawa, A.F., Wu, A.W., Kolyada, A., Potemkina, A. and Donaldson, L.J., 2021. The aspects of healthcare quality that are important to health professionals and patients: A qualitative study. *Patient education and counselling*. S0738-3991(21)00675-3.
- Health and Social Care Act 2008 (Regulated Activities) Regulations 2010
<https://www.qcs.co.uk/cqc-health-social-care-act-2012>
- Healthcare Access and Quality Collaborators, 2018. Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet* (London, England), 391(10136), 2236–2271.
[https://doi.org/10.1016/S0140-6736\(18\)30994-2](https://doi.org/10.1016/S0140-6736(18)30994-2).

- Hoffman, S.J. and Cole, C.B., 2018. Defining the global health system and systematically mapping its network of actors. *Globalization and health*, 14(1), pp.1-19.
- Holley, J., 2012. *Network weaver handbook*. Athens, OH: Network Weaver.
- Hsieh, H.F. and Shannon, S.E., 2005. Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), pp.1277-1288.
- Hunter, 2014. The Ideal Clinic in South Africa: planning for implementation. *South African health review*, 2014(1),pp.23-33
- Hussey, P.S., Anderson, G.F., Osborn, R., Feek, C., McLaughlin, V., Millar, J. and Epstein, A., 2004. How does the quality of care compare in five countries? *Health Affairs*, 23(3), pp.89-99.
- Institute of Medicine 2013. *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis*. Washington, DC, National Academies Press.
- Interligi, L., 2010. Compliance culture: A conceptual framework. *Journal of Management & Organization*, 16(2), pp.235-249.
- Jojo, Z., 2019. Mathematics education system in South Africa, education systems around the World. *Intech Open*. London
- Kama, Z. S. 2017. *An evaluation of access to health care: Gugulethu Community Health Clinic*. Cape Town: Master of Technology Dissertation, Faculty of Business Cape Peninsula University of Technology.
- Kelemen, M. and Rumens, N., 2008. *An Introduction to Critical Management Research*. London: Sage.
- Kekae, T. K. 2017. *An evaluation of the public service anti-corruption strategy in the Department of Arts and Culture*. Pretoria: M Phil in Public Policy Dissertation, University of Pretoria.

- Khamis, K. and Njau, B., 2016. Health care worker's perception about the quality of health care at the outpatient department in Mwananyamala Hospital in Dar es Salaam, Tanzania. *Tanzania Journal of Health Research*, 18(1).
- Korstjens, I. and Moser, A., 2018. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), pp.120-124.
- Kruk, M.E., Gage, A.D., Arsenault, C., Jordan, K., Leslie, H.H., Roder-DeWan, S., Adeyi, O., Barker, P., Daelmans, B., Doubova, S.V. and English, M., 2018. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet global health*, 6(11), pp.e1196-e1252.
- Lawati, M.H.A., Dennis, S., Short, S.D. and Abdulhadi, N.N., 2018. Patient safety and safety culture in primary health care: a systematic review. *BMC family practice*, 19(1), pp.1-12.
- Lemke, A.A. and Harris-Wai, J.N., 2015. Stakeholder engagement in policy development: challenges and opportunities for human genomics. *Genetics in Medicine*, 17(12), pp.949-957.
- Leslie, H.H., Ndiaye, Y. and Kruk, M.E., 2017. Effective coverage of primary care services in eight high-mortality countries. *BMJ Global Health*, 2(3), p.e000424.
- Lieberman, E., Hauert, C. and Nowak, M.A., 2005. Evolutionary dynamics on graphs. *Nature*, 433(7023), pp.312-316.
- Lincoln, Y.S. and Guba, E.G., 1982. Establishing dependability and confirmability in naturalistic inquiry through an audit.
- Malakoane, B., Heunis, J.C., Chikobvu, P., Kigozi, N.G. and Kruger, W.H., 2020. Public health system challenges in the Free State, South Africa: a situation appraisal to inform health system strengthening. *BMC Health Services Research*, 20(1), pp.1-14.

- Magee, L.A., Sharma, S., Nathan, H.L., Adetoro, O.O., Bellad, M.B., Goudar, S., Macuacua, S.E., Mallapur, A., Qureshi, R., Sevene, E. and Sotunsa, J., 2019. The incidence of pregnancy hypertension in India, Pakistan, Mozambique, and Nigeria: a prospective population-level analysis. *PLoS medicine*, 16(4), p.e1002783.
- Magobe, N.B., Ally, H. and Mogakwe, L.J., 2019. Recommendations to facilitate managers' compliance with quality standards at primary health care clinics. *Curationis*, 42(1), pp.1-8.
- Manor, J. and Duckett, J., 2017. The significance of political leaders for social policy expansion in Brazil, China, India and South Africa. *Commonwealth & Comparative Politics*, 55(3), pp.303-327.
- Manyisa, Z.M. and van Aswegen, E.J., 2017. Factors affecting working conditions in public hospitals: A literature review. *International journal of Africa nursing sciences*, 6, pp.28- 38.
- Maphumulo, W.T. and Bhengu, B.R., 2019. Challenges of quality improvement in the healthcare of South Africa post-apartheid: A critical review. *Curationis*, 42(1), pp.1-9.
- Martino, F. and Spoto, A., 2006. Social Network Analysis: A brief theoretical review and further perspectives in the study of Information Technology. *PsychNology J.*, 4(1), pp.53-86.
- Matotoka, MD, & Odeku, KO. (2021). Mainstreaming Black Women into Managerial Positions in the South African Corporate Sector in the Era of the Fourth Industrial Revolution (4IR). *Potchefstroom Electronic Law Journal (PELJ)*, 24(1), 1-35. <https://dx.doi.org/10.17159/1727-3781/2021/v24i0a10734>

- Matsoso, P., 2011. National Core Standards for Health Establishments in South Africa. Tshwane, South Africa.
- Mbandlwa, Z., Nirmala, D. and Fagbadebo, O., 2020. Leadership challenges in the South African local government system. *Journal of Critical Reviews*.7:1642-1653
- Mbunge E. (2020). Effects of COVID-19 in South African health system and society: An explanatory study. *Diabetes & metabolic syndrome*, 14(6), 1809–1814.
<https://doi.org/10.1016/j.dsx.2020.09.016>
- McIntyre, D. and Ataguba, J. (2018). *Access to quality health care in South Africa: Is the health sector contributing to addressing the inequality challenge?* Cape Town: Health Economics Unit, University of Cape Town.
- Michel, J., Chimbindi, N., Mohlakoana, N., Orgill, M., Bärnighausen, T., Obrist, B., Tediosi, F., Evans, D., McIntyre, D., Bressers, H.T. and Tanner, M., 2019. How and why policy-practice gaps come about: a South African universal health coverage context. *Journal of global health reports*, 3, p.e2019069.
- Moat KA, Lavis JN, Abelson J. How contexts and issues influence the use of policy-relevant research syntheses: a critical interpretive synthesis. *Milbank Q*. 2013;91(3):604–48.
- Mokoena, M. J. (2017). *Perceptions of professional nurses on the impact of shortage of resources for quality patient care in a public hospital: Limpopo Province*. Pretoria: Master of Arts Dissertion, University of South Africa.
- Moreno, J. L. (1994). *The development of social network analysis*. London: ResearchGate.
- Mosadeghrad, A.M., 2014. Factors influencing healthcare service quality. *International journal of health policy and management*, 3(2), p.77-89

- Moyakhe, N.P., 2014. Quality healthcare: An attainable goal for all South Africans? *South African Journal of Bioethics and Law*, 7(2), pp.80-83.
- Muhwava, L.S., Murphy, K., Zarowsky, C. and Levitt, N., 2018. Policies and clinical practices relating to the management of gestational diabetes mellitus in the public health sector, South Africa—a qualitative study. *BMC Health Services Research*, 18(1), pp.1-16.
- Munzhedzi, P.H. (2016). ‘South African public sector procurement and corruption: Inseparable twins?’, *Journal of Transport and Supply Chain Management* 10(1), Art. #197, 8 pages. <http://dx.doi.org/10.4102/jtscm.v10i1.197>
- Mueller, B., 2020. Why public policies fail: Policymaking under complexity. *Economia*, 21(2), pp.311-323.
- Mumbauer, A., Strauss, M., George, G., Ngwepe, P., Bezuidenhout, C., de Vos, L. and Medina-Marino, A., 2021. Employment preferences of healthcare workers in South Africa: Findings from a discrete choice experiment. *PLoS One*, 16(4), p.e0250652.
- Murray, C.J. and Frenk, J., 2000. A framework for assessing the performance of health systems. *Bulletin of the World Health Organization*, 78, pp.717-731.
- Muthathi, I.S. and Rispel, L.C., 2020. Policy context, coherence and disjuncture in the implementation of the Ideal Clinic Realisation and Maintenance programme in the Gauteng and Mpumalanga provinces of South Africa. *Health Research Policy and Systems*, 18(1), pp.1-15.
- Naher, N., Hoque, R., Hassan, M.S., Balabanova, D., Adams, A.M. and Ahmed, S.M., 2020. The influence of corruption and governance in the delivery of frontline health care services in the public sector: a scoping review of current and future

prospects in low and middle-income countries of south and south-east Asia. *BMC public health*, 20(1), pp.1-16.

National Department of Health, 2007. *National core standards for health establishments in South Africa*. Pretoria: National Department of Health.

National Department of Health 2012. The national health care facilities baseline audit. National Summary Report, Health e-News, in R. Visser, R. Bhana & F. Monticelli (eds.), National Department of Health, Pretoria, South Africa.

National Department of Health, 2013. Regulating the quality of health services: Benchmarking of approaches, institutions and systems, Towards the establishment of an office of health Standards. Republic of South Africa, Pretoria.

National Department of Health, 2016. Statistics South Africa. Mid-year population estimates.

National Department of Health, 2007. *Policy on quality in health care for South Africa*. Pretoria: Government Printers.

National Department of Health. (2010). *National Strategic Plan 2010/11-2012/13*. Pretoria: National Department of Health.

National Health Consultative Forum. 2010. Fast Track to Quality. The Six most critical areas for patient centred care. NDOH. November 2010.

National Department of Health. 2018. Ideal Hospital Realisation and Maintenance Framework Manual 2018. <https://www.idealhealthfacility.org.za>. Accessed 4 March 2022

New South Wales Health Department. 2020. What is a person-centred approach? Available:[https://www.health.nsw.gov.au/mentalhealth/psychosocial/principles/Pages/personcentred.aspx#:~:text=A%20person%2Dcentred%20approach%](https://www.health.nsw.gov.au/mentalhealth/psychosocial/principles/Pages/personcentred.aspx#:~:text=A%20person%2Dcentred%20approach%20)

20is,their%20needs%20and%20unique%20circumstances. Accessed 4 March 2022

- Newton, R.C., Mytton, O.T., Aggarwal, R., Runciman, W.B., Free, M., Fahlgren, B., Akiyama, M., Farlow, B., Yaron, S., Locke, G. and Whittaker, S., 2010. Making existing technology safer in healthcare. *BMJ Quality & Safety*, 19(Suppl 2), pp.i15-i24.
- Neyer, J. and Zürn, M., 2001. Compliance in comparative perspective: The EU and other international institutions.
- Oleribe, O.O., Ezieme, I.P., Oladipo, O., Akinola, E.P., Udofia, D. and Taylor-Robinson, S.D., 2016. Industrial action by healthcare workers in Nigeria in 2013–2015: an inquiry into causes, consequences and control—a cross-sectional descriptive study. *Human resources for health*, 14(1), pp.1-10.
- Oleribe, O.O., Udofia, D., Oladipo, O., Ishola, T.A. and Taylor-Robinson, S.D., 2018. Healthcare workers' industrial action in Nigeria: a cross-sectional survey of Nigerian physicians. *Human resources for health*, 16(1), pp.1-10.
- Oleribe, O.O., Momoh, J., Uzochukwu, B.S., Mbofana, F., Adebisi, A., Barbera, T., Williams, R. and Taylor-Robinson, S.D., 2019. Identifying key challenges facing healthcare systems in Africa and potential solutions. *International journal of general medicine*, 12, p.395.
- Oliver, K., Lorenc, T., Tinkler, J. and Bonell, C., 2019. Understanding the unintended consequences of public health policies: the views of policymakers and evaluators. *BMC Public Health*, 19(1), pp.1-9.
- Onoka, C.A., Hanson, K. and Hanefeld, J., 2015. Towards universal coverage: a policy analysis of the development of the National Health Insurance Scheme in Nigeria. *Health policy and planning*, 30(9), pp.1105-1117.
- Organisation for Economic Cooperation and Development. 2017. *Tackling wasteful spending on health*. Paris: Organisation for Economic Cooperation and Development.

- Pannucci, C.J. and Wilkins, E.G., 2010. Identifying and avoiding bias in research. *Plastic and reconstructive surgery*, 126(2), p.619.
- Pillay-van Wyk, V., Msemburi, W., Laubscher, R., Dorrington, R.E., Groenewald, P., Glass, T., Nojilana, B., Joubert, J.D., Matzopoulos, R., Prinsloo, M. and Nannan, N., 2016. Mortality trends and differentials in South Africa from 1997 to 2012: second National Burden of Disease Study. *The Lancet Global Health*, 4(9), pp.e642-e653.
- Polit, D. F. and Beck, C. T., 2010. *Nursing Research:Appraising Evidence for Nursing Practice*. New York: Wolters Kluwer/ Lippincott Williams & Wilkins.
- Presidential Health Summit. 2018. *Strengthening the South African health system towards an integrated and unified health system*. Johannesburg: The Presidency, Republic of South Africa.
- Quagraine T.L. (2010). 'Employee involvement as an effective management tool in decision-making: A case study of Merchant Bank (Ghana) Limited', MBA thesis, Kwame Nkrumah University of Science and Technology. <http://docplayer.net/8022029-Employee-involvement-as-an-effective-management-tool-in-decision-making-a-case-study-of-merchant-bank-ghana-limited.html>.
- Rensburg, R. 2021. Healthcare in South Africa: how inequity is contributing to inefficiency.<https://theconversation.com/healthcare-in-south-africa-how-inequity-is-contributing-to-inefficiency-163753> Accessed 20 March 2022.
- Rodziewicz, T.L., Houseman, B. and Hipkind, J.E., 2021. Medical error reduction and prevention. *Stat Pearls Publishing, Treasure Island (FL)*
- Rogers, E. M., 2003. *Diffusion of Innovations (5th Ed.)*. New York: Free Press

- Rosell, L., Alexandersson, N., Hagberg, O. and Nilbert, M., 2018. Benefits, barriers and opinions on multidisciplinary team meetings: a survey in Swedish cancer care. *BMC health services research*, 18(1), pp.1-10.
- Rosen, M.A., DiazGranados, D., Dietz, A.S., Benishek, L.E., Thompson, D., Pronovost, P.J. and Weaver, S.J., 2018. Teamwork in healthcare: Key discoveries enabling safer, high-quality care. *American Psychologist*, 73(4), p.433.
- Rychetnik, L., Hawe, P., Waters, E., Barratt, A. and Frommer, M., 2004. A glossary for evidence based public health. *Journal of Epidemiology & Community Health*, 58(7), pp.538-545.
- Saldaña, J., 2021. *The coding manual for qualitative researchers*. Sage.
- Sanusi, F.A. and Johl, S.K., 2021. Assessment of Top Management Commitment and Support on IS Risk Management Implementation in the Business Organization. *Risk Management*, p.275.
- Sarniak, R., 2015. *9 types of research bias and how to avoid them*. Retrieved August 8, 2020, from Quirks.com: <http://www.quirks.com/articles/2015/20150825-2.aspx>
- Saunders, M., Lewis, P. and Thornhill, A., 2016. *Research Methods for Business Students*. England: Prenticehall.
- Schiffer, E. 2007. Net-Map – Influence Mapping of Social Networks. Manual. Presented at the Sunbelt Conference of the International Network of Social Network Analysis, 01-06 May 2007, Corfu, Greece
- Schuster, M.A., McGlynn, E.A. and Brook, R.H., 1998. How good is the quality of health care in the United States?. *The Milbank Quarterly*, 76(4), pp.517-563.
- Sekhon, M., Cartwright, M. and Francis, J.J., 2017. Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC health services research*, 17(1), pp.1-13.

- Setshegetso, Naomi. 2020. *“Financial Risk Protection, Decomposition and Inequality Analysis of Household Out-of-Pocket Health Payments.”* PhD thesis, Department of Economics, Faculty of Economic; Management Sciences, University of Pretoria, Pretoria, South Africa.
- South African Lancet National Commission. 2019. *Confronting the right to ethical and accountable quality health care in South Africa: A consensus report.* Pretoria: National Department of Health, 2019.
- South African Nursing Council: <https://www.sanc.co.za/wp-content/uploads/2021/04/Distribution-2020.htm>
- Sharma, S. K., & Rani, R. (2020). Nurse-to-patient ratio and nurse staffing norms for hospitals in India: A critical analysis of national benchmarks. *Journal of family medicine and primary care*, 9(6), 2631–2637. https://doi.org/10.4103/jfmpc.jfmpc_248_20
- Sutton RS and Barto AG. 2018. *Reinforcement learning: An introduction.* MIT press
- South African National Department of Health NDoH; 2017. *White paper: National Health Insurance Policy. Towards Universal Health Coverage.* Pretoria:
- South African National Health Act 61 Of 2003. Government Notice No. 869, Government Gazette No. 26595; 23 July 2004
- South Africa. Statistics SA. 2020. *Midyear estimates – 2020.* Statistical Release P13453. 9 July. [Online] Available from: <http://www.statssa.gov.za/publications> [Accessed: 2021-04-11]
- South African Health Review, 2018. Health Systems Trust. Durban. South Africa. <http://www.hst.org.za/publications/Pages/SAHR2018>
- Stewart, J. and Wolvaardt, G., 2019. Hospital management and health policy—A South African perspective. *J Hosp Manag Health Policy*, 3, p.14.

- Sturmberg, J.P. and Bircher, J., 2019. Better and fulfilling healthcare at lower costs: the need to manage health systems as complex adaptive systems. *F1000Research*, 8.
- Sweileh, W.M., 2020. Bibliometric analysis of scientific publications on “sustainable development goals” with emphasis on “good health and well-being” goal (2015–2019). *Globalization and health*, 16(1), pp.1-13.
- Tavakoli, H., 2012. *A dictionary of research methodology and statistics in applied linguistics*. Rahnama press.
- Terwindt, F., Rajan, D. and Soucat, A., 2016. Priority-setting for national health policies, strategies and plans. *Strategizing national health in the 21st century: a handbook*, 71.
- The Lancet. [https://www.thelancet.com/journals/lancet/article/piiS0140-6736\(21\)00768-6/fulltext](https://www.thelancet.com/journals/lancet/article/piiS0140-6736(21)00768-6/fulltext)
- Tian, X. and Zhai, X., 2019. Employee involvement in decision-making: the more the better? *International journal of manpower*. 40(4): pp. 768-782
- Tichy, N.M., Tushman, M.L. and Fombrun, C., 1979. Social network analysis for organizations. *Academy of management review*, 4(4), pp.507-519.
- TimesLIVE. 2018. *Eight alarm bells at South African state hospitals*. Retrieved June 15, 2020, from Sunday Times: from <https://www.timeslive.co.za/news/south-africa/2018-06-14-eight-alarm-bells-at-south-african-state-hospitals>
- Traoré, O., 2021. Convergence in public health expenditure across the Sub-Saharan African countries: does club convergence matter? *Health Economics Review*, 11(1), pp.1-14.
- United Nations International Children's Emergency Fund, UNICEF. 2020. Wash Norm Report 2019. Water, Sanitation and Hygiene National Outcome Routine Mapping Exercise. Federal Government of Nigeria.

- Valente TW, Pumpuang P. 2007. Identifying opinion leaders to promote behaviour change. *Health Education & Behaviour* 34: 881–96
- Valente, T. W., 2010. *Social Networks and Health: Models, Methods, and Applications*. California: Oxford University Press.
- Van Ryneveld, M., Schneider, H. and Lehmann, U., 2020. Looking back to look forward: a review of human resources for health governance in South Africa from 1994 to 2018. *Human Resources for Health*, 18(1), pp.1-10.
- Vecchio, N., Davies, D. and Rohde, N., 2018. The effect of inadequate access to healthcare services on emergency room visits. A comparison between physical and mental health conditions. *PloS one*, 13(8), p.e0202559.
- Velenyi, E.V., 2016. Health care spending and economic growth. In *World Scientific Handbook of Global Health Economics and Public Policy: Volume 1: The Economics of Health and Health Systems* (pp. 1-154).
- Venkatesh V. (2020). Impacts of COVID-19: A research agenda to support people in their fight. *International journal of information management*, 55, 102197. <https://doi.org/10.1016/j.ijinfomgt.2020.102197>
- Victoria State Government. (2018). *HealthLinks: Chronic Care*. ResearchGate.
- Visser, R, Bhana, R, & Monticelli, F. 2012. The National Health Care Facilities Baseline Audit National Summary Report 2012. Health Systems Trust.
- Walt, G. and Gilson, L., 1994. Reforming the health sector in developing countries: the central role of policy analysis. *Health policy and planning*, 9(4), pp.353-370.
- Walt, G., Shiffman, J., Schneider, H., Murray, S.F., Brugha, R. and Gilson, L., 2008. 'Doing'health policy analysis: methodological and conceptual reflections and challenges. *Health policy and planning*, 23(5), pp.308-317.

- Wiid, J. and Diggins, C., 2013. *Marketing Research 2nd Edition*. Cape Town: Juta & Company.
- Whittaker, S., Shaw, C., Spieker, N. & Linegar, A., 2011, Quality standards for healthcare establishment in South Africa, SAHR, Pretoria, South Africa.
- Wilson, C. 2014. Semi-Structured Interviews. 10.1016/B978-0-12-410393-1.00002-8.
- World Health Organisation 2007. Quality of care: a process for making strategic choices in health systems.
- World Health Organisation, WHO. 2007. Quality of Care. Components of a strong Health Information System, A guide to the Healthcare Frameworks. Geneva
- World Health Organisation. 2014. The health of the people: what works – the African Regional Health Report. WHO, <https://www.afro.who.int/publications/african-regional-health-report-2014-health-people-what-works> Accessed 4 March 2022
- World Health Organisation. 2018. *Delivering quality health services: A global imperative for universal health coverage*. World Health Organisation, OECD, World Bank.
- World Health Organisation, 2015. Monitoring health inequality: an essential step for achieving health equity. Geneva
https://apps.who.int/iris/bitstream/handle/10665/133849/WHO_FWC_GER_2014.1_eng.pdf Accessed 4 March 2020
- World Health Organization, 2018. Organisation for Economic Co-operation and Development & International Bank for Reconstruction and Development. Delivering quality health services: a global imperative for universal health coverage. <https://apps.who.int/iris/handle/10665/272465>. Accessed 4 March 2022
- World Health Organization. 2020. Quality Health Services. Universal Health Coverage. A global commitment. Geneva, Switzerland.

World Bank. World Development Indicators. 2015. Nurse and Midwives per 1000 people. Washington D.C.: United States of America. Retrieved 10 March 2022 <<http://databank.worldbank.org/data/reports.aspx?source=2&series=SH.MED.NUMW.P3&country=2017>

Yaya, S., Otu, A. & Labonté, R. (2020). Globalisation in the time of COVID-19: repositioning Africa to meet the immediate and remote challenges. *Global Health* 16, 51. <https://doi.org/10.1186/s12992-020-00581-4>

Yin, R.E., 2009. *Case study research: Design and methods (4th Ed.)*. Fourth Edition. Thousand Oaks: Sage Publications

Young, M. 2016. Private vs Public healthcare in South Africa. Western Michigan University Honors Theses. 2741. https://scholarworks.wmich.edu/honors_theses/2741 Accessed 4 march 2022

Your Dictionary, 2022. On line available at (<https://www.yourdictionary.com/compliance>) Accessed 4 March 2022
<https://www.sanc.co.za/wp-content/uploads/2021/04/Distribution-2020.htm>

ANNEXURES

ANNEXURE A: INFORMATION LETTER – QUALITY MANAGER

University of Witwatersrand

21 November 2017

Hello

I am a student studying towards a Doctor of Philosophy (PhD) at the school of therapeutic sciences at the University of Witwatersrand, Johannesburg South Africa. My research topic is on the dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

As such, I kindly request for your participation in order to permit the gathering of primary data that will inform this research. Your participation in this study will assist in gathering primary data in order to provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng Province. Your participation will be voluntary, and you may withdraw at any stage. There shall be no physical harm or injury of any nature due to your participation in

this study. Your contributions to this study shall be strictly confidential by assigning codes to all transcripts and other data and your identification as a participant will be anonymous as your name will not be reflected anywhere in the study. The data will be destroyed two years after publication of the findings.

The interview will be tape-recorded; the tape will be destroyed two years after publication of the findings. The interview will take approximately 15 minutes.

Your participation in this study will involve the filling of a demographics section that asks for your age range, years of experience, educational qualifications and gender. An interview section will follow from which the researcher will ask questions that you are free to respond to as comfortably as you can.

This study will not pose any risks to participants and no reimbursement will be done to any participants.

Should you have any queries please consult the following people:

| | | |
|--|---|---|
| 1. Dr Sue Armstrong (Supervisor) Department of Nursing Education, School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000 sue.armstrong@wits.ac.za Tel: +27(0)114883094 | 2. Dr Prudence Ditlopo Centre for Health Policy School of Public Health University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000 prudence.ditlopo1@wits.ac.za Tel: +27 11 717 3433 | 3. Professor Clem Penny Chairperson, HREC Medical Research office, Senate House University of Witwatersrand 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000 Clement.Penny@wits.ac.za Tel: +27 11 717 2301 |
|--|---|---|

I look forward to your participation.

Yours sincerely,

Sphiwe Yomvula Mabena

Cell: 074 602 3504

Email: nomvu@magicmail.co.za

ANNEXURE B: INFORMATION LETTER – MANAGERS

University of Witwatersrand

21 November 2017

Hello

I am a student studying towards a Doctor of Philosophy (PhD) at the school of therapeutic sciences at the University of Witwatersrand, Johannesburg South Africa. My research topic is on the dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

As such, I kindly request for your participation in order to permit the gathering of primary data that will inform this research. Your participation in this study will assist in gathering primary data in order to provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng Province. Your participation will be voluntary, and you may withdraw at any stage. There shall be no physical harm or injury of any nature due to your participation in this study. Your contributions to this study shall be strictly confidential by assigning codes to all transcripts and other data and your identification as a participant will be anonymous as your name will not be reflected anywhere in the study. The data will be destroyed two years after publication of the findings.

The interview will be tape-recorded; the tape will be destroyed two years after publication of the findings. The interview will take approximately 15 minutes.

Your participation in this study will involve the filling of a demographics section that asks for your age range, years of experience, educational qualifications and gender. An interview section will follow from which the researcher will ask questions that you are free to respond to as comfortably as you can.

This study will not pose any risks to participants and no reimbursement will be done to any participants.

Should you have any queries please consult the following people:

| | | |
|---|--|--|
| <p>1. Dr Sue Armstrong (Supervisor) Department of Nursing Education, School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>sue.armstrong@wits.ac.za Tel: +27(0)114883094</p> | <p>2. Dr Prudence Ditlopo Centre for Health Policy School of Public Health University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>prudence.ditlopo1@wits.ac.za Tel: +27 11 717 3433</p> | <p>3. Professor Clem Penny Chairperson, HREC Medical Research office, Senate House University of Witwatersrand 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000</p> <p>Clement.Penny@wits.ac.za Tel: +27 11 717 2301</p> |
|---|--|--|

I look forward to your participation.

Yours sincerely,

Sphiwe Yomvula Mabena

Cell: 074 602 3504

Email: nomvu@magicmail.co.za

ANNEXURE C: INFORMATION LETTER – PHARMACIST

University of Witwatersrand

21 November 2017

Hello

I am a student studying towards a Doctor of Philosophy (PhD) at the school of therapeutic sciences at the University of Witwatersrand, Johannesburg South Africa. My research topic is on the dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

As such, I kindly request for your participation in order to permit the gathering of primary data that will inform this research. Your participation in this study will assist in gathering primary data in order to provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng Province. Your participation will be voluntary, and you may withdraw at any stage. Your contributions to this study shall be strictly confidential by assigning codes to all transcripts and other data and your identification as a participant will be anonymous as your name will not be reflected anywhere in the study. The data will be destroyed two years after publication of the findings.

The interview will be tape-recorded; the tape will be destroyed two years after publication of the findings. The interview will take approximately 15 minutes.

Your participation in this study will involve the filling of a demographics section that asks for your age range, years of experience, educational qualifications and gender. An interview section will follow from which the researcher will ask questions that you are free to respond to as comfortably as you can.

This study will not pose any risks to participants and no reimbursement will be done to any participants.

Should you have any queries please consult the following people:

| | | |
|---|--|--|
| <p>1. Dr Sue Armstrong (Supervisor) Department of Nursing Education, School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>sue.armstrong@wits.ac.za Tel: +27(0)114883094</p> | <p>2. Dr Prudence Ditlopo Centre for Health Policy School of Public Health University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>prudence.ditlopo1@wits.ac.za Tel: +27 11 717 3433</p> | <p>3. Professor Clem Penny Chairperson, HREC Medical Research office, Senate House University of Witwatersrand 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000</p> <p>Clement.Penny@wits.ac.za Tel: +27 11 717 2301</p> |
|---|--|--|

I look forward to your participation.

Yours sincerely,

Sphiwe Yomvula Mabena

Cell: 074 602 3504

Email: nomvu@magicmail.co.za

ANNEXURE D: INFORMATION LETTER – FRONTLINE STAFF

University of Witwatersrand

21 November 2017

Hello

I am a student studying towards a Doctor of Philosophy (PhD) at the school of therapeutic sciences at the University of Witwatersrand, Johannesburg South Africa. My research topic is on the dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

As such, I kindly request for your participation in order to permit the gathering of primary data that will inform this research. Your participation in this study will assist in gathering primary data in order to provide recommendations on the improved implementation of the six KPAs of the NCS in Gauteng Province. Your participation will be voluntary, and you may withdraw at any stage. Your contributions to this study shall be strictly confidential by assigning codes to all transcripts and other data and your identification as a participant will be anonymous as your name will not be reflected anywhere in the study. The data will be destroyed two years after publication of the findings.

The interview will be tape-recorded; the tape will be destroyed two years after publication of the findings. The interview will take approximately 15 minutes.

Your participation in this study will involve the filling of a demographics section that asks for your age range, years of experience, educational qualifications and gender. An interview section will follow from which the researcher will ask questions that you are free to respond to as comfortably as you can.

This study will not pose any risks to participants and no reimbursement will be done to any participants.

Should you have any queries please consult the following people:

| | | |
|---|--|--|
| <p>1. Dr Sue Armstrong (Supervisor) Department of Nursing Education, School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>sue.armstrong@wits.ac.za Tel: +27(0)114883094</p> | <p>2. Dr Prudence Ditlopo Centre for Health Policy School of Public Health University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000</p> <p>prudence.ditlopo1@wits.ac.za Tel: +27 11 717 3433</p> | <p>3. Professor Clem Penny Chairperson, HREC Medical Research office, Senate House University of Witwatersrand 1 Jan Smuts Avenue, Braamfontein, Johannesburg, 2000</p> <p>Clement.Penny@wits.ac.za Tel: +27 11 717 2301</p> |
|---|--|--|

I look forward to your participation.

Yours sincerely,

Sphiwe Yomvula Mabena

Cell: 074 602 3504

Email: nomvu@magicmail.co.za

ANNEXURE E: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR QUALITY MANAGER

Section A: Demographics Data

In this section, please fill in the appropriate box with a tick. You can only fill in once for each question.

| | | | | | |
|--------------------------------------|-------------|-------------|-------------|---------------|-----------|
| 1. Age Range | <30 Years | 30-39 Years | 40-49 Years | 50-59 Years | 60 Years+ |
| 2. Gender | Male | Female | | | |
| 3. Experience in Health Care Service | <5 Years | 5-9 Years | 10-14 Years | 15-19 Years | 20 Years+ |
| 4. Highest Academic Qualifications | Certificate | Diploma | Degree | Post Graduate | Others |

Section B: Interview questions

This interview schedule serves as a guide for the areas that we will explore with key informant in the in-depth interview on the NCS policy implementation, role players, processes involved and the content of the policy

5. Please tell me what you know about the six KPAs and the NCS policy and

what it entails?

Probe on:

- a. Aims of the policy
- b. Expected or intended benefits (for managers, nurses, frontline staff & organisation)?
- c. Outcomes: How it is put into effect or practice

6. Who are the main driver(s) of the NCS policy implementation?

Probe on:

- a. Roles, responsibilities (of government, of regulating bodies e.g. OHSC, of managers & other)?
- b. Influences and contestations
- c. Who are left out
- d. Probe on relationships and co-ordination between key players
- e. What is your role in NCS policy implementation in this organisation

7. Do you think that there was a need for a NCS policy?

Probe on:

- d. Contextual factors?
- e. Whether the context has changed over time?

- f. Current debates in public health facilities that influence NCS?
 - g. Is there any impact in health system changes?
1. What account for the delays if (any) in aligning the NCS to daily operational activities?
 - a. In your opinion, what critical steps are required to implement the NCS to all healthcare services departments e.g. Wards, Pharmacy, procurement & supply chain?
 2. NCS has now been implemented since 2012. How would you rate the overall implementation of the policy in this organisation?

Probe:

- a. Provincial variation
 - b. Interest groups/ alliances
 - c. Contestations/ conflicts
3. What training, either formal or informal have you ever received related to the NCS policy implementation.

Probe:

- a. When was the training conducted?
 - b. Is the training received had an impact on daily routine of the NCS policy implementation? If yes, please explain how
4. Please tell me what you think has influenced the successes and failures relating to the implementation of the NCS policy.

Probe:

- a. What do you think are the key factors that have contributed to these successes if any and enablers experienced by health care managers and other health care workers?
 - b. Which actors (individuals or organisations) were responsible for these successes?
 - c. What are the challenges experienced by health care managers and other healthcare professionals in the implementation of the NCS policy?
5. What is your opinion of the way the six KPAs were implemented and do you have suggestions for how it could have been done better?

ANNEXURE F: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR MANAGERS

Section A: Demographics Data

In this section, please fill in the appropriate box with a tick. You can only fill in once for each question.

| | | | | | |
|--------------------------------------|-------------|-------------|-------------|---------------|-----------|
| 1. Age Range | <30 Years | 30-39 Years | 40-49 Years | 50-59 Years | 60 Years+ |
| 2. Gender | Male | Female | | | |
| 3. Experience in Health Care Service | <5 Years | 5-9 Years | 10-14 Years | 15-19 Years | 20 Years+ |
| 4. Highest Academic Qualifications | Certificate | Diploma | Degree | Post Graduate | Others |

Section B: Interview questions

This interview schedule serves as a guide for the areas that we will explore with key informant in the in-depth interview on the NCS policy implementation, role players, processes involved and the content of the policy

5. Please tell me what you know about the six KPAs and the NCS policy and

what it entails?

Probe on:

- h. Aims of the policy
- i. Expected or intended benefits (for managers, nurses, frontline staff & organisation)?
- j. Outcomes: How it is put into effect or practice

6. Who are the main driver(s) of the NCS policy implementation?

Probe on:

- f. Roles, responsibilities (of government, of regulating bodies e.g. OHSC, of managers & other)?
- g. Influences and contestations
- h. Who are left out
- i. Probe on relationships and co-ordination between key players
- j. What is your role in NCS policy implementation in this organisation

7. Do you think that there was a need for a NCS policy?

Probe on:

- k. Contextual factors?
- l. Whether the context has changed over time?
- m. Current debates in public health facilities that influence NCS?
- n. Is there any impact in health system changes?

6. What account for the delays if (any) in aligning the NCS to daily operational activities?
 - b. In your opinion, what critical steps are required to implement the NCS to all healthcare services departments e.g. Wards, Pharmacy, procurement & supply chain?
7. NCS has now been implemented since 2012. How would you rate the overall implementation of the policy in this organisation?

Probe:

- d. Provincial variation
 - e. Interest groups/ alliances
 - f. Contestations/ conflicts
8. What training, either formal or informal have you ever received related to the NCS policy implementation.

Probe:

- c. When was the training conducted?
 - d. Is the training received had an impact on daily routine of the NCS policy implementation? If yes, please explain how
9. Please tell me what you think has influenced the successes and failures relating to the implementation of the NCS policy.

Probe:

- a. What do you think are the key factors that have contributed to these successes if any and enablers experienced by health care managers and other health care workers?
 - b. Which actors (individuals or organisations) were responsible for these successes?
 - c. What are the challenges experienced by health care managers and other healthcare professionals in the implementation of the NCS policy?
10. What is your opinion of the way the six KPAs were implemented and do you have suggestions for how it could have been done better?

ANNEXURE G: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR PHARMACIST

Section A: Demographics Data

In this section, please fill in the appropriate box with a tick. You can only fill in once for each question.

| | | | | | |
|--------------------------------------|-------------|-------------|-------------|---------------|-----------|
| 1. Age Range | <30 Years | 30-39 Years | 40-49 Years | 50-59 Years | 60 Years+ |
| 2. Gender | Male | Female | | | |
| 3. Experience in Health Care Service | <5 Years | 5-9 Years | 10-14 Years | 15-19 Years | 20 Years+ |
| 4. Highest Academic Qualifications | Certificate | Diploma | Degree | Post Graduate | Others |

Section B: Interview questions

This interview schedule serves as a guide for the areas that we will explore with key informant in the in-depth interview on the NCS policy implementation, processes involved and the content of the policy

5. Please tell me what you know about the six KPAs and the NCS policy and

what it entails?

Probe on:

- o. Aims of the policy
- p. Expected or intended benefits (for managers, nurses, frontline staff & organisation)?
- q. Outcomes: How it is put into effect or practice

6. Who are the main driver(s) of the NCS policy implementation?

Probe on:

- k. Roles, responsibilities (of government, of regulating bodies e.g. OHSC, of managers & other)?
- l. Influences and contestations
- m. Who are left out
- n. Probe on relationships and co-ordination between key players
- o. What is your role in NCS policy implementation in this organisation

7. Do you think that there was a need for a NCS policy?

Probe on:

- r. Contextual factors?
- s. Whether the context has changed over time?

- t. Current debates in public health facilities that influence NCS?
- u. Is there any impact in health system changes?

8. What account for the delays if (any) in aligning the NCS to daily operational activities?

- c. In your opinion, what critical steps are required to implement the NCS to all healthcare services departments e.g. Wards, Pharmacy, procurement & supply chain?

9. NCS has now been implemented since 2012. How would you rate the overall implementation of the policy in this organisation?

Probe:

- g. Provincial variation
- h. Interest groups/ alliances
- i. Contestations/ conflicts

10. What training, either formal or informal have you ever received related to the NCS policy implementation.

Probe:

- e. When was the training conducted?
- f. Is the training received had an impact on daily routine of the NCS policy implementation? If yes, please explain how

11. Please tell me what you think has influenced the successes and failures relating to the implementation of the NCS policy.

Probe:

- a. What do you think are the key factors that have contributed to these successes if any and enablers experienced by health care managers and other health care workers?
- b. Which actors (individuals or organisations) were responsible for these successes?
- c. What are the challenges experienced by health care managers and other healthcare professionals in the implementation of the NCS policy?

12. What is your opinion of the way the six KPAs were implemented and do you have suggestions for how it could have been done better?

**ANNEXURE H: RESEARCH INSTRUMENT – INTERVIEW SCHEDULE FOR
FRONTLINE NURSES, SHOP STEWARDS AND REPRESENTATIVES OF THE
HOSPITAL POLICY DEVELOPMENT COMMITTEE**

Section A: Demographics Data

In this section, please fill in the appropriate box with a tick. You can only fill in once for each question.

| | | | | | |
|--------------------------------------|-------------|-------------|-------------|---------------|-----------|
| 1. Age Range | <30 Years | 30-39 Years | 40-49 Years | 50-59 Years | 60 Years+ |
| 2. Gender | Male | Female | | | |
| 3. Experience in Health Care Service | <5 Years | 5-9 Years | 10-14 Years | 15-19 Years | 20 Years+ |
| 4. Highest Academic Qualifications | Certificate | Diploma | Degree | Post Graduate | Others |

Section B: Interview questions

This interview schedule serves as a guide for the areas that we will explore with the frontline staff in the in-depth interviews on the NCS policy implementation and roles in policy involvement

1. What is your job title and responsibility?
 - Probe on:
 - Name of the ward
 - How long have you been working in this hospital
 - Personal employment history (if respondent have been at the hospital for less than 2 years)
 - If respondent used to work for a private sector or through a nursing agency, ask them why they now came to the public sector

2. Have you heard of the NCS policy that was developed in 2011? *If **NOT**, skip to Question 3*
 - Probe on:
 - What have you heard?
 - Where did you get your information from?
 - Can you tell me what it is all about? (Content of the policy)
 - What do think the NCS intends to do?
 - How do you think it will impact on your work and on nursing?

3. What do you think should be involved in making decisions or policies like we have just been talking about regarding NCS & quality of healthcare services in South Africa?
 - Probe on:
 - What role should frontline staff play in NCS policy development & implementation
 - Have you been taught on how to play a role in policy development? If so, by whom?

- How can communication to frontline staff regarding NCS & quality issues be improved?

7. What role should the following people /agencies play in **NCS** policy implementation:

- The Quality manager?
- The Managers?
- The Pharmacist?
- The public?

8. Are there any other comments you would like to make on **NCS** policy issues?

ANNEXURE I: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS – QUALITY MANAGER

Project Title: The dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

| Contact details | | |
|---|--|---|
| 1. Dr Sue Armstrong | 2. Dr Prudence Ditlopo | 3. Ms Nomvula Skhosana |
| Supervisor | Co-Supervisor | Principal Investigator (PI) |
| Department of Nursing Education, School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000 sue.armstrong@wits.ac.za | Centre for Health Policy School of Public Health University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000 prudence.ditlopo1@wits.ac.za | Department of Nursing Education School of Therapeutic Sciences University of Witwatersrand 7 York Road, Parktown 2050 Johannesburg, 2000 nomvu@magicmail.co.za |

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____

Date: _____

Place: _____

Signature or mark _____

Witnessed by:

Name of Witness: _____

Signature: _____

Date: _____

ANNEXURE J: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS - MANAGERS

Project Title: The dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study,
which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details

1. Dr Sue Armstrong

Supervisor

Department of Nursing Education,

School of Therapeutic Sciences

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

sue.armstrong@wits.ac.za

2. Dr Prudence Ditlopo

Co-Supervisor

Centre for Health Policy

School of Public Health

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

prudence.ditlopo1@wits.ac.za

3. Ms Nomvula Skhosana

Principal Investigator (PI)

Department of Nursing Education

School of Therapeutic Sciences

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

nomvu@magicmail.co.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____

Date: _____

Place: _____

Signature or mark _____

Witnessed by:

Name of Witness: _____

Signature: _____

Date: _____

ANNEXURE K: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS – FRONTLINE STAFF

Project Title: The dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details

1. Dr Sue Armstrong

Supervisor

Department of Nursing Education,

School of Therapeutic Sciences

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

sue.armstrong@wits.ac.za

2. Dr Prudence Ditlopo

Co-Supervisor

Centre for Health Policy

School of Public Health

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

prudence.ditlopo1@wits.ac.za

3. Ms Nomvula Skhosana

Principal Investigator (PI)

Department of Nursing Education

School of Therapeutic Sciences

University of Witwatersrand

7 York Road, Parktown 2050

Johannesburg, 2000

nomvu@magicmail.co.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at:

Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____

Date: _____

Place: _____

Signature or mark _____

Witnessed by:

Name of Witness: _____

Signature: _____

Date: _____

ANNEXURE L: PARTICIPANT CONSENT SHEET: SEMI STRUCTURED INTERVIEWS - PHARMACIST

Project Title: The dynamics of compliance with the national core standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto;
2. I was given time to read it, or had it read to me, in the language I best understand;
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory;
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be;
5. I understand that there will be no immediate benefit to me, should I agree to participate, nor will I receive any payment; conversely, participation will not cost me anything but my time;
6. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained
7. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Contact details

1. Dr Sue Armstrong

Supervisor
 Department of Nursing Education,
 School of Therapeutic Sciences
 University of Witwatersrand
 7 York Road, Parktown 2050
 Johannesburg, 2000
 sue.armstrong@wits.ac.za

2. Dr Prudence Ditlopo

Co-Supervisor
 Centre for Health Policy
 School of Public Health
 University of Witwatersrand
 7 York Road, Parktown 2050
 Johannesburg, 2000
 prudence.ditlopo1@wits.ac.za

3. Ms Nomvula Skhosana

Principal Investigator (PI)
 Department of Nursing Education
 School of Therapeutic Sciences
 University of Witwatersrand
 7 York Road, Parktown 2050
 Johannesburg, 2000
 nomvu@magicmail.co.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

Name of Participant: _____

Date: _____

Place: _____

Signature or mark _____

Witnessed by:

Name of Witness: _____

Signature: _____

Date: _____

ANNEXURE M: CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION

Project Title: The dynamics of compliance with the National Core Standards (NCS) for health establishments in South Africa: A case study of two tertiary hospitals in Gauteng province

I have been given the Information Sheet on the research project entitled “The Dynamics of Compliance with the National Core Standards (NCS) for Health Establishments in South Africa: A Case Study of Two Tertiary Hospitals in Gauteng Province”. I have read and understood the Information Sheet and all my questions have been answered satisfactorily.

I understand that I can decide whether or not the interview should be tape-recorded and that there will be no consequences for me if I do not want the interview to be recorded.

I hereby consent to audio recording of the interview

I understand that:

- The recording will be stored in a secure location (a locked cupboard or password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed,
- The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research
- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.
- I understand that I can ask the person interviewing me to stop tape recording, and to stop the interview altogether, at any time.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark _____

Witnessed by:

Name of Witness: _____
Signature: _____
Date: _____

ANNEXURE N: DOCUMENT REVIEW – APPROXIMATELY 60 DAYS TO COMPLETE THE REVIEW

| Criteria | Document required | Meets criteria (Yes/No) | Remarks |
|----------|--|---|---------|
| 1.1 | NCS Policy and related documents: HST report; National health Amendment Act No 12 of 2013; OHSC annual report; NDOH annual report describing services that is covering up to date information | Policy Clarifies: <ul style="list-style-type: none"> • Purpose • Objective • Target group • Mode of delivery | |
| 1.2 | Format and mode of communication of the service unit in implementing policy and procedures | How is policy communicated to relevant stakeholders | |
| 2.1 | The document spells out in each of the policies and the procedures: as stipulated under 3, 4, 5 & 6 <ul style="list-style-type: none"> • Whether it will be reviewed regularly and for how often and/or under what circumstances it will be reviewed • The person or committee responsible for review • When the policy or procedure last reviewed | Document indicates: <ul style="list-style-type: none"> • Regularly review and for how often and/or under what circumstances it will be reviewed • The person or committee responsible for review indicated • Date of review highlighted | |
| | <ul style="list-style-type: none"> • Having all samples of the current policies and procedures recently reviewed and updated at each hospital | All samples of the current policies and procedures recently reviewed and updated are available | |
| 2.2 | There is a documented mechanism spelling out : <ul style="list-style-type: none"> • How input from service users can be obtained • How input from staff can be obtained | There is indication that the staff input is obtained | |
| 3.1 | Availability of the records of the health service operations and activities of the 6 KPAs which are current, collected and kept in a consistent manner and covering the information related to the performance standards on the content, processes and context as stipulated in the service agreement documents | Records available and kept in the consistent manner | |
| 3.2 | Availability of the two samples of the accurate and current audit reports most recently done either internal or external in accordance with the compliance standards requirements | Audits report available for review | |
| 4.1 | Availability of the accurate and current job description and duty statements for all service unit | Job description of the hospital available | |

| | | | |
|-----|--|--|--|
| | staff which clearly states out their responsibilities and accountability relationships | | |
| 4.3 | Availability of the documents which clearly states out the roles, responsibilities and the membership of the management committee and other decision making bodies | Records of staff kept for the regulating body that governs practice and compliance | |
| 4.4 | Availability of the current organisational chart which depicts overall structure and accountability relationships of the hospital | Organogram of the hospital available | |
| 5.1 | Availability of the documented policies and procedures on staff recruitment, deployment and promotions specifying <ul style="list-style-type: none"> • selection criteria • time frames • responsible person & their roles | Documented policies and procedures on staff recruitment, deployment and promotions is available specifying <ul style="list-style-type: none"> • selection criteria • time frames • responsible person & their roles | |
| | <ul style="list-style-type: none"> • having documented policy and procedures on establishing employment contracts | Employment contracts and turn-over of staff records available, indicating level of accountability | |
| | Availability of the documented policy and procedures on taking disciplinary actions specifying: <ul style="list-style-type: none"> • criteria for action • measures to avoid conflict of interest • responsible person and roles | Disciplinary actions specifies: <ul style="list-style-type: none"> • criteria for action • measures to avoid conflict of interest • responsible person and roles | |
| 5.2 | Availability of the documented policy and procedures on induction for new or regular staff | There is evidence that new or regular staff is orientated on the policy and procedures | |
| 5.3 | Availability of the documented policy and procedures for staff supervision and performance appraisal specifying: <ul style="list-style-type: none"> • when and by whom regular staff supervision and appraisal to be conducted • identification of areas of performance that need improvement • identification of the on-going training and development needs | <ul style="list-style-type: none"> • Time frame for the performance appraisal indicated and adhered to, • Areas of performance that need improvement are highlighted and acted upon • There is records of on-going training | |
| 6.1 | Availability of the checklist of all relevant legislations governing the service unit operations and delivery | File of the legislations governing the service unit operations and delivery is available with the checklist | |
| 6.2 | Availability of the documented policy and procedures to ensure compliance with the relevant legislation | Policy and procedures to ensure compliance with the relevant legislation are available and communicated within the hospital to all stakeholder | |

| | | | |
|------------|---|--|--|
| 6.3 | Availability of the documented policy and procedures spelling out: <ul style="list-style-type: none"> • under what circumstances and how to provide service users with the information about operations that affects them • timing required and how to provide service users with information | <ul style="list-style-type: none"> • Service user information clearly displayed • Services rendered clearly displayed • Feedback given to service user after discussion of complaints/compliments | |
| | <ul style="list-style-type: none"> • Availability of the two samples of notices or records of information about operations given to service users in the preceding year (if applicable) | Operational times of the facility available and clearly displayed | |
| 6.4 | Availability of the documented policy and procedures specifying: <ul style="list-style-type: none"> • When and how the service user will be informed of choices that are available • How and when their decision about services they receive are sought | <ul style="list-style-type: none"> • Availability of hospital committees • Minutes of the meetings with the committee | |
| 6.5 | Availability of the documented policy and procedures in relation to handling complaints | <ul style="list-style-type: none"> • Records of feedback given to service user after discussion of complaints/compliments available | |
| 6.7 | Availability of the document on the overall plan(s) on its operation spelling out: <ul style="list-style-type: none"> • service planned ahead • objectives to be achieved • tools for evaluation • time frames for evaluation | <ul style="list-style-type: none"> • Operational plans available • Objectives clearly stated • Timeframes stated clearly • Evaluation tools available | |
| 6.8 | Availability of the documented policy and procedures for: <ul style="list-style-type: none"> • obtaining feedback from service users and staff on the hospital performance • responding to feedback from service users and staff on the hospital performance | Compliments/Complains box available in accessible places for the service users | |
| 6.9 | Availability of the documentation on the action taken in response to performance/quality issues identified during review and evaluation processes | Corrective actions records available | |

ANNEXURE O: SOCIAL NETWORK ANALYSIS – STEPS/PROCEDURE ON HOW TO CONDUCT SNA

STEP – 1: PREPARATION

1. Define question (e.g. “Who can influence the implementation of the six KPAs?”)
2. Define links (e.g. who provide funds/facility budget, giving support, giving instructions) and different colours will be assigned to the links (e.g. giving money = red link)
3. Define goals (e.g. environmental orientation: bed occupancy and development orientation: number of staff)
4. Decide who should be involved in interviews/discussion through purposive sampling & assistance of the key actors (E.g. Quality managers)

STEP – 2: ACTOR SELECTION

1. Ask: “Who is involved in this process?”

Write names on actor cards and distribute on empty NetMap sheet (chart & marking pens with different colours will be provided by researcher)

STEP – 3: DRAWING OF LINKS

1. Ask: “Who is linked to whom?” Go through the links one by one (e.g. “Who gives money to whom? Who influence whom?”)
2. Draw arrows between actor cards according to interviewees’ directions.
3. If two actors exchange something (e.g. information) draw double headed arrows. If actors exchange more than one thing, add differently colored arrow heads to existing links.

STEP – 4: INFLUENCE TOWERS

1. Ask: “How strongly can actors influence each other?”
2. Explain/agree on a definition of influence with the interviewee, clarify that this is about influence on implementation of the six KPAs and not influence in all the services provided at the hospital
3. Ask interviewee to assign influence towers to actors: The higher the influence on the issue at stake, the higher the tower. Towers of different actors can be of the same height. Actors with no influence can be put on ground level. Towers can be as high as interviewees want.
 - Influence towers will be placed next to actor cards
 - Set-up will be verbalized and give the interviewee the chance to adjust towers before noting height of tower on the Net Map

STEP – 5: GOALS

1. Ask according to pre-defined goals, actor by actor, e.g. “Does this actor support the implementation of the six KPAs of the NCS?” Will be named one by one
2. Note abbreviations for goals next to actor cards, allow for multiple goals where appropriate, by noting more than one goal next to the actor.

STEP – 6: DISCUSSIONS

1. According to specific goal of the researcher’s NetMap exercise, discussion on what this network means for strategy of organization, where influence comes from, what happens in case of conflicting goals etc.

ANNEXURE P: ETHIC CLEARANCE CERTIFICATE - WITS

UNIVERSITY OF THE
WITWATERSRAND.
JOHANNESBURG



R14/49 Ms Sphiwe Yomvula Mabena

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M180366

NAME: Ms Sphiwe Yomvula Mabena
(Principal Investigator)
DEPARTMENT: Nursing Education
[REDACTED]


PROJECT TITLE: The Dynamics of Compliance with the National Core Standards (NCS) for Health Establishments in South Africa: A Case Study of Two Tertiary Hospitals in Gauteng Province

DATE CONSIDERED: 06/04/2018

DECISION: Approved unconditionally

CONDITIONS:

SUPERVISOR: Dr Sue Armstrong

APPROVED BY: 
Doctor CB Penny, Chairperson, HREC (Medical)

DATE OF APPROVAL: 28/11/2018

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on the Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report.** The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in **March** and will therefore be due in the month of **March** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature

Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

ANNEXURE Q: PERMISSION LETTER HOSPITAL



GAUTENG PROVINCE

HEALTH
REPUBLIC OF SOUTH AFRICA

**PRIVATE BAG X396
PRETORIA
0001**

ENQUIRIES : MS NT LEDIGA
TEL : 012 318 6995
FAX : 012 373 6791
EMAIL : Nelly.Lediga@gauteng.gov.za
REF : KPTH 77/2018

TO: MS NOMVULA SKOSANA

RE: PERMISSION TO CONDUCT RESEARCH

TITLE: THE DYNAMICS OF COMPLIANCE WITH THE NATIONAL CORE STANDARD (NCS) FOR HEALTH ESTABLISHMENT IN SOUTH AFRICA: A CASE STUDY OF TWO TERTIARY HOSPITALS IN GAUTENG PROVINCE

Permission is hereby granted for the research to be conducted at [REDACTED] **Tertiary Hospital.**

This is done in accordance to the "Promotion of Access to Information Act. No 2 of 2000".

Please note that in addition to receiving approval from the hospital research committee, you are still required to seek permission from the relevant departments.

Furthermore, collecting of data and consent for participation remains the responsibility of the researcher.

You are also required to submit your final report or summary of your findings and recommendations to the office of the CEO.

Approved:

DR K.E LETEBELE-HARTELL
SENIOR MANAGER: MEDICAL SERVICES
DATE: 02/09/2018

ANNEXURE R: PERMISSION LETTER HOSPITAL



GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Gauteng Department of Health

Enquiries: Dr. M. Mukansi
Research Committee: Chairperson
Tel : (011) 489-0306/1087
Fax : (011) 489 1038
E mail: Murimisi.mukansi@wits.ac.za

13 September August 2018

To whom it may concern

Subject: [REDACTED]

PROTOCOL TITLE: The dynamics of compliance with the core standards (NCS) for health establishments in South Africa: A case study of two Tertiary hospitals in Gauteng Province.

Protocol Ref No: Yomvula Mabena

Ethic Clearance: Pending

Principal investigator: Yomvula Mabena

Department: [REDACTED]

Committee Recommendations

The Committee is giving you Conditional access while awaiting the final ethical clearance certificate from the university of Witwatersrand HREC.

It is the duty of the researcher to collect the data to the relevant department after the Research Committee approved the study.

Dr. M. Mukansi
Chairperson of HJH Ethic and Research Committee

ANNEXURE S: SSI PPT

KNOWLEDGE OF THE SIX KPAs OF THE NCS POLICY

Hospital A

- 5 participants had knowledge of both the NCSs and the KPAs and were able explain the aim of the policy
- 10 participants had some generalized knowledge of the NCSs but were unable to name any of the six KPAs

Hospital B

- 11 participants answered the question which indicated varying knowledge and understanding of the content and purpose of the NCSs and KPAs
- 2 participants indicated awareness of the NCSs but no knowledge of the KPAs
- 2 participants not heard about either the NCSs or the KPAs

Minority of participant in hospital A had knowledge on the six KPAs of the NCS while in hospital B majority of the participants managed to identify three of six KPAs, mentioning cleanliness, values and attitudes, and waiting times.

IMPACT OF THE NCS POLICY ON IMPLEMENTATION

Hospital A

- Actors had generalised knowledge but compliance was good
- The participants stated that most activities were being done just for compliance purposes and for scoring high points rather than for real improvement of quality standards at the hospital

Hospital B

- Actors are knowledgeable about the policy, but compliance is poor
- Knowledge of policy does not necessarily mean the policy will be implemented

Hospital A findings revealed that good performance was not based on the knowledge of standards but for compliance during assessment rather than improving quality. In hospital B actors demonstrated knowledge but compliance was poor. The NCS is therefore a very good policy but there are no structures and conditions for its successful implementation.

GENERAL RESPONSES ON SIX KPAS OF THE NCS

Hospital A

- There are no proper structures and staff for monitoring the standards and this makes it difficult to assess the levels of compliance with quality standards
- The view that the policy was still a long way from achieving the desired results as is not receiving adequate support and not all the KPAs are being given adequate attention
- Compliance measures are usually put in place only in preparation for an audit. To the extent of borrowing equipment and some medicines from other hospitals so that they are seen as compliant*.

Hospital B

- Participants were of the view that the change of policy needed accompanying resources to make the policy work
- Participants reiterated that there was actually the need to go back to the drawing board and discuss how the policy can be effectively implemented
- Compliance is viewed as only for assessment but practically it is not happening as there is no formal training about policy itself even informal training is not happening

In both hospital A & B compliance to the policy was only done for assessment purposes. The context of policy was viewed as not fit for the state of both tertiary hospitals.

PERCEPTIONS ON THE VALUES AND STAFF ATTITUDES

Hospital A

- The participants pointed out that there have still been several incidents in which patients are not treated with respect and some even dread visiting hospitals because of the treatment that they get from healthcare staff
- The responses shows that due to demotivation and lack of support internal and from the province affect the implementation of the standards
- Participants were of the view that patients will always have something negative to say about hospital staff even if they are treated in a respectful manner.

Hospital B

- Negative staff attitudes were prevalent especially in the administration and retrieval of files followed by constant loss of files.
- Majority of healthcare staff still display negative attitudes towards patients and towards their work in general, mainly because working conditions have not improved

Both hospital A and B the majority of participants were of the view that there had not been any significant changes in the values and attitudes of healthcare staff towards their work and towards patients. The responses show that the implementation of the NCS has not yet achieved the desired result of having a caring staff that will make patients have a feeling of being cared for.

MONITORING THE WAITING TIMES

Hospital A

- The number of patients that visit the hospital compared to the staff compliment at the hospital, does not make it possible to have staff monitoring waiting times.
- Long queues of patients waiting for medication

Hospital B

- Patient spends the whole day at a hospital and may even be told to come back the following day due to shortage of doctors and beds
- Long queues of patients waiting for medical attention are still being seen at the hospital

Hospital A had long queues at pharmacy as there are many specialized clinics while at hospital B long queues were at out patient department and clinics for medical attention. Waiting time frames are displayed to comply with the policy but not adhered to in both hospitals

CLEANLINESS AS THE FIRST LAW OF HEALTH

Hospital A

- Improvement in cleanliness was cited because of the quality marshalls that takes rounds at hospital as compared to before quality standards implementation
- Hospital was constantly facing shortages of cleaning materials and equipment, and this made it difficult to keep the cleanliness of the hospital to the expected standards

Hospital B

- Increasing number of patients is cited as not matching the number of available cleaners to keep the hospital clean.
- The hospital is not cleaned as often as it is supposed to be due to a shortage of cleaners

Hospital A had noted improvement of cleanliness as there are cleaning marshalls doing rounds however there is shortage of cleaning material which limit efforts to compliance. Hospital B keeping hospital clean was not possible as the were shortage of cleaners. Responses in this study therefore indicate that the implementation of the NCS has not yet reached the expected levels since the situation of cleanliness in hospital has not improved significantly in both hospitals

DRUG STOCK AND PROCUREMENT OF EQUIPMENT

Hospital A

- Participant stated that the availability of equipment was mainly affected by the tender process which was not flexible to the hospital
- Budgetary constraints was a concern in repairing broken equipment and allocation of resources
- Bed capacity is almost the same as with the previous level of care

Hospital B

- It was highlighted that it was still common in their hospital to go without particular drugs that are critical
- Due to high volume of patient the hospital experience shortage of beds, patients sleep on the benches to wait for next available bed

In hospital A tender process was blame as contributing to poor allocation of resources while in hospital B high volume of patients was cited as the contributing factor for the high demand of the resources available. The responses from participants however indicate that this KPA has so far not shown sign of improvement since the implementation of the NCS and it would appear to be a systems issue that cannot be resolved at institutional level

INFECTION PREVENTION AND CONTROL

Hospital A

- Patients are still exposed to hospital-acquired infections as conditions in the hospital have not improved significantly
- Infection control not given priority and support like other areas of the KPAs of the NCS

Hospital B

- Overcrowding at the hospital due to influx of patient facilities have never been improved to accommodate the increased number of patients thus infection control become impossible
- Hygiene conditions had been seen to make difficult to control and prevent the infection
- Structural issues not addressed as the staff use sluice room to conduct other activities that are not relevant to the purpose of the room

In hospital A lack of support of the infection prevention and control KPAs was a concern. It can therefore be noted that the KPA that relates to infection prevention and control in hospital B has so far not been successfully implemented because of failure to address the infrastructure demands of the hospitals

ASSESSMENT TOOL

Hospital A

- Evaluation tools were cited as one-size-fit-all
- Participant stated that the assessment tool had the problem of repeating questions, which does not add value to the quality assessment

Hospital B

- Participants stated that the tool doesn't have "Not Applicable", so it forces to say "Yes/No" if "No" it makes the facility to fail that aspect. The tool & questions are one-size-fits and not according to level of care
- Hospital is not accommodating children, but the assessment tool needs that aspect. Therefore, children's syrups are borrowed just for compliance

Results from the review of policy documents indicated that an assessment tool is an important aspect in the implementation of quality standards. The participants cited the assessment tool as one of the barriers to the successful implementation of the NCS. According to the participants, the assessment tool that is used to assess the level of compliance with health standards does not take into account the different circumstances faced by different health institutions. Assessment questions are the same for all hospitals but these institutions have different circumstances and at times different administrative procedures. The results that are obtained in the assessments do not reflect the situation that is prevailing at the hospitals.

LACK OF ADEQUATE TRAINING AND KNOWLEDGE

Hospital A

- Orientation on NCS is done only during induction of new employees
- 70% of respondents affirmed that casual training is only done when there is assessment of the NCS, but when there is no assessment there is no continuous in-service training and coaching on the standards
- Participants are told how to answer questions if we selected to participate in the assessment and given pamphlet to read about the NCS without proper training
- Communication of trainings not done in time

Hospital B

- Informal sharing of information among staff members
- 80% who had received training stated that hit and run training is only done during induction of new staff but no further follow up of proper and full training on the NCS

A handful of participants at both hospitals indicated that they had received some form of training, the majority of participants stated that they had not received any formal training on the implementation of the NCS. This lack of training means that most employees are not aware of what they are expected to do in terms of implementing the policy and its KPAs. Few participants who received formal training felt that it was not adequate to equip them with the full knowledge to effectively implement the NCS in their hospitals

INEQUITABLE DISTRIBUTION OF RESOURCES AND SHORTAGE

Hospital A

- Participant highlighted that the hospital does not have the resources that can match the number of patients that are now coming for treatment
- Capacity of the hospital had also been overwhelmed by the number of the specialised clinics as such resulted in the shortage of most supplies and resources

Hospital B

- Overcrowding plays a key role in allocation of equipment and resources are not enough for the growing number of patients

According to all participants, compliance with the NCS is seriously hampered by the shortage of financial and other resources. The participants indicated that the implementation of the NCS was not accompanied by efforts to ensure that the hospitals and clinics are well resourced so that the KPAs can easily be implemented. The shortage of resources in hospitals is therefore one of the major impediments in the implementation of quality standards.

LACK OF ADEQUATE SUPPORT FROM HOSPITAL MANAGEMENT AND PROVINCIAL DEPARTMENT OF HEALTH

Hospital A

- One cleaner works in more than two wards per day which affect cleanliness at the hospital, requests fall on deaf ears
- Lack of support visit from the provincial DoH and Office of the Health Standards Compliance (OHSC) for support and feedback to work on recommendations for improvement

Hospital B

- lack of support on budgeting for the replacement of hospital BP monitors and ageing equipment as the processes are not supported by the tendering procedures that are used by the Department of Health to procure equipment
- Hospital stacked with equipment that is not functional but counted being available in number and which affects their work as no equipment is procured because on paper there is enough equipment

Results shows that eighty percent (80%) of the respondents in both hospital A and B raised a concern with the lack of adequate support from hospital management and the provincial department of health (DoH). Healthcare workers are forced to work within the minimal resources at the same time explicitly expected to meet targets on implementing the six KPAs of the NCS.

POOR COMMUNICATION TO GUIDE POLICY IMPLEMENTATION AND COMPLIANCE

Hospital A

- Staff left in the dark about happening of the hospital
- Poor feedback on performance from management and grievances
- There is an element of working in silos as anyone for his/her business and responsibility shifting and blaming
- Inputs/suggestion or concerns are not considered

Hospital B

- Poor dissemination of information to all staff members
- There is no two-way communication between managers and staff rather given instructions without them airing out their views to management

The fact that a good number of the participants did not understand the NCS and also did not receive proper training shows that there is a huge communication gap in the system

ANNEXURE T: SNA PPT

MAPPING PROCESS FINDINGS

Hospital A

- Participants were specific in naming individual actors by title and level of responsibility
- CEO has an open door policy for the staff and works directly with the QA manager and pharmacy
- Individual actors are held accountable for the elements for which they are responsible

Hospital B

- Grouped the actors according to department rather than individual key functions e.g. CEO office/EXCO
- Implementation of the quality standards is monitored by the senior team
- The CEO interacts with QA manager during EXCO meeting

CEO as a senior manager at hospital A was portrayed as being hands-on and deals directly with the relevant department whenever there is an issue of concern in facilitating the implementation and compliance of the six KPAs of the NCS while at hospital B QA department only interact directly with CEO during EXCO meeting

SIZE OF THE NETWORK

Hospital A

- Seven actors who were part of the bounded network
- Network comprised of the hospital CEO, nursing matrons, operational managers of the hospital units, a pharmacist, a quality assurance manager, nurses and a cleaning manager

Hospital B

- Six actors who were part of the bounded network
- Network comprised of the CEO of the hospital, members of the executive committee of the hospital (EXCO) which included all departmental managers of the hospital and CEO, quality assurance manager, assistant directors of nursing, operational managers and the support staff

In hospital A the support staff was considered to be isolated from the network that influences implementation of six KPAs of the NCS while in hospital B support staff was included in the network. As much as hospital B had involved frontline staff, the network fused the key players as a team (EXCO) which could limit accountability on the part of individual and thus create structural holes and bottlenecks and hospital A each key function is assigned to individual actor for accountability.

STRENGTH OF THE RELATIONSHIPS BETWEEN INDIVIDUALS

Hospital A

- QA manager has strong relation with the CEO as they share a shortest path in a triangle
- CEO also has a close tie (short path) and relation with the pharmacy manager also symbolises strong relation
- QA manager and pharmacy have the longest path in a triangle which signify weak relation
- Furthermore, pharmacy and the operational manager share the shortest path which portrays a strong relation

Hospital B

- Strength of relationships is displayed between the QA manager, CEO and EXCO
- QA manager and the CEO share a short part which signify a close tie and strong relation
- QA manager share the longest path with the EXCO which indicate weak tie and relation

Strong relation enables open and constant communication for the overall implementation of the six KPAs of the NCS. The QA manager in hospital A does not have a direct link with the operational manager and the relationship is therefore weak. Hospital A QA manager has a strong relation with the CEO and have direct communication. Hospital B, QA manager has a strong relation with the CEO however, they communicate indirectly and only during monthly EXCO meeting

RECIPROCIITY AS ACTOR'S PERCEPTIONS OF A RELATIONSHIP

Hospital A

- Study revealed that QA manager is the key actor perceived by other actors in the network to be responsible for the implementation of the quality standards
- Supported by reciprocal relationship with the CEO and the pharmacy where communication is bi-directional in supporting the availability of medicine

Hospital B

- QA manager is the key actor in facilitating the implementation of the quality standards
- There is a bi-directional communication between the CEO and the EXCO however QA manager accounts to both the CEO and the EXCO

Both in hospital A and B, the QA manager facilitate and give advice on the quality standards implementation and the CEO approves funding of resources to comply to such standards. As such, there is a strong emphasis on compliance to the individual standards such as pharmacy standards in hospital A and therefore the CEO and the pharmacy actors communicate directly. While in hospital B, emphasis and decisions on compliance is only done during EXCO meeting as responsibility is assigned according to organogram.