EXPLORING IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU-NATAL RURAL PHC FACILITIES

by

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DEDICATION

I dedicate this work to God, the Creator of all loving and sagacious women who sacrificed their lives and happiness for the well-being and good of others, especially my mother (Mgabashe). You are my hero and the wind beneath my wings. To my late sister (Ntombiyomusa Infrida Mhlungu).... she is always in my heart.... How I wish she were here to reap the fruits of her unselfish labour. She contributed immensely to the person I am today. May she rest in peace and rise in glory; we will meet in the morning. And last but not least, the study is dedicated to our clients in the PHC environment for constantly utilising our services and believing in our skills.

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DECLARATION

I, Donald Thandokuhle Mhlungu, declare that **EXPLORING IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU-NATAL RURAL PHC FACILITIES** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before at any other institution.

Donald Thandokuhle Mhlungu Date: 30.01.2023

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To God, the Almighty, words may fail me. What shall I render to You in thanksgiving? My faithful Father, everything in me says “*Ebenezer*” to You for your grace, love and strength. I sometimes feel I do not deserve it, I do not have anything fit or worthy to express my gratitude. You deserve all the glory, praise and veneration, my faithful Father.

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ABSTRACT

South African rural communities depend on Primary Health Care services. Ideal Clinic Realisation and Maintenance programme is implemented to improve quality of Primary Health Care services. A qualitative case study design was used to explore the Ideal Clinic Realisation and Maintenance programme's implementation in public Primary Health Care facilities in a rural KwaZulu-Natal sub-district. Eight senior health managers and seven professional nurses were interviewed.

Four themes were developed, including the organisation, barriers, facilitators and recommendations for Ideal Clinic Realisation and Maintenance programme's implementation in a rural context. Data suggested challenges in rural Primary Health Care such as sub-optimal infrastructure, growing disease burden and resource shortage. Successful implementation of Ideal Clinic Realisation and Maintenance programme requires stakeholder support, communication and teamwork. The study's findings can be utilised to improve implementation of Ideal Clinic Realisation and Maintenance programme in Primary Health Care, facilitate Primary Health Care re-engineering and achieve universal health coverage.

Key concepts: Fixed Primary Health Care facilities; ideal clinic; Ideal Clinic Realisation and Maintenance programme; implementation; professional nurse; rural; senior health managers.

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LIST OF ABBREVIATIONS AND ACRONYMS

ICRM	Ideal Clinic Realisation and Maintenance
KZN	KwaZulu-Natal
NGO	Non-governmental Organisation
NHI	National Health Insurance
PHC	Primary Health Care
PPTICRM	Perfect Permanent Team for Ideal Clinic Realisation and Maintenance
SANC	South African Nursing Council
SDG	Sustainable Development Goal
UHC	Universal Health Coverage
WHO	World Health Organisation

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The Constitution of South Africa indicates that all its inhabitants have the right to healthcare services (South Africa 1996:1255). However, there are still challenges, especially in South African rural areas where people cannot access quality healthcare services. Despite the progress that was made, post-apartheid South Africa's health system is generally resource-restrained as inequalities in the distribution of health and economy are still prevalent and affecting healthcare consumers. The gross domestic product per capita spending on health is 8.5%, and half is allocated to the private sector catering to the socio-economic elite. The remaining large number of people are mostly affected by increased morbidity rates and depend on the public sector, which has fairly limited resources (Michel et al. 2020:2). This poor access to care is, in part, due to staff shortages and poor resource allocation (Maphumulo & Bhengu 2019:4). Therefore, the government of South Africa increased the healthcare budget and continuously strengthens the network and infrastructure of public hospitals and Primary Health Care (PHC) facilities. One of the important initiatives is the Ideal Clinic Realisation and Maintenance (ICRM) programme which was introduced in 2013 (Coetzee 2018:7).

All public PHC facilities must comply with the core elements of the ICRM programme to achieve and maintain the "ideal clinic" status that allows for quality patient-centred care. An ideal clinic is defined as "a clinic with good infrastructure, adequate staff, adequate medicines and supplies, good administrative processes and adequate bulk supplies" (Hunter et al. 2017:111; South Africa 2020:1). Furthermore, an ideal clinic is a clinic where the staff "utilises applicable clinical policies, protocols and guidelines, and obtain support from partners and stakeholders' support, to ensure the provision of quality healthcare services to the community" (South Africa 2020:1). Successful implementation of the ICRM programme in PHC facilities is essential to improve the quality of healthcare services. Quantitative data is available on the ideal clinic scores, but qualitative data on barriers and facilitators to successful implementation is lacking. Therefore, the researcher was interested in exploring the phenomenon of the ICRM

programme's implementation using a qualitative case study design. This study explores the views of the senior health managers and professional nurses in implementing the ICRM programme.

This chapter outlines the background of the study, the research problem, the aim and objectives, as well as the significance of the study. The chapter also outlines the research methodology and ethical considerations. The key terms used in the study are clarified in this chapter.

1.2 BACKGROUND TO THE RESEARCH PROBLEM

The 2030 Agenda for Sustainable Development reported that the United Nations member states, including South Africa, maintained their agreement and committed to the promotion of the health and well-being of their people. In order for the member states to achieve this agreement, universal access to quality essential healthcare services, including access to safe, effective and efficient services, must be ensured (Mofolo, Heunis & Kigozi 2019:1; WHO 2018:2).

Developing countries are adopting Universal Health Coverage (UHC) as their health principle, expanding the range of healthcare services provided to citizens (Barasa et al. 2018:346). UHC is the strategy that allows communities to benefit from quality essential healthcare services without having to pay more than they can afford (Hogan et al. 2018:152). "Availability of and accessibility to essential healthcare services imply that the most disadvantaged have a privilege to affordable or free medical interventions, including sexual and reproductive health, well-baby services and the management of all ailments" (WHO 2019:12).

The accomplishment of universal access to quality healthcare for all citizens suggests that historical disparities in resource allocation and service delivery should be dealt with to the maximum benefit of all healthcare clientele. Generally, African countries have adopted the district healthcare system, which has become the backbone and the vehicle of the delivery of health services in the national healthcare system and PHC forms part of the district healthcare system (Rispel et al. 2018:18; WHO 2019:11). PHC services are paramount to the delivery of essential healthcare services for an effective healthcare system in developing countries and ensuring UHC. At the core of

effective progress towards UHC is access to quality healthcare in rural areas, including resource mobilisation at the PHC level (Umeh 2018:6).

Sub-Saharan Africa is facing challenges with the achievement of UHC due to a large number of people still living below the poverty line, making it difficult for them to pay for healthcare services and transport to access healthcare services (Assan et al. 2019:5; Umeh 2018:894). UHC is also difficult to attain in light of the collapsing public health system due to under-financing, corruption and incompetence of some healthcare workers (Muthathi & Rispel 2020:12).

Several innovations are being presented to facilitate UHC in South Africa, including PHC re-engineering, improving the infrastructure of health facilities and piloting the National Health Insurance (NHI) (Afrizal et al. 2019:2). A large magnitude of people relies on public PHC services as it is the first point of entry into a comprehensive range of healthcare services (Michel et al. 2020:2; Vasuthevan & Mthembu 2021:43). South Africans are utilizing PHC facilities in large and escalating numbers as PHC visits have grown to approximately over 128 million from 2013 which indicates that people are interested in mechanisms to improve their health (South Africa 2018:14). In South Africa there are still impediments in rendering quality PHC services to the public, especially in rural areas, for example long waiting times and inadequate distribution of resources, whether human or material (Egbujie et al. 2018:311; Steyl 2020:1).

The ICRM programme was adopted to counteract the current inadequacies in the quality of PHC services and to re-align all PHC facilities to achieve the national standards in preparation for the introduction of NHI and improve health services beyond the implementation of NHI (Hunter et al. 2017:111; Rispel et al. 2018:13). At the beginning of July 2013, the National Department of Health dedicated eight months piloting and structuring the ideal clinic framework in partnership with provinces, districts and PHC facility managers and staff (Hunter et al. 2017:112). Countrywide, the use of Version 15 of the ICRM framework began on the 1st of April 2015. The implementation was closely aligned with the Plan-Do-Study-Act cycle four-stage problem-solving model. The Plan-Do-Study-Act cycle, as applied to the ICRM programme, begins with determining the ideal clinic to set a baseline for future assessments (Hunter et al. 2017:115).

Recent statistics published by the South African Department of Health indicate that the implementation of the ICRM programme in the Zululand district is adequate (above 80%) (South Africa 2018:9). However, several challenges remain, affecting its optimal implementation in some public PHC facilities in the rural sub-districts leading to inferior quality care. According to the Zululand District Health Plan 2018/19- 2020/21 (South Africa 2018:47), there is poor implementation and monitoring of the ICRM programme and the National Core Standards. It is mentioned that such poor implementation is due to failure to attend to the quality improvement areas originating from the lack of buy-in from the institutional top management.

The ideal clinic score allocated during the clinic's ideal status determination provides a quantitative perspective on the performance in terms of the ICRM programme. However, there is little known about the views of the senior health managers and professional nurses concerning the processes and organisation of the whole programme. How the nurses conceptualise the ICRM programme is unknown (Hlongwane, Ngongoni & Grobbelaar 2019:226). Simelane-Zulu (2019:25) indicated that there is a need to monitor and evaluate the implementation of the ICRM programme in all facilities to improve the quality of PHC service. Monitoring and evaluation can be done through research and enquiry using the appropriate resources and allocated budget.

The health managers are assigned to plan the health programmes to help achieve the health objectives. Organisation and leading in all activities are also important in the roles of health managers. Furthermore, the managers must be able to control, monitor and evaluate the effectiveness of healthcare programmes (Meyer et al. 2019:227).

Professional nurses play a vital role in the South African PHC system, and nursing managers have a legal, professional and ethical obligation to drive change and innovation, thereby ensuring quality in healthcare (Maphumulo & Bhengu 2019:4). To fulfil this professional obligation, the professional nurse has to understand the ICRM programme as a strategy to improve quality of services rendered at PHC facility level. However, several barriers exist to successfully implementing quality improvement programmes, such as the ICRM programme. A high attrition rate of skilled personnel from the PHC setting leads to an inadequately trained community health workforce,

thus affecting the quality of PHC services rendered (Assan et al. 2019:5; Umeh 2018:798).

Professional nurses sometimes perceive innovative strategies such as the ICRM programme as an additional responsibility on an already faltering PHC system and underestimate the value of such innovations (Brooke-Sumner et al. 2019:3). There is a significant task-shifting when it comes to the implementation of programmes such as the ICRM programme leading to poor coordination of services at management level. Clinical management decision support is sometimes a challenge where nurses' knowledge at PHC is relatively inadequate, and the clinical guidelines are not readily available (Lebina et al. 2019:11).

1.3 RESEARCH PROBLEM

PHC services providers in South Africa, particularly PHC facilities in the selected sub-district operating under Zululand district, are experiencing inadequacies in the provision of quality PHC services (South Africa 2018:22). For most rural communities, public PHC facilities in South Africa are the first level and often the only contact with the healthcare system. Therefore, poor quality of care at PHC facilities will negatively affect the health of the patients and the population it serves.

The ICRM programme addresses inadequacies in providing quality healthcare at PHC facilities (Hunter et al. 2017:111). However, several PHC facilities in the Zululand district are not performing as expected (at 90% on average for all sub-districts) concerning some aspects of the ICRM programme, for example, adherence to guidelines on archiving and filing of patients' records, slow increase of immunization coverage of babies to at least 92%, lack of essential equipment and more (South Africa 2018:2). Variations in the performance of these elements have also been observed among PHC facilities receiving support from the same management structures. Failure to optimally implement and sustain the ICRM programme in rural PHC facilities will indirectly compromise the preparation of a platform to launch the NHI since South Africa has widespread rural areas.

Although quantitative measures are available, qualitative exploration could furnish an in-depth understanding of perceived challenges compromising the implementation of

the ICRM programme and provide insights into possible facilitators to improve the performance of the ICRM programme.

Muthathi, Levin and Rispel (2019:1-11) conducted a study on implementing the ICRM programme and found a greater need to involve frontline managers and staff in decision-making. Therefore, the views of senior health managers and professional nurses are invaluable in understanding the factors related to implementing the programme in these selected PHC facilities in the selected sub-district.

1.4 PURPOSE OF THE STUDY

The purpose, objectives and questions are outlined in the sections below since they were considered throughout the study. The researcher ensured that the research questions aligned with the study's objectives.

1.4.1 Research purpose

The purpose of the study was to explore and describe the implementation of the ICRM programme in PHC facilities of a rural sub-district in KwaZulu Natal by explicating senior health managers' and professional nurses' views with an aim to provide feedback to improve the programme.

1.4.2 Research objectives

The objectives of the study were to:

- Determine professional nurses' views regarding the organisation and processes of the ICRM programme's implementation in PHC facilities of a rural sub-district in KwaZulu-Natal.
- Explore professional nurses' and senior managers' views regarding barriers and facilitators to the successful implementation of the ideal clinic elements in PHC facilities of a rural sub-district in KwaZulu-Natal.
- Recommend measures to improve the ICRM programme's implementation in PHC facilities.

1.4.3 Research questions

The research questions of the study were:

- What are the views of professional nurses regarding the organisation and processes of the ICRM programme's implementation in PHC facilities of a rural sub-district in KwaZulu-Natal?
- What are the views of professional nurses and senior health managers regarding barriers and facilitators to the successful implementation of the ideal clinic elements in PHC facilities of a rural sub-district in KwaZulu-Natal?
- Which measures can be recommended for improved implementation of the ICRM programme in PHC facilities?

1.5 SIGNIFICANCE OF THE STUDY

The study aimed to increase understanding of implementing the ICRM programme in rural PHC facilities. The study aimed to provide a qualitative perspective of the senior health managers' and professional nurses' views to acquire an in-depth understanding of the ICRM programme's implementation. Achievement of desired outcomes depended on identifying contextual determinants (barriers and facilitators). The strategies can be explicitly selected to address the barriers and enhance facilitators.

The implementation strategies aimed at specific barriers and facilitators are more effective than the implementation strategies chosen at random within the specific context (Waltz et al. 2019:42). The results from this study may inform policy makers to improve the implementation of the ICRM programme within these rural PHC facilities in terms of processes but also concerning the selection of appropriate implementation strategies. The study findings could inform future studies to improve the implementation of the ICRM programme within the study context but perhaps also in the broader context of South Africa to ultimately enhance the standard of PHC services rendered within the identified sub-district. Publication of the study methods and findings may stimulate interest in conducting studies of similar nature in other districts in South Africa. The results of this study may offer insights into how senior health managers and professional nurses interpret and respond to initiatives such as the ICRM programme.

The study might contribute to understanding and evaluating quality improvement innovations implemented by health professionals, such as the National Core Standards and the ICRM programme. The study might also help identify the problem areas within the identified sub-district that may impede the successful implementation of the NHI and the PHC Re-engineering.

1.6 DEFINITIONS OF KEY TERMS

In this section, the key concepts used are clarified according to what they represent in the study.

1.6.1 Fixed public primary health care facilities

Fixed public PHC facilities are PHC clinics with permanent staff providing various PHC services between eight to 24 hours a day for five or more days per week (Van Rensburg 2022:506). In this study, fixed public PHC facilities are government-managed PHC facilities within the sub-district implementing the ICRM programme.

1.6.2 Ideal clinic

An ideal clinic is defined by Hunter et al. (2017:111; South Africa 2020:1) “as a clinic with good infrastructure, adequate staff, adequate medicines and supplies, good administrative processes and adequate bulk supplies. An ideal clinic uses applicable clinical policies, protocols and guidelines, as well as partner and stakeholder support, to ensure the provision of quality healthcare services to the community” (Mogakwe, Ally & Magobe 2019:2). “Ideal Clinic” in this study is a PHC facility which obtained acceptable scores for non-negotiable vitals, vital elements, essential elements and important elements. This PHC facility is then classified as silver, gold or platinum according to the ideal clinic categories. Such PHC can render quality healthcare services to the community and has all the necessary resources to address the community’s dynamic and unique health needs.

1.6.3 Ideal Clinic Realisation and Maintenance Programme

The ICRM programme is defined by Hunter et al. (2017:112) as a programme designed to address current shortfalls in the quality of PHC services. The ICRM programme is a strategy to ensure that the healthcare services rendered to community

members can meet their needs by considering certain elements and components to be met. In this study, Version 19 of the ICRM programme is currently implemented and consists of 238 elements, ten components and 33 subcomponents.

1.6.4 Implementation

“Implementation is an act of putting a resolution or plan into effect or execution of a plan” (Oxford Advanced Learner’s Dictionary 2019, “implementation”). In the context of this study, implementation denotes the execution of the ICRM programme by the senior health managers and professional nurses working at fixed public PHC facilities with the supervision, guidance and support from the senior health managers.

1.6.5 Professional nurse

A professional nurse is a healthcare professional certified and capable of independently practising comprehensive nursing in a way and to the level prescribed and who is proficient in accepting obligation for such practice (South Africa Nursing Council [SANC] 2005:25; Vandali 2017:445). In this study, a professional nurse is a nurse registered with the SANC and practising at fixed public PHC facilities and is involved in the execution of the ICRM programme. Professional nurses include those with post-basic clinical specialities referred to as clinical nurse practitioners.

1.6.6 Rural

A rural area is characterised by long distances from urban centres and is characteristic of the countryside (Oxford Advanced Learner’s Dictionary 2019:1200 s.v. “rural”). The term rural can be considered in geographical, locational and sociocultural domains. The majority of rural communities experience similar challenges in terms of access to care, resource allocation, health inequalities and deprivation (Stockton et al. 2021:2). In this study, a rural area pertains to an area in which the sub-district under study is situated, the population is dispersed, and some PHC facilities are far from the hospital.

1.6.7 Senior health managers

Senior health managers are the officials or health executives in the hospital management committee who manage the business and administrative side of healthcare organisations. Their functions encompass, but are not limited to, health

planning, developing health policies, and risk and asset management (Booyens, Jooste & Sibiya 2015:78; Meyer et al. 2019:227; Reblando 2018:306). In this study, the senior health managers are the members of the hospital executive committee and the extended top management committee. The extended top management committee includes the operational nurse managers of all departments and PHC facilities within the sub-district. This committee is responsible for the management functions of various hospital departments and oversees the functioning of all PHC facilities involved in this study, including the implementation of the ICRM programme. The senior health managers in this study include the Chief Executive Officer, PHC assistant nurse manager supervisors and operational nurse managers.

1.6.8 View

"View" refers to "a particular way of considering or regarding something; an attitude or opinion" (Oxford Advanced Learner's Dictionary 2019:1657 s.v. "view"). In the context of this study, "view" denotes the opinions and perceptions of senior health managers and professional nurses working in the identified sub-district towards their understanding and experience of implementing the ICRM programme.

1.7 RESEARCH DESIGN

"A research design is a blueprint the investigator utilises to conduct a study, and it guides the planning and implementation of the study to achieve research objectives" (Brink, Van der Walt & Van Rensburg 2018:217; Creswell & Poth 2018:327; Grove, Gray & Burns 2017:511). The researcher used a qualitative approach and case study design.

The qualitative approach aimed to ensure an in-depth exploration and description, and the case study design aimed to focus on a specific case (also referred to as a bounded system) (Polit & Beck 2021:483). A case is defined as a specific, complex functioning entity and could represent a person, an institution, a programme or a system (Creswell & Poth 2018:96; Yin 2016:68). In this study, the case represented the implementation of the ICRM programme within a typical context of rural PHC facilities in the selected sub-district, which were studied in a real-life situation.

A case study design values the exploration of multiple perspectives to describe the case, and interviews are the preferred method to gain in-depth perspectives (Creswell & Creswell 2018:14; Creswell & Poth 2018:97; Yin 2016:147). Data were collected from senior health managers and professional nurses through individual telephonic interviews to better understand the ICRM programme from different sources or perspectives.

1.8 RESEARCH METHODOLOGY

Research methodology describes the mechanisms used by the researcher to solve the research problem or to answer research questions (Brink et al. 2018:200; Polit & Beck 2021:801). Table 1.1 outlines the aspects considered in the research methodology. Detailed explanations are provided in the methodology section of Chapter 3.

Table 1.1: Summary of the research methods

COMPONENT	DESCRIPTION
Setting	Rural sub-district in North-Eastern KZN
Population	Professional nurses working at PHC facilities in the sub-district and senior health managers supervising the implementation of the ICRM programme at the PHC facilities in the sub-district
Sampling	Non-probability convenience sampling considering the inclusion criteria
Data collection	Semi-structured telephonic interviews using interview guides
Data analysis	Thematic analysis

1.9 ETHICAL CONSIDERATIONS

In this section, the researcher summarises the ethical principles applied and observed in this study. The full description is provided in the methodology Chapter 3.

During all research steps, researchers must ensure participants' protection from harm. Protection from harm includes ensuring that the risks are not detrimental to the health and well-being of the participants and that they are free to choose to participate (Grove et al. 2017:119; Polit & Beck 2021:133). The ethical principles according to the

Belmont Report guided the researcher, namely, beneficence, respect for human dignity and justice.

The risks and benefits of research were considered before the study was initiated, and the researcher put mechanisms in place to maximise the benefits to the senior health managers, professional nurses and health service. The benefits and risks of the study were explained to the senior health managers and professional nurses in the participant information sheet.

The researcher ensured that the participants could exercise their right to autonomy and decide whether or not to participate in the study. Participants had a free choice of whether or not to participate in the study and were free to refuse or withdraw without being forced. They all signed informed consent.

The selection and recruitment of participants were based on the requirement of this study, and requirements were applied throughout all the research phases. Participants' privacy was respected by not asking invasive questions and ensuring that interviews were conducted in private areas. Information given by the participants was not shared with outsiders, and the people officially assisting with the research signed a confidentiality agreement.

1.10 SCOPE OF THE STUDY

This research was conducted at seven of the 15 PHC facilities implementing the ICRM programme within the identified sub-district of Zululand health district in the KZN Province of South Africa. This study was confined to only one sub-district of the KZN Department of Health, and the researcher provided common context elements concerning the findings to ensure transferability. The research occurred in a rural sub-district where a substantial proportion of the population depends on PHC services.

1.11 OVERVIEW OF THE DISSERTATION'S STRUCTURE

The dissertation consists of five chapters. Table 1.2 outlines the five chapters.

Table 1.2: Overview of the dissertation's structure

CHAPTER	BRIEF OUTLINE
1	This chapter outlined background details about the research problem, the purpose and objectives of the study, and its significance. The key terms were defined in this chapter. In this chapter, the researcher provided a brief outline of the research design, methodology and ethical considerations.
2	This chapter provides a description of the literature reviewed in order to put the research problem into context.
3	This chapter outlined the research paradigm, design and methodology. This chapter describes the study population, recruitment and sampling procedures. The process of data collection and analysis is discussed in this chapter. The measures that were used to enhance trustworthiness are discussed in this chapter.
4	In this chapter, the findings are reported and described concerning existing literature.
5	This chapter concludes the study by revisiting the research objectives and design used to answer the research questions. The chapter interprets the research findings and makes recommendations for further research. A reflection on the study's contributions and limitations is provided in this chapter.

1.12 SUMMARY

Chapter 1 outlined the essential information that orientates the reader to the study, including the background to the research problem, the research problem, the significance of the study, the research purpose and objectives, data collection and analysis methods and ethical considerations. This chapter forms the foundation for this research study and outlines the process. In the next chapter, a review of the literature relevant to the key constructs in this study is discussed.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The first chapter provided an outline of the research problem, research purpose and study objectives. The research methodology was briefly outlined. The study recognises the debates among qualitative theorists regarding the stand-alone chapter on reviewed literature. This chapter presents a theoretical literature review, which is used to introduce the context of this research study (Waltz et al. 2019:2), namely, the implementation of the ICRM programme in general and policies that South Africa adopted to improve UHC. Reference is also made to previous studies related to the broader organisation of the ICRM programme. Literature included peer-reviewed journal articles, government databases and websites. The five-year timeframe was used to identify the most recent trends in implementing the ICRM programme. Studies older than five years were used to describe the origins of the ICRM programme's implementation.

The first section of the chapter outlines the UHC from a global perspective, followed by the implementation within the global and South African healthcare system. NHI, PHC re-engineering, and the challenges in the healthcare system are also outlined. The chapter closes with a discussion of the ICRM programme, its evaluation and the context within which the ICRM programme is implemented in this study. The role of the healthcare professionals is discussed as they are the implementers of the ICRM programme.

2.2 PERSPECTIVES ON UNIVERSAL HEALTH COVERAGE

Globally, there have been efforts to improve access to quality healthcare. UHC means that all people receive the healthcare services they need, including public healthcare services that are designed to promote better health and to provide preventative, curative, rehabilitative and palliative care (South Africa 2017:7; WHO 2018:1). UHC is not merely about access to healthcare, but it also aims to promote quality of care and financial risk protection. Quality of care is the safe, efficient, patient-centred, timely and equitable provision of healthcare services to achieve the desired health outcomes.

Therefore, scaling up the implementation of evidence-based healthcare interventions is critical to achieving UHC (WHO 2018:1).

More than a decade into the 21st century, access to essential and quality healthcare services to attain UHC remains a global problem, especially in low and middle-income countries. At least half of the world's population still lacks access to essential healthcare services, with 800 million people spending more than 10% of their household budget on healthcare. Spending more on healthcare pushes them to extreme poverty and keeps them from affording other essential living expenses (WHO 2018:1).

Globally, there is a need to accelerate the progress towards strengthening healthcare systems and achieving UHC, particularly in lower-income settings. Following the commitments by the countries at the United Nations Sustainable Development Goals (SDG) Summit, most countries have enacted legislation to expand healthcare services. Countries that are United Nations member states adopted the UHC initiative as one of the seventeen SDGs. These countries committed themselves to achieving UHC even before the era of SDGs, and among those countries were the United Kingdom in 1948 and Japan in 1961. On the African continent, Ghana and Rwanda have started to strengthen their healthcare systems to achieve UHC (WHO 2019:5).

South Africa also committed to attaining UHC by 2030. It included this intent in the National Development Plan (WHO: 2019:6). However, healthcare service delivery in South Africa is challenged by critical staff shortages, inadequate skill mixes, and the widespread geographical distribution of the workforce (WHO 2018:2). These challenges pose a threat to achieving UHC, especially in developing countries. Additionally, equity is essential to achieving UHC. For many decades healthcare service provision in South Africa was fragmented and divided along racial lines. The South African healthcare funder market is complicated and interrelated, the medical aid schemes enable approximately 16% of the population to access privately delivered healthcare, and the remainder is dependent on publicly funded healthcare services (WHO 2019:6).

The South African government is making an effort to improve UHC through the NHI and strengthening of the PHC system (WHO 2019:6). Despite the commitment by the government, implementation of quality assurance programmes has been affected by

numerous challenges experienced by the implementers at the PHC facilities (Muthelo et al. 2021:50).

2.2.1 National Health Insurance

South Africa introduced the NHI model in response to the global call for member countries to achieve UHC. The NHI represents a reform that would provide equity and social support through pooling risks and funds (Barasa et al. 2018:346; Dieleman 2018:1793). The introduction of the NHI within the South African healthcare system originates from the PHC approach. It allows PHC Re-engineering (South Africa 2017:1). The NHI aims to address the unsustainable inequities in healthcare in South Africa, namely that the public sector serves 80% of the population and not all the people can access quality healthcare services. To achieve this aim, an all-inclusive care package has to be provided that supports PHC Re-engineering. The NHI offers a system of financing that ensures that all citizens of South Africa will be provided with essential healthcare, whether employed or not (Coetzee 2018:106).

The NHI project is an attempt by the government to implement UHC, but the South African government faces major obstacles in implementing this idea. The challenges are mainly experienced in rural areas due to limited resources (Coetzee 2018:374). The implementation of NHI requires some critical and strategic adjustments to existing regulations and the enactment of new laws to ensure that there is not only legislative alignment but also policy consistency across all spheres of government and the healthcare system. The government is working on the mechanisms to prepare for the NHI, the resources to be provided, and acts are promulgated in line with this strategy (South Africa 2017:2).

2.2.2 The South African healthcare system and Primary Health Care re-engineering

South Africa has a large population, with approximately two-thirds of people living in urban areas with healthcare services provided at three levels: national, provincial and district. The healthcare system comprises private and public sectors, and more than 80% of South Africans utilise the public sector. PHC is the cornerstone of healthcare service delivery to the population dependent on the public healthcare sector (Webb, Rheeder & Wolvaardt 2019:2).

PHC is a strategy developed at the 1978 Alma-Ata Conference, and the resolution was based on the fact that health is a fundamental right of every citizen and should be preserved. PHC, as defined at the Alma-Ata Conference, is a form of healthcare that is “based on practical, scientifically sound and socially acceptable methods and technology made universally accessible through people’s full participation and at the cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination” (Coetzee 2018:23; Olalubi & Bello 2020:2; Setswe, Naude & Zungu 2018:5).

PHC forms the foundation of the public healthcare system in South Africa, bringing the service as close as possible to the people regardless of any factor (Coetzee 2018:21; Olalubi & Bello 2020:2). Bringing the healthcare services close to the people will assist in improving accessibility and allow the citizens to utilise the services fully. This is important since PHC is regarded as the first point of entry or contact that the consumers have with the healthcare system (Khuzwayo & Moshabela 2018:2). PHC remains the minimum package of healthcare that should be provided to every individual across all communities (Dassah et al. 2018:2; Olalubi & Bello 2020:1). PHC services include health education, environmental health services, immunization, epidemiology and disease control and emergency care to mention a few.

Since the enforcement of the PHC approach, some of the essential indicators of healthcare delivery at PHC, like immunisation coverage and Antiretroviral Treatment (ART), have increased in some districts, leading to the improved health status of the community. In South Africa, the community-orientated primary care approach to UHC addresses many challenges and shortcomings of hospital-based care since the diseases are prevented or managed at the community level (Olalubi & Bello 2020:2).

Although PHC has been part of the South African healthcare system since its introduction, it requires a new approach to remodel and restructure the services. In 2010, the National Department of Health introduced Primary Health Care Re-engineering as part of a multi-pronged system reform to ensure the quality of PHC services. South Africa committed itself to several reforms in the PHC setting, including, but not limited to, the District Clinical Specialist posts, strengthening of community-based health promotion and remodelling of services as part of PHC Re-engineering. PHC Re-engineering is part of a broader policy commitment to achieving UHC through

the NHI and ensuring that quality of care is affordable to all (Bresick, Von Pressentin & Mash 2019:109).

The success of the South African NHI depends on a well-functioning PHC system that provides equitable access to communities, especially those most in need. Therefore, there was a need to rethink the PHC approach. PHC Re-engineering is a strategic reform that is implemented through four streams, namely:

a) Municipal Ward-Based PHC Outreach Teams (WBPHCOTS), forming a pivotal part of South Africa's re-engineering strategy. The teams consist of Community Health Workers (CHWs) led by a nurse and are linked to a PHC facility. The team screens and refers clients with health problems.

b) Integrated School Health Programme (ISHP), rendering the healthcare services to improve the physical, mental and general well-being of children of school-going age.

c) District Clinical Specialist Teams (DCSTs), supporting capacity building and mentoring, strengthening the use of clinical guidelines and protocols and the use of information to achieve positive health outcomes.

d) Contracting-in of private health practitioners at the non-specialist level, which is an essential step in strengthening PHC and ensuring integrated services at the PHC level in order to address the health needs of the population and is aimed not only at improving access but also at decreasing the burden of disease (South Africa 2017:29).

Re-engineering of PHC is among the priorities in the National Department of Health's strategic plan (2015-2019), and based on the plan, the Operation Phakisa ICRM programme has been implemented since 2013.

2.2.3 Challenges in the South African healthcare system

Rural Sub-Saharan Africa's healthcare system faces challenges with achieving UHC due to the lack of equal access to essential services because of resource limitations. Primary healthcare services are also overburdened, and fragmentation affects the quality of healthcare services rendered (Umeh 2018:894).

Prior to 1994, the South African healthcare system was built on an apartheid ideology and was characterised by racial and geographic disparities and fragmentation.

Historically vertical fragmentation of healthcare services resulted from the essentially curative hospital-based care given clear priority over the PHC approach at the local and community level, and this led to health services lacking promotion of preventive and promotive services. Vertical fragmentation of healthcare services undermined the role PHC services can play in improving the health status of the rural communities to achieve UHC (Khuzwayo & Moshabela 2018:2; South Africa 2017:1). South Africa underwent a peaceful transition from apartheid to constitutional democracy and considerable progress has been made towards reversing discriminatory practices. However, the country is still experiencing persistent socio-economic disparities and inadequate human resources, affecting the quality of healthcare rendered to communities (Burger & Christian 2018:9; Omotoso & Koch 2018:1).

Acceptability of healthcare services by the members of the public is high, but the availability and affordability of healthcare services remain persistently low. Low levels of availability and affordability imply that only 53% of South Africans have full access to the healthcare services they need. These low levels of availability are emphasised in rural areas in South Africa, where there is often a mismatch between the expected duties and the available resources to meet those expectations in terms of staffing, essential infrastructure and supplies (Jaeger et al. 2018:1). The commitment by the South African government in the adoption of a comprehensive PHC approach was initiated to address some of the inequalities. The PHC approach was implemented to deliver care closer to where communities live through the fixed PHC facilities and mobile clinics (Tabish 2018:496).

The healthcare system is also challenged by the quadruple burden of disease, which overstretches the resources (South Africa 2017:8). The quadruple burden of disease results from communicable diseases, for example, Human Immunodeficiency Virus (HIV) and Tuberculosis (TB), maternal and child mortality, non-communicable diseases as well as injury or trauma (WHO 2018:1). The South African government is responsible for the prevention of diseases and other aspects of public healthcare to address the quadruple burden of disease and ensure equitable resource allocation.

2.3 STRENGTHENING THE SOUTH AFRICAN HEALTHCARE SYSTEM THROUGH THE ICRM PROGRAMME

Several innovations at the PHC level are used to facilitate the achievement of UHC, including but not limited to PHC re-engineering, improving health infrastructure availability and piloting the NHI, among others (South Africa 2017:2). Quality improvement interventions like Operation Phakisa and the ICRM programme among others were introduced in 2013 to address current inadequacies in the quality of public PHC services in South Africa, ensuring the promotion of the UHC agenda and improving the standard of healthcare services provided for all South Africans (Hunter et al. 2017:111).

2.3.1 The objective and origin of the Ideal Clinic Realisation and Maintenance programme

The objective of the ICRM programme is for the PHC facilities to attain or achieve "ideal clinic" status. The ideal clinic is the strategy by the National Department of Health to establish excellence and is designed to respond directly to the challenges regarding the nature of services rendered at the PHC and ensuring community-orientated primary healthcare practice (Coetzee 2018:7).

An ideal clinic is defined by Hunter et al. (2017:111) as a PHC facility with appropriate buildings, enough human and material resources and which can apply up-to-date administrative guidelines in patient care. An ideal clinic utilises up-to-date procedure manuals, standing orders and evidence-based clinical guidelines to offer quality healthcare services to the clients and is supported by local partners and stakeholders (Coetzee 2018:107; Mogakwe et al. 2019:2).

The ICRM programme, as implemented since 2013, has its basis in the Malaysian eight-step problem-solving method commonly known as "Big Fast Results". This method was named "Operation Phakisa" to fast-track the delivery of the National Development Plan 2030. This was done to hasten the efficiency and quality of PHC facilities and Community Health Centres for positive health outcomes and client satisfaction (Hunter et al. 2017:112; Mogakwe et al. 2019:3). The processes of the Malaysian eight-step problem-solving methodology are designed to allow the public PHC system in South Africa to gain the required knowledge through monitoring of the

programme, testing outcomes and outlining the essential adjustments to existing quality systems in PHC (Lebina et al. 2019:2).

2.3.2 Scoring of the ideal clinic during an assessment

A “dashboard” was developed to score a PHC facility in terms of its “ideal” status, using two colours, green for functional elements and red for non-functional elements. The dashboard comprises 238 elements, categorised into ten components and 33 sub-components (Figure 2.1) (Hunter et al. 2017:113; South Africa 2020:143). The dashboard outlines the constituent elements that have the potential to enhance or hamper the quality of healthcare service delivery. Using the dashboard, the ideal clinic assessment team can identify challenges at the PHC facilities and work with the PHC managers at all levels to effect adjustments and improvements (Hunter et al. 2017:26). Version 19 of the ideal clinic manual is currently in use and has been updated from the version that was used in 2013 (South Africa 2020:1).

Constituent elements are assigned a green colour when they are fully functional in the PHC facility and a red colour if absent or non-functional (Hunter et al. 2017:112; South Africa 2020:143). A PHC facility has to obtain an 80% score on the Office of Health Standards Compliance (OHSC) assessment to qualify as an ideal clinic. The evaluation of PHC facilities occurs in phases and by different stakeholders. The facility manager performs the initial evaluation, followed by the PPTICRM evaluation (South Africa 2020:128). The PPTICRM comprises the sub-district PHC Manager and PHC Supervisors responsible for the PHC facilities in the sub-district. The initial evaluation is aimed at providing a baseline assessment and an opportunity for the facility manager and staff to address the deficiencies in the elements of the programme.

COMPONENTS									
1 Administration	**2 Integrated Clinical Service Management**	**3 Medicines, supplies and laboratory services**	**4 Human resources for health**	**5 Support services**	**6 Infrastructure**	**7 Health Information management**	**8 Communication**	**9 District Health system support**	**10 Implementing partners and stakeholders**
SUB-COMPONENTS									
1.Signage and notices	5.Clinical service provision	13.Medicines and supplies	15.Staff allocation and use	17.Finance and SCM	22.Physical space and routine maintenance	26.District Health information software	27.Internal communication	29.District Health system support	32.Implementing partners support
2.Staff identity and dress code	6.Access to medical, mental health and allied practitioners	14.Management of laboratory services	16.Professional standards and Performance Management and Development System	18.Hygiene and cleanliness	23.Essential equipment and furniture		28.Community engagement	30.Emergency response	33.Multi-sectoral collaboration
3.Patient service organisation	7.Management of patient appointments			19.Security	24.Bulk supplies			31.Referral system	
4.Management of patients' records	8.Coordination of Primary Health Care services			20.Outbreak and disaster preparedness	25.Information, Communication Technology infrastructure and hardware				
	9.Clinical guidelines and protocols			21.Transport					
	10.Infection Prevention and Control								
	11.Patient waiting times								
	12.Patient experience of care								

Figure 2.1 Structure of the ideal clinic dashboard (Adapted from South Africa 2020:143)

The average ideal clinic score of a PHC facility is allocated according to the weights assigned to the 238 elements. Three elements are weighted as non-negotiable vitals, 53 as vital, 104 as essential and 78 as important. For the PHC facility to obtain ideal clinic status, a score of 100% has to be obtained for non-negotiable vital elements, 70% for essential elements, and 69% for important elements. The ideal clinic status depends on how the PHC facility performs in the evaluation, and it will be scored as silver, gold and platinum (Table 2.1). The category can only be achieved when the minimum average percentages for non-negotiable vital, essential, and crucial elements have also been achieved. Therefore, it is important to note that a PHC facility can obtain a high score (70-99%) but still fail to obtain an ideal clinic status (categorised as non-compliant) as they have failed to obtain the minimum score per weighted category. Each element is scored according to the performance of the PHC facility; green indicates “achieved”, amber indicates “partially achieved”, and red indicates “not achieved” (South Africa 2020:2).

Table 2.1 Summary of ideal clinic categories

Weights	Silver	Gold	Platinum
Non-negotiable vital (3 elements)	100%	100%	100%
Vital (53 elements)	60-69%	70-79%	≥80%
Essential (104 elements)	50-59%	60-69%	≥70%
Important (78 elements)	50-59%	60-69%	≥70%

(Adapted from South Africa 2020:2)

To strengthen the health system’s effectiveness, the National Department of Health refined and finalised the National Core Standards and audit tools for accreditation and quality monitoring. Auditing for the achievement of National Core Standards and the achievement of ideal clinic status should be conducted concurrently, and several measurement elements overlap or align. In addition to ensuring the quality of PHC services rendered, it is essential that PHC facilities meet the national treatment guidelines and the National Core Standards in terms of structure, process and outcomes (Webb et al. 2019:2).

The National Core Standards are structured into seven cross-cutting domains linked to six fast-track areas as areas where the quality or safety of the healthcare services

might be affected, whether positively or negatively, depending on how services are rendered (Webb et al. 2019:3). Patient's rights, safety, clinical governance and care and clinical support services are involved directly in the provision of quality healthcare services to the patients or clients as the consumers. Public health, leadership and corporate governance, operational management and facilities and infrastructure are part of the support system that ensures that the healthcare services meet the clients' needs. There are sub-domains under each domain which assist in breaking down the details on how to ensure the quality requirements are met (Mogakwe et al. 2019:1; Webb et al. 2019:3).

2.3.3 Evaluation of the ICRM programme

A review of the ideal clinical performance in 2016 showed that approximately 28% of the PHC facilities across the country achieved an ideal clinic status (Hunter et al. 2017:116). Lower-scoring PHC facilities generally improved their scores during the 2015/2016 period (Hunter et al. 2017:116). However, the ideal clinic scores have since improved provincially, with 469 PHC facilities obtaining the ideal clinic status in the ICRM programme assessments in the 2017/2018 financial year, and the identified sub-district obtained 85.7% (South Africa 2021:7).

The Western Cape has the highest number of PHC facilities, followed by KZN. In Gauteng, 89% of the PHC facilities achieved the ideal clinic status; in KZN, 77% of the PHC facilities achieved the ideal clinic status. In Mpumalanga province, the achievement of ideal clinic status among the PHC facilities was at 34%, and in the Eastern Cape, approximately 32% of PHC facilities achieved an ideal clinic status in the 2020/2021 financial year (South Africa 2020:71; South Africa 2021:23). These percentages show that there are still challenges in achieving the ideal clinic status within certain provinces primarily because of poor access to technology, lack of technical support and inadequate human resources for health (South Africa 2020:41). Hunter et al. (2017:116) found that not having enough space to accommodate all services, staffing and supply-chain management are vital challenges resulting in low ideal clinic scores. Some PHC facilities did not have a functional backup electricity supply, enough furniture, a consistent water supply or a functional sewerage system (Hunter et al. 2017:118).

A study that evaluated the integrated management of chronic disease management under the ICRM programme in two South African districts found that 12.5% of the PHC facilities did not achieve an ideal clinic status on chronic disease management. Silver status was obtained by 37.5%, while 50% of the PHC facilities obtained a gold status, and no PHC facility obtained a platinum status. The fact that many PHC facilities did not obtain a platinum ideal clinic status could indicate the need for improvements in the infrastructure, personnel and supply chain issues in these facilities. However, in the peer-to-peer assessment reviews for ideal clinics conducted in 2016, the number of PHC facilities scoring more than 70% has increased (Lebina et al. 2019:9). The results from the peer-to-peer reviews in the 2015/2016 financial year in KZN province's PHC facilities reveal that 25 of PHC facilities obtained platinum status, 87 gold, 29 silver and 44 did not achieve the ideal clinic status. The achievements were due to the availability of facility managers and the use of the teams to scale up the implementation of the ICRM programme (Hunter et al. 2017:116).

2.4 CONTEXTUAL CHARACTERISTICS OF THE RESEARCH SETTING

The description of the characteristics of the research setting is important in this study since the researcher used a qualitative case study. The province, district and PHC facilities' characteristics are described.

2.4.1 Characteristics of the province and district

A Provincial Department of Health is responsible for providing a system of corporative governance and management of health services within national guidelines in each province, municipality and health district. Effective management of all levels of healthcare facilities ensures the provision of quality PHC services (South Africa 2021:4). The KZN province comprises one metropolis, ten districts and 50 sub-districts. Four districts (Ugu, UMzinyathi, Zululand and UMkhanyakude) and one municipality (UMzimkhulu in Harry Gwala) have been declared rural based on the characteristics of the districts. The countryside is characterised by dispersed rural settlements and communal villages with households settling on the crests of hills or near rivers. This poses some unique challenges to development and equity in healthcare (South Africa 2018:15).

The district from which the sub-district of this study was selected is mainly rural, with communities dispersed in the mountainous landscape in the North-Eastern part of KZN province (South Africa 2018: 110). The district includes five health sub-districts: Nongoma, Ulundi, eDumbe, UPhongolo and Abaqulusi. The District Director manages the health district and is responsible for running both hospitals and PHC services smoothly.

The district has a population of 854 894, with a population density of 57, equating to eight persons per km^2 (which means that the population is scattered across the district), and falls into the socio-economic quintile one, thus among the poorest districts. The estimated medical scheme coverage is 5.6%, meaning that most of the district's population depends on the public healthcare sector (South Africa 2018:10).

The rural PHC context is not ideal due to several challenges. The challenges affect how the healthcare services and programmes are rendered (Muthelo et al. 2021:5). The situation in this specific rural context is not ideal and includes challenges such as poor complaints management and communication, a shortage of staff, and the unavailability of medicines and supplies (South Africa 2018:41). Maphumulo and Bhengu (2019:5) indicate that poor implementation of quality improvement programmes may generally be due to insufficient knowledge regarding the importance of the programmes and insufficient training and lack of financial support for improving client satisfaction and health services. Poor support for innovative PHC strategies and poor clinical decision-making, leadership and insufficient training by the management may undermine the importance of rendering quality PHC services to the members of the public (Olalubi & Bello 2020:7).

2.4.2 Characteristics of the sub-district

The total population in the identified sub-district where the study was conducted is estimated at 305 000 (DHIS 2021:online), of which more than 210 000 were uninsured (South Africa 2018:24). In this sub-district, there is a relatively sizeable proportion of the population entirely dependent on public health services which indicate a very strong need for the district to develop plans, strategies and activities to focus on the prevention and management of diseases associated with low socio-economic status, such as malnutrition. Chronic and severe malnutrition in children still generally remains

a challenge, especially in rural under-developed countries, which may be due to unemployment, food insecurity and more (Jaeger et al. 2018:2; South Africa 2018:12). Compared to the populations in the other sub-districts, the population within this sub-district has the highest unemployment rate, namely 71.7%. More than 40% of the people live in poverty. The sub-district PHC utilization rate is 2.4% compared to the district PHC utilisation rate of 2.5%, and the PHC head count is 234 8437 (South Africa 2018:25).

The sub-district under study has 15 fixed public PHC facilities involved in implementing the ICRM programme. The organisational span of control runs from the Chief Executive Officer, situated at the district hospital, to the enrolled nursing assistants to facilitate the smooth running of the PHC facilities within the sub-district (Figure 2.2). Healthcare management is essential for the coordinated functioning of healthcare facilities (Meyer et al. 2019:256).

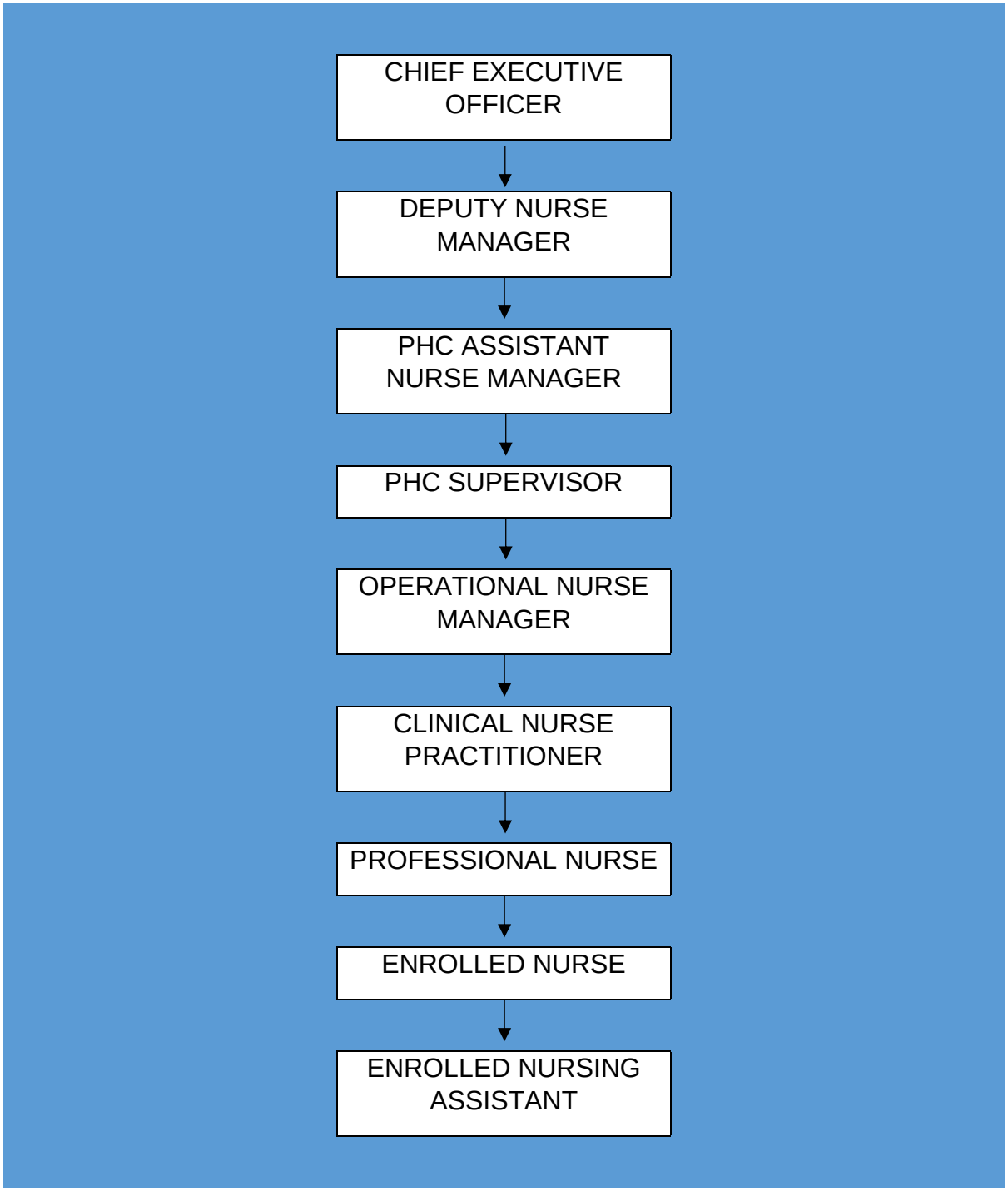

Figure 2.2: Shortened organogram for Primary Health Care

(Adapted from Booyens et al. 2015:84; Meyer et al. 2019:226)

2.5 ROLE OF HEALTH PROFESSIONALS IN THE ICRM PROGRAMME

The ICRM programme implementation requires the facilities to be staffed by the human resources for health, including the senior health managers and all other categories of nurses and staff (South Africa 2020:143). The PHC facility staff members apply their skills, knowledge and abilities, and such characteristics are incorporated into the daily functions to achieve the ideal clinic status.

2.5.1 Senior health management

The senior health managers, including the Chief Executive Officer, Deputy Nurse Manager, Assistant Nurse Managers and Operational Managers, are responsible for ensuring that the PHC facilities operate according to acceptable quality standards to promote positive health outcomes. Their role involves planning for well-coordinated services in the PHC facilities and organising the available resources to ensure the success of all programmes. Furthermore, the senior health managers lead and control all processes in healthcare service delivery (Meyer et al. 2019:227).

Senior health managers ensure the availability of supplies and medical equipment, monitor the stock availability, review levels and order the required supplies. The availability of supplies ensures that the services rendered meet the quality standards (Muthathi et al. 2019:3). Ensuring infection control and prevention is another function of the senior health managers since they ensure policies and procedures for the safe disposal of all hazardous materials are implemented, train staff on the safety measures, and delegate accordingly (Muthathi et al. 2019:3).

2.5.2 Professional nurses

In managing the PHC services, the professional nurse is responsible for adhering to the regulatory standards of care and holding himself or herself and others accountable for rendering quality services and implementing innovative strategies such as the ICRM programme. In the context of implementation, the ICRM programme as a new quality improvement initiative, the nurse has to develop the necessary skills, for example, cognitive skills, to be able to render high-quality services in a constantly changing sphere of the public healthcare system and skills to build trusting relationships (Brooke-Sumner et al. 2019:6; Duffy 2018:39).

In fulfilling the quality management role, the professional nurse is actively involved in compiling the quality improvement plans for the identified gaps and offers support in implementing them to support quality improvement initiatives. Quality management includes supporting the staff and the sub-district management during audits and PHC meetings and actively identifying the staff and client's needs (Meyer et al. 2019:254; Mogakwe et al. 2019:4).

Understanding organisational objectives, mission and vision in order to be able to benchmark for policy formulation according to the organisational processes and practices and ensure that the policies support the innovative strategies such as the ICRM programme is the responsibility of a nurse (Muthathi et al. 2019:3). The nurse also has a responsibility for being a change agent, to adopt the policies to changing organisational circumstances, thus ensuring effective implementation at PHC level. Adopting the policies promotes a safe environment for co-workers and staff by shaping the policy to ensure positive healthcare outcomes at the PHC level (Duffy 2018:40; Vandali 2017:444).

2.6 SUMMARY

In this chapter, the researcher described UHC as the important end goal to achieve SDGs, especially the third goal of ensuring good health and well-being. Programmes for strengthening the South African healthcare system have been discussed, including the NHI and PHC re-engineering. Since the South African healthcare system is undergoing restructuring through PHC re-engineering, the researcher incorporated the remodelling in this chapter to show its importance and relevance to the study. The chapter also highlighted the relationship between PHC re-engineering, the NHI and the ICRM programme's implementation. The ICRM programme as the intervention under investigation, the context of the study and the roles of the senior health managers and professional nurses were described.

In the next chapter, the researcher explains the research methodology: a qualitative case study to answer the research questions. The data collection and analysis methods are also described in Chapter 3.

CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

The previous chapter provided an overview of the South African healthcare system, UHC, PHC re-engineering and the ICRM programme. The contextual characteristics of the sub-district under study and the role of ICRM programme implementers were outlined. This chapter outlines the paradigm, research design and methodology in response to the research objectives. The data collection and analysis, the strategies to maintain trustworthiness and the ethical considerations are also described in this chapter.

3.2 PARADIGM

A research paradigm is a worldview influencing how realities and contexts are interpreted (Polit & Beck 2021:9; Yin 2016:22). A research paradigm is a philosophical position assumed by the researcher and has a fundamental set of assumptions that influence action (Brink et al. 2018:19; Creswell & Poth 2018:325). This research study was grounded on the constructivist paradigm, which is an approach to social science that emphasises the importance of the participant's viewpoints and understanding of reality (Cohen, Manion & Morrison 2018:9). Constructivists believe that individuals aim to develop an understanding of the world in which they live and work and that the researcher develops subjective meanings of their experience (Creswell & Poth 2018:20). Qualitative researchers using the constructivist paradigm use open-ended questions to explore participants' views (Creswell & Creswell 2018:8). The assumptions of the constructivist paradigm are discussed as applied in this study.

3.2.1 Ontology

Ontology is concerned with the nature of reality and addresses how a phenomenon makes sense or is real. In the constructivist paradigm, reality is viewed as constructed through the participants' minds (Creswell & Poth 2018:35; Cohen et al. 2018:288). The researcher in this study assumed that the reality about the ICRM programme implementation is multiple, subjective and mentally constructed by the participants

(Brink et al. 2018:19). Data were collected from two cadres of health professionals, namely the senior health managers and professional nurses from different PHC facilities in the sub-district. Their experiences of the ICRM programme implementation were expected to be subjective and varied.

3.2.2 Epistemology

Epistemology is concerned with the nature of knowledge in research. Knowledge was assumed as constructed and based on subjective, nonquantifiable beliefs, values and understandings (Brink et al. 2018:19; Cohen et al. 2018:287). In this study, participants' views were explored through interaction to arrive at an in-depth understanding of the context-bound phenomenon, namely the organisation, barriers and facilitators of the ICRM programme's implementation. A researcher-participant relationship based on professional trust assisted the researcher in gaining a deeper understanding of the phenomenon. The study was based on the premise that the generation of knowledge related to the implementation of the ICRM programme that originated from the participants' interpretation and meaning.

3.2.3 Axiology

Axiology is concerned with the role of the values of the researcher and participants in the study which impact the dialogue and inform the researcher's interpretation of data (Creswell & Poth 2018:20; Polit & Beck 2021:9). In this research, the values of the researcher were bracketed as data collection and analysis were done according to the prescribed method. The researcher ensured that his personal values did not influence the participants. The researcher identified and held in abeyance any preconceived ideas about the ICRM programme.

3.2.4 Methodology

Methodology pertains to the processes and techniques applied to answer the research questions. In qualitative research, the procedures are inductive, focused on the subjective, holistic, and nonquantifiable data obtained in a narrative format (Cohen et al. 2018:289; Polit & Beck 2021:9). The researcher analysed the experiences of the senior health managers and the professional nurses inductively to explore the context-bound phenomenon of the ICRM programme implemented in rural PHC facilities. Data

were collected from information-rich participants (senior health managers and professional nurses) as the supervisors and implementers of the ICRM programme.

3.3 RESEARCH DESIGN

A research design is a plan that the investigator uses to address a research question, including all procedures to ensure the trustworthiness of the study (Creswell & Poth 2018:10). Research designs also include measures to maximize control over factors that could interfere with the trustworthiness of the findings and guide the planning and implementation of the research (Brink et al. 2018:92; Leedy & Ormrod 2021:457; Grove et al. 2017:511). This researcher used a qualitative approach and qualitative case study design. The qualitative research approach and case study design and their justification are discussed in this section.

3.3.1 Qualitative research approach

Qualitative researchers use an emergent design, ensuring that data and the descriptions are based on the enquiry into the participants' viewpoints (Polit & Beck 2021:471). In this study, the aim was to achieve a holistic understanding of the whole, namely the unexplained factors related to ICRM programme's implementation. Qualitative research is an enquiry process of gaining an in-depth understanding of a social phenomenon based on a distinct methodological approach in a natural setting (Creswell & Poth 2018:326). Words are analysed in qualitative approaches. In this study, the researcher interacted with the participants and obtained their views on their experiences in implementing the ICRM programme in their specific context.

In qualitative research, researchers become intensely involved, instrumental and immersed in data collection and analysis processes to gain a comprehensive understanding of the subject under study (Cohen et al. 2018:289; Polit & Beck 2021:471). The researcher used semi-structured interviews for data collection to allow for deep exploration and provision of thick descriptions of the participants' views of the organisation, barriers and facilitators of the ICRM programme implementation. Recommendations as measures for quality improvement were also obtained from the participants. In this study, the researcher was responsible for all the stages of data collection and analysis of data. The researcher spent time reading the data to

understand what the participants were explaining during interviews and to ensure that their voices were captured accurately and correctly represented their views.

In qualitative research, data are analysed from various sources, including interview transcripts, observational field notes and diaries and data are represented in themes and categories (Polit & Beck 2021:471). In this study, the researcher analysed data from the transcriptions, while reflective notes were used to enhance the interpretation. Data were represented in themes, sub-themes and categories.

3.3.2 Qualitative case study design

The case study aims to analyse and describe a typical or unique case (also called a bounded system) to gain an in-depth understanding of its functioning within its specific context (Leedy & Ormrod 2021:116; Polit & Beck 2021:721). A case is described as "a specific, a complex, functioning entity" and could represent a person, an institution, a programme or a system (Creswell & Poth 2018:96). In this study, the case represented the ICRM programme and its implementation within a typical context of rural PHC facilities in the selected sub-district, which was studied in a real-life situation.

The researcher used a qualitative case study to explore the implementation of the ICRM programme as a single case. In a qualitative case study design, in-depth data are collected regarding a single individual, programme, or event to learn more about an unknown or poorly understood situation. Interviews are often used as a data collection method (Yin 2016:68). Qualitative case studies are characterised by research taking place in a real-life situation and analysis of a context-bound system from multiple sources to provide a clear description of a case (ICRM programme implementation) (Creswell 2018:96; Grove at al 2017:11; Stake 1995:2). The rural PHC facilities represented the real-life context and interviews were used to collect data and thus gain in-depth perspectives from those who supervise and implement the ICRM programme. The participants operated at various PHC management and service delivery levels, which ensured that the data presented were from different or multiple perspectives.

3.3.3 Justification

The researcher selected a qualitative case study design since the aim was to collect data on the organisation, barriers to and facilitators of the ICRM programme's implementation in these specific rural PHC facilities. The use of a qualitative case study allowed the examination of the contextual factors related to the implementation of the ICRM programme, factors which were specific to the rural PHC facilities (Leedy & Ormrod 2021:261). The case study was also suitable since little was known about the ICRM programme implementation in rural contexts. Therefore, it was essential to understand the experiences of senior health managers and professional nurses as programme implementers in a rural context. The senior health managers are involved in implementing the ICRM programme and supervising staff. An in-depth exploration of context-specific factors might not have been possible with a quantitative design. The case study method also allowed for contextual-specific factors to be evaluated from multiple perspectives providing a comprehensive view of the ICRM programme implementation.

3.4 RESEARCH SETTING

Research setting in qualitative research refers to the physical location or place where data collection occurs in a study. Qualitative researchers are likely to be involved in fieldwork in natural settings as the interest is in the context and people's experiences about an unexplained phenomenon (Polit & Beck 2021:42). This research took place in the rural sub-district in the north-Eastern Zululand of the KZN province. Figure 3.1 illustrates the research setting.

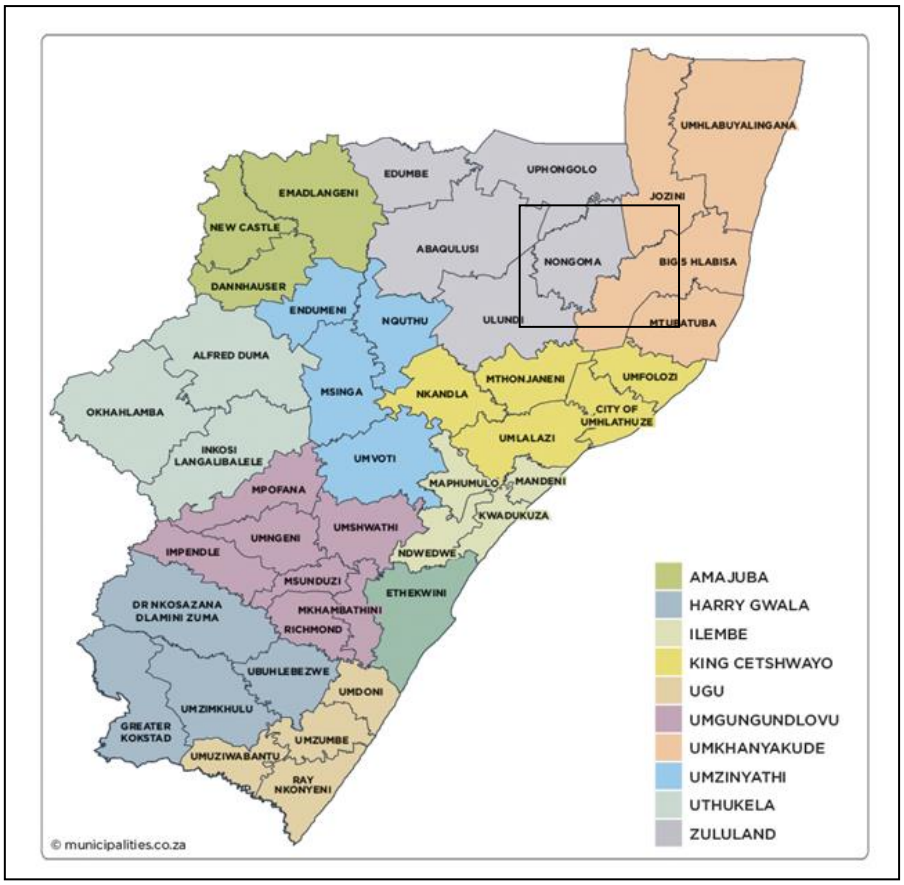

Figure 3.1 Map of the research setting (Source: Yes Media 2023: online)

3.5 RESEARCH METHOD

The research method involves the techniques used to structure a study and collect and analyze information systematically (Polit & Beck 2021:801). The research methodology includes a description of the population, the sampling method and sample criteria, data collection and analysis methods and the measures taken to ensure the rigour of the research.

3.5.1 Population

Population in research is defined as all persons or objects the researcher is interested in studying. The target population is persons or objects who meet the sample criteria for inclusion in the study (Grove et al. 2017:509; Polit & Beck 2021:797).

In this research study, the population referred to senior health managers and professional nurses employed at fixed public PHC facilities or at the district hospital in the selected rural sub-district. All the public PHC facilities implement the ICRM

programme in the identified sub-district. The sub-district was chosen since it was in a rural area, and the researcher aimed to explore the implementation of the ICRM programme in rural PHC facilities. The reason for choosing this rural sub-district was because it did not perform as expected in the ideal clinic assessments, and although the performance had improved, there were still unique challenges experienced as characteristic of a rural area (South Africa 2018:41). Rural sub-districts are characterised by challenges in the PHC facilities, including staff shortages and infrastructural and information technology challenges (Muthelo et al. 2021:5). Senior health managers formed part of the hospital executive and extended executive committees in the sub-district and oversaw the implementation of the ICRM programme in the 15 PHC facilities in this sub-district. The senior health managers were situated at the district hospital or were operational managers working at the PHC facilities. This district hospital **is** the only hospital in the sub-district. Professional nurses were working in the fixed PHC facilities implementing the ICRM programme.

3.5.2 Sampling

Sampling is selecting a fraction of the population to represent the entire population. In research, the appropriate sampling approach must be applied so that researchers can study a subset of the population of interest and use analytical methods that allow them to arrive at a conclusion about the population (Patten & Newhart 2018:89).

The original plan was to use non-probability purposive sampling to initially select four PHC facilities that were near the district hospital (<10km radius), and far from the district hospital (>10km radius), those with a high client volume and those with a low client volume. The aim of collecting data from different PHC facilities was to ensure that the researcher achieved an in-depth understanding of implementing the ICRM programme from different perspectives. The reason for the 10 km consideration was that the researcher expected that those closer than 10 km would receive more support than those farther, but that was not the case. For the volume consideration also, the expectation was that the high-volume PHC facilities would have more challenges than the low-volume PHC facilities, but fairly common challenges were experienced by all facilities in the sub-district. However, because data were collected during alert level five of the COVID-19 lockdown with high numbers of staff testing COVID-19 positive and the PHC facilities closing down, the researcher used convenience sampling

according to specific inclusion criteria. The PHC facilities should have been in the identified rural sub-district and should have been implementing the ICRM programme. Seven of the 15 PHC facilities agreed to participate. Four facilities were further than 10 km from the district hospital, two were within 10 km, and one was within the district hospital as a gateway PHC facility. Three PHC facilities had high client volumes, three had a medium client volume, and one had a medium to high client volume.

The senior health managers and professional nurses as the implementers and overseers of the ICRM programme were sampled based on their availability and the following inclusion criteria:

- Professional nurses who were permanently employed at the selected PHC facilities at the time of data collection.
- Professional nurses who worked in the selected PHC facilities for at least six months and had been involved with implementing the ICRM programme. All professional nurses are involved in implementing the programme since it is an organisational requirement.
- Senior health managers who were part of the hospital executive and extended executive committees and supervising selected PHC facilities at the time of data collection.
- Senior health managers with at least six months experience in management and overseeing the implementation of the ICRM programme and who supervised the PHC facilities in the selected sub-district.

The sample size was determined through data saturation achieved from interviews with the senior health managers and the professional nurses. Data saturation is “the gathering of qualitative data to the stage where no new information is obtained subject under study from the participants” (Grove et al. 2017:511). The researcher noted that the participants were not giving any new information at around interview number 13 but continued until interview number 15 to confirm the identical and recurring patterns in the data. Eight of the participants were senior health managers, and seven were professional nurses.

3.5.3 Recruitment

Prior to recruitment, ethical clearance was obtained from the relevant committees. The researcher obtained the PHC facilities' telephone numbers from the Department of Health website and senior health managers' office telephone numbers from the sub-district's PHC Manager. All 15 PHC facilities were contacted, and the researcher identified the seven to participate in the study. The researcher asked for the support of one research assistant per PHC facility and one for the district hospital to distribute participant information sheets (Annexure E) and to collect informed consent forms (Annexure F). Research assistants working at the district hospital and PHC facilities as part of the staff during recruitment were identified to limit the movements of people from outside the facilities and reduce the risks during the COVID-19 pandemic. Data were collected from June 2020 during alert level five of the national lockdown. The researcher applied the measures to limit the spread of COVID-19 as outlined in (Annexure H).

The researcher delivered the hard copies of the informed consent forms and participant information sheets to the research assistants' houses, keeping a two-meter distance from the research assistants and wearing a facemask. Research assistants then distributed the informed consent forms and information sheets to the potential participants, namely to all professional nurses and senior health managers. Interested participants gave consent for a first telephonic conversation on the consent form, indicating their telephone number and preferred date and time for this conversation and consent for using an audio recorder. The signing of the informed consent forms was witnessed. The research assistant collected the hard copy, witnessed and signed consent forms from the interested participants and kept them under lock and key to ensure confidentiality. After two days, the researcher collected the informed consent forms from the research assistants' houses and kept them in a lockable steel cabinet only he could access.

3.5.4 Data collection

Data must be collected using appropriate tools and processed to answer questions about an unexplained phenomenon. Data collection is the thoughtful and organised accumulation of information pertinent to the study and aims to answer the research

questions and meet the study's objectives (Grove et al. 2017:502; Polit & Beck 2021:783). This section describes the data collection approach and method, the characteristics of the interview guides, the exploratory interviews, and the data collection process.

3.5.4.1 Data collection approach and method

Data were collected using semi-structured, individual telephonic interviews. Telephonic interviews were appropriate for data collection to avoid face-to-face contact with the participants during the alert level five lockdown to minimise the risk of COVID-19 transmission. Additionally, telephonic interviews were an advantage since challenges reaching facilities in rural areas were eliminated. The participant was likely to be relaxed during the interview since data were collected while participants were in the comfort of their own place (Saarijävi & Bratt 2021:393).

The telephonic interviews have some limitations, including the inability to observe the body language and non-verbal language cues and possible poor connections or breaks in the connection (Saarijävi & Bratt 2021:393). Additionally, telephonic interviews bear a cost implication for the researcher. To minimise the risk of poor reception, data were collected during low peak periods of cellular network activity as per agreement with those participants living in areas with poor reception**.** Low peak times, according to this setting, are after working hours since the data and network connectivity are better during these times.

3.5.4.2 Characteristics of the interview guides

Telephonic interviews were conducted with the senior health managers (Annexure G 1) and professional nurses using interview guides (Annexure G 2). Each interview guide consisted of Section A with questions about the demographic information of the participants and Section B with open-ended questions and some probing questions to explore the views of the participants on the ICRM programme's implementation. The interview guide used to collect data from the professional nurses had open-ended questions similar to those for senior health managers. However, one question regarding the organisation of the ICRM programme implementation was asked only to the professional nurses. The development of interview questions was guided by research questions and objectives, and they were aligned with the literature.

The following questions were asked and included several probing questions:

- *Can you please share with me how the ICRM programme is implemented in your sub-district or clinic?*
- *Please describe, in your view, the success of the ICRM programme implementation at the PHC clinics in this sub-district or clinic.*
- *Tell me more about the aspects that you think can help improve the implementation of the ICRM programme at selected clinics.*

The interview guides had a space for the code name to ensure anonymity for the senior health managers, code “MAN:...” and a number and “PN:…” and a number assigned starting from number one in the sequence of the interviews conducted.

3.5.4.3 Exploratory interviews

Two exploratory interviews were conducted to test and improve the clarity of the interview guide’s questions and to prepare the researcher’s interviewing skills. The researcher discussed the interviews with the supervisors, and there were minor changes. The researcher had to improve on the probing technique. Responses obtained from the participants during these interviews were not included in the data for this research.

3.5.4.4 Data collection process

The researcher contacted the potential participants who met the criteria for inclusion telephonically for a first conversation on a suitable date and time as indicated in the informed consent. The participants were also asked to use a quiet and private room during the interview to ensure privacy, minimal interruption and effective data collection. A quiet environment was an area with minimal noise to ensure the participant and researcher could clearly hear each other. All information regarding this research study was explained to participants again during the first telephonic conversation. Participants were allowed to ask questions during the first telephonic conversation, and the researcher provided sufficient information to the participants. Interested participants gave permission to be contacted a second and consequent times if the call was disconnected by mistake or due to other technical factors.

Participants were contacted during tea or lunch breaks or after official office hours as discussed and arranged to ensure that service delivery was not affected. The respective interview guides were used (Annexure G 1 and G 2). Individual telephonic interviews with the participants were recorded, with their consent, on audio-recorder software on the researcher's cell phone and on a voice-recorder device as a backup to ensure that the recordings were not missed.

Sampling and individual telephonic interviews continued until no meaningful new information emerged from the interviews. The researcher noted around the thirteenth interview that no new information was given by the participants but continued until the fifteenth interview to confirm data saturation. The researcher conducted 15 telephonic interviews with an average duration of 36 minutes (ranging between 30 to 37 minutes). Eight of the participants were senior health managers, and seven were professional nurses. Reflective notes were written after each interview as part of the preliminary data analysis, helping the researcher understand the participants' responses and ascertain data saturation.

3.5.5 Data analysis

Data analysis involves methods used to narrow, examine, interpret and organise information to denote data collected (Grove et al. 2017:502; Polit & Beck 2021:783). Thematic analysis was applied to analyse the data. Data analysis was done inductively since the researcher engaged in discussions with the participants and derived patterns and conclusions from the findings. A bottom-up approach was used for data analysis, not a pre-selected conceptual or theoretical framework. The analysis led to the understanding of the phenomenon of ICRM programme implementation.

3.5.5.1 Data analysis protocol

Demographic data were analysed using descriptive statistics, including frequencies and percentages. The demographic data is reported in Chapter 4, Table 4.1.

The transcriptions were sent to the coder, and the researcher did his own preliminary coding. The coder held a Master of Arts Degree in Research Consultation and had eight years of experience in qualitative coding. After receiving the ATLAS.ti version 9 input, the researcher engaged in Tesch's data analysis protocol. The coder was

involved in promoting research rigour and limiting bias in data analysis. Tesch's data analysis protocol was used to analyse the data (Creswell & Poth 2018:193). Data analysis in qualitative research occurs concurrently with data collection, an evolving and iterative process (Grove et al. 2018:88). Preliminary data analysis followed after at least two interviews. Reflective notes were used during the analysis to help the researcher identify the outstanding aspects of the interviews and develop preliminary themes.

STEP 1: Preparation of data

The researcher spent considerable time listening to the audio recordings and trying to understand the data gathered. A professional transcriber transcribed the recordings, and the researcher checked accuracy by listening to the recordings and reading the transcriptions. The researcher read the transcriptions and the codes carefully and wrote down the ideas that emerged according to the study objectives about the ICRM programme in the selected PHC facilities. The ideas that emerged were about implementing the ICRM programme and barriers and facilitators in the views of implementers. Additionally, reflective notes were read and organised concerning the transcribed data to enhance the collected data.

STEP 2: Defining the unit of analysis

One interview transcript was picked and read at a time to get a sense of the content and write down the thoughts about the ICRM programme implementation as a general impression. The researcher wrote down thoughts in the margin to capture the underlying meaning of the information and asked himself what the content was about. The process was repeated for all transcripts. The researcher read the transcripts and thought about the emerging themes and the codes to be assigned to the responses in relation to the research objectives and questions.

STEP 3: Developing categories and checking the coding scheme

The researcher coded the transcripts independently to make sense of the ideas in them concerning the phenomenon of ICRM programme implementation. The researcher also did his own preliminary coding by immersing himself in the data and

developing themes and codes. Additionally, the outputs from the coder were reviewed, and codes were rearranged into categories.

STEP 4: Assigning categories

The researcher identified descriptive words to assign to categories. Through discussions with the research supervisor and co-supervisor, the researcher reduced the number of categories by looking at their relationships and similarities. The categories were merged into broad themes, sub-themes and categories and then checked for similarities and differences. The research objectives and questions were kept in mind during the categorisation.

STEP 5: Assessing for consistency of the codes

The researcher kept checking the themes, sub-themes and categories by reading them and discussing them with the supervisors to establish and ensure the links to the responses as verbal quotations of the participants when discussing findings.

STEP 6: Drawing conclusions and reporting findings

The researcher read the themes, sub-themes and categories. Both supervisors helped identify similarities and merge them to conclude the findings. The themes were organised into a table to show the structure of themes, sub-themes and categories (see Chapter 4, Table 4.2). The researcher discussed the themes, categories and sub-themes in Chapter 4 and in relation to the existing body of literature.

3.6 RIGOUR OF THE STUDY: TRUSTWORTHINESS

Trustworthiness is important in qualitative research and ensures that the researchers conduct high-quality research. Lincoln and Guba (1985) identified the criteria for enhancing trustworthiness in qualitative research urging the researchers to be mindful in collecting and analysing data (Brink et al. 2018:111; Cohen et al. 2018:318). The criteria applied to ensure the rigour of this research were credibility, dependability, confirmability, transferability and authenticity, as discussed below:

3.6.1 Credibility

Credibility refers to the reader's assurance about the extent to which the researcher has produced results that are a true reflection of participants' views (Grove et al. 2017:392; Polit & Beck 2021:569). Data credibility was promoted by having adequate engagement with participants until data saturation was reached. Data collection was an iterative process of reflection, and details of each section were given, and an audit trail was created for the research supervisor and co-supervisor to cross-check verbatim statements. During data collection, the main questions were asked, and the researcher used probing questions to reach an in-depth understanding of the views of the senior health managers and the professional nurses on the implementation of the ICRM programme. Data were collected from senior health managers and professional nurses to explore the unexplained phenomenon from perspectives in line with the case study method. The researcher did a literature control to confirm the research findings concerning the published literature about ICRM programme implementation. To promote confidence in the research findings, the researcher involved an expert independent coder and transcriber.

3.6.2 Dependability

Dependability refers to the consistency and conditions of data collected in research over time (Leedy & Ormrod 2021:269; Polit & Beck 2021:569). The steps were followed sequentially and structured to attain transparency in the research process. Sufficient information and rich, thick descriptions were provided to be able to audit the sampling, data collection and analysis processes.

3.6.3 Confirmability

Confirmability refers to the ability of the researcher to avoid bias and maintain neutrality, preciseness, applicability and meaning of data obtained during data gathering (Leedy & Ormrod 2021:269; Polit & Beck 2021:570). The researcher guarded against the influence of personal experiences and values on the interpretation of data to ensure that the findings represented the participants' perceptions. The researcher set aside any preconceived ideas and opinions about the implementation of the ICRM programme. Data reporting was based on information or responses given by the participants and not preconceived ideas, views, perceptions or biases. No data

were invented, and only the participants' views were reflected in the data analysis report. Findings were analysed and discussed in a manner that represented the participants' responses, and the researcher guarded against personal bias. This study was systematically documented to ensure that an independent auditor can make conclusions about trustworthiness.

3.6.4 Transferability

Transferability refers to the likelihood of data collected to be applied and be relevant to other settings (Leedy & Ormrod 2021:269; Polit & Beck 2021:570). Rich and thick descriptions of the PHC facilities' characteristics and participants' views were provided to allow other researchers or readers to identify how the findings could apply to a different context.

3.6.5 Authenticity

Authenticity refers to "the degree to which the study impartially shows a variety of realities" (Cohen et al. 2018:145; Polit & Beck 2021:570). The researcher, in this case, did not attempt to manipulate the natural setting, and data were collected using semi-structured interviews allowing exploration of the ICRM programme's implementation phenomenon. The participants were treated fairly, and their views about the ICRM programme were captured truthfully and credibly. Authenticity was ensured by including participants' verbal quotations in reporting the findings. The number of participants included in the sample was not predetermined as the researcher aimed to collect data until no new information was obtained. The responses that were likely to be obtained from the respondents were not known in advance, and the researcher captured data as it emerged.

3.7 ETHICAL CONSIDERATIONS RELATED TO THE STUDY

During all phases of research, researchers must guard against exposing the participants to unnecessary harm, which would outweigh the benefits of the study. For this low-risk study involving human participants, the risk involved in participating should not be greater than the everyday norm (Leedy & Ormrod 2021:135).

The research proposal was submitted to the UNISA HSREC for approval. The University of South Africa granted ethical clearance (Ref: HSHDC/984/2020, Annexure A). Permission to conduct research was requested from the gatekeepers (Annexure B). The ethical clearance certificate for UNISA HSREC was obtained, after which the gatekeeper permissions were obtained from the Chief Executive Officer and Deputy Nursing Manager of the identified district hospital (Annexure C). The KZN Provincial Research Database Board also granted clearance (Ref: KZ_202006_025, Annexure D).

Applying ethical principles in research is essential to protect human participants from exploitation. In this section, the researcher explains how the ethical principles in the Belmont Report, including beneficence, respect for human dignity and justice, were applied to sampling (Polit & Beck 2021:133).

3.7.1 The principle of beneficence

The ethical principle of beneficence involves the researcher's responsibility to maximise the study's benefits and minimise harm (non-maleficence). This principle includes the right to freedom from harm and protection from exploitation (Polit & Beck 2021:1333).

The participants were sampled according to the inclusion and exclusion criteria. The researcher protected the participants from exploitation during sampling. Organisational procedures and protocols were followed in arranging the signing of informed consent forms, and COVID-19 regulations were observed during sampling to protect the researcher and participants from the risk of being infected.

The researcher did not expose the participants to any harm above the everyday norm since none of the questions in the interview guides required sharing of sensitive experiences. The questions concerned experiences of daily implementation of the ICRM programme. The researcher used the main and probing questions but did not expose any deep-seated fears or emotions from the participants. Data were collected by the researcher who prepared for the interviews through exploratory interviews.

The information gathered during data collection was not used against the participants but only for the study's purpose. The time commitment was explained before the

beginning of the interview, and the researcher kept all the appointments and agreements made with the participants. Verbal consent was obtained in addition to written consent before the commencement of the interview. The findings from this study might be used to improve the implementation of the ICRM programme, thus benefitting the participants in the future. Feedback about the findings was given after the study to the participants to ensure that those involved could use the findings to improve their functioning in ICRM programme implementation.

3.7.2 The principle of respect for human dignity

Respect for humans pertains to the right to self-determination and full disclosure. Participants had the freedom to decide whether or not to participate in the research study (Brink et al. 2018:35; Polit & Beck 2021:134) and signed the informed consent. To protect the participants' right to full disclosure, the researcher disclosed all the information about the study, including the risks and benefits of the research. The study was fully explained in the information sheet, including participants' involvement in the study and the contact details of the researcher, research supervisors, and the ethics committees that approved the study.

Participants were informed about their right to withdraw from the study at any time and refusal to give information without any penalties. Monetary or material incentives that could manipulate the participants to agree to participate in the research were not given. No other incentives were promised or given for answering the research questions. The researcher reminded all the participants that the interviews were audio-recorded, and they gave consent. The researcher allowed the participants to contact him or the research supervisor if there was a need for clarification about the research.

During sampling and signing of consent, the researcher respected the agreements and appointments made with the participants. The participants who refused to sign the informed consent were not exposed to any penalties or prejudicial treatment.

3.7.3 The principle of justice

The ethical principle of justice refers to the participants' right to fair treatment and their right to privacy and confidentiality. The researcher selected participants in a fair way and for reasons directly related to the research (Brink et al. 2018:360). The participants

were sampled based on their possession of rich information about the ICRM programme and not because they were easily accessible or may have seemed to be easily manipulated.

The researcher observed the participants' right to privacy by ensuring that the interview guides and informed consent did not have intrusive or personal questions that invaded their personal space. Informed consent was signed by the research participants with the help of the research assistant as a witness in a private area in the PHC facility. Research assistants, the coder and editors signed the confidentiality agreement (Annexure I) as a binding contract not to share the information collected during and after the study. The signed informed consent forms were stored in a locked steel cabinet to which only the researcher had access to ensure confidentiality.

Participants were treated with respect, and the researcher did not invade the participants' personal spaces since data were collected during office hours and some during weekends as per agreements with the participant. The treatment of participants was similar, with no distinction made concerning age, position or gender. Arrangements were made by the researcher while considering the personal preferences of the participants.

Data were collected in private rooms, and the participants were assured that the information obtained would be treated confidentially. Code names were used to de-identify the participants and were used to describe the data obtained from the participants and the PHC facilities. All information collected during data collection was kept in a safe place (in a locked steel cabinet) by the researcher, and the lists of names were not connected with the corresponding codes. A professional transcriber, editor and coder signed confidentiality agreements. Participants' names were not asked for during the telephonic interview nor recorded on the transcriptions. The telephone numbers were transferred from the consent form onto a Word Document without the participants' names ensuring that the researcher could not identify the participant in person. However, the researcher may have recognised the voice of some participants (e.g. the operational managers of specific PHC facilities or some of the hospital's senior managers), and anonymity could not be guaranteed for some participants. However, their actual names did not appear on the transcriptions and were not asked

for during the telephonic interviews. Codes were created for the participants, and these codes were used in the discussion of data.

Hard copies were kept in a secured steel cupboard throughout the study and were not and will not be made available to anyone except the researcher and supervisor. Electronic data were saved in encrypted files, and only the researcher had the password. Data collected during the scope of this study will be preserved for five years after the research report submission according to the institutional policy. Audio recordings will be permanently deleted from files, and the researcher will shred hard copies after five years.

3.8 SUMMARY

In this chapter, the paradigm was described through which the researcher applied the assumptions to complete the research. This chapter also provided a detailed description of the research methodology followed in the study. The research design used was a qualitative case study, and the choice was based on the design's ability to address the research problem, answer research questions and meet objectives. The chapter also outlined the systematic data collection and analysis process and the ethical principles applied to protect the research participants from harm. Mechanisms for ensuring the rigour and trustworthiness of the study were outlined. The next chapter presents the study findings.

CHAPTER 4

PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

The previous chapter outlined the research methodology. This chapter describes the demographic characteristics of the participants and the research findings. Four themes emerged from the data relating to the organisation of the ICRM programme's implementation, its barriers, facilitators and the recommended measures to improve the programme implementation in PHC facilities. Several themes, sub-themes and categories were developed. A literature control followed the presentation of findings in each category.

4.2 DEMOGRAPHIC CHARACTERISTICS

This section presents the demographic characteristics of the senior health managers and professional nurses.

4.2.1 Demographic characteristics of participants

Seven professional nurses participated, five from four PHC facilities further away and two from two PHC facilities closer to the district hospital. Eight senior health managers participated. For two of the seven PHC facilities, only one senior health manager was recruited, thus no professional nurse. Professional nurses were not available at these two PHC facilities. Data were collected during alert level five of the COVID-19 lockdown, with many staff members testing positive for the disease.

Table 4.1 summarises the demographic characteristics of the participants. Demographic characteristics of the senior health managers and professional nurses include their job title, age, gender and years of experience in PHC. Years of experience in PHC management was an additional characteristic of senior health managers.

Table 4.1 Demographic characteristics of participants

	Frequency (n)	Proportion of total sample (%)
Senior health managers and Professional Nurses **Job Title**		
Chief Executive Officer	1	6.7%
Assistant Nurse Manager	1	6.7%
Operational Nurse Manager	6	40%
Clinical Nurse Practitioner	5	33.3%
Professional Nurse	2	13.3%
Senior health managers and Professional Nurses **Age**		
22 to 30 years	2	13.3%
31 to 40 years	5	33.3%
41 to 50 years	4	26.7%
51 to 60 years	3	20%
61 to 65 years	1	6.7%
Senior Health Managers and Professional Nurses **Gender**		
Male	3	20%
Female	12	80%
Other	0	00
Senior Health Managers and Professional Nurses **Years of experience in PHC**		
6 months to 10 years	3	20%
11 years to 20 years	9	60%
21 years to 30 years	3	20%
31 years and more	0	0

	Frequency (n)	Proportion of total sample (%)
Senior Health Managers **Years of experience in management**		
6 months to 10 years	2	25%
11 years to 20 years	6	75%
21 years to 30 years	0	0
31 years and more	0	0

PHC=Primary Health Care

4.2.1.1 Job title

Most of the participants were operational nurse managers (n=6, 40%); one (6.7%) was the CEO of the district hospital, and one (6.7%) was an assistant nurse manager. An operational nurse manager was a professional nurse with a clinical speciality and was responsible for managing the PHC facility. The CEO was responsible for managing the hospital or the sub-district. An Assistant Nurse Manager was a nurse responsible for nursing management and took over the duties in the absence of the Deputy Manager of Nursing (Vandali 2017:446).

Most participants were clinical nurse practitioners (n=5, 33.3%). Clinical nurse practitioners are professional nurses, often with a clinical speciality in nursing, for example, a Diploma in Nursing Science Health Assessment Treatment and Care. Two (13.3%) were professional nurses without any clinical speciality.

4.2.1.2 Age

The dominating age distribution of participants in this study was (n=5, 33.3%) between 31 and 40 years. Four (26.7%) were between 41 and 50 years of age, and three (20%) were between 51 and 60 years. Two participants (13.3%) were between 22 and 30 years of age, and one (6.7%) was between 61 and 65 years of age.

4.2.1.3 Gender

Most participants (n=12, 80%) in this study were females working as senior health managers and professional nurses in PHC facilities. There were three (20%) male

participants. This could relate to the fact that nursing is a female-dominated profession (Mao et al. 2021:1).

4.2.1.4 Years of experience in PHC

Most participants (n=9, 60%) had between 11 and 20 years of experience in PHC service delivery. Three participants (20%) had less experience (between 6 months and 10 years), and another three participants (20%) had more than 21 years of experience in delivering PHC services.

4.2.1.5 Years of experience in management

Most senior health managers (n=6, 75%) had between 11 and 20 years of experience. Two managers (25%) had less than 11 years of experience in management.

4.3 FINDINGS

The findings of this research are presented in themes and sub-themes.

4.3.1 Overview of themes and sub-themes

Four themes emerged from the data: the organisation of the ICRM programme's implementation, barriers to the ICRM programme implementation, facilitators of the implementation, and recommendations to improve ICRM programme implementation. Table 4.2 outlines the themes and sub-themes.

Table 4.2: Overview of themes and sub-themes

THEMES	SUB-THEMES
1. The organisation of the ICRM programme's implementation	1.1 The regulatory framework for the ICRM programme's implementation 1.2 The assessment of compliance with quality requirements 1.3 The rationale for the implementation of the ICRM programme
2. Barriers to the ICRM programme's implementation	2.1 Overburdened PHC facilities 2.2 Behavioural and organisational challenges 2.3 Infrastructural challenges

THEMES	SUB-THEMES
3. Facilitators of the ICRM programme's implementation	3.1 Stakeholder support 3.2 Teamwork
4. Recommendations for successful implementation of the ICRM programme	4.1 Infrastructure provision 4.2 Resource support 4.3 Improvement of clinical practice

4.3.2 Theme 1: The organisation of the ICRM programme's implementation

The first theme referred to the views of professional nurses on *how* the ICRM programme was organised (arranged) at their respective PHC facilities. Professional nurses were asked about the organisation of the ICRM programme, not the senior health managers, since the professional nurses were implementing the ICRM in their day-to-day work. Sub-themes in the organisation of the ICRM programme included the regulatory framework for implementation and the assessment of compliance with quality requirements. The third sub-theme was the rationale for implementing the ICRM programme (the *why*). Table 4.3 outlines the sub-themes and categories.

Table 4.3: Sub-themes and categories to the organisation of ICRM programme's implementation

SUB-THEMES	CATEGORIES
1.1 The regulatory framework for the ICRM programme's implementation	1.1.1 Broad directives for the ICRM programme's implementation 1.1.2 Alignment with the National Core Standards
1.2 Assessment of compliance with quality requirements	1.2.1 The nature of the assessment 1.2.2 Maintaining the ideal clinic status
1.3 Rationale for the implementation of the ICRM programme	1.3.1 Ensuring Universal Health Coverage 1.3.2 Preparation for the National Health Insurance 1.3.3 Ensuring quality assurance, monitoring and evaluation

4.3.2.1 Sub-theme 1.1: The regulatory framework for the ICRM programme's implementation

Implementing the ICRM programme required regulation and monitoring of all elements of the ideal clinic for the PHC facility to function optimally. Professional nurses stated that the implementation process of the ICRM programme was not linear and was a complex process that involved interaction between human and material resources. Therefore, the ICRM programme's regulatory framework was viewed as an essential part of the ICRM programme's implementation because it provided a fixed point of reference to guide the iterative implementation process. Two categories related to the ICRM programme's regulatory framework emerged from the data: broad directives for the ICRM programme implementation and alignment with the National Core Standards.

4.3.2.1.1 Category 1.1.1: Broad directives for the ICRM programme's implementation

Professional nurses from the various PHC facilities stated that professional nurses must be able to understand the content of the guiding manuals for the successful implementation of the ICRM programme. The professional nurses referred to the ICRM programme manual and National Core Standards guiding specific activities at various clinical management levels, including national, district and sub-district. An indication was further made by professional nurses that the ICRM programme was implemented using the current version of the ICRM programme manual, which was released in July 2020. In this ICRM programme manual, elements were addressed individually, but all contributed to attaining the ideal clinic status.

> *"All elements are supposed to be implemented at the clinic according to the ICRM manual" (PN05).*
>
> *"There is an ideal clinic manual version 19 released in July 2020, and this manual guide(s) us on how to go about implementing the ICRM programme. This manual was developed to assist managers at various levels of healthcare service provision to correctly interpret and understand the requirement for achieving the elements as depicted in the Ideal Clinic dashboard" (PN02).*

"The manual is also a useful tool for managers at sub-district, district, provincial and national level to ensure progressive discipline of those reporting to them" (PN01).

"The ideal clinic manual guides us in the implementation of the programme and it has all the key elements to be considered in order to achieve the ideal clinic status" (PN06).

"It is implemented using the two manuals the one for the ideal clinic and other one for the national core standards we should always observe when we do our work at all the clinics" (PN03).

The levels of management included the sub-district (hospital), the district (which supports the hospital), and the provincial and national health departments. The district management team included officials from the district office who supported the hospital, and the sub-district team consisted of the senior health managers from the hospital. The ICRM programme manual guided the actions for daily use in the PHC facilities. It was used for self-assessment and to prepare for the main assessments (South Africa 2020:14). Additionally, the ICRM programme introduced a set of standards for quality improvement and these guide the process of implementation and monitoring of the programme (Stacey et al. 2021:1). Professional nurses working at the PHC facilities had to access the manual daily – whether in electronic or paper form – to carry out PHC facility activities. The South African healthcare system or context is mainly nurse-based, and the nurses must apply the standards, protocols and the manual in their daily practice and ensure consistency in care as nurses have multiple responsibilities (Maphumulo & Bhengu 2019:4).

4.3.2.1.2 Category 1.1.2: Alignment with the National Core Standards

The National Core Standards document outlines the expected level of service that the clients at PHC must receive for client satisfaction. A few professional nurses stated that the implementation of the ICRM programme was closely related to the domains of the National Core Standards and that both outline similar requirements for quality assurance.

"Also to standardise care rendered in all clinics since the programme is aligned to the national core standards. Also to improve health care delivery in rural areas to meet the acceptable standards" (PN05).

"We are involved in implementing all the elements of the programme and we even assist the operational manager during the assessments in order to learn more about the programme since we need to be in line with what the national core standards and the programme says in order to be able (to) render quality services" (PN07).

The findings of this study were consistent with the statement that implementing the elements of the ICRM programme required the use of the relevant manuals. In this case, the National Core Standards and ICRM programme manual ensured the integration of the ICRM programme and made the implementation manageable for professional nurses. Although compliance with the ICRM programme requirements and the National Core Standards were assessed separately, there was a strong link between the two since both enforced compliance with quality standards. Therefore, compliance with the National Core Standards facilitated compliance with the ICRM programme implementation guidelines and vice versa. Whether rural or urban, the PHC facilities must ensure compliance with the National Core Standards (Muthathi et al. 2021:2).

4.3.2.2 Sub-theme 1.2: Assessment of compliance with quality requirements

According to the evaluation cycle, all assessments of PHC facilities for their ideal clinic status had to be finalised by the end of each financial year. The professional nurses stated that PHC facility staff was involved in implementing and assessing the ICRM programme to prepare for the end-of-year assessment. As the implementers of the ICRM programme, the professional nurses were responsible for the PHC facility's self-assessment and consulted the relevant management structures for support. Active involvement of the professional nurses in the assessment assisted them in developing skills to evaluate health programmes at PHC facilities. Two categories emerged from the data: the nature of the assessment and maintaining the ideal clinic status.

4.3.2.2.1 Category 1.2.1: The nature of the assessment

The professional nurses from various PHC facilities stated that formative self-assessment and summative assessment were used to monitor and evaluate compliance with the ICRM programme requirements. Formative self-assessment was performed periodically by the operational managers and professional nurses to identify problem areas for further improvement. Professional nurses emphasised their involvement in the formative assessments. The assessment tools and ICRM programme manual allowed the PHC staff to assess their compliance informally to improve elements and not wait for the summative assessments.

> *"I assist in ensuring that everybody in this clinic is rendering the quality health care services and also we do ICRM self-assessment together with the operational manager and we are all involved in identifying problem areas in the implementation of the programme" (PN02).*
>
> *"We are involved in implementing all the elements of the programme and we even assist the operational manager during the assessments in order to learn more about the programme since we need to be in line with what the national core standards and the programme says in order to be able (to) render quality services" (PN07).*
>
> *"I also participate in self-assessment activities in preparation for the main assessments" (PN04).*
>
> *"The people from management come and do the assessments in prescribed times, but our operational manager always encourage(s) us to assess ourselves and give ourselves a score and try to improve where necessary" (PN05).*

Professional nurses further stated that district and sub-district management assessed performance and allocated a score during each summative assessment. The summative assessment usually takes place at the end of the assessment cycle. All elements were given a score based on their functionality or performance of the elements. These element scores added up to a final ideal clinic score, indicating the silver, gold, or platinum status of compliance with the ICRM programme's quality standards.

“People from the hospital and other operational managers come to assess us and give a score” (PN03).

“For the clinic to achieve the ideal clinic status there is a certain score that must be achieved and the status is graded as gold, silver or platinum” (PN01).

“We are assessed by the management and all the elements must be functional but it depends on their importance in the clinics. In order for us to pass, we need to have the elements in a good condition” (PN07).

Periodic assessment and scoring is a standard procedure for monitoring the ICRM programme’s implementation (Muthathi et al. 2019:3). However, the involvement of all categories of healthcare staff as implementers in the assessment was a unique advantage since involvement allowed them to learn more about the ICRM programme, become aware of the shortcomings and improve accordingly (Udenigwe et al. 2021:7). The operational managers and PHC staff were responsible for quality assurance and ensuring that the facility was compliant with the PHC standards.

4.3.2.2.2 Category 1.2.2: Maintaining the ideal clinic status

Sustainability was at the core of the ICRM programme. Professional nurses indicated the importance of maintaining the ideal clinic status once achieved. However, some participants indicated that some elements were more challenging to achieve and maintain than others. The elements that were not easy to implement and sustain were those beyond the control of PHC facility staff, for example, infrastructure and availability of supplies. Monitoring the elements of the ICRM programme and adhering to guidelines ensured that the ideal clinic status and quality of the PHC services were maintained.

“The manual comes with the explanations on what to do when running the clinic. All the clinics whether rural or urban use this manual and they are expected to achieve and maintain an ideal clinic status” (PN04).

‘‘Some elements are easy to implement and be able to maintain and some are just challenging” (PN02).

"All elements are implemented, but we are challenged by other elements which are beyond the scope of the operational manager and the professional nurses like the infrastructure and the availability of supplies since we order from stores" (PN07).

"All elements are supposed to be implemented at the clinic according to the ICRM manual, but there are those that are beyond the nurses' control for example infrastructure, and you find that it affects other elements like availability of streams because the streams were added but the old clinic structures were not changed" (PN05).

"Monitoring and evaluation of the whole PHC package in order to maintain quality after having achieved the ideal clinic status" (PN01).

The findings of this study corroborated the findings by Lebina et al. (2019:2), who argued that the PHC facility was required to achieve and maintain the ideal clinic status. This meant that after an element was found to be functional during the assessment, it was essential to keep that element functional as a means of status maintenance. The implementation and maintenance of elements stipulated in the quality standards were important to ensure compliance with quality standards (Mogakwe et al. 2020:1). Professional nurses required support from the district and sub-district management to implement the elements successfully.

4.3.2.3 Sub-theme 1.3: Rationale for the implementation of the ICRM programme

The professional nurses stated the reasons for the implementation of the ICRM programme. These findings were significant since implementers' views on the rationale for implementation can be used to motivate and achieve commitment to the ICRM programme's implementation and maintenance. The perceived rationale included ensuring UHC, preparation for the NHI and ensuring quality assurance, monitoring and evaluation.

4.3.2.3.1 Category 1.3.1: Ensuring Universal Health Coverage

Professional nurses from PHC facilities stated that implementing the ICRM programme was a government response to ensure quality and enhance accessibility

to health services. The ICRM programme was perceived as necessary to ensure UHC through the improvement of accessibility, availability and efficiency of appropriate PHC services in rural areas.

> *"To ensure that people have access to quality health care at the clinics and to prepare for the national health insurance and to ensure universal health coverage" (PN06).*
>
> *"To also increase access to the PHC services for our clients. To improve availability and efficiency of our services at the clinics. Also generally to achieve the vision of health for all by the government" (PN04).*
>
> *"Also to standardise care rendered in all clinics since the programme is aligned to the national core standards. Also to improve health care delivery in rural areas to meet acceptable standards" (PN05).*

The South African government had prioritised health services to those vulnerable and in need, living in rural areas and previously disadvantaged communities, in order for them to improve their health status. This was evidenced by the government of South Africa's commitment to bringing positive change to the lives of its citizens (Bresick et al. 2019:1). The ICRM programme was a strategy to be adopted by all PHC facilities, and among the aims of the programme was to ensure UHC. The ICRM programme aimed at ensuring that the services meet the standards and that the citizens of South Africa have equal access to effective and safe services (South Africa 2020:3). The professional nurses' views aligned with the purpose of the ideal clinic programme to improve access to health services to all the members of the community according to their needs.

4.3.2.3.2 Category 1.3.2: Preparation for the National Health Insurance

The preparatory activities for the NHI were aimed at strengthening the health system and service delivery and included the implementation of PHC re-engineering and the ICRM programme. Professional nurses stated that the ICRM programme assisted in identifying and managing challenges at PHC facilities to prepare for the rolling out of the NHI. The ICRM programme ensured the reduction in medico-legal risks and in facilitating the rendering of services that responded to the community's needs.

"It is implemented to maintain the quality care and ensure that all citizens are covered with essential health care services in preparation for the National Health Insurance. Reduce medico-legal risks" (PN01).

"We are also told that the programme will assist us in preparing for the implementation of the national health insurance in order to ensure that everybody has access to quality services in both public and private sectors" (PN06).

"As I mentioned earlier, it was implemented to ensure that people have access to quality health care at the clinics and to prepare for the national health insurance" (PN05).

The findings are supported by Muthelo et al. (2021:7), who stated that the ICRM programme was implemented in South Africa to prepare for the implementation of the NHI. The South African government made efforts to pilot the implementation of NHI, and the aim was to identify any challenges and address them before the actual rollout. The NHI was focused on strengthening the public healthcare sector and was aimed at bridging the gap between the rich and the poor concerning access to effective healthcare services and thus meeting the Sustainable Development Goals (Mofolo et al. 2019:1). Therefore, identifying barriers to the ICRM programmes' implementation in rural PHC facilities can guide the development of strategies for improvement.

4.3.2.3.3 Category 1.3.3: Ensuring quality assurance, monitoring and evaluation

Professional nurses stated that the implementation of the ICRM programme allowed the government and the managers to maintain an acceptable and desired level of care. Furthermore, the ICRM programme allowed the district and sub-district management officials in the health sector to monitor and appraise the care rendered to the clients. Therefore, the ICRM programme's evaluation process aided in quality assurance of the service and healthcare programmes rendered to the clients.

"The programme assists in monitoring and evaluation of the whole PHC package in order to maintain quality after having achieved the ideal clinic status" (PN01).

"The programme also allows for the PHC management to monitor and evaluate the effectiveness of our services. The programme helps us to be on our toes and try by all means to implement guidelines whenever rendering services" (PN02).

"Also, the programme has made us to be able to evaluate the nature and the level of care we are rendering even before we get any complaints from the community" (PN04).

The findings of this current study were consistent with a study conducted by Cloete, Yassi and Ehrlich (2019:2), who posit that the quality assurance programmes were developed and implemented to ensure that there was monitoring and evaluation of the care provided to the clients. Muthathi and Rispel (2020:2), in their study in the South African PHC context, stated that the goal of the ICRM programme was to ensure that all facilities meet quality standards, and the programme allowed for monitoring of the nature of the care given to the clients as consumers of PHC services.

4.3.3 Theme 2: Barriers to the ICRM programme's implementation

The second theme was about the senior health manager's and professional nurse's views on the factors that negatively affect implementing the ICRM programme at the selected rural PHC facilities. Senior health managers indicated that the factors affect the implementation of the ICRM programme and the quality of services rendered at the PHC facilities. Three sub-themes emerged for theme two: overburdened PHC facilities, behavioural and organisational challenges and infrastructural challenges. The sub-themes and categories of theme two are outlined in Table 4.4.

Table 4.4: Sub-themes and categories on barriers to the ICRM programme's implementation

SUB-THEMES	CATEGORIES
2.1 Overburdened PHC facilities	2.1.1 Staff shortages 2.1.2 Growing disease burden
2.2 Behavioural and organisational challenges	2.2.1 Non-adherence to clinical guidelines due to misconception of roles 2.2.2 Poor communication 2.2.3 Burnout

SUB-THEMES	CATEGORIES
	2.2.4 Lack of mentors at PHC facilities 2.2.5 Financial constraints
2.3 Infrastructural challenges	2.3.1 Sub-optimal PHC facility infrastructure 2.3.2 Inadequate equipment and supplies 2.3.3 Information technology challenges

4.3.3.1 Sub-theme 2.1: Overburdened PHC facilities

Senior health managers and professional nurses indicated that the PHC system was overloaded with clients needing health care services since primary health care was the first entry point accessible to the clients. The escalation in disease burden and staff shortages challenged the staff at PHC facilities to function effectively. The burden of communicable and non-communicable diseases is increasing exponentially and putting pressure on the PHC system, especially in developing countries (WHO 2019:71). The senior health managers confirmed the problem of staff being overburdened. They indicated that this could lead to staff perceiving the ICRM programme as an additional burden to their workload. Two categories emerged from the data: staff shortages and the growing disease burden.

4.3.3.1.1 Category 2.1.1: Staff shortages

The responses from the senior health managers and professional nurses suggested an overload of work at PHC due to a shortage of nursing staff. High staff turnover is one reason for staff shortages. Staff shortage prolonged patients' waiting time and affected health care quality and the ability to meet the targets as per identified health programmes. High staff turnover and shortage resulted in personnel with limited experience in primary health care and the ICRM programme employed at PHC facilities. This presented a barrier to the ICRM programme's implementation. Long waiting times affected client satisfaction since the clients had to wait longer than expected to get the services at the PHC facilities, and therefore the quality of services was affected. In the PHC facilities, the nurses sometimes missed the training opportunities for new developments in PHC since a nurse sometimes had to work alone at the PHC facility running all the programmes (streams). Working alone and

running all the PHC streams also made it difficult for professional nurses to provide efficient services and meet the prescribed indicators.

> *"Shortage of staff in our clinic and our clinic is overcrowded" (PN05).*
>
> *"Being short-staffed also causes staff not to attend workshops leading to lack of knowledge" (PN01).*
>
> *"Also waiting times are a problem due to staff shortages and (an) increasing number of services that are supposed to be rendered for each client"(PN02).*
>
> *"To be honest with you, we try our best to function according to the guidelines, but you find that the nurse is working alone, and it is then difficult to do your best, remember you are working with all the streams. And also if there is a new programme or indicator that is being pushed by the district, it becomes impossible to implement the existing indicators and be successful" (PN04).*
>
> *"High staff turnover due to heavy workload causing posts being filled with personnel who have no experience in PHC let alone ICRM" (PN01).*
>
> *"And also providing training though trainings are provided but they are not adequate since we are a rural sub-district with a serious staff shortage... so one chooses not to attend training since maybe only one professional nurse will be left alone in the clinic" (MAN01).*
>
> *"We try to implement all the elements according to the manual though staff shortage is sometimes a problem, and the clinic is sometimes busy as we work no matter how busy we are... in our functioning we try to apply the guidelines" (MAN05).*

The findings indicated that the strategic objective of the National Department of Health to provide sufficient human resources had not been achieved in these rural PHC facilities. The department aims to provide healthcare services to the communities of this sub-district according to the staffing norms (South Africa 2018:73). However, staff shortages prevail in most PHC facilities and not only in rural areas but also in urban areas due to the challenges in filling of critical posts in the health department in order to have the necessary human resources with skills to render quality services (WHO

2018:2). Brooke-Sumner (2019:2) found that rural areas are experiencing serious staff shortages due to high staff turnover as a result of resignations, retirements and transfers of staff outside the health department. Mainly rural PHC facilities were challenged by staff shortages.

4.3.3.1.2 Category 2.1.2: Growing disease burden

The professional nurses from PHC facilities and the senior health managers stated that the rural PHC setting was challenged by a changing and increasing disease burden that led to competing priorities and negatively impacted the PHC services. The Coronavirus pandemic has put an additional strain on PHC services since it became a priority. Although additional resources were allocated to deal with the challenges, the resources were not enough. Senior health managers cited the unstable PHC environment and changing guidelines as factors that affect the successful implementation of the ICRM programme.

> *"But we need to understand that the nature of the client we are dealing with has changed over the years, there are a lot of diseases, and the system is overloaded" (PN04).*
>
> *"There are always new programmes added on an already overloaded facility, thus causing staff to do what they can do and leave the rest" (PN01).*
>
> *"The increasing workload at PHC since we keep on adding programmes for our clients, but the staff is never added and this leads to burnout. The current state of COVID 19 is a barrier, since all the attention is now given to it and it is compromising quality of services" (PN02).*
>
> *"Sometimes the staff is overworked since there are a lot of programmes and also there are a lot of other programmes that need to be prioritized so it gets too much for us as the staff" (PN07).*
>
> *"The current state of COVID 19 is a barrier since all the attention is now given to it and it is compromising quality of services" (PN05).*
>
> *"Another thing, it will be rapidly changing guidelines in response to changing disease burden and it becomes challenging to keep up with the changes.*

You see every program will come with a guideline and some guidelines may overlap" (MAN02).

"Ever changing PHC environment as diseases change and where you find that there are many programmes added in response, but no staff is added" (MAN01).

A growing disease burden challenged not only the frontline staff but also the management of the programmes since emergent health priorities increased the demands. As new health issues emerge, additional programmes must be introduced and implemented. An understanding of each other's situation due to the overburdened PHC system was seen from the perspectives expressed by participants. The professional nurses indicated that the management at PHC facilities was trying their best to support the implementation of the ICRM programme but that the support was not enough. The senior health managers indicated that due to an overburdened PHC system, frontline staff might perceive the ICRM programme as adding to their workload.

"As mentioned earlier, the management is trying its best, but the support is not enough due to the fact that they are dealing with a lot of programmes. Some are new and need implementation" (PN04).

"Our operational manager and the top management try to support us even though the management is overstretched due to a lot of programmes, and as you know that there is COVID vaccination: it is hard for them also " (PN05).

"The staff members feel that the programme is for the operational manager, and they think it is adding a burden or workload on top of that they are already doing" (MAN06).

This current study's findings aligned with Setswe et al. (2018:8), who stated that an ever-changing and increasing disease burden poses a challenge for healthcare services in rural South Africa. The quadruple burden of diseases in South Africa is even more pronounced in the rural contexts, with a higher rate of communicable diseases and malnutrition (Chellan & Sibiya 2018:1), in the study in the South African PHC context. The quadruple disease burden includes communicable diseases, for

example, Human Immunodeficiency Virus (HIV) and Tuberculosis (TB), maternal and child mortality, non-communicable diseases and injury or trauma (WHO 2018:1). Numerous challenges to the quality of care still exist despite the government's and NGO's efforts and were exacerbated by the increasing disease burden and inequalities concerning access to healthcare services (Gray & Vawda 2018:78).

4.3.3.2 Sub-theme 2.2: Behavioural and organisational challenges

Senior health managers indicated that staff members did not always adhere to the guidelines as expected since there was role confusion. Through the views of professional nurses, reasons for non-adherence could be identified, including poor communication, burnout due to the workload and financial constraints. Five categories emerged from the data: non-adherence to guidelines was from the senior health managers only, and burnout and poor communication were from professional nurses. Lack of mentors at PHC facilities and financial constraints emerged from both senior health managers' and professional nurses' views.

4.3.3.2.1 Category 2.2.1: Non-adherence to guidelines due to misconception of roles

The operational managers (as senior health managers) from most PHC facilities indicated that guidelines were not always adhered to as intended and that some staff members viewed the implementation of the ICRM programme as the responsibility of the operational manager. The ICRM programme requires using all clinical guidelines to render the PHC services. Professional nurses suggested that there was poor communication at the PHC level leading to challenges with implementing the ICRM programme.

> *"Some elements are not performing well due to the fact that the guidelines are not correctly implemented by the staff" (MAN04).*
>
> *"The staff members feel that the programme is for the operational manager, and they think it is adding a burden or workload on top of that they are already doing" (MAN06).*
>
> *"And they don't involve themselves and this thing makes it difficult for you as an operational manager" (MAN02).*

"Okay, another thing it's lack of support from other categories of staff. Some people have a mentality that this is the responsibility of PHC management. So, yes, that one makes it difficult" (MAN02).

"Sometimes the burnout from our staff where you find that they think that the ICRM programme is for the operational manager and they fail to cooperate leading to failure in some elements" (MAN03).

"In rare cases, the issue of staff attitude where other categories think that the ideal clinic is the responsibility of the operational managers only" (MAN07)

Clinical guideline adherence was found to be a problem in other South African rural healthcare contexts (Tshivhase, Madumo and Govender 2020:5). The findings of this study were consistent with those of Muirhead and Birks (2019:28), who suggested that the nurses in the rural areas were sometimes expected to fulfil multiple roles since there is a shortage of staff. Some nurses felt that there was an additional burden and felt unprepared to carry out the roles thinking that such roles must be carried out by their superiors. This affected the quality of care.

4.3.3.2.2 Category: 2.2.2: Poor Communication

Successful implementation of the ICRM programme requires open communication channels to avoid miscommunication. Prompt feedback was required to avoid delays in service provision. The professional nurses indicated poor communication between different health system levels as a major challenge and included a delayed response from management and other support departments, such as the maintenance department. Additionally, professional nurses complained that they did not receive prompt and timely feedback on reasons for delayed payment of the on-call allowance. Poor communication was reported between the professional nurses and top management and between the PHC facilities within the same sub-district.

"Sometimes the time it takes for the management to attend to the staff complaints also is too long and leads to problems. For example, we have a problem with the on-call system in our sub-district and (it) affects us and the quality of care, it takes time for you to get paid after being on-call. Sometimes no one informs us on what is happening" (PN05).

"Lack of response from other stakeholders like maintenance, if you call them reporting something that needs to be fixed" (PN04).

"Sometimes there are breaks in communication where you find decreased information sharing between us at clinics. The information about patient care and feedback" (PN06).

"Long-standing problems of non-payment of overtime to staff leading to negative staff attitude and demotivation and no feedback is given to us" (PN01).

Communication with all the management, service providers and staff at PHC facilities is critical to the rendering of effective and acceptable services that are responsive to the client's needs (Fernandes et al. 2020:3). This links with the implementation of the ICRM programme since lack of communication will affect the successful programme implementation. Mogakwe et al. (2019:6), in their study, also concurred with the findings of this study in stating that in the cases where there was marked communication breakdown in the PHC setting, the quality of healthcare standards was challenged, and this affects the efficiency of the services rendered.

4.3.3.2.3 Category 2.2.3: Burnout

Professional nurses mentioned that the poor work conditions affected their mental health and caused burnout. Burnout led to demotivation, and they were unable to successfully implement the ICRM programme and provide quality care for the clients. The increasing workload at PHC facilities leads to overstretching staff roles, and the quality of all activities and programmes performed is affected.

"Demotivation on the staff's side also proves to be a barrier and affects all other quality programmes. The increasing workload at PHC since we keep on adding programmes for our clients, but the staff is never added and this leads to burnout" (PN05).

"Shortage of personnel leading to stretched roles on the available staff causing burnout thus compromising the quality and extending waiting times" (PN01).

"The staff is sometimes demotivated due to shortage no matter how hard you try" (PN07).

The findings under this category were supported by Jaeger et al. (2018:7), who determined that poor working conditions contribute to demotivation and burnout, which affects the quality of the services rendered. The psychological environment of the staff, in this case, the professional nurses, is a factor in ensuring that the clients are treated with dignity and courtesy. The findings of this study concur with the study by Hlongwane et al. (2019:226), suggesting that demotivation, dissatisfaction, and stressors in the workplace were prevalent in overburdened but understaffed rural facilities resulting in high staff turnover and absenteeism.

4.3.3.2.3 Category 2.2.4: Lack of mentors at PHC facilities

Mentors in PHC healthcare setting empower and support the PHC staff with the required knowledge, skills and ability to adapt to the healthcare environment. Mentoring was mentioned as useful in implementing the ICRM programme since it ensured collaborative learning and skill transfer. Senior health managers expressed that due to work overload, exacerbated by the demands of COVID-19, especially in rural areas, the PHC facilities did not have dedicated personnel to act as mentors. However, an acknowledgement was made that despite the workload, the management still provided support, though it was not enough, and the managers tried to support each other and new staff.

"Also, it is difficult to find a good mentor at PHC since it is always busy, and we are short-staffed, and you may find a mentor since there are good people with knowledge, but also they are stretched to the maximum" (MAN06).

"Sometimes the support we get from the management is not enough since also them, they are too busy, and with the COVID 19, everybody is busy with this disease, but they still give us that support or guidance" (MAN08).

"If you are an operational manager, you are expected to lead all the programmes in the facility and be able to monitor and supervise the staff, but sometimes it is challenging since there is not enough staff so that we guide and coach each other and young staff in quality" (MAN04).

"Also, I think mentoring of newly employed professional nurses and operational nurses, which we lack here; the district may provide more objective and structured training of staff in quality assurance programmes" (PN03).

The sub-district under study was a rural area experiencing staff shortages, making it difficult to have staff members acting as mentors. Effective application of mentorship programmes can be a powerful tool to strengthen the quality of healthcare by orientating newly appointed nurses, especially in rural areas where healthcare workers are scarce (Khunou & Rakhudu 2022:6). The findings of the current study matched with the findings of a study conducted by Koon et al. (2020:1) who determined that there is a shortage of adequately skilled professionals in rural areas resulting in lack of good mentors. There was a lack of a clear, structured mentoring model, and the skilled health professionals were overstretched, which left little to no time to invest in mentoring other junior or newly employed staff members.

4.3.3.2.4 Category 2.2.5: Financial constraints

The senior health managers and professional nurses lamented that financial restrictions negatively affected the implementation of the ICRM programme. The application of financial restrictions affected the rendering of quality services since equipment and supplies, for example, pharmaceutical and surgical sundries, could not be ordered. Professional nurses stated that the staff did not receive recognition for working overtime and that the funds allocated were insufficient to implement the ICRM programme in the sub-district effectively. The senior health managers were involved in the supply chain and procurement processes and attended meetings such as cash flow, and their inputs were required. Senior health managers indicated that the cost-cutting imposed by the government harmed the implementation of the ICRM programme and the services rendered at PHC facilities. Personal resources were often used to achieve some elements of the ICRM programme. However, some of the elements were difficult to implement because of being beyond the control of senior health managers and professional nurses since strict policies for cost containment were applied.

"Finance budget is not enough for the implementation of ICRM" (PN03).

"Unavailability of funds to buy equipment. The staff sometimes is demotivated due to shortage no matter how hard you try" (PN07).

"Financial constraints within the sub-district leading to non-payment of overtime to staff leading to negative staff attitude and demotivation" (PN01).

"Also, something needs to be done about the finance at the hospital since we cannot order sometimes since we are told that there is no money to buy things" (PN06).

"Sometimes the implementation is difficult in some elements, not all of them, since we are told to cut on the cost and financial constraints are always a problem. But the implementation would be much better and interesting if we have the necessary resources" (MAN08).

"The implementation is quite challenging, and sometimes you end up using your personal resources in trying to cover up for the challenges that are likely to affect the achievement of the status. Like your airtime, data, and sometimes money for some items in the clinics since the supply chain processes are sometimes problematic" (MAN07).

"The implementation of the programme is not too difficult if you have all the necessary resources in terms of staff and materials. With us in this clinic, sometimes it becomes a bit challenging since some of the elements are beyond our control and we have limited money due to budget cuts" (MAN03).

Budgetary constraints implemented by the government affected the senior health managers in their efforts to provide healthcare services in the PHC facilities. A senior health manager's key performance areas include managing and controlling the PHC facility's budget and operating within the prescriptions of financial management policies. The government implemented cost containment plans and measures to address the over-expenditure on laboratory services, medical supplies and equipment (South Africa 2022:1)**.** The findings of this current study concurred with the findings by (Matlala et al. 2021:4), who suggested that the decision by the government to enforce cost-cutting measures harmed the services that were rendered at PHC facilities. The findings were consistent with the study by Olalubi et al. (2020:4), who stated that

insufficient funding for the health sector, especially in health districts, affects healthcare activities.

4.3.3.3 Sub-theme 2.3: Infrastructural challenges

The senior health managers and professional nurses elaborated on several infrastructural challenges that affected how the PHC streams were provided. PHC services in South Africa were delivered with the application of three streams, namely, acute, chronic and preventative healthcare services (maternal child women's health). The physical infrastructure of the PHC facility contributed to the rendering of quality PHC services to clients (Webb et al. 2019:2) in the study conducted in a PHC context. There were some variations in the PHC facilities since some of them had some computers but had problems with the availability and accessibility of the internet. Intranet access in rural areas is important for easy access to the updated guidelines for patient management. Access to the internet facilitates communication with the stakeholders and access to online training courses. Some PHC facilities had newly renovated structures and limited space, and some had no computers to store and retrieve client records. Three categories emerged from this sub-theme: sub-optimal PHC facility infrastructure, inadequate equipment and supplies, and information technology challenges.

4.3.3.3.1 Category 2.3.1: Sub-optimal PHC facility infrastructure

The senior health managers elaborated on several infrastructural challenges that affected how the PHC streams were provided. A further indication was that the ICRM programme manual provided directives on implementing elements. However, some of these elements required amendments to the existing facility infrastructure, such as the size and the number of consulting rooms to render different services per stream. Professional nurses further stated that the limiting PHC facility infrastructure made applying the three PHC streams through which services were rendered difficult. The participants indicated an element of hopelessness since they mentioned that the issue of infrastructure is beyond their control.

> *"All elements are supposed to be implemented at the clinic according to the ICRM manual, but there are those that are beyond the nurses' control, for example, infrastructure, and you find that it affects other elements like*

availability of streams because the streams were added, but the old clinic structures were not changed" (PN02).

"The size of the facility and the structure is not conducive to implement the programme effectively, e.g. small consulting rooms that cannot accommodate all the equipment for all the services to be carried in one area" (PN01).

"All elements are implemented, but we are challenged by other elements which are beyond the scope of the operational manager and the professional nurses like the infrastructure" (PN07).

"Also, we are using an old clinic structure, and it is challenging for us to implement some of the configurations as per streams" (PN04).

"Some elements are performing as they do since they are beyond our control. For example, sometimes infrastructure become(s) a problem in terms of the availability of all the services as per the streams" (MAN01).

"For the elements that are doing well, it is because they are within our scope of control, and some of the elements are beyond our control, and we always do bad in them like infrastructure since it is the national function" (MAN03).

"Almost all the elements are implemented in this clinic except for infrastructure which is beyond our control, and we are still waiting for the assistance from the management to deal with that challenge" (MAN07).

PHC services were rendered from fixed structures or buildings (PHC facilities) within the communities, and all the care provided was affected by the state of the physical structure of these amenities. PHC services were to be delivered using or applying the three streams, and such streams were a requirement of the ICRM programme. Facilitation of effective and comprehensive care to the clients and patients at PHC results in the improvement of health indicators (South Africa 2020:13). There was a need for the South African government to improve infrastructure for these PHC facilities in order to accommodate the three streams, thus improve the quality of services the patients receive. In the study conducted in a rural South African PHC context, a limited PHC facility structure restricted the implementation of appropriate PHC services since the clients cannot be sorted and attended to according to their

needs in various streams (Maphumulo & Bhengu 2019:5). Sorting and allocation of clients according to their needs and streams facilitates the rendering of healthcare services. The responses and findings of this study were consistent with the findings of Mogakwe et al. (2020:6), who determined that challenges with suitable infrastructure at PHC facilities affected the daily functioning of the PHC facility. Additionally, the challenges with the PHC facility infrastructure affected the ability of the facility to achieve and maintain the ideal clinic status.

4.3.3.3.2 Category 2.3.2: Inadequate equipment and supplies

Professional nurses indicated that the lack of medical-surgical equipment, equipment for the maternity and obstetric unit and supplies to render services to the clients posed a challenge to ensuring that the care met the client's needs. The problem with supplies could be related to problems at the hospital where the supplies and stock are ordered. Senior health managers indicated that the supply chain processes sometimes took too long, affecting the success of some of the elements. The unavailability and delays in obtaining resources affected the implementation of the ICRM programme since some elements were found to be non-functional, and some resources may have been rechannelled or allocated to other elements as prioritised. The senior health managers indicated that means are made to implement all the elements of the ICRM programme, but some were beyond their control, for example, the challenges with the availability of supplies.

> *"Shortage of surgical sundries, pharmaceutical supplies and equipment" (PN01).*
>
> *"Also lack of necessary equipment in our maternity and obstetric unit which causes problems in case we have a delivery" (PN01).*
>
> *"Shortage of supplies and staff is a challenge, and I think not in PHC only" (PN04).*
>
> *"Sometimes we run short of the supplies and equipment due to problems at the hospital" (PN06).*
>
> *"All elements are implemented, but we are challenged by other elements which are beyond the scope of the operational manager and the professional*

nurses, like the infrastructure and the availability of supplies since we order from stores" (PN07).

"Also, sometimes the availability of supplies is a problem due to supply chain issues that take too long until we receive what we have ordered. And also, as I have mentioned earlier, the fact that some resources are channeled to other PHC programmes like the issue of COVID 19... a lot of services and planned activities have been affected by COVID 19" (MAN01).

"Yes, actually, it's a couple of them, things that I have noted. It's a couple of them, but basically it's lack of material resources and problems with the supply chain and maintenance" (MAN02).

"Sometimes the supply chain issues come into play when it comes to procurement of services and equipment" (MAN06).

This study concurred with the study conducted by Hlongwane et al. (2019:226) in a PHC setting with a focus on continuous quality improvement, who stated that the shortage of medical equipment in rural PHC facilities limited professional nurses from working to their full capabilities. Equipment included the medical apparatus used to assess the clients and offer treatment services according to their diagnoses. The challenge with the medical equipment was in contrast with the requirements of the National Core Standards, which state that functional equipment must be in all PHC facilities for effective care to be rendered. The ICRM programme depended on conformance to national standards of care, including the provision of functional equipment in all PHC facilities in disease management (Lebina et al. 2019:2).

4.3.3.3.3 Category 2.3.3: Information technology challenges

The senior health managers and professional nurses indicated that the sub-district experienced challenges regarding the new computer and information technology systems. Furthermore, a suggestion was made that network issues were experienced, and staff could not access the intranet and internet to download necessary information to improve healthcare services. The professional nurses ended up using their cell phones to access the internet and intranet, and there was no electronic record system for the clients' files and records for easy retrieval.

"Also, we have problems with computers, and I said the manual can be downloaded from the intranet, but we cannot, and we end up using our cell phone due to network problems" (PN04).

"Also, things like network issues and information technology services are a problem since we do not have computers" (PN02).

"Also, if we can have electronic recording system(s) and computers, it will be easier to work in the clinics, but we do not have that" (PN06).

"And another thing, also the rural clinics need to be developed in information technology services and infrastructure that will help us assess contemporary information via (the) internet and improve the quality of care that is rendered. Look at things like computers and stuff" (MAN02).

"Unavailability and no access to enough computers for storing and retrieving the clients' records" (MAN03).

The use and application of new technology in rendering healthcare services was essential to be in line with the fourth industrial revolution and offer nursing care according to the clients' needs. Computers were to be used in PHC facilities to store and retrieve client information and check results from the national laboratory system to ensure continuity of care. The definition of primary health care encompasses that scientifically sound methods and technology should be made universally accessible to the members of the public to improve their health status (Coetzee 2018:23). KZN province is second with the highest number of PHC facilities after Eastern Cape with approximately 790 PHC facilities with 32% obtaining ideal clinic status. In Mpumalanga province, the achievement of ideal clinic status was at 34% and in Gauteng, at 89% (South Africa 2020:41). These percentages from the ideal clinic status assessments show that there were still challenges in achieving the ideal clinic status within certain PHC facilities having poor access to information and technology infrastructure and experiencing connectivity issues (South Africa 2020:41). In the study conducted by Brooke-Sumner et al. (2019:3) in South African PHC facilities, it was found that nurses had no access to an appropriate and reliable information technology infrastructure to apply in rendering healthcare services to clients and patients.

4.3.4 Theme 3: Facilitators of the ICRM programme's implementation

The third theme outlines the views of senior health managers and professional nurses on the factors that contributed to the success of the ICRM programme at rural PHC facilities. Two sub-themes emerged, namely, stakeholder support and teamwork. The sub-themes and categories of theme three are presented in Table 4.5.

Table 4.5: Sub-themes and categories to facilitators of the ICRM programme's implementation

SUBTHEMES	CATEGORIES
3.1 Stakeholder support	3.1.1 District and sub-district management support 3.1.2 Non-governmental organisations as supporting partners 3.1.3 Community participation
3.2 Teamwork	3.2.1 Collaborative team efforts 3.2.2 Professional nurses' key role in quality initiatives 3.2.3 Benchmarking with other PHC facilities

4.3.4.1 Sub-theme 3.1: Stakeholder support

Senior health managers and professional nurses stated that the ICRM programme required strong stakeholder support since many elements were involved in implementing the programme. Stakeholders were individuals or organisations with an interest in healthcare services and may have been involved in decision-making about health issues and implementation of the ICRM programme. Three categories emerged from the data: district and sub-district management support, NGOs as supporting partners and community participation.

4.3.4.1.1 Category 3.1.1: District and sub-district management support

Support from the district and sub-district management facilitated the provision of PHC services and implementation of the ICRM programme at PHC facilities. Senior health managers and professional nurses stated that since PHC was district-based, support was received from various levels of healthcare management to ensure that the ICRM programme was implemented effectively. Additionally, the professional nurses

regarded the in-service training and support offered by the hospital management (sub-district) and the district officials as crucial to implementing the ICRM programme. On the other hand, senior health managers stated that the district management gave expert clinical advice and constructive feedback on performance.

> *"In-service training on quality assurance programmes like the National Core Standards and the Ideal Clinic is done also at district level to develop knowledge for all employees in the facility" (PN01).*
>
> *"Our operational manager and the top management try to support us and also with the quality improvement plans that we write after each assessment help us to improve" (PN05).*
>
> *"Also, the feedback that we get from the PHC management and the assessors help us identify the areas of improvement" (PN02).*
>
> *"At least we do get feedbacks from the assessors, for example, for ideal clinic and core standards that help us to do the things right" (PN07).*
>
> *"Consistent support and consultation from the top management in the mother hospital and support from other clinics or peers with constructive feedback and introspection on the performance of each clinic" (PN01).*
>
> *"The programme keeps us on our toes, and you, as a manager, are able to grade yourself and be able to correct the shortcomings in your clinics with the support of the management from the hospital" (MAN01).*
>
> *"Well, my clinic is performing well in some elements due to the support we get from PHC management. As much as it is difficult, but yes, we are trying" (MAN02).*
>
> *"We also get support from the PHC management, although it is not adequate since there are other programmes which have taken priority, but we try to render quality services at PHC. We also try to check ourselves with my staff to grade our compliance using the tool" (MAN03).*

The professional nurses further stated that the PHC management office and supporting medical officers were used as reference points for technical advice. A further indication was made that though the PHC managers were busy and

overstretched, time was made for supervisory visits to the PHC facilities. The sub-district management conducted supervisory visits per quality assurance and monitoring requirements.

> *"Using the PHC office as a reference source in cases of uncertainty" (PN01).*
>
> *"For new or unfamiliar cases, the doctor or PHC management is contacted for their support on management or referral if the need arises" (PN01).*
>
> *"The PHC management sometimes comes to assist and support us although they are always busy, but that helps as they know what is required" (PN02).*

In South Africa, a district health system has been adopted to manage health services effectively. The healthcare decisions are made by the health team in that district and sub-district (Coetzee 2018:97). The findings are supported by Muthathi and Rispel (2020:7) and Stacey et al. (2021:1543), who argue that the district management support is essential in the implementation of the quality assurance programmes. The district is concerned with the delivery of comprehensive and integrated community-based services efficiently and effectively. The district health system forms part of the healthcare management and the national healthcare system for facilitating healthcare service delivery. Hlongwane et al. (2019:5) state that for quality improvement programmes to be successful, all levels of healthcare management must be involved. Consulting the experts from the district and sub-district, such as health district clinical specialists and management, promotes the achievement of quality assurance goals (Lebina et al. 2019:110).

4.3.4.1.2 Category 3.1.2: Non-governmental organisations as supporting partners

The senior health managers and professional nurses stated that implementing the ICRM programme required working closely with the NGOs to get assistance on quality improvement to ensure that the targets are met. The NGOs assisted in organising and facilitating the workshops contributing to staff development at the PHC facilities. The support from the NGOs came in the form of supplies, including, but not limited to, the provision of educational materials during community awareness campaigns and workshops. NGOs also supplemented the services that improve the quality of PHC

services, like providing staff to assist with meeting the targets in the priority programmes and improving access to counselling services.

> *"Also, I organize meetings and support sessions with the stakeholders or our NGOs as partners in quality improvement" (PN02).*
>
> *"I think the staff work very hard in spite the challenges, the support we also get from the partners to meet our targets also help us with quality of care" (PN07).*
>
> *"And we usually have the meetings with NGOs to talk about the areas that need improvement in our functioning as staff as that helps us to achieve the ideal clinic status it identifies the problems early" (PN06).*
>
> *"The companies like HST help train us and give things like banners for campaigns and training material support during workshops, and this helps us to do well. Sometimes they give us people to assist with data and counsellors" (PN05).*
>
> *"I communicate with my fellow colleagues from other clinics and the non-governmental organisations to solve problems" (PN05).*
>
> *"We have been able to achieve the results due to the technical support and advice that we get from NGOs because we do have NGOs around that support us in the sub-district. So, we see the impact here in meeting targets and other areas." (MAN02).*
>
> *"I also liaise with our district for support and technical advice and not forgetting our partners who give us much-needed support" (MAN04).*

The findings are supported by Stacey et al. (2021:1543), who state that the ICRM programme requires multi-stakeholder involvement to ensure that all elements are effectively implemented. Chemouni (2018:90), in a study conducted in a rural PHC setting with a focus on UHC, suggested that the subject of quality assurance in PHC requires partners and stakeholders, especially the NGOs' involvement, to facilitate the implementation of all healthcare programmes. The partners at rural PHC facilities include all stakeholders that support the functioning of PHC facilities, for example, the non-government organisations such as Health Systems Trust and other providers

assisting in rendering services that improve the indicators of the identified programmes.

4.3.1.3 Category 3.1.3: Community participation

Senior health managers and professional nurses stated that the buy-in and cooperation from the community members as the recipients of healthcare services facilitated the implementation of the ICRM programme. The PHC facility management and staff were able to improve the services rendered since the communication was open with the community in order to identify challenges. Community members who participate tend to utilise the PHC facility more often for the management of their healthcare needs. The clinic committees acted as a connection in ensuring that participation and information were shared between the healthcare provider and the community to identify the deficiencies in delivering PHC services. Community participation also came in as the staff provided means for suggestions, complaints and compliments, improving PHC services' quality.

> *"Also, I think the lines of communication have improved between us and the community since everything is done openly and there is a clinic committee which must be functional" (PN04).*
>
> *"Health education to the community to gain their cooperation and for them to fully utilize the facilities to their full advantage, and involving the clinic committee more in the running of the facility in order to have a buy-in or support at community level" (PN01).*
>
> *"Also, strong involvement of the members of our community as we have a clinic committee that tells us if we are not doing the things right and it helps us to improve and is needed by the quality audits" (PN07).*
>
> *"Yes, I need to take the staff, the management, the community on board so that the clinic is run smoothly. Our community is also now forthcoming with suggestions, complaints, and compliments. So, the ideal clinic makes us to display the details of the operational manager for our clients to see so that there is some little bit of transparency, and so that the community can now voice out their suggestions because we encourage community involvement" (MAN02).*

"We ensure involvement of the community since we have the functional clinic committee where we discuss the issues affecting them" (MAN05).

Community participation is achieved through service delivery mechanisms and efforts in which community members become involved in the aspects that affect their health and well-being. The findings of this current study were supported by Muthathi & Rispel (2020:11), who argue that quality assurance programmes, like the ICRM programme, require strong and positive community leadership and participation, where the members of the community take ownership of the healthcare services and support the healthcare staff in providing the quality services.

4.3.4.2 Sub-theme 3.2: Teamwork

The responses from the senior health managers and professional nurses in this study indicated that effective implementation of the quality assurance programmes like the ICRM programme at rural PHC facilities requires collaboration from all levels at PHC. Three categories emerged from this sub-theme: collaborative team efforts, professional nurses' key role in quality initiatives and benchmarking with other PHC facilities.

4.3.4.2.1 Category 3.2.1: Collaborative team efforts

Senior health managers and professional nurses pointed out that the staff at the rural PHC facilities worked as a team, motivating each other to achieve excellence. Teamwork was perceived as a driving force to enhance quality. The staff worked towards achieving set targets and goals, such as managing and sustaining the ICRM programme's basic elements. Professional nurses further stated that information was shared on experiences across other service delivery programmes, and sharing of such information assisted in improving the ICRM programme implementation. The professional nurses also supported each other and worked together to develop strategies to improve service quality. The senior health managers indicated that they give support to all members of the team and involve all staff, whether clinical or non-clinical, in implementing the ICRM programme.

"For all those mastered elements, quality is maintained and kept in (sic) a high standard. Working as a unit always helps as we overlap to achieve one goal of quality care" (PN01).

"The programme has improved the whole functioning of the clinic, there is communication and information sharing between the staff and the management since we need to together come up with strategies to achieve the ideal clinic status and thus improving the quality of the services rendered" (PN06).

"Also, we support each other as clinicians from this clinic and sub-district in order to give each other tips and share important information based on experiences" (PN02).

"Our operational manager always involves us in discussions, even the other categories of staff in the ideal clinic and has explained to us that we all need to be involved in this programme and be active since everybody contributes to the achievement of the ideal clinic status" (PN06).

"I also provide support to other members of the team in terms of technical advice and skills to deal with various challenges at PHC and implement programmes" (MAN04).

"It's a lot that I do as an operational manager, also supervise and work with all other members of the team be it clinical and non-clinical staff since the elements of the ICRM runs across all areas of the clinic" (MAN06).

Senior health managers indicated that the performance of the PHC facilities had improved since the staff engaged in the quality improvement processes, and feedback provided direction for improvements. The implementation of the ICRM programme had improved since the elements not doing well were considered and prioritised, with steps to improve being followed. The senior health managers further stated that the quality improvement process allowed them to work together and discuss the mechanisms to be applied after the assessments as corrective action. The staff met and discussed the standard operating procedures per the manual to improve understanding of their application and contributed positively to the ICRM programme's implementation.

"Actually, my clinic is now performing very well, I would say generally. Although there are some challenges here and there, and we have explained some of those challenges in the past. The performance has actually improved drastically, and we are getting more used to the tools, and the quality improvement plans we draw have been effectively implemented. Following the quality improvement process has made us successful in an ideal clinic" (MAN02).

"When it comes to the performance in the last assessment, the clinic did fairly well since we try to break the items down and implement as we go to make it easier for the staff to implement. But some items need improvement and we have written our quality improvement plans and we are in the process of implementing the plans and correct(ing) the mistakes" (MAN05).

The service delivery activities carried out by the staff members as a team at the PHC facilities contribute to facilitating the quality assurance programmes. Working as a unit ensures that the efforts are pooled together to realise a common goal and improve health outcomes. The findings of this study are supported by Hlongwane et al. (2019:233), in their study in rural PHC setting with the aim of quality improvement, who argue that teamwork and collaborative efforts contribute to ensuring that care rendered to clients is effective and efficient in meeting their needs. Senior health managers were responsible for quality assurance and monitoring of healthcare services in the PHC facilities. The findings of this study are supported by the study conducted by (Mogakwe et al. 2019:4), carried out in the PHC context with limited resources and problems with compliance with quality standards who argue that the quality improvement process is part of the health professionals' duty and should be used to ensure that the standards are met. The quality improvement process includes identifying problem areas and designing the relevant strategies to address those deficiencies as a form of corrective action.

4.3.4.2.2 Category 3.2.2: Professional nurses' key role in quality initiatives

The professional nurses as implementers of the ICRM programme indicated that they had a role to play in quality assurance and monitoring for the programme to be successful at the PHC facilities. Professional nurses stated that their role included assisting operational managers in ensuring that all quality requirements were

observed and participated in the assessments. After the ideal clinic assessments, the professional nurses were involved in drawing up the quality improvement plans for the non-functional elements contributing to the programme's success. The professional nurses also supervised staff and delegated tasks accordingly, ensuring that quality care was achieved and maintained. For quality healthcare services to be rendered, the professional nurses also checked and ensured the availability of supplies and emergency preparedness which all supported the implementation and success of the ICRM programme.

> *"Taking part in developing quality improvement plans where there are gaps in service rendering" (PN01).*
>
> *"I am also expected to draw quality improvement plans on the identified gaps in implementation of services or meeting of targets in my clinic" (PN02).*
>
> *"Also, I assist the operational manager in the implementation of the guidelines and all the aspects of the programme" (PN04).*
>
> *"As a professional nurse, we are involved in the implementation of the programme since all our functioning must be to ensure quality of services and we need to be able to supervise staff and assist the operational manager if there is a need" (PN05).*
>
> *"All the duties of the professional nurse are integrated into the programme, starting from things like checking the emergency trolley and supplies" (PN01).*

In quality improvement, professional nurses create and maintain an environment that facilitates and promotes team efforts that initiate actions that produce positive results in the PHC facilities. The professional role of the nurse includes the involvement in research about quality improvement and the adoption of effective customer service models based on scientific findings to advance quality in healthcare (Duffy 2018:39). The findings of this study are supported by Meyer et al. (2019:254) who suggest that in the implementation of quality assurance programmes, the professional nurse has a role in quality management at PHC and to participate in ensuring that the service rendered complies with the acceptable quality standards. The nurse also should

participate in quality improvement measures for the deficiencies identified and facilitate the implementation of corrective action.

4.3.4.2.3 Category 3.2.3: Benchmarking with other PHC facilities

Implementing and maintaining quality assurance programmes such as the ICRM programme require information sharing and learning from best practices to facilitate compliance. The senior health managers and professional nurses expressed that the PHC facility staff members obtained advice from their colleagues within the sub-district and PHC facility. For the programme to be successful, strategies had to be implemented to share information and learn from other facilities that were doing well in various elements.

> *"Asking from other facilities and sub-districts to ensure that we get advice from them on how to deal with the problems we encounter at the clinics" (PN07).*
>
> *"I communicate with my fellow colleagues from other clinics and the non-governmental organisations to solve problems" (PN05).*
>
> *"Use prior knowledge and skills learnt from other places to tackle problems that arise on a day-to-day basis and share information with other colleagues from other clinics" (PN01).*
>
> *"I also benchmark from other districts and sub-districts as identified for their best performance and best practices" (MAN03).*
>
> *"We capitalise on benchmarking information, especially from performing clinics, to assist with the stabilisation of the program implementation and try to do those things that they are doing right" (MAN02).*

Senior health managers indicated that the PHC facilities' staff, after learning from colleagues in other PHC facilities, applied the lessons and best clinical practices they have learnt to the clinical practice to improve the quality of care. The managers worked with other personnel in the identified areas of good practice and assisted in applying the information to the nursing practice. The senior health managers identified the areas in which PHC facilities were not doing well, looked at other PHC facilities in the sub-district and outside which were doing well in those elements, and tried to adopt

how the services were rendered. The PHC management afforded the senior health managers and staff an opportunity and means to benchmark and apply the best practices in patient care so that they could improve.

> *"The reason for us to perform as we do is that we are trying to follow the manual for (the) ideal clinic, and we go to other facilities and call other managers and ask for advises and assistance where needed" (MAN07).*
>
> *"I also benchmark from other districts and sub-districts as identified for their best performance and best practices" (MAN03).*
>
> *"We capitalise on benchmarking information, especially from performing clinics, to assist with the stabilisation of the program implementation and try to do those things that they are doing right" (MAN02).*
>
> *"The implementation has improved since we have clinics even in other districts, which are performing well in certain elements and we are given time and chance by supervisors to go and look at them and come back to do what they do in our clinics" (MAN06).*

The findings of this study concur with a study done by Mogakwe et al. (2020:7), who recommend that, to facilitate compliance with the quality standards, benchmarking of best practices must be used. Communication was encouraged among all staff, PHC management and the implementing partners to ensure that all the necessary feedback was received to upgrade the quality of care. Muthathi and Rispel (2020:130) also recommend that open communication and learning from one another in all spheres of PHC management is vital to progressive leadership. Benchmarking also helps to create a productive relationship between healthcare professionals and enforce compliance to shared best practices for quality of care.

A rural sub-district like the one under study relies on the application of benchmarked best practices to be comparable and improve the quality of services rendered. The findings of this study are consistent with a study by (Muthathi & Rispel 2020:7), in the study in a predominantly rural province of South African PHC context, who suggest that sharing information on best practices and resources among health professionals assists in ensuring that the applied quality assurance programmes are successful. Health professionals need to understand their capabilities and strengths compared to

their peers from other PHC facilities and then apply the learned practices to improve healthcare services.

4.3.5 Theme 4: Recommendations for successful implementation of the ICRM programme

After identifying and discussing how the barriers affected the quality of PHC services and the implementation of the ICRM programme in the identified sub-district, senior health managers and professional nurses suggested measures to improve the ICRM programme's implementation. The senior health managers and professional nurses indicated that the application of the measures would improve the implementation of the ICRM programme and the quality of PHC services in general. Three sub-themes emerged from the data: infrastructure provision, stakeholder and resource support and improvement of clinical guideline use. The sub-themes and categories of theme two are outlined in Table 4.6.

Table 4.6: Sub-themes and categories on recommendations to improve the ICRM programme implementation

SUB-THEMES	CATEGORIES
4.1 Infrastructure provision	4.1.1 Improvement of PHC facility infrastructure 4.1.2 Integration of new technology
4.2 Stakeholder and resource support	4.2.1 Provision of staff, champions and material resources 4.2.2 Management and NGO support 4.2.3 Staff capacity building
4.3 Improvement of clinical guideline use	4.3.1 Motivating staff to use clinical guidelines 4.3.2 Timed introduction of clinical guidelines

4.3.5.1 Sub-theme 4.1: Infrastructure provision

Two categories emerged as recommendations from data obtained from senior health managers and professional nurses: improvement of PHC facility infrastructure and integration of new technology.

4.3.5.1.2 Category 4.1.1: Improvement of PHC facility infrastructure

Senior health managers and professional nurses stated that the provision of funds by the government was necessary for the renovation and revitalisation of PHC facilities, especially those in rural areas since the structures were old. The renovation of such physical structures was likely to address the space challenge as the space in such PHC facilities was too limited to deal with the community's diverse needs and provide all the primary health care streams.

> *"Another thing, the government needs to invest some money on infrastructure, especially infrastructure of rural clinics since they are so old. And another thing, space is a problem if you consider the increased needs of our community" (MAN02).*
>
> *"Refurbishment of infrastructure to meet the requirements of ICRM. This includes the physical infrastructure or the building" (PN01).*
>
> *"Also revitalising the clinics, especially those with old structures" (MAN04).*
>
> *"Improve on the building of the clinics to allow for enough space and services" (PN05).*
>
> *"Another thing maybe is to provide temporary structures so that we are able to implement the three streams effectively." (MAN07).*

Jaeger et al. (2018:9), in their study in a rural healthcare context, recommend that, to improve the quality of healthcare services, the infrastructure needs to be upgraded to meet the community's needs. The ideal clinic is a PHC facility with good infrastructure to ensure quality services to the community members according to their needs (South Africa 2020:383). The South African government is committed to quality improvement. Since the government's initiative on NHI launched, various reforms have been underway. The initiatives by the South African government included upgrading the PHC facility infrastructure to accommodate the three streams for PHC re-engineering. Despite the need and the government's initiatives for infrastructure provision, the rural PHC facilities were found too inadequate and not up to acceptable quality standards.

4.3.5.1.2 Category 4.1.2: Integration of new technology

Senior health managers and professional nurses indicated a need to use new technology in the activities in the PHC facilities. The application of technological systems has the probability of improving the quality of healthcare services, and the need to incorporate information technology has the potential to ensure that the staff can access current information to help in patient care, especially in rural areas. The provision of computers helped with easy functioning and records management since it facilitated the storage and easy retrieval of patients' records from an electronic database.

> *"And another thing, also the rural clinics need to be developed in information technology services and infrastructure that will help us access contemporary information via (the) internet and improve the quality of care that is rendered. Look at things like computers and stuff" (MAN02).*
>
> *"Technology infrastructure provision to adapt to the fourth industrial revolution since we are still lagging behind, especially in the rural areas" (PN01).*
>
> *"Improve (the) infrastructure of our clinics. Provide clinics with computers for easy capturing of information and clients" (PN02).*
>
> *"Also, if we can have electronic recording system(s) and computers, it will be easier to work in the clinics" (PN06).*
>
> *"Infrastructure, availability and access to enough computers for storing and retrieving the clients' records" (MAN05).*

PHC is "a form of healthcare that is based on practical, scientifically sound and socially acceptable methods and technology made universally accessible through people's full participation and at the cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination" (Olalubi & Bello 2020:2). The study was done at a rural community-based setting using a case study. Matlala et al. (2021:4) suggest that the application of new technology facilitates the provision of quality healthcare services if appropriately applied in assessing, diagnosing and managing the clients at PHC facilities.

4.3.5.2 Sub-theme 4.2: Stakeholder and resource support

Concerning the barriers, three categories emerged from data as measures to improve ICRM programme implementation: provision of staff, champions and material resources, management and NGO support and staff capacity building.

4.3.5.2.1 Category 4.2.1: Provision of staff, champions and material resources

Senior health managers and professional nurses indicated that the ICRM programme relied on the provision of personnel to run the programmes at the PHC facilities. All categories of staff need to be involved in implementing the programme and all the healthcare activities. Furthermore, a measure was put forward that the staff must utilise material resources and guidelines to manage the clients, and such documentation must be available. The pharmaceutical and all other supplies and material resources need to be provided and utilised appropriately since the services providers require them to render care that is in line with the organisational objectives. Two senior health managers suggested that staff must be employed as the programme's champions since it was mentioned that there was a lack of mentors in primary health care.

> *"Provision of more staff. Provision of human resources for effective service delivery. Also, generally motivate all categories of staff to be hands-on and involved in the implementation of the quality assurance programmes" (MAN07).*
>
> *"Another thing, the involving of other categories of clinic staff in the implementation of the program just to have their inputs as they need to be involved" (MAN02).*
>
> *"Have enough staff for (the) smooth realization of the programme, that is (the) recruitment of more staff to the clinics to run the programmes according to the streams in order to render quality PHC services" (PN01).*
>
> *"Employ more staff to work at the clinics" (PN05).*
>
> *"Ensuring that the supplies are available for the provision of PHC services. Ensuring that the provided resources and supplies are used appropriately to meet the mission and vision of the facility" (MAN01).*

"Also, have people like we do in Mother and Child and TB, to coordinate quality and implementation of ICRM at PHC since I think the work is too much for the hospital quality manager. Also, have champions at lower levels to look into quality like we have breastfeeding champions and all that" (MAN01).

"Having people at the clinics to support the quality programmes to improve results like the champions" (MAN05).

The findings of this study are consistent with the findings of Tshivhase et al. (2020:5), who suggest that the provision and the appropriate utilisation of all resources support the implementation of quality programmes at the PHC facilities. The provision of the necessary resources helps meet the department's vision of providing health to all citizens of the country. Koon et al. (2020:4) state that mentoring in healthcare service should be part of staff support since it allows the transfer of information among the staff and improves the quality of healthcare. The champions at the PHC facilities motivate the implementation of the quality assurance programmes and the ICRM programme. Therefore suggestions were aligned with strategies that promote access to effective and efficient healthcare services using the available human and material resources.

4.3.5.2.2 Category 4.2.2: Management and NGO support

The senior health managers and professional nurses stated that there was a need for consistent support from all the levels of management (district and sub-district) and not only to be offered in preparation for the formative and summative assessments. A suggestion was also made about support in the form of resources and advice. A further suggestion by the senior health managers and professional nurses was that the involvement of all other stakeholders in the implementation and assessment of the ICRM programme was essential to improve the results.

"Another thing, to have management support throughout, even when there is no assessment. Management shouldn't come when there is (an) assessment. Even if there is no assessment, we need to see such management support" (MAN02).

"More support from the side of the management and NGOs with resources and ideas on overcoming hindrances" (PN01).

“Also, if the management can support more as it was happening, but now we are challenged by this COVID-19, so it is a bit challenging” (PN02).

“Also to have more support from the management, not that they are not supporting us but to be more” (PN06).

“But maybe another thing that has just come to my mind, we need to involve other stakeholders and partners, include other members of the health care service provision team in assessment so that they understand the impact of not attending to these items. For example, the maintenance and the chain supply. And also including the supporting partners, like the NGOs” (MAN02).

Comprehensive support on all aspects of PHC facility functioning is important since it ensures that the facility operates in line with national quality and management standards. The ideal clinic is the PHC facility that cooperates with other government departments and private sector protocols to address the social determinants of health (South Africa 2020:128). Muthathi and Rispel (2020:11), in the study in a predominantly rural province of the South African PHC context, indicate that leadership and management able to negotiate for service improvements are required to promote the quality of healthcare services.

4.3.5.2.2 Category 4.2.3: Staff capacity building

Senior health managers and professional nurses stated that the trainers must be on-site to improve the quality of healthcare services at PHC facilities. Having on-site trainers was more appropriate in the rural sub-district under study since there was a serious staff shortage. New staff orientation and induction were necessary for the staff to be skilled in rendering services. Capacity among personnel in the regional training centres allowed for imparting knowledge and skills to staff at PHC facilities. The senior health managers and professional nurses further indicated the need for structured training programmes to equip the staff with appropriate skills for implementing quality assurance programmes at the PHC facilities.

“I think if we can have more staff to be at the clinics, and to have trainers at our facilities so that we do not have to leave the clinics for training since we are short staffed” (PN01).

"Strengthen orientation and induction of new staff in order for them to render quality care. Also, ensure that the training centres and regional training centres are well vested about the quality programmes and also encourage the use of guidelines in rendering care. And during training to have at least the priority programmes like IMCI and HIV done later on training to ensure that professional nurses still remember such strategies" (MAN06).

"In-service training on quality assurance programmes like the National Core Standards and the Ideal Clinic is done also at district level to develop knowledge to all employees in the facility for coordination of services" (PN01).

"Orientation and induction of new staff regarding the PHC programmes and all other aspects at PHC to achieve quality services" (MAN01).

"The district may provide more objective and structured training of staff in quality assurance programmes" (PN03).

The ideal clinic must have structured programmes and a schedule for training staff to render services that respond to the community's needs. Staff training records need to be kept as evidence of staff development (South Africa 2020:23). Koon et al. (2020:2) recommend consistent support to healthcare professionals and support staff as human resources for health as indicated in components of the ICRM programme implementation. Such support may be in the form of orientation, induction, preceptorship and refresher training to upgrade healthcare personnel's skills.

4.3.5.3.1 Sub-theme 4.3: Improvement of clinical guideline use

Implementing the ICRM programme requires using current clinical guidelines and protocols to assess, diagnose and manage various patient needs. In an ideal clinic, the quality of patient care is assured by using the relevant national guidelines in all the PHC facility activities. The ICRM programme manual requires the staff to have the knowledge and implement the guidelines, and there must be proof that those guidelines were communicated to the staff. Two categories emerged from the data: motivating staff to use clinical guidelines and timed introduction of clinical guidelines.

4.3.5.3.1 Category 4.3.1: Motivating staff to use clinical guidelines

The senior health managers cited an unwillingness to use the clinical guidelines as a barrier to the successful implementation of the ICRM programme. Senior health managers and professional nurses suggested that the ICRM programme was the responsibility of all staff and that for successful implementation, current guidelines must be used, thus improving the quality of care. It was further suggested that the ICRM programme manual and other guidelines must be used to direct the activities performed in the PHC facilities. The staff needed to be motivated by the managers to use the clinical guidelines to improve the quality of health services.

> *"In implementing the programme, it is the responsibility of all of us to carry out all our functions according to the policies and guidelines and it is for the reasons related to (the) quality of our PHC services" (PN02).*
>
> *"The clinics must follow the prescribed guidelines in all their functioning. There is a manual that is always updated. Currently, we are using the latest version. I think it was issued last year, and all the clinics must have access to that manual since it is used when assessing" (MAN04).*
>
> *"Motivating staff to implement the guidelines for improving quality of PHC services" (PN04).*
>
> *"Another thing, it will be ensuring that the guidelines are implemented, patients are treated with courtesy and supplies are available" (MAN02).*
>
> *"Using latest guidelines to diagnose and treat" (PN01).*

The findings of this study are consistent with the critical reforms in the PHC re-engineering, which include the role of the district clinical specialists in ensuring the strengthening of the use of clinical guidelines and protocols to improve health outcomes (South Africa 2017:29). This recommendation was in line with the statement indicating that an ideal clinic utilises up-to-date procedure manuals, standing orders and evidence-based clinical guidelines to offer quality healthcare services to the clients and is supported by local partners and stakeholders (Mogakwe et al. 2019:2). The study was carried out in the PHC context with limited resources and problems

with compliance with quality standards. However, suggestions for improving clinical guideline use were necessary due to barriers related to guideline use.

4.3.5.3.2 Category 4.3.2: Timed introduction of clinical guidelines

A rapidly changing disease burden and the introduction of new clinical guidelines were indicated as barriers to implementing the ICRM programme by professional nurses. The senior health managers suggested that for quality improvement and to overcome the barriers mentioned by the professional nurses, the clinical guidelines must be given time to be understood and internalised by staff before a new one is introduced. The recommendation indicated that the healthcare staff must be allowed to observe the results or outcomes of the introduced clinical guideline before the new one was introduced. The senior health managers further indicated that some of the clinical guidelines were duplicated, which affected the quality of the service provided to the clients since it confused the healthcare staff.

> *"Also, when it comes to guidelines, allow the guideline to be known by staff before implementing the next one because it affects quality if you do not wait for the results of the guidelines before introducing the next one" (MAN01).*
>
> *"Another thing, it will be rapidly changing guidelines in response to changing disease burden and it becomes challenging to keep up with the changes. You see, every program will come with a guideline, and some guidelines may overlap. So allow staff to be familiar with guidelines first before adding" (MAN02).*
>
> *"Just to allow the staff to get used to the guidelines and allow them to see their results before they are changed or replaced in a short period of time to ensure consistency and continuity" (MAN03).*
>
> *"Limit or minimise the guidelines that are duplicated at the clinics since it causes confusion to the staff" (MAN05).*

The findings of this study are consistent with the suggestions by Brooke-Sumner et al. (2019:4) in their study in the South African PHC context with managers who determine that for effective policy implementation at PHC, there must be a proper introduction of updated protocols and clinical guidelines according to the clients' needs and the staff

must be familiar with the policies. The PHC facility staff must be allowed time to understand and internalise the newly introduced clinical guidelines. Policy implementation must allow the implementers to understand the contents of the policy to promote quality.

4.4 SUMMARY

This chapter discussed the demographic characteristics of participants, the research context as well as the findings of the study. Four themes were developed from the data: the organisation of the ICRM programme, views of senior health managers and professional nurses on the barriers and facilitators in the ICRM programme's implementation and measures to overcome the barriers. The next chapter will provide an interpretation of the research findings, recommendations, limitations and a conclusion.

CHAPTER 5

INTERPRETATION OF FINDINGS, RECOMMENDATIONS, LIMITATIONS AND CONCLUSIONS

5.1 INTRODUCTION

This chapter presents the interpretation of the research findings, recommendations, contributions and limitations of the study. This study used a qualitative approach and case study design to find answers to the following research questions:

- What are the views of professional nurses regarding the organisation and processes of the ICRM programme's implementation in PHC facilities of a rural sub-district in KwaZulu-Natal?
- What are the views of professional nurses and senior health managers regarding barriers and facilitators to the successful implementation of the ideal clinic elements in PHC facilities of a rural sub-district in KwaZulu Natal?
- Which measures can be recommended for improved implementation of the ICRM programme in PHC facilities?

The ICRM programme and its implementation represented the case, and the rural PHC facilities in this specific sub-district provided the context in which the programme was implemented, from which a thread of meanings emerged. Therefore, the interpretation and discussion will focus on how well this study addressed the research questions.

5.2 SUMMARY OF THE ICRM PROGRAMME AND THE RESEARCH CONTEXT

In case study research, the researcher considers and records the contextual factors surrounding the case under study, including information about the physical environment (Leedy & Ormrod 2021:261). A summary is provided of the ICRM programme as the case and the rural PHC facility as the context.

5.2.1 Summary of the ICRM programme

The ICRM programme was described in the literature chapter (Chapter 2), but this section provides a summary of the purpose and elements of the ICRM programme. The ICRM programme has been implemented since 2013 in PHC facilities to fast-track delivery of the National Development Plan 2030 and to improve the efficiency and quality of healthcare (Mogakwe et al. 2019:3). To trace progress towards an ideal clinic status, 238 elements, categorised into ten components and 33 sub-components are monitored formatively and summatively (South Africa 2020:143).

5.2.2 Summary of the research context

The case study occurred in a rural sub-district in the KZN province in South Africa. Rural areas are characterised by long distances from urban centres and supporting hospitals and are typically where communities with challenges accessing healthcare services reside. Most people in these communities do not have medical insurance coverage and rely on public PHC services (Gray & Vawda 2018:15).

Human and material resources are known to be in shortage in rural PHC contexts in South Africa (Brooke-Sumner 2019:2), and findings from this study confirmed this shortage of staff and material resources. What is more, the PHC facility infrastructures are also ageing. A quadruple burden of disease and a rapidly changing disease profile affect rural areas (WHO 2018:1).

The selected sub-district implemented the ICRM programme in all the PHC facilities, and the ideal clinic assessments are being carried out periodically. The sub-district was reasonably compliant with the requirements of the ICRM programme's implementation since all the PHC facilities have attained the ideal clinic status with an average score of 79% in the October 2022 assessments. The performance has improved as compared to 2018 statistics. This was despite various challenges (Ideal Clinic Monitoring system 2023: online).

5.3 INTERPRETATION OF RESEARCH FINDINGS

The interpretation of the findings is provided according to the four themes generated during data analysis, namely:

- Theme 1: The organisation of the ICRM programme's implementation.
- Theme 2: Barriers to the ICRM programme's implementation.
- Theme 3: Facilitators of the ICRM programme's implementation.
- Theme 4: Recommendations for successful implementation of the ICRM programme.

5.3.1 Theme 1: The organisation of the ICRM programme's implementation

All professional nurses are mandated to participate in the ICRM programme's implementation and maintenance. Therefore, the professional nurses' understanding of the ICRM programme's organisation is crucial to its effective implementation. The evidence showed that professional nurses regarded the regulatory framework and the assessment as the key components of the ICRM programme's implementation. However, nurses recognised that the ICRM programme is not implemented in isolation but is aligned and incorporated into the PHC facility activities and integral to their daily tasks.

The participants viewed the ICRM programme as a complex process that required policies and protocols for standardisation across the facilities. Furthermore, the regulatory framework, consisting of guidelines and protocols, provided a fixed point of reference guiding them to implement the ICRM programme at each PHC facility. Participants emphasised the need for every professional nurse to be familiar with these manuals. The staff members at an ideal clinic are supposed to apply up-to-date procedure manuals, standing orders and evidence-based clinical guidelines to offer quality healthcare services (Coetzee 2018:107).

The study assumed that effective implementation of the ICRM programme would be influenced by the degree of the nurses' understanding and interpretation of the manuals and the guidelines used to guide the implementation. Participants' interpretations of the regulatory framework seemed to converge with the provisions of the guidelines. The ICRM programme requires the correct use of the relevant

guidelines, and such practice improves adherence to prescribed quality standards and the priorities of the government. This would ensure proper management of clients and thereby address some of the challenges in the facilities.

The ICRM programme implementation appeared to be similar across the PHC facilities according to the regulatory frameworks (manuals and guidelines) and according to the process of assessment. The assessment appeared to be one of the important elements in ensuring adherence/compliance to the prescripts of the clinical guidelines. Participants highlighted their role in the assessment and supportive role of management. The participants understood the vital role of all stakeholders and how the regulation from the clinical guidelines was applied and incorporated into their daily routines.

Since the ICRM programme consists of several elements, participants indicated that some elements were more challenging to implement and maintain than others, such as adequate space and physical infrastructure, availability of medicines and supplies and reliable information technology infrastructure. The physical infrastructure of the PHC facilities differed since some were recently renovated, and some had new structures. Some PHC facilities had old structures and limited space to render services. To cope with the space challenge, some PHC facilities were supplied with temporary structures or park homes. The PHC facilities within this sub-district were experiencing staff shortages and a lack of equipment and supplies. Furthermore, the PHC facilities had challenges with the availability of computers, networks and data connectivity.

However, they acknowledged the significance of physical space and infrastructure to improve the quality of care rendered at PHC facilities, specifically the services rendered to clients. This study could not establish the reasons for challenges related to these specific elements. However, it assumed that the rural environment and infrastructural challenges could have impacted the programme's operationalisation.

The evidence shows hope and reassurance since the professional nurses, as the implementers, understand the organisation of the ICRM programme concerning the regulatory framework and assessment processes. It assumed that the professional nurses viewed the ICRM programme's implementation as achievable if the stakeholders addressed the challenges. Some participants indicated that they made

an effort to apply the necessary guidelines, but limited resources in this rural sub-district challenge them. The significance of the ICRM programme was well articulated by the participants, which seemed to demonstrate their willingness to make positive contributions to the attainment of the ideal clinic status. The compliance assessment in the ICRM programme's implementation also helped the PHC staff identify the problem areas that could possibly affect the quality of care delivered.

5.3.2 Theme 2: Barriers to the ICRM programme's implementation

South African healthcare services, predominantly in rural areas, are facing challenges with achieving UHC due to under-resourced PHC facilities (Umeh 2018:894). The ICRM programme was meant to guide nurses to improve the quality of healthcare services at PHC facilities consistently. However, this study found several factors challenging the optimal implementation of the ICRM programme in rural PHC facilities in KZN.

This study found that community members in rural areas were utilising the PHC facilities in large numbers due to the increased need for healthcare services, but little had been done to employ more personnel to cope with increasing demands. It is assumed that the implementation of the ICRM programme may be impacted negatively by the inability of the government to increase human resources to render services to the communities. Lack of human resources was also found to be prevalent, especially in rural PHC facilities, affecting the quality of PHC services (WHO 2018:2).

There is a challenge in recruiting and retaining staff with experience working at PHC facilities and with experience in the ICRM programme's implementation in rural areas like this sub-district in the study. The lack of experience among staff can affect the quality of healthcare services. The South African health system in rural areas is under pressure, and the incidence of communicable diseases requires more staff, resource allocation and close monitoring and evaluation (Chellan & Sibiya 2018:1). It is a known fact that PHC facilities in South African rural areas are overburdened and lack resources (Maphumulo & Bhengu 2019:4). Therefore, the quality of healthcare will be compromised and the aspirations to maintain the ideal clinic status may be threatened. The growing burden of diseases in rural areas is affecting how healthcare services are rendered to the benefit of community members (WHO 2018:1).

The COVID-19 pandemic further perpetuated the vulnerability of the PHC in the sub-district under study. Nurses as frontline workers were caught in rendering services with limited resources, which had to be re-assigned and shared among all other programmes in the PHC facilities. The competing priorities were highlighted as a challenge, and the study assumed that this would negatively impact the ICRM programme's successful implementation.

Furthermore, human resources shortages hindered PHC facility staff from attending training on new developments and innovations to improve healthcare quality. The study assumes that a failure to attend workshops and training on new developments will affect how the services are rendered and thus affect meeting quality standards and effective implementation of the ICRM programme.

Open communication plays a vital role in all operations of a healthcare system. It would appear that the level of communication was not ideal as participants voiced their concerns regarding the response from the stakeholders regarding the resolution of challenges experienced by staff at the PHC facilities. It is assumed that the communication roles and accountability for implementing the ICRM programme were not adequately executed due to administrative delays in responding to their requests or complaints from the ICRM programme implementers. Poor communication was mainly suggested by the responses from the professional nurses. The senior health managers suggested that there was communication on various levels of PHC management, but it needs to be improved for positive outcomes.

Experienced staff members employed in the PHC facilities could not execute the mentoring role due to the work overload. It was found that burnout contributed to experienced staff's inability to mentor newly employed personnel. Healthcare providers in rural areas require good mentors to build their capacity and support them to cope and develop resilience (Koon et al. 2020:4). The lack of mentors seemed to harm the skills transfer from the experienced staff to the newly appointed staff to improve the quality of healthcare. It is assumed that the lack of good mentors meant a lack of support for the staff members who were already overstretched and exhausted.

Data seemed to suggest that lack of funds affected the acquisition of necessary supplies, resources and services for implementing the ICRM programme in the rural PHC facilities. Additionally, supply chain issues compounded the challenges. The government has committed to funding health services at various levels of disease prevention for the public. Health services include the PHC facilities, which form part of the primary level of disease prevention. The funding by the government as the healthcare service provider includes finances to pay for material, human resources and services for the effective operation of the PHC facilities (Matlala et al. 2021:2). Financial restrictions harm the health services predominantly in the rural areas, which are already affected by the shortage of resources (Matlala et al. 2021:4).

This study showed that infrastructure in the rural PHC facilities was not consistent with the requirements of the ICRM programme implementation. PHC re-engineering has been introduced, but the government has not improved or revitalised the old infrastructure of some PHC facilities to cater for the remodelling requirements, such as the application of the three PHC streams of service delivery. Limited space affected the sorting of the clients to access the different PHC services separately, such as minor ailments, maternal, and chronic healthcare services. Separate access to the PHC streams was intended to ensure that the clients are managed holistically and not sent from one section to another to access care (South Africa 2020:140). The PHC facilities in the rural context of this study had a space challenge since the newly introduced programmes were added, but little to no adjustments have been made in response to the increasing health needs of the public.

Senior health managers and professional nurses of these rural PHC facilities identified the need for integrating new technology into the PHC facilities' activities to enhance service delivery efficiency. Access to computers connected to the internet can facilitate the implementation of the ICRM programme and improve all other healthcare services since data can be stored and retrieved quickly and easily. However, all PHC facilities in this rural sub-district still relied on paper-based documentation for patient data.

5.3.3 Theme 3: Facilitators of the ICRM programme's implementation

Participants described numerous factors they believed contributed to the success of the ICRM programme implementation, such as stakeholder support and teamwork.

PHC facilities that were near or far from the sub-district hospital and those with a high or a low client volume were supported similarly, meaning that there were no variations in the support offered by the sub-district management to the PHC facilities. The distance from the sub-district hospital supporting the PHC facilities was not found to impede the successful implementation of the ICRM programme.

Participants believed that the district and sub-district management as stakeholders had a role to play in ensuring that the consumers of PHC services have adequate access to care, as this would be a reflection of the successful implementation of the ICRM programme. The participants in this study understood the role played by the district and sub-district management. The support from the sub-district management came from the hospital management (the CEO, deputy nursing managers and the assistant nursing managers) and this type of support was assumed to be immediate since the PHC facilities were attached to a district hospital.

District support was also important since PHC is district-based, and the district management team coordinates all the functions of the hospital and PHC facilities. In this study, the support from the PHC management as part of the district and sub-district management structure enabled the PHC facilities to provide appropriate services to the community members. The support from the district and sub-district management and stakeholders included advice, in-service training, resources and planning for the healthcare programmes to improve the healthcare services at PHC facilities. The PHC programme's success relies on stakeholder support to ensure positive results (Lebina et al. 2019:110).

Participants indicated satisfaction with the level of support from the NGOs. The NGOs supported the PHC facilities with technical advice, training workshops, problem-solving and resources for essential needs such as personnel to render services in implementing the ICRM programme. The NGOs' involvement in supporting public PHC efforts is invaluable. It has shown effectiveness with other quality improvements like the implementation of the ICRM programme and other programmes, for example, the management of communicable diseases in this rural sub-district. Therefore, strengthening the relationships with NGOs should be an ongoing strategy to ensure long-term positive outcomes.

Participants understood the significance of incorporating the community's views of their needs to render responsive public services. In this sub-district, communities were actively involved in matters that concerned them. This open communication seemed to strengthen the mutual relationship between the healthcare providers and the consumers, thus ensuring adherence to the principles of primary healthcare. Community involvement is important to ensure that the community members take ownership of the healthcare programme and have input in improving the service delivery (Muthathi & Rispel 2020:11).

Teamwork was cited as one of the strengths of the implementers of the ICRM programme to achieve mutual goals and benefit the community. The implementers had individual roles within the team but collaborated with each other in implementing the ICRM programme. Collaboration was shown to have had a direct bearing on the implementation of the ICRM programme through information sharing, motivation of each other and a mutual understanding of the goals and targets. Teamwork is important for implementing quality programmes that contribute to meeting the clients' needs (Hlongwane et al. 2019:233). However, participants acknowledged some shortcomings in the clarity of the execution of individual roles and communication. Understanding such roles and responsibilities in implementing the ICRM programme facilitates the implementation process.

Quality assurance is important to ensure that the PHC services are delivered according to the set standards and contribute positively to improving the consumer's health status (Webb et al. 2019:2). Data reveal that participants strived to provide quality care, irrespective of the challenges with which they were confronted. They engaged in monitoring and evaluation activities such as checks of the PHC package through self-monitoring, using the appropriate tools and strategies and applying the necessary corrective measures. Performance monitoring allowed them to compare themselves with staff from the best-performing districts and sub-districts. However, this study did not establish the outcomes of such benchmarking.

The researcher contends that these multiple activities and interpretations provided better insights into how the ICRM programme was implemented in the PHC facilities. The facilitators ensured success in implementing the ICRM programme in the PHC facilities in the sub-district under study since all PHC facilities attained the ideal clinic

status. The awareness and insights about the facilitators are essential to enhance the implementation of the ICRM programme. The implementers of the ICRM programme need to take maximum advantage and use the effects of the enablers to achieve and sustain the ideal clinic status. Therefore, the contextual factors can be integrated into strategies for the sustained implementation of the ICRM programme in PHC facilities (Damschroder et al. 2022:8). The ICRM programme implementation requires the understanding of all activities involved in rendering healthcare services to the members of the community.

5.3.4 Theme 4: Recommendations for successful implementation of the ICRM programme

Participants recommended various measures to address several of the barriers identified and improve the implementation of the ICRM programme in rural PHC facilities. The participants believed that the application of necessary adjustments in the operations of the facilities and the introduction of some developments or changes would strengthen the implementation of the ICRM programme. These adjustments included the provision of infrastructure, resources support, stakeholder support and enhancing clinical guideline use.

Recommendations for improving the infrastructure are related to effective health information management. Technology is vital in primary healthcare to facilitate easy access to up-to-date information by staff and ensure that client records are stored securely (South Africa 2020:119). Participants expressed the need for adequate health information management and indicated that this could be achieved by digitising data capturing, transmission and storage for easy retrieval. Applying these innovations will ensure that patients can access relevant and quick services according to their needs. There is also a strong need for ensuring reliable data connectivity to ensure optimum functionality of the PHC facilities. Data connectivity is important to ensure easy access to patient records and health information. Rural areas need to be prioritised for the revitalisation of information technology infrastructure because the consumers in these areas are vulnerable, isolated and, in most instances, already affected by a wide range of communicable and non-communicable diseases. However, introducing technology would demand an adequate infrastructure and specialised skills. It is suggested that

computers and other information technology systems be provided for the PHC facilities staff to render healthcare services.

It was further suggested that improving the infrastructure relates to renewing structures or providing new structures for more space to cope with the increased consumer demands. The physical infrastructure needed to be upgraded to cope with increasing patient needs.

Resource support is important to achieve positive outcomes for effectively implementing quality assurance programmes like the ICRM. The resources for health include human resources, materials and supplies to ensure that the clients can access effective healthcare services. Healthcare providers must ensure the availability of crucial resources through financial management policies (South Africa 2020:83).

Stakeholder support facilitates the implementation of the ICRM programme. The stakeholders include the district and sub-district management and the NGOs. The senior health managers and professional nurses rely on the support they obtain from the stakeholders through advice and support with resources to render quality healthcare services (Lebina et al. 2019:110).

A well-coordinated system of clinical governance at an operational level which ensures the application of clinical guidelines in patient care, was deemed essential for the successful implementation of the ICRM programme. Participants understood that guidelines and protocols for implementing the ICRM programme and general patient care were central to implementing the programme since they all contribute to improving the PHC services. The data suggest that there is a need for a timed introduction of guidelines and a period for them to be internalised by the implementers and see the results. The managers must also have a system for motivating the staff to implement the guidelines to ensure the quality of care. The motivation to implement an intervention is a vital component of the effective implementation and sustainment of quality assurance programmes (West & Michie 2020:1).

The recommendations were assumed to be relevant since they provide applicable and practical solutions to the challenges experienced by the implementers of the ICRM programme in this rural sub-district. Implementing the ICRM programme provided the senior health managers and professional nurses an opportunity to experience first-

hand the evolution of a programme that intends to improve quality standards. The study was based on the premise that for any policy or programme to be effectively implemented, the professionals at the forefront must understand the policies/ programmes and implement them for effective service delivery. The implementers of the ICRM programme must be capacitated to apply the necessary skills and improve implementation. Furthermore, health professionals must be able to identify the barriers and develop strategies to deal with barriers as they may harm the quality of care rendered. The ICRM programme implementation was also a learning curve for the senior health managers and the professional nurses since it allowed them to apply their skills and learn from each other to achieve the ideal clinic status. The stakeholders, such as the district and sub-district management, could better understand the ICRM programme implementation as they supported the implementers. The participants suggested appropriate measures that can be applied in the rural context; however, it will be challenging to implement since there are a number of constraints, including finances.

5.4 RECOMMENDATIONS

Based on the findings, recommendations are made, namely, recommendations for policy-related issues and suggestions for further research.

5.4.1 Recommendations for policy-related issues

- Develop evidence-based strategies to address the barriers and enhance the facilitators as identified in the current study.
- Healthcare management should invest time and resources to develop quality assurance strategies that consider the characteristics of the rural primary healthcare context. Furthermore, such strategies must cater for assessment and corrective action to be applied as remedial action and to improve communication between the stakeholders and implementers of the ICRM programme.
- The government needs to work with the NGOs at the primary healthcare level to develop strategies for creating a positive organisational environment and strategies to provide psychological support to PHC facility staff.

- The government needs to develop a system for change management using quality assurance programmes and improve on the healthcare managers' approaches to improve the implementation of the ICRM programme. In change management, the implementers of the ICRM programme must be well-prepared and supported for the change and be able to adapt to the new developments in the healthcare system.
- Develop and capitalise on the strategies that will ensure the recruitment of skilled staff and promote staff development for all staff to improve the implementation of the ICRM programme.
- Provide the information and technology infrastructure and train staff, especially in rural areas, about the innovations to be applied in patient care, thus promoting the quality of healthcare services.
- The government should allocate sufficient funds for healthcare services, train staff to use the supplies and equipment appropriately, and monitor the use of such funds to minimise unnecessary expenditures.
- Extend the involvement of the ICRM programme implementation and assessment to other categories of staff and other departments (supply chain, maintenance and pharmacy) to contribute to the achievement of the ideal clinic status.

5.4.2 Recommendations for further research

- A study on mentoring as a support strategy for quality improvement for nurses in a rural PHC environment.
- A study to explore the level of readiness in the rural sub-districts for implementing the NHI and the SDGs.
- A comparative study of barriers and facilitators of the ICRM programme implementation in rural primary healthcare contexts. The comparative study may show the commonalities, unique differences and challenges in order to guide the development of strategies that may have a wider impact on the quality of healthcare services.
- A study on the strategies to be applied by the managers in the health sector to recruit, select and retain adequate and skilled staff in rural areas.

- Research into the effects of cost containment measures on the quality of patient care as applied by the government.
- A study to determine the factors that promote psychological resilience of the staff in PHC rural facilities.

5.5 CONTRIBUTIONS OF THE STUDY

The study's findings provided insights into nurses' and managers' experiences of implementing a complex programme to address the challenges of rural healthcare providers. Several factors perceived as facilitators and barriers to implementing the ICRM programme were outlined. The knowledge generated from this study provides an understanding of the ICRM programme's implementation which can inform plans for improved implementation of quality assurance programmes in PHC.

The study reveals the importance of open communication between the implementers of the ICRM programme and the management to ensure that healthcare service delivery is improved at PHC facilities. The need for consistent communication and feedback at all levels of healthcare management is highlighted as an effective tool to achieve positive results in quality assurance.

Nurses perceived their role as vital in the re-engineered PHC model. They believed they were integral in providing quality healthcare in a rural setting. The evidence can increase further awareness about the importance of the ICRM programme's implementation, especially in resource-constrained settings. The findings could be of value to researchers and policymakers to develop strategies and integrate them into policy.

The current study was conducted at a time when there was (and still is) a strong need for PHC remodelling through the process of PHC re-engineering and the preparation for the implementation of the NHI (Lebina et al. 2019:3). The link between the ICRM programme implementation and the National Core Standards was highlighted in this study's findings. The barriers and facilitators may be similar for implementing various quality improvement programmes. Due to such similarity, the study's findings can be used to develop strategies that may positively affect the delivery of several or all quality improvement programmes in PHC, hence strengthening the process of PHC re-engineering, rolling out of NHI and achieving UHC.

This study provides qualitative perspectives from the implementers of the ICRM programme since their views were explored. This will add to the quantitative data available as ideal clinic scores and is likely to give a comprehensive picture of the ICRM programme implementation in this rural sub-district. Feedback about the study findings given to the relevant stakeholders may improve the implementation of the ICRM programme in this sub-district.

5.6 LIMITATIONS OF THE STUDY

The study occurred during the height of a pandemic; there could have been some limitations with recruitment and accessibility of potential participants. However, the researcher managed to mitigate threats to the integrity and trustworthiness of the study.

The study only focused on implementing the ICRM programme in a rural sub-district. Thus the findings cannot necessarily be transferred to the entire province. However, qualitative studies do not primarily require generalising the findings.

5.7 CONCLUDING SUMMARY

It is widely documented that in South Africa, rural PHC facilities experience complex challenges to service delivery compared to those in urban contexts. Policy imperatives such as implementing the ICRM programme require a concerted effort of multiple stakeholders and adequate resources to improve health indicators, especially in rural areas.

Nurses at the forefront of healthcare service delivery require support, resources and skills to implement the ICRM programme successfully. Successful implementation of the ICRM programme is vital to ensure that the clients as consumers receive appropriate quality healthcare services that respond to their needs. This study revealed that communication and benchmarking between the implementers and the stakeholders are crucial to implementing the ICRM programme. The support from the management encouraged the implementers to apply their skills to improve the quality of healthcare services in the sub-district under study. The nurses, as the implementers of the ICRM programme, are on track towards meeting the programme's ideals, and the findings have shown some mastery in how the PHC programmes are run, although

there were persisting challenges. The distance between the PHC facilities from the hospital and the client volumes had no impact on implementing the ICRM programme.

Upgrading the physical infrastructure of the PHC facilities and clinical guidelines used could improve the success of the ICRM programme implementation in this sub-district. Furthermore, the need was identified for integrating and upgrading the information technology infrastructure and incorporating new technology in how healthcare services are rendered. The findings of this qualitative study will be officially communicated to relevant stakeholders, which might improve the implementation of the ICRM programme and the quality of healthcare services.

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ANNEXURE A: ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

UNISA HEALTH STUDIES HIGHER DEGREES ETHICS REVIEW COMMITTEE

Date 25 May 2020

Dear Donald Thandokuhle Mhlungu

NHREC Registration # : REC-012714-039
ERC Reference # : **HSHDC/984/2020**
Name : Donald Thandokuhle Mhlungu

Student #: 55249701
Staff #:

Decision: Ethics Approval from 25 May 2020 to 25 May 2023

Researcher(s): Name Donald Thandokuhle Mhlungu
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Working title of research:

Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities

Qualification: MA

Thank you for the application for research ethics clearance by the Unisa Health Studies Higher Degrees Ethics Review Committee for the above mentioned research. Ethics approval is granted for three (3) years.

*The **medium risk application** was **reviewed** by a Sub-committee of URERC on 5 May 2020 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision will be tabled at the next Committee meeting on 2 June 2020 for ratification.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics

attached.

2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Health Studies Research Ethics Committee HSREC@unisa.ac.za.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
8. No field work activities may continue after the expiry date (25 May 2023). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **HSHDC/984/2020** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,

Signatures :

PP

Chair of HSREC : Prof JM Mathibe-Neke

E-mail: mathijm@unisa.ac.za

Tel: (012) 429-6443

Executive Dean : Prof K Masemola

E-mail: masemk@unisa.ac.za

Tel: (012) 429-6825

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ANNEXURE B: LETTERS REQUESTING PERMISSION TO CONDUCT RESEARCH

LETTER SEEKING CONSENT TO CONDUCT RESEARCH AT
DISTRICT HOSPITAL

P.O. Box 1993
Mondlo
3105
26 May 2020

The Chief Executive Officer

Re-Application to conduct a research study

I am current studying towards master's Degree in public health (MPH) with the University of South Africa (UNISA); and I am expected to conduct a research study as a requirement of the degree. I kindly request your permission to conduct research at your institution.

Research topic: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

A qualitative case study method will be used and involves collection of data from professional nurses at the primary health care (PHC) clinics and senior health managers on the executive management committee, using individual telephonic interviews. The purpose of the study is to explore and describe the views of the professional nurses and senior health managers in the implementation of Ideal Clinic Realisation and Maintenance programme in rural PHC clinics.

The telephonic interviews will be scheduled at a time suitable for the potential participants.

Ethical clearance has been obtained for this study from the Health Sciences Research Ethics Committee at the UNISA (clearance number: **HSHDC/984/2020**).

For more information fee free to contact me or my supervisor.

Yours sincerely

Donald Thandokuhle Mhlungu (Mr) Cell: 082 3498926

Email: 55249701@mylife.unisa.ac.za

Signature: 

Date: 2020.05.26

Supervisor: Mrs G. C. Boersema

Office: 012 429 6027

Email: eboergc@unisa.ac.za

LETTER SEEKING CONSENT TO CONDUCT RESEARCH AT
DISTRICT HOSPITAL

P.O. Box 1993
Mondlo
3105
09 June 2020

The Deputy Nursing Manager

Re-Application to conduct a research study

I am current studying towards Master's Degree in Public Health (MPH) with the University of South Africa (UNISA); and I am expected to conduct a research study as a requirement of the degree. I kindly request your permission to conduct research at your institution.

Research topic: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

A qualitative case study method will be used and involves collection of data from professional nurses at the primary health care (PHC) clinics and senior health managers on the executive management board, using individual telephonic interviews. The purpose of the study is to explore and describe the views of the professional nurses and senior health managers in the implementation of Ideal Clinic Realisation and Maintenance programme in rural PHC clinics.

The telephonic interviews will be scheduled at a time suitable for the potential participants.

Ethical clearance has been obtained for this study from the Health Sciences Research Ethics Committee at the UNISA (clearance number: **HSHDC/984/2020**).

For more information feel free to contact me or my supervisor.

Yours sincerely

Donald Thandokuhle Mhlungu (Mr) Cell: 082 3498926

Email: 55249701@mylife.unisa.ac.za

Signature: 

Date: 2020.06.09

Supervisor: Mrs G. C. Boersema

Office: 012 429 6027

Email: eboergc@unisa.ac.za

ANNEXURE C: LETTERS GRANTING PERMISSION TO CONDUCT RESEARCH

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:
CEO

[redacted]@kznhealth.gov.za
www.kznhealth.gov.za

Enquiries:
Ext:
11/06/2020

To: Mr. Donald Thandokuhle Mhlungu

Dear Sir

Re- approval to conduct research in PHC facilities

This letter serves to confirm authority being granted for Mr. Donald Thandokuhle Mhlungu, to conduct his research in PHC facilities.

1. We believe your research will provide significant information for effective decision making within sub district.
2. The sub district will request a copy of findings being presented to the management after conclusion of the research.

We wish you all the best in your academic endeavor.

Yours faithful

Mr.
Chief Executive Officer

KZN - DEPARTMENT OF HEALTH
2020 -06- 11
CHIEF EXECUTIVE OFFICER

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:
Nursing Management Office

[redacted] kznhealth.gov.za
www.kznhealth.gov.za

ENQUIRIES:
EXT:
15.07.2020

To: Mr. Donald Thandokuhle Mhlungu

Dear Sir

RE: APPROVAL TO CONDUCT RESEARCH IN PHC FACILITIES

Permission to conduct a research study as a requirement of the degree to explore and describe the views of the Professional Nurses and senior health managers in the implementation of Ideal Clinic Realisation and Maintenance programme in the rural PHC facilities has been granted.

Wishing you all the best in your academic study

Thank you

Yours faithful

Deputy Manager Nursing

Date: 15/07/2020

KZN - DEPARTMENT OF HEALTH
2020 -07- 15
CHIEF EXECUTIVE OFFICER

Fighting Disease, Fighting Poverty, Giving Hope

ANNEXURE D: DEPARTMENT OF HEALTH APPROVAL

health
Department:
Health
PROVINCE OF KWAZULU-NATAL

DIRECTORATE:
Health Research & Knowledge Management

Physical Address: 330 Langalibalele Street, Pietermaritzburg
Postal Address: Private Bag X9051
Tel: 033 395 2805/ 3189/ 3123 Fax: 033 394 3782
Email:
www.kznhealth.gov.za

NHRD Ref: KZ_202006_025

Dear Mr DT Mhlungu
(UNISA)

Approval of research

1. The research proposal titled **'Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities'** was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

   The proposal is hereby **approved** for research to be undertaken at .

2. You are requested to take note of the following:
   a. *All research conducted in KwaZulu-Natal must comply with government regulations relating to Covid-19. These include but are not limited to: regulations concerning social distancing, the wearing of personal protective equipment, and limitations on meetings and social gatherings.*
   b. *Kindly liaise with the facility manager BEFORE your research begins in order to ensure that conditions in the facility are conducive to the conduct of your research. These include, but are not limited to, an assurance that the numbers of patients attending the facility are sufficient to support your sample size requirements, and that the space and physical infrastructure of the facility can accommodate the research team and any additional equipment required for the research.*
   c. *Please ensure that you provide your letter of ethics re-certification to this unit, when the current approval expires.*
   d. *Provide an interim progress report and final report (electronic and hard copies) when your research is complete to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za*
   e. *Please note that the Department of Health shall not be held liable for any injury that occurs as a result of this study.*

For any additional information please contact Mr X. Xaba on 033-395 2805.

Yours Sincerely

Dr E Lutge
Chairperson, Health Research Committee

ANNEXURE E: PARTICIPANT INFORMATION LETTER

PARTICIPANT INFORMATION SHEET

Ethics clearance reference number: HSHDC/984/2020
Research permission reference number: KZ_202006_025

Date:

Title: **EXPLORING IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU NATAL RURAL PHC FACILITIES.**

Dear Prospective Participant

My name is Donald Thandokuhle Mhlungu (see photo below) and I am studying towards a Master's Degree in Public Health at the University of South Africa (UNISA), Department of Health studies under the supervision of Mrs. GC Boersema and Professor MM Ramukumba. We are inviting you to participate in this research study titled: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC clinics.

THE PURPOSE OF THE STUDY

The purpose of this study is to explore and describe the implementation of ICRM programme in a rural sub-district in KwaZulu Natal.

This study is expected to collect important information that could identify views of professional nurses and health care managers in implementing the ICRM programme and make recommendations based on the responses of the participants to improve the programme's implementation.

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www.unisa.ac.za

The study might also contribute to preparation for PHC clinics for the PHC re-engineering and National Health Insurance.
The study will add to the knowledge about implementation of ICRM programme in rural PHC clinics.

SELECTION CRITERIA

You are invited to participate in this study for your experience with implementation of the ICRM programme at the PHC clinic you are working at. The criteria for inclusion in this study is willingness to participate in the study, being a professional nurse working at fixed public PHC clinic in Nongoma sub district. Having worked as a professional nurse at a fixed public PHC clinic for at least six (6) months or more. I am to include a number of clinics from across the sub-district in the study. Being a senior health manager working in the sub-district.
Both the Operational Managers and Chief Executive Officer granted permission for professional nurses and senior health managers from the sub-district to participate in the study.

THE NATURE OF PARTICIPATION IN THE STUDY

You will be asked to provide the researcher with your views during a telephonic interview that will be about 30-45 minutes long. The interview questions will not be sensitive in nature but only ask about your views and experiences regarding the ICRM programme. A few demographic questions will be asked at the beginning of the interview. The interview will be audio-taped if you agree to it. The recording will assist the researcher to reflect on the content of the interview during data analysis. You may be called for the second time in case the call gets disconnected.

SELF DETERMINATION AND VOLUNTARY PARTICIPATION

Participation is voluntary .You are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You will be asked to indicate your contact number on the consent form, from which you wish to be contacted for the interview. You will be called for the first time to explain the research information and you will be called for the second time (for the actual interview) if you agree to participate. You are free to withdraw at any

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time before data analysis without giving a reason. Interview will be recorded if you agree.

POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY

The findings of this study might lead to an increased understanding of implementation of the ideal clinic programme at PHC clinics in a rural context. The study will assist in developing suggestions to improve the quality of Primary Health Care services at clinics in rural contexts. There might be comfort and reassurance for you as a professional nurse or senior health manager as you will be able to discuss your challenges with an impartial party in a non-threatening environment.

NEGATIVE CONSEQUENCES FOR PARTICIPATING IN THE RESEARCH PROJECT

The time spent for the interview might lead to minor disruptions in normal routine in the facility.

To address this possible adverse effect, data will be collected during less busy times in the facilities to ensure that there is no disruption in rendering of care in the clinics. You are therefore requested to inform the researcher of a time most suitable. No personal information or intrusive questions will be asked from you and information will be collected in a private environment and will not be shared with anyone.

CONFIDENTIALILTY AND ANONYMITY

Data collected during the scope of this research will not be shared with people outside the research team. Only the researcher, supervisors and independent coder will have access to the data. Your name will not appear on the interview notes and the researcher will allocate a code/ pseudonym to represent your responses in the data. The researcher will keep your informed consent and cell number in confidence. The researcher will therefore ensure anonymity. Aggregate data will be reported, and no data will be reported or linked to your name. The publications will be anonymous and your name will not be mentioned in the publications.

PROTECTION OF THE SECURITY OF DATA

Hard copies of the informed consent and data will be stored by the researcher for a period of five years as legally required in a locked cupboard/filing cabinet at the researcher's office. Electronic data will be stored on a password protected computer.

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PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

INCENTIVES FOR PARTICIPATING IN THIS STUDY

No payments or rewards will be received by the participants for participating in this study.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the Research Ethics Review Committee of the College of Human Sciences; Department of Health Studies, Unisa. A copy of the approval letter can be obtained from the researcher if you so wish.

REPORTING OF FINDINGS/RESULTS OF THE RESEARCH

If you would like to be informed of the final research findings, please contact Donald Thandokuhle Mhlungu on 0823498926 or email 55249701@mylife.unisa.ac.za. The findings are accessible for five (5) years.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Donald Thandokuhle Mhlungu on 0823498926 or email 55249701@mylife.unisa.ac.za.

Should you have concerns about the way in which the research has been conducted, you may contact Mrs. G.C. Boersema (Supervisor) on 0124296027 or email Eboergc@unisa.ac.za. Contact the research ethics chairperson of the Department of Health Studies Review Committee, Prof JM Mathibe-Neke on 012-429-6443 or HSREC@unisa.ac.za if you have any ethical concerns.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Signature:

DT Mhlungu

Donald Thandokuhle Mhlungu (Researcher)

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

ANNEXURE F: INFORMED CONSENT

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirms that I have read and understood the study as explained in the information sheet. I here with allow the researcher, Mr. Donald Mhlungu to contact me telephonically to set up an appointment for an interview. I would prefer the first telephonic conversation at the following date and time :_____(preferably within two weeks form this date).

I understand that the researcher will provide me with sufficient opportunity to ask questions and prepare me to participate in the study, during this first telephonic conversation.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept anonymous and confidential unless otherwise specified.

I agree to the recording of the telephonic conversations and interview with the researcher.

Participant Name & Surname..... (Please Print)

Participant Signature.....Date.....

Participant Contact Number :..... (You will be called from this number to arrange and conduct an interview).

Researcher's Name & Surname..... (Please Print)

Researcher's signature.....Date.....

Witness signature.....Date.....

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www.unisa.ac.za

ANNEXURE G 1: INTERVIEW GUIDE FOR SENIOR HEALTH MANAGERS

INTERVIEW GUIDE FOR SENIOR HEALTH MANAGERS

Code name: MAN:.....

RESEARCH TOPIC: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

Date: _____

Time: _____

INTRODUCTION

The researcher greets and welcomes the participant.

Introduction of self (interviewer), the purpose of the interview, discussion of confidentiality, anonymity, duration of interview and ground rules.

Explanation that the telephonic interview will take approximately 30 to 45 minutes and will be audio recorded.

After recruitment, research participants will be asked demographic details with five closed ended questions, which will take approximately 5 minutes.

SECTION A

DEMOGRAPHIC DETAILS

1. Age

22 to 30 years	
31 to 40 years	
41 to 50 years	
51 to 60 years	
61 to 65 years	

2. Gender

Male	
Female	
Other	

1

3. Rank

Chief Executive officer	
Deputy Nurse Manager	
Assistant Nurse Manager	
Operational Manager	

4. Years of experience in health sector

6 months to 10 years	
11 years to 20 years	
21 years to 30 years	
31 years and more	

5. Years of experience in PHC environment

6 months to 10 years	
11 years to 20 years	
21 years to 30 years	
31 years and more	

6. Years of experience in Management

6 months to 10 years	
11 years to 20 years	
21 years to 30 years	
31 years and more	

2

SECTION B

INFORMATION RELATED TO THE STUDY

QUESTIONS

1. **Can you please share with me how the ICRM programme is implemented in your sub-district or clinic?**
    - Probe: What is your involvement or role in the management of the ICRM programme implementation?
    - Probe: What is your experience in management or implementation of the ICRM programme?
2. **Please describe, in your view, the success of the ICRM programme implementation at the PHC clinics in this sub-district or your clinic.**
    - Probe: Please explain why you think the clinics are performing as they do or your clinic performs as it does?
3. **Tell me more about the aspects at management level that you think can help to improve the implementation of the ICRM at the selected clinics.**
    - Probe: Tell me more about the aspects in your day to day functioning as the manager that support the implementation of the ICRM programme
    - Probe: Please explain any suggestions for improvement to overcome the challenges.
    - Probe: As a manager, if you are given an opportunity to restructure the ICRM programme implementation, what would you change and why?

CONCLUSION

Thank the participant, reminder of confidentiality and anonymity.

ANNEXURE G 2: INTERVIEW GUIDE FOR PROFESSIONAL NURSES

INTERVIEW GUIDE FOR PROFESSIONAL NURSES

Code name
PROF:.....

RESEARCH TOPIC: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

Date: _____

Time: _____

INTRODUCTION

The researcher greets and welcomes the participant.

Introduction of self (interviewer), the purpose of the interview, discussion of confidentiality, anonymity, duration of interview and ground rules.

Explanation that the telephonic interview will take approximately 30 to 45 minutes and will be audio recorded.

After recruitment, research participants will be asked demographic details with five closed ended questions, which will take approximately 5 minutes.

SECTION A

DEMOGRAPHIC DETAILS

1. Age

22 to 30 years	
31 to 40 years	
41 to 50 years	
51 to 60 years	
61 to 65 years	

2. Gender

Male	
Female	
Other	

1

3. Rank:

Clinical Nurse Practitioner	
Professional Nurse	

4. Years of experience in nursing profession

6 months to 10 years	
11 years to 20 years	
21 years to 30 years	
31 years and more	

5. Years of experience in Primary Health Care (PHC)

6 months to 10 years	
11 years to 20 years	
21 years to 30 years	
31 years and more	

SECTION B

INFORMATION RELATED TO THE STUDY

QUESTIONS

1. **Can you please share with me how the ICRM programme is implemented in your facility?**
    - Probe: How is the ICRM programme's implementation organised in your clinic? When and how do you integrate the ICRM programme's elements within your daily practice (or management).
    - Probe: According to your knowledge, why is ICRM programme implemented?
    - Probe: What is your personal involvement in the ICRM programme?
2. **Please describe how you view the success of the ICRM implementation at your clinic.**
    - Probe: What would you consider as factors that assist in the successful implementation of the ICRM programme?
    - Probe: What would you regard as barriers to implementation of the ICRM programme?
    - Probe: When are some of the ICRM elements not implemented and why?
    - Probe: Explain why you think certain ICRM elements are performing as they do?
3. **Tell me more about the aspects that you think can help to improve the implementation of the ICRM at this clinic.**
    - Probe: Tell me more about the aspects in your day to day functioning that support the implementation of the ICRM programme
    - Probe: Please explain any suggestions or recommendations you might have for improvement to overcome the challenges to implementation of the ICRM programme or some of its elements.

CONCLUSION

Thank the participant, reminder of confidentiality and anonymity.

ANNEXURE H: MEASURES APPLIED DURING DATA COLLECTION DURING LEVEL 5 LOCKDOWN

To: CHAIRPERSON: HEALTH STUDIES RESEARCH ETHICS COMMITTEE

MEASURES APPLIED IN DATA COLLECTION DURING LEVEL 5 COVID-19 LOCKDOWN

Student: Mhlungu Donald Thandokuhle - 55249701

Study title: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

The researcher will collect data during Level 5 COVID-19 lockdown and the following measures will be applied to prevent the spread:

- Help of research assistants will be enlisted in delivering the information letters and signing the informed consents.
- Research assistants, the researcher and participants will sanitise and do screening where necessary.
- Informed consents and information sheets will be delivered to the researcher assistant by the researcher wearing a face mask and a two meter distance will be maintained.
- Signed informed consents will be collected by the researcher after three days of signing.
- Data collection will be done telephonically and no face to face interviews will take place.

Thank you

Yours faithfully

Mr Donald Thandokuhle Mhlungu

Date: 2020-05-05

ANNEXURE I: CONFIDENTIALITY AGREEMENT

CONFIDENTIALITY AGREEMENT

RESEARCH TOPIC: Exploring implementation of the Ideal Clinic Realisation and Maintenance programme in KwaZulu Natal rural PHC facilities.

I, Monique van der Walt will assist and work collaboratively with the researcher regarding research-related matters about this study. I will be assisting as a qualitative coder I will maintain confidentiality of all data which come to my attention from or about research subjects. I will undertake security measures to maximise privacy. I will help the researcher in the aspects allocated to me in order for him to meet the research objectives. I will also cooperate with the supervisor where necessary to facilitate the accomplishment of the study.

Signature:

Date: 30/08/2021

Researcher:

Date: 30/08/2021

Witness:

Date: 30-08-2021

ANNEXURE J: LANGUAGE AND TECHNICAL EDITING CERTIFICATE

I, the undersigned, declare that I have edited the

MASTER OF PUBLIC HEALTH dissertation of Donald Thandokuhle Mhlungu, titled:

EXPLORING IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU-NATAL RURAL PHC FACILITIES**.**

Some sections of the thesis, such as transcribed quotations from the interviews, were not corrected, except for insertions between brackets or punctuation marks to give a better reflection of the meaning or the probable intention of the interviewee.

I am also not responsible for the correctness of any changes made to the dissertation after completing the editing and before submission or after possible changes as advised by the examiners would be implemented.

Signed:

Prof (emeritus) P.J. Botha

(Member of the South African Translators' Institute, no. 1000048.)

Date: 25 January 2023

ANNEXURE K: TURNITIN REPORT

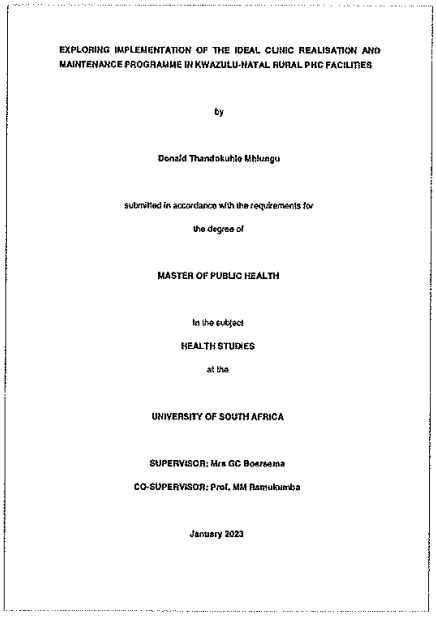
turnitin

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author:	D T MHLUNGU
Assignment title:	Revision 2
Submission title:	FULL DISSERTATION- EXPLORING THE IMPLEMENTATION OF ...
File name:	DISSERTATION_DONALD_MHLUNGU_20230128.docx
File size:	1.82M
Page count:	166
Word count:	38,975
Character count:	225,249
Submission date:	29-Jan-2023 06:38PM (UTC+0200)
Submission ID:	2001573934



EXPLORING IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU-NATAL RURAL PHC FACILITIES

by

Donald Thandokuhle Mhlungu

submitted in accordance with the requirements for

the degree of

MASTER OF PUBLIC HEALTH

in the subject

HEALTH STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: Mrs GC Boersema

CO-SUPERVISOR: Prof. MM Ramukumba

January 2023

FULL DISSERTATION- EXPLORING THE IMPLEMENTATION OF THE IDEAL CLINIC REALISATION AND MAINTENANCE PROGRAMME IN KWAZULU-NATAL RURAL PHC FACILITIES

ORIGINALITY REPORT

23%	22%	11%	10%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	uir.unisa.ac.za Internet Source	4%
2	hdl.handle.net Internet Source	2%
3	vital.seals.ac.za:8080 Internet Source	1%
4	health-policy-systems.biomedcentral.com Internet Source	1%
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