UNIVERSITY OF KWAZULU-NATAL

Paradigm Shift in South African Medical Education: A Management Model for Decentralised Training in KwaZulu-Natal

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DECLARATION

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ACRONYMS

DHET	Department of Higher Education and Training
DOH	Department of Health
MBChB	Bachelor of Medicine and Bachelor of Surgery
NDOH	National Department of Health
NHI	National Health Insurance
PHC	Public Health Care
SPSS	Statistical Package for Social Science
UKZN	University of KwaZulu-Natal
WHO	World Health Organisation

ABSTRACT

The changes towards a comprehensive National Health system advocated by the Department of Health and the enrolment objectives provided by the Department of Higher Education and Training have called for South African Universities to redefine the goals of medical education. Decentralized Training merged as a solution for Medical Schools to increase their enrolments, despite human resource and infrastructure constraints they were faced with. The expansion of clinical training to peri-urban areas was seen as a viable option for meeting the mandated targets of increasing the supply of medical personnel, taking into consideration the competences needed to deliver healthcare targeted at the needs of the country. The shift to decentralized training platforms is characterized by four interrelated but distinct shifts: a) geographic shift, b) curriculum transformation, c) pedagogical shift and d) governance and management shift as a unitary structure for managing the overall program across the six years, given the strong participation of the Department of Health and the emphasis in community engagement.

The aim of this study was to interrogate and develop a managerial model of decentralised clinical training for medical Universities, using the University of KwaZulu Natal as a case study. This study highlights the importance of leadership and management in executing a successful decentralised programme. It also proposes a framework that assists in setting the decentralised training agenda, building necessary capacity and facilitating communication between the relevant stakeholders.

A mixed methods approach was used to collect data from students and employees from the Department of Health and the University of KwaZulu Natal. The relationship between themes that emerged from the qualitative data were explored and descriptive statistics were used to summarize the quantitative data.

The findings of this study suggest various mechanisms that can be affected to facilitate better coordination between central and decentralized entities within the decentralised programme. The study also proposed a model which could be used as a foundation for future management studies aimed towards a successful implementation of decentralized education not only in the medical field but in any other Health related fields.

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CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Preamble

This research investigates the paradigm shift within the South African medical education landscape, specifically focusing on the management aspects of decentralized clinical training. Leadership and management play crucial roles in ensuring the success of decentralized training, as deficiencies in these elements can lead to the inadequate implementation of well-conceived policies and strategies. The primary objective of this study is to examine existing national imperatives designed to enhance the healthcare system in South Africa. Furthermore, the research aims to assess the effective implementation of such imperatives within training institutions, utilizing the Province of KwaZulu-Natal medical school as a case study. KwaZulu Natal, recognized as a province with the second-largest population in South Africa, also encompasses substantial underdeveloped areas with constrained healthcare accessibility, rendering it a fitting pilot region for a decentralized programme.

This chapter provides a background and the rationale for the study, clearly outlining the problem statement. Within this chapter, key research concepts are outlined, encompassing the study's rationale, problem statement, and research significance. The chapter further elucidates the study's objectives and questions, research design and methodology, data collection techniques, and its contribution to the existing body of knowledge.

1.2 Background to the Study

Although South Africa exhibits characteristics typically associated with a developed nation, its socio-economic and political instability, among other factors, firmly position it as a developing country (Bakari, 2017). Social instability manifests prominently in the healthcare sector, where the minority of the middle to high-income class is serviced by the private sector. This then leaves the majority of the country's population reliant on the public sector. To address this misalignment emanating from a two-tiered system, the government proposed for the implementation of a comprehensive national healthcare system. This system aims to ensure accessible and equitable healthcare for all citizens.

This paradigm shift in healthcare, along with the emergence of new health risks and changing population health status, necessitated for a re-evaluation of the objectives of medical education. Moreover, it emphasised the competences required to provide targeted care that aligns with the country's needs. In response to the demand for healthcare professionals to meet the country's requirements, academic institutions have been mandated to formulate plans to expand enrolment, despite their current limitations in terms of human resources and

infrastructure constraints.

The need for enrolment increases in South African medical institutions was driven by three primary objectives: a) the Health Ministry's directive to augment the number of South African trained medical professionals, b) the Department of Higher Education and Training's (DHET) enrolment targets to increase enrolment in the Health Sciences, and c) the need to accommodate South African students trained in Cuba, who return to complete their studies in their home country. These national mandates necessitated for the universities and the Department of Health (DOH) to reconsider their operational approaches and align them with these new realities. Parallel to this, South African academic institutions contend with the challenges stemming from the proposal of free tertiary education, decreased national funding and the call for the decolonisation of the curriculum.

South African medical schools operate within an apprenticeship model, where the training of senior students heavily relies on clinical exposure rather than classroom-based instruction. Presently, student placements are predominantly in well-resourced tertiary and district hospitals in close proximity with the universities. With a sufficient compliment of clinicians and clinical educators, these academic hospitals serve as the primary training ground for students. However, an additional influx of students may lead to saturation, potentially hampering the ability of clinical sites to fulfil their primary function of service delivery. To accommodate the growing number of students, decentralizing the training platform emerged as the most viable option. This entails placement of students in various clinical sites throughout the province, predominantly in peri urban areas, utilising sites that were not previously used for academic instruction. This would necessitate making use of staff members or clinicians with limited or no prior teaching exposure to train students. Moreover, these individuals would be required to meet university requirements while upholding service delivery and quality standards mandated by the Health Professions Council of South Africa.

Although decentralized teaching has been implemented in several first-world countries, there is limited literature on the management and sustainability of such programs, especially within the context of developing nations. Additionally, no framework has been established to address the challenges that third-world countries may encounter when considering the implementation of decentralized training.

In the South African context, the decentralized training platform can be characterized by four interrelated but distinct shifts: a) geographical shift, b) curriculum transformation, c) pedagogical transition from traditional block rotations to longitudinal placements, and d) governance and management reorganisation which seeks to establish a unified structure. A unified structure is required to oversee the overall medical program across the six-year

curriculum, with active participation from the Department of Health and a strong emphasis on community engagement.

Existing literature highlights that deficiencies in leadership, stewardship, and weak management often lead to inadequate implementation of otherwise sound policies. This study aims to examine existing policies aimed at improving the healthcare system in South Africa. It also seeks to assess how such policies can be effectively implemented within training institutions, using the University of KwaZulu-Natal (UKZN) medical school as a case study.

1.2.1 Background to the South African Health context

Literature indicates that African countries are confronted with challenges related to access, equity, and management in their healthcare systems. South Africa is not exception to this challenge. Despite political transformations stemming from the dissolution of the apartheid regime, persistent disparities in health service coverage persist in South Africa (Ntuli et al., 2003). The redress under the post-apartheid government aimed to reduce inequalities in health and health services and integrate the disparate homeland health care systems. Moreover, they planned to reorient services towards primary healthcare in line with existing models of successful healthcare systems in the world. They advocated for a community-based primary healthcare system, citing studies demonstrating its effectiveness in developing countries (Tanser et al., 2006).

To ensure uniform service delivery across the country and address inequality, health programs have been centrally directed by the National Department of Health through a policy-driven approach. However, the success of such health programs in specific regions of the country have been hindered by a lack of capacity to implement the policies and programs. The deficiency in monitoring implementation of such policies has, at times, resulted in suboptimal implementation of straightforward health interventions (Chopra et al., 2009). The persistence of health challenges despite the government's response through policy changes highlights the existing gap in implementation strategies (Tollman et al., 2008).

Health expenditure in the country is primarily dominated by tertiary-level hospitals, with about thirty percent of the total public health expenditure allocated to super tertiary hospitals in Johannesburg, Durban, and Cape Town (Chopra et al., 2009). While these institutions serve as crucial centres for regional referrals and medical education, they fail to fully address the burgeoning demand for chronic care related to HIV, tuberculosis, mental illnesses and non-communicable diseases (McIntyre and van de Heever, 2007). Moreover, inequities persist in health spending, as 50-60% of total health expenditure is directed toward the private sector, catering to less than 15% of the country's population.

In response to the prevailing healthcare challenges which were discussed in the preceding section, the government has introduced a healthcare charter, aiming to foster collaboration between the public and private sectors. This charter seeks to confront issues of accessibility, inequality, and elevate the overall quality of health services. Notably, countries with a lack of universal healthcare systems often contend with pronounced health inequalities. Furthermore, to address the stark disparities in health spending resulting from the two-tiered system of a well-equipped private sector and an under-resourced public sector, discussions were initiated about the implementation of a National Health Insurance (NHI) system. This proposal aimed to gradually transform the existing unequal and racially biased healthcare system (Kleinert and Horton, 2009). Furthermore, it was also perceived that the integration of this system would make public hospitals more appealing for skilled healthcare professionals to work in. This would aid in mitigating the current trend favouring the private sector (Mills et al., 2012).

Healthcare organisations operate within complex structures, where the interplay between structure, function, and individuals influences the process of change. The rapid shifts in policy and public regulatory frameworks, the pursuit of quality improvement, and the management of multiple missions and stakeholders emphasize the intricate nature of leadership within such institutions (Eddy, 2009).

1.2.2 Background to the Higher Education context

The issue of inequality is also prominent within the South African higher education landscape. Under the apartheid regime, the majority of universities which catered to the privileged minority group, received substantial funding. They also enjoyed a significant degree of autonomy. In contrast, the homeland universities serving disadvantaged groups faced strict controls and limited financial resources (Cooper and Subotzky, 2001). The post-apartheid period witnessed an increase in higher education participation alongside a reduction in public funding. This necessitated a shift in the conventional models of university organisation and management in South African academic institutions.

The higher education funding mechanism has undergone several changes since its inception in 1953. In 2003, a new funding framework was introduced, enabling the allocation of government grants to academic institutions based on their performance and their alignment with national goals and priorities (Steyn and DeVilliers, 2007). Famurewa (2014) posits that the funding received by public higher education institutions is insufficient to cover all operational costs. This subsequently led universities to compensate for such shortfalls through third-stream income sources and tuition fees.

The recent discourse surrounding the possibility of free higher education heralds a new era

for the functioning of universities in South Africa. Similar to many governments, South Africa has adopted quasi-market approaches in managing its higher education institutions. This transition involves transforming universities from state agencies to public corporations with increased autonomy in resource utilisation, while also being held accountable for outputs and performance (Dill, 2001). Alongside these developments, discussions on the decolonisation of knowledge have gained prominence (Leibowitz, 2016).

1.2.3 Governance in Higher Education

Various managerial oriented implications of governance exist, all of which emphasize the significance of policy, procedure, and oversight. Lock and Lorenz (2007) defines governance as the process, structure, and relationship through which the council oversees management functions. To avoid oversimplifying the complexity of governance in higher education, Marginson and Considine (2000) argue that governance encompasses internal and external relationships, as well as their interplay. Universities are structured by the internal world of knowledge production and its processes, as well as the broader social and economic environment. Shattock (2010) further suggests that management is the process and structure through which managers strive to achieve institutional goals.

The rise of massification and commodification in higher education, focusing on benchmark behaviours among universities, has become a key element shaping governance in institutions (Lock and Lorenz, 2007). Academic capitalism, as described by Slaughter and Rhoades (2004), characterizes this phenomenon, placing added strain on public institutions as they navigate competition with private and for-profit higher education counterparts. This dynamic compels public institutions to sustain competitiveness both locally and globally, despite rising operational costs and resource limitations. To thrive in this academic capitalist environment, robust and adaptable leadership is imperative for public institutions to maintain relevance and sustainability.

The governance of South Africa's higher education sector is persistently evolving to address the country's unique social and economic challenges while striving to maintain academic excellence and provide quality education to students (Shattock, 2010). Given the historical context of apartheid, there is a notable emphasis on promoting transformation and equity within higher education. Ongoing initiatives seek to broaden access to tertiary education for historically disadvantaged groups and promote diversity within institutions.

1.2.4 Decentralisation in Education

Gukas (2007) traces the origins of the concept of medical education in many African nations to the colonial period of the 1950s and 1960s. He highlights that the curricula were heavily influenced by Western approaches, as the pioneering doctors and lecturers in African universities had received training in Western institutions. Since then, the role of medical educators has evolved over the years. The transformed roles are shaped by the local environment and the socioeconomic status of the population.

Tan and Ng (2007) argue that there is an increasing trend towards decentralisation in education, often attributed to globalized reforms necessitating countries to equip their students to meet challenges in a knowledge economy and enhance the country's competitive edge. However, there is limited literature on the analysis of decentralized centralism in higher education, particularly in the health sector.

1.2.5 Application of Theoretical Frameworks

This research is grounded in the theoretical framework of decentralised centralism, as proposed by Karlsen (2002). Karlsen defines decentralised centralism as the dynamic interplay between decentralizing and centralizing forces in an educational decentralisation process. While originating from a European national context, Karlsen's framework is deemed suitable for analysing South Africa's decentralisation process.

The study incorporates the leadership competency framework by Wright et al. (2000), initially developed in the United States in response to the evolving landscape of public service. The Public Leadership Framework's emphasis on ethical decision-making, stakeholder engagement, and strategic thinking aligns with South Africa's public service needs. To integrate this model into the context of medical education, the study also draws on competencies from the Medical Leadership competency framework. While there may be some overlap between the public leadership competency framework and the medical competency model, each addresses distinct areas pertinent to their respective fields, emphasizing the significance of both frameworks in their specific contexts.

1.3 Problem Statement

The overarching problem addressed in this study revolves around the need for a comprehensive understanding of the governance and managerial challenges within South African medical universities, particularly in the context of implementing a decentralised teaching management framework. The study aims to investigate the current state of governance in these institutions and the external factors that are at play. It also seeks to assess the readiness of medical universities for decentralised training, and propose a robust framework which can be used to strengthen the management of decentralized training. The focal points include analysing the impact of governance on decentralised program implementation, evaluating the broader context of South African healthcare and medical education, and determining the institutions' capacity for adopting decentralised training. This research is imperative given the evolving landscape of the South African health agenda, the anticipated influx of Cuba-trained students, and the imperative to align higher education with the transformative requirements of the healthcare sector. The findings will contribute valuable insights to guide the interaction between key stakeholders and provide a tailored decentralised training agenda for the University of KwaZulu-Natal, fostering effective leadership, capacity building, and communication among relevant entities.

1.4 Aim of the Study

The aim of this study was to interrogate and develop a Decentralised Training management framework for KwaZulu Natal which could be adapted by the South African medical universities.

1.5 Research Objectives

The objectives of the study were:

- To describe and analyse the present state of South African governance in medical universities and the impact of governance to the successful implementation of the decentralised programme;
- To describe and analyse the current context of the South African health care and medical education with emphasis on the significant changes and trends that have shaped priorities for both sectors;
- To determine the extent to which medical universities are capacitated to implement decentralized training; and
- To recommend or propose a decentralised management for South African medical universities.

1.6 Research Questions

In line with the aforementioned objectives, the research questions for the study were as follows:

- What is the present state of governance in higher medical universities and how would it impact to the successful implementation of the decentralised programme?
- What is the current context in the South African health care system? What is the current context in the South African higher education landscape? What are the significant changes and trends that have shaped priorities for both sectors?
- To what extent are medical universities capacitated to implement decentralised training?
- What model could be used for successful implementation of the decentralised training in South African medical institutions?

1.7 Significance of the Study

The current context of the South African healthcare agenda and the transformation required in higher education necessitates for this study, along with those related to curriculum development, to be conducted. The mandated increase in enrolment, coupled with the substantial number of students trained in Cuba expected to return to South Africa for the completion of their training, necessitate for governance and managerial studies to be undertaken.

1.8 Contribution to Knowledge

It was expected that this research study will accentuate the critical role of leadership and management in the successful implementation of a decentralized clinical training programme. Moreover, it was also envisioned that the findings of the study would provide institutions with a framework to guide interactions between the Universities, the Department of Health, and the Health Professional Council of South Africa. This framework will contribute in establishing and sustaining the decentralized training agenda for the University of KwaZulu Natal, building essential capacity, and fostering communication between relevant stakeholders.

The anticipated outcome was the development of a model that, based on the findings of this study, could assist not only other South African universities but also universities in middle-income countries in successfully implementing decentralized training. The developed model can then be further adapted, through further research, to be applicable not only in the medical field but also in other health-related fields.

1.9 Research Design

The mixed-methods research approach, characterized by methodological pluralism, allows for the simultaneous adoption of positivist and interpretivist epistemologies in a specific research inquiry (Brouwers, 2015). This approach was chosen for the current study, enabling the blending and comparison of quantitative and qualitative data to achieve a comprehensive understanding of the research question.

The central theme of this study was to assess the implications of the paradigm shift in healthcare for training institutions and the management thereof. A mixed-method approach was employed, using a variety of data collection techniques to enable data triangulation. This approach assisted in balancing and providing a more realistic and truthful account of the results, as quantitative and qualitative data complement each other (Boaduo, 2011). Quantitative research, involving surveys without direct contact with the study subjects, was conducted alongside qualitative research, which involved interviews (Shaw, 2005).

In this study, the qualitative approach was used to gain insights from a managerial perspective. An exploratory research design was chosen due to the sensitivity and complexity of the issues being addressed (Brikmann and Kvale, 2005). The quantitative approach was employed to gain insights from students, as this method can reach a large number of potential respondents (Williams, 2007). Additionally, a review of existing documents and policies were conducted as a means of secondary data collection. This is essential for determining the extent to which such policies have been implemented at various levels.

The sample

The study adopts a mixed-methods approach, combining established qualitative and quantitative techniques creatively to address the research questions. The geographical focus of the study was KwaZulu-Natal. KwaZulu Natal was chosen for its designation as a pilot region for a decentralized program and its large population, including underdeveloped areas with limited healthcare accessibility. The sampling population comprised of employees and students from the University of KwaZulu Natal and the Department of Health staff working in hospitals used by the University as decentralized training sites.

The study utilized maximum variation sampling in conjunction with purposeful sampling techniques to select the staff members participating in the research. These techniques were chosen to ensure the representativeness of the research focus (Denzin and Lincoln, 2006). Purposeful sampling is a non-random sampling method in which the researcher selects information-rich cases for an in-depth study. Information-rich cases are those that can provide

a significant amount of insight into issues central to the research's purpose (Bryman, 2016). These sampling approaches were employed to ensure the collection of the broadest range of information and perspectives, given the size of the population.

Data collection

Primary data was collected through interviews and questionnaires. Interviews allowed for in-depth exploration of important topics and the observation of social cues, while questionnaires enabled data collection from a large number of participants at their convenience.

Data analysis

Thematic analysis was used for qualitative data analysis, involving the classification of data into themes using NVivo. Thematic analysis is a technique that allows for critical conversation analysis from the responses generated from interviews (Bryman, 2016). This analysis allowed the researcher to classify data thereby laying the conceptual foundations upon which interpretation and explanations could be based. For quantitative data, Statistical Package for the Social Science (SPSS) software was used. Inferential statistical approaches including multiple regression analysis, correlation tests, Chi-Square tests were employed to draw valid conclusions and generalize findings. The utilisation of various statistical tests provided valuable insights presented through frequency tables, pie charts, and bar graphs.

A pilot study was conducted to ensure the research instrument's effectiveness in achieving its intended purpose. This process allowed for the researcher to engage with the data, gaining insight into the collected responses and facilitating interpretation and explanation based on the conceptual foundations established.

Reliability and validity

In assessing the quality of the research study, applicability, consistency, and neutrality play crucial roles, indicating the study's reliability and validity. It's essential to recognize the fundamental differences between the quantitative and qualitative paradigms, each requiring a paradigm-specific approach to ensure validity and reliability. In the quantitative paradigm, the key criteria are validity, reliability, and objectivity. In the qualitative paradigm, trustworthiness and credibility are essential (Cohen et al., 2002).

In this study, both quantitative and qualitative validation procedures and standards were considered to ensure the quality and rigor of the research. Content validity, used in the

development of questionnaires and interviews, ensured that the data collection instrument covered all the necessary aspects of the study. To ensure reliability and validity in the study, verification was conducted. This mechanism of checking and verifying information was consistently implemented throughout the data collection and interpretation process.

Ethical consideration

Regarding ethical considerations, ethical clearance was obtained from the University of KwaZulu-Natal Ethics committee. Permission was sought from the University of KwaZulu-Natal Registrar and the Department of Health to conduct interviews and questionnaires with their staff and students. Participants were required to document their willingness to take part in the study prior to commencing with the interview process. The questionnaire was accompanied with an information sheet detailing the purpose of the study and their rights as potential participants of the study. The participants were informed of their right to decline participation. These ethical protocols ensured the integrity and compliance with ethical requirements.

1.10 Scope and Limitations of the Study

The scope and limitations of a study play a vital role in contextualizing the research and providing realistic parameters within which it is conducted. In this study, the scope was limited to the investigation of decentralised training within the KwaZulu-Natal region. The limitation of the study pertained to the absence of an exploration of decentralised training platforms offered by universities in other provinces. Since KwaZulu-Natal represents only one of the nine provinces in South Africa, the findings, while providing valuable insights, cannot be generalized beyond the region due to potential contextual disparities in other areas. Additionally, the external socioeconomic and political factors were acknowledged as potential limitations, as these may have influenced the implementation and outcomes of the decentralised training initiatives. With students trained in public hospitals facing a growing demand for healthcare and limited resources, the overall experiences of the study participants may have been impacted by the prevailing conditions.

1.11 Structure of the Study

The thesis is organised as follows:

Chapter One: **Introduction**

Chapter One of the study serves to introduce and provide a background context for medical education in South Africa. It includes a brief overview of the literature that will be further

examined in subsequent chapters. The chapter also highlights the problem statement, research questions, objectives, the structure of the study, and its significance.

***Chapter Two*: Theoretical Framework**

Chapter Two interrogates the theoretical framework of decentralized centralism and leadership competency models.

***Chapter Three*: Literature Review**

Chapter Three delves into the existing knowledge of the higher education landscape and the healthcare sector. Against this backdrop, decentralised training in medical education was discussed.

***Chapter Four:* Research Methodology**

This chapter outlines the research methods and design, the population and sample, and the data collection processes. It also discusses the data analysis processes, validity and reliability of the study, and the ethical considerations involved in the research.

Chapter Five: Results

This chapter presents the findings of the study. Section one discusses quantitative results in the form of descriptive statistics and section two provides an overview of the qualitative data collected in an attempt to address the research questions.

***Chapter Six*: Interpretation of the Results**

This chapter focuses on integrated results extracted from both the quantitative and qualitative findings. This chapter aims to discuss the integrated results in the context of the research questions and objectives.

***Chapter Seven*: Summary, Conclusion and Recommendations**

This chapter provides a summary of the research study based on the four research objectives. The chapter proposes a framework to enhance the decentralised training of medical students, followed by a conclusion, the study's limitations, and suggestions for future research areas.

1.12 Conclusion

This chapter introduced the evolving landscape of medical education, specifically focusing on the decentralized clinical training paradigm. By delineating the study's scope, providing a comprehensive background, and offering a succinct overview of the research paradigm, it sets the stage for an in-depth exploration. The subsequent chapters further enrich the narrative by delving into pertinent literature and examining the theoretical frameworks, contributing to a holistic understanding of this paradigm shift in medical education.

CHAPTER TWO: THEORETICAL FRAMEWORK

2.1 Introduction

The focus of this research study was to identify an effective managerial framework for decentralized clinical training in medical education. The review of literature that underpins the theoretical frameworks presented in this section aim to investigate the fundamental issues and relationships that underpin decentralised training. Furthermore, it explores the macro and micro environments that impact the success of such training. It was envisioned that the review of related theories would also assist in identifying a gap in information around the phenomena and assist in the development of a conceptual framework. This theoretical framework chapter is organised into two sections: Section one focuses on the theoretical literature review. Section two presents a summary of the theoretical literature which informed the formulation of a conceptual framework.

2.2 Section One: Theoretical Frameworks

In this section, we examine the pertinent empirical theories that underpin this study. Two theoretical frameworks were identified to contextualize the decentralisation of medical education and the role of leadership in ensuring success and sustainability of the programme. The inclusion of multiple frameworks in this study was instrumental in comprehending the phenomenon, particularly the examination of leadership within the contexts of Higher Education and Health Services. These theoretical concepts draw from (a) the decentralisation framework and (b) the concept of leadership competencies in both the Health and Higher Education sectors. The discussion now shifts to the first theory, which is decentralised centralism.

2.2.1 Decentralised Centralism Theory

To comprehend the decentralised centralism framework, it's crucial to grasp the concepts of centralisation and decentralisation. The theoretical framework of decentralised centralism aims to reconcile the tension between these two concepts, positioned at the opposite ends of a spectrum. This section will delve into the literature surrounding both centralisation and decentralisation to provide a comprehensive understanding.

2.2.1.1 Centralisation

Various authors have defined the centralisation concept as a process in which decision-making powers remain concentrated in a central point or person within an institution (Peckham et al., 2005). With this arrangement, all other members within the institution receive commands for which they are required to execute (Donders and Raats, 2015). This concentration manifests in activities related to planning, decision-making, strategy framing, and policy formulation within an institution, to be cantered on a specific geographic location or a specific leader.

Advocates of centralisation (Cooper, 2013; Meuller, 2013) have highlighted several advantages associated with a centralized structure. Primarily, these authors emphasize the clear chain of command as the main advantage for centralisation within organisations. They further elaborate on their arguments by emphasizing that centralization allows decisions to be made by those in senior positions within the organisation. Incumbents in these leadership positions are perceived to be better equipped to make sound decisions based on their experiences and exposure to the information accessible to them. Furthermore, they posit that these senior managers have the latitude to delegate authority to employees for executing the plans that were agreed upon by those in the higher hierarchy of the organisation or institution. Thus, facilitating rapid implementation of decisions that were made at executive level (Beckmann, 2002). Consequently, this allows for a focused vision which is facilitated by clear lines of communication. This model arguably enables senior executives to communicate the institution's vision to employees and guide them towards its realisation. Moreover, directing the institution's vision from the top ensures a smooth implementation of its strategies and a uniform message for stakeholders such as customers, suppliers, and communities (Bergfors and Larsson, 2009).

Another advantage of centralisation documented in literature reviewed is that all staff members are housed in a central geographic location (Peckham et al., 2005). Consequentially, there are reduced administrative costs as there is no need for additional costs associated with setting up remote sites which would require more office space, personnel and equipment. Cooper (2013) further argued that the centralised structure also allows for improved quality of work because there are standardised procedures which are monitored at a central point. In agreement, Korsnes (2014) further stated that the standardisation of work also reduces the replication of tasks that may result in high labour costs.

Despite the advantages associated with centralisation, some critics have likened this top-down model to dictatorial leadership. This is where employees are expected to deliver results according to the directives of top executives, without providing any inputs into the process.

Moreover, they contend that in some cases, depending on the type and size of the organization, decisions made at the top may be misunderstood as they are filtered down to the lower ranks within the institution (Mazzaffero and Zanardi, 2008).

Scholars have also argued that the centralisation structure, at its highest magnitude, leaves diminutive room for employees to contribute to the decision-making processes. Subsequently rendering employees' mere implementers of decisions made at higher levels (Donders and Raats, 2015). Consequently, this creates a misalignment, as decision-makers may not be aware of the challenges faced by those implementing the decisions at the grassroot level. Such actions result in a decline in performance, as employees lack the motivation to execute decisions made by top-level managers without their input. Similarly, top management equally faces challenges, despite making the decisions, they have limited control over the implementation process. This then leads to either poor implementation or disregard of decisions by employees.

2.2.1.2 Decentralisation

Over the past decade, the concept of decentralization has gained widespread traction, particularly in governance strategy (Burns et al., 1994). Its surge in popularity is grounded in the belief that it fosters a democratic and participatory approach, aiming to distribute decision-making authority within institutions to lower-level structures (Smoke, 2003). To comprehend the mechanics of decentralization, one must delve into the various concepts associated with this phenomenon. These concepts are explored further.

Decentralization is tied to several core concepts which include power, authority, delegation, and devolution. The majority of literature concerning the decentralization framework concentrates on the organization of public administration within a specific country, predominantly within the government. Saltman et al (2003) states that decentralization involves the transfer of authority and power in planning, management, and decision-making from higher to lower levels of organizational control. Burns et al., (1994) distinguished two types of decentralization: (a) the physical dispersal of operations to local offices and (b) the delegation or devolution of a more extensive degree of decision-making authority to lower levels of administration. Building on this, Boyne (1992) expanded the discussion by introducing the vertical and horizontal dimensions of decentralization, identifying processes of concentration and fragmentation. Their theory posits that activities within decentralization can be spread across both the vertical and horizontal axes or concentrated at particular levels. Deeming (2004) integrated the concept of discretion, highlighting the necessity to discern not only what is being decentralized and to whom but also what autonomy exists in terms of the freedom to make decisions.

2.2.1.3 Theories related to Decentralisation

Rondinelli's (1981) framework, which is commonly used for decentralization, identifies four key categories: concentration, delegation, devolution, and privatization. This framework stemmed from research conducted in developing countries, with a specific focus on the legal structures of decentralized organizations. However, critiques of this framework point out that it conflates power and authority, blurring the distinction between delegation and devolution, with the two terms often used interchangeably. Devolution is generally associated with political decentralization, while delegation is viewed as administrative decentralization (Peckham and Exworthy, 2003). Furthermore, privatization is viewed as an ill fit, as not all privatizations signify decentralization, depending on the market's nature or the established contractual relationship (Bossert, 1998). Consistent with Peckham's critique, this study does not explore the concept of privatization further and will not delve into it.

Building on Rondinelli's (1981) framework, Burns et al. (1994) identified five dimensions of decentralization: localization, flexibility, devolution, organizational, and democratization. Their study emphasizes localization as the physical relocation of offices from a central point. In their interpretation, flexibility refers to the need for multi-disciplinary teams and multi-skilling for effective implementation of decentralization. In their study, devolution also emerges as a crucial pillar for enabling the delegation of decision-making powers. Consequently, necessitating a reorientation of organizational values and culture, given that decisions will no longer be confined to the highest levels of the organizational hierarchy. This, in turn, enables democratization, broadening opportunities for those at lower ranks within an organization and the public to actively participate in decision-making.

2.2.1.4 Decentralisation and Empowerment

Team empowerment holds significant importance in promoting team performance (Kirkman et al., 2004). Despite a substantial body of research demonstrating the positive effects of empowerment, some scholars have expressed scepticism toward it (Argyris, 1998). This scepticism is partly rooted in the overemphasis on the psychological state of empowerment, overlooking the structures and practices that actively foster empowerment (Forrester, 2000). Mintzberg (1989) asserts that the two dimensions of organizational structure and design linked to empowerment are decentralization and formalization. While the decentralization of decision-making bears clear parallels with autonomy, a critical component of empowerment, the relationship of formalization with empowerment is less straightforward. Tata and Prasad (2004) have suggested that formalization can either hinder empowerment due to bureaucratic red tape or convey values and clarify goals beneficial to empowerment (Segars et.al, 1998). Therefore, it can be argued that the degree of formalization within an organization will impact

empowerment differently depending on its application.

Although decentralization is closely linked to the autonomy aspect of empowerment, it remains conceptually distinct (Hempel et al., 2012). Decentralization serves as a structural characteristic of an institution, delineating the extent to which power or authority is either concentrated or shared (Hage and Aiken, 1967). It occurs when decision-making discretion is extended outward and downward to other parts of the institution (Lin and Germain, 2003).

Theories examining decentralisation suggest that it provides employees with greater autonomy, enhancing motivation and enabling them to utilize information that managers might lack (DeVries et al., 2000; Hempel et al., 2012). Even when decision-making authority is not delegated to the team, decentralisation ensures that decisions are made closer to the team level. This shift in decision-making downwards improves the flow of information (Fujimoto and Clark, 1991). Enhanced information flow, coupled with the proximity of decision-making to the team, augments team members' capacity to make and influence decisions (Spreitzer, 1995). Moreover, alongside bolstering perceptions of autonomy, decentralisation amplifies perceptions of influence and control (Hempel et al., 2012), thereby enhancing team potency (Kirkman et al., 1999).

2.2.1.5 Implementation challenges in decentralisation

As previously stated, decentralisation is a concept predominantly applied in government settings. Critics of decentralized systems argue that a degree of central oversight is necessary for ensuring quality in implementation. This necessity stems from the limited capacity at lower levels for effective governance and constraints in human resources (Eboreime et al., 2018). A significant challenge arises from funding, as it is often the root cause of implementation difficulties. Reddy and Govender (2013) contended that the delegation or devolution of functions cannot be effectively carried out without the requisite human and financial resources. In some cases, decentralized units may be inadequately resourced to fulfil their obligations. This inadequacy may manifest as a shortage of staff, insufficient training, poor management, and the absence of adequate systems and procedures. Capacity plays a critical role in the success of decentralisation. For decentralisation to be effective, it must be underpinned by legitimacy through broad-based participation, fairness, and accountability (Reddy and Govender, 2013).

2.2.1.6 Decentralisation in Health

Decentralisation reforms also gained status in the health care sector, especially the primary care reforms initiated by the World Health Organisation (WHO, 2015). The Alma Ata declaration adopted by this organisation emphasise that community participation is crucial to

the development of responsive health care systems (Munga et al., 2009). Participation at community levels enable a better understanding of the resources required to service the population.

The challenge pointed out by many studies is the issue of responsibility without resources and authority. The study conducted by Mangu et al (2009) reflected that districts were assigned too many responsibilities that did not match with the resources allocated by central government. From this study it can then be concluded that in order for decentralisation to work efficiently, the decentralised sites must be supported by central governance. This support should be in line with capacitating the decentralised districts with adequate human and financial resources in order to fulfil their mandate. Studies have shown that if not well defined, central can interfere with excessive and unnecessary interventions that may stifle the efforts made at decentralised levels (Peckham et al., 2005; Burns et al., 1994)

2.2.1.7 Decentralised Centralism

Decentralized centralism is a theoretical framework that seeks to reconcile the tension between centralisation and decentralisation. The term has been used in different contexts, including political, economic, and organisational systems.

In political systems, the concept of decentralized centralism pertains to a form of governance where power is apportioned across multiple levels of government. With this form of governance, the central authority maintains the responsibility of coordinating and overseeing the overall system's operation (Tan and Ng, 2007). This approach seeks to strike a balance between the advantages of decentralisation and centralisation. The approach draws on the advantage of enhanced local control and responsiveness in decentralisation. Moreover, it draws the benefits of centralisation which incorporate factors such as the capacity to consistently implement and enforce policies across large geographic areas.

Within economic systems, the term decentralized centralism describes a hybrid model that amalgamates elements of both centralized and decentralized approaches to economic planning and control (Fombad, 2019). For example, in a centrally planned economy, some decision-making authority may be delegated to local managers or committees, while retaining overarching control over the economic direction and goals.

In organisational systems, decentralized centralism characterizes a management approach that harmonizes autonomy and independence among individual units or teams with central oversight and coordination. This model fosters local-level flexibility and innovation while ensuring the organisation as a whole operates cohesively and efficiently (Braun, 2011).

The decentralised centralism approach delineates the four dynamics within the

decentralisation process: (1) the dynamics of initiation, which refers to the practice of initiating decentralisation reforms from the upper echelons of central authorities, (2) dynamics of content, which encompasses disparities in curriculum and implementation practices within the decentralisation process, (3) dynamics of levels, involving decisions concerning the macro-micro distribution of tasks and administrative responsibilities, (4) dynamics of simultaneity, a pivotal element as some shifts are both centralizing and decentralizing simultaneously (Lee and Samuels, 2020).

Scholars have contended that decentralized centralism represents a strategic compromise between centralisation and decentralisation, thus capitalizing on the advantages of both governance models (Fombad, 2019). In their argument, Lee and Samuel (2020) indicate that decentralized centralism denotes centralized actions that primarily entail the transfer of executive functions without transferring any real power from the centre to the periphery. Their stance perceives decentralised centralism as a form of decentralisation where the central authority not only determines which executive functions are to be transferred but also specifies the means by which to measure compliance with established standards.

The arguments presented on decentralised centralism accentuate the advantages which are beneficial in the context of this study. It can be posited that the decentralized centralism allows for greater flexibility and adaptability for decentralised sites to respond to local needs and their evolving circumstances. This then implies that local decision-makers have a more substantial role in shaping policies and their implementation. This results in a creation of a more responsive and effective system that can address the challenges faced at local levels. Moreover, enhanced coordination can be achieved through oversight provided by central authority. The central oversight and coordination ensure that the organisation operates cohesively and efficiently as a whole. The coordinated efforts between central and decentralised administration allow for a more unified approach. Furthermore, it prevents redundant efforts that normally result if the two sections don’t work together in unison.

Additional advantages proffered indicate that decentralized centralism can heighten accountability in decentralised sites as decision-making authority is delegated to local managers or committees (Karlsen, 2002). This then sequentially makes them answerable for their actions. At central level, executives are held accountable for the level of support and oversight provided to the decentralised structures. The heightened level of accountability at both central and decentralised levels encourages r utilisation of innovative ways to resolve challenges. It also allows for greater collaboration and tolerance between both levels when experimenting and finding ways to navigate unexplored territories. This ultimately leads to novel and improved work methods.

Proponents of the decentralized centralism framework emphasize that some executive decisions must be made at a central level (Jarzabkowski, 2002). This proves especially crucial in the context of higher education, where oversight authorities like the Council on Higher Education (CHE) ensure quality and uniformity across the sector. Similarly, the Health Professions Council of South Africa regulates standards for education, training, and professional practice in the health sector. As a result, adherence to the prescribed standards set by these bodies is essential for maintaining accreditations at all educational institutions offering medical training. This underscores the necessity for centralized oversight of all educational activities, both in centralized and decentralized training sites.

The arguments presented by scholars have also distinguished several drawbacks associated with decentralized centralism (Brady, 2002). The principal concern raised was with reference to the restricted control central entities may possess over the functions executed in decentralised levels. This suggests that central leadership may not be able to ensure that local decisions made by managers and committees at decentralised levels align with their articulated strategy. Subsequently, this compromises the effectiveness of the oversight provided at central level. The introduction of this dynamic where there is lack of transparency and communication between the levels could potentially result in conflicts which impedes on the desired efficiencies required for successful implementation of the strategies developed.

In summary, the concept of decentralized centralism recognizes that both centralisation and decentralisation possess their own merits and demerits, contingent upon the specific context. By amalgamating elements from both approaches, decentralized centralism seeks to create a more effective and sustainable system that capitalizes on the strengths of each (Tan and Ng, 2007). In terms of application, the decentralized centralism framework can be implemented in higher education and clinical training to strike a balance between the necessity for centralized coordination and oversight and the benefits of local autonomy and flexibility. The application of decentralized centralism in higher education can foster a balance between centralized coordination and local autonomy, leading to a more effective and efficient institution capable of meeting the needs of its students and stakeholders (Karlsen, 2002).

2.2.2 Leadership Competency Framework

Leadership theories have traversed a diverse landscape, evolving from the foundational trait theory to contemporary perspectives emphasizing relationships between leaders and employees. The purpose of these theories is to aid in comprehending the science of leadership and discern the optimal combination of characteristics for effective leadership. The trajectory of these theories, as noted by McCleskey (2014), started with the Great Man Theory, progressed to the Trait Theory, and eventually culminated in modern-day conceptualisations. Despite the abundance of definitions for leadership, the essence of leadership remains a well-explored yet subjective concept (Czabanowska et al., 2014).

The shift in focus from inherent traits to relational dynamics signifies a broader acknowledgment that effective leadership is intricately woven into the interactions and connections between leaders and their teams. As leadership theories continue to evolve, this relational perspective gains prominence, reflecting an understanding that leadership is not solely about individual characteristics but also about fostering positive and impactful relationships within the organisational context (Davidson et al., 2012).

The inception of competency models in the 1970s marked an effort to delineate the essential behaviours and skills crucial for effective leadership. While competency models have played a significant role in leadership development, Ruderman et.al, (2011) argued that their efficacy might be constrained by a potential lack of adaptability to the evolving environment and the dynamic nature of leadership. In the context of this study, the aim is to articulate, profile, and contextualize leadership competency frameworks within the academic and health sectors.

2.2.2.1 Leadership vs management

Leadership and management, although intertwined, are distinct concepts that play pivotal roles in an organisation's success (Algahtani, 2014). While both are indispensable for effective governance and guidance, they have distinct focuses and approaches, embodying core differences in their implementation. Management entails the coordination of actions and allocation of resources to achieve institutional goals. This is achieved through planning, organizing, leading staff and controlling as its primary functions. Conversely, leadership grapples with the complexities of human behaviour and serves as the driving force behind transformative changes (Gilson and Daire, 2011). Effective leadership is considered a necessity rather than a luxury in the face of dynamic change (Harris and Jones, 2018). While the central priorities of management lie in efficiency and ensuring task completion, leadership priorities include upholding a moral high ground and crafting a vision, strategic direction, and goals for the institution. Leaders then communicate this vision, inspiring and motivating

followers to achieve the shared objectives (Gilson and Daire, 2011).

Avolio et al. (2010) shed light on the increasing challenges confronting leaders, emphasizing the need for the assessment of leadership competencies. Asree et al. (2010) supported this notion, adding that leadership competencies significantly influence organisational performance. Muller and Turner (2010) highlighted the necessity of integrating intellectual, emotional, and managerial competencies within a successful framework. Levay (2010) underscored the importance of aligning a vision with strategic intent as the foundation for effective leadership. Rees and French (2010) outlined some crucial differences between managers and leaders summarised in Table 2.1.

Table 2.1: Differences between Managers and Leaders

Approach to Processes	**Administer policies and procedures.**	**Challenge and change existing processes.**
Approach to Results	Use directives and control measures.	Inspire and empower to achieve results.
Attitude towards Change	Comfortable with the status quo, resist change.	Challenge the status quo, seek service improvement.
Attitude towards Change	May resist change to maintain stability.	Embrace change as an opportunity for growth and improvement.
Conflict Resolution	Handle conflicts by enforcing rules.	Address conflicts by promoting open communication and resolution.
Decision-Making Style	Involved in decision-making and problem-solving.	Provide guidance but delegate decisions to subordinates.
Environmental Preference	Operate well in a stable environment.	Excel in dynamic and changing settings.
Evaluation Criteria	Focus on the bottom line and financial outcomes.	Balance financial outcomes with a broader organisational impact.
Followership	Have subordinates reporting to them.	Have people who choose to follow them.
Influence Approach	Rely on authority and formal position.	Rely on influence and personal relationships.
Leadership Style	Seek control and authority.	Demonstrate behaviours consistent with the company's vision and values.
Organisational Culture	Provide stability and order.	Foster a culture of creativity and calculated risk-taking.
Performance Evaluation	Evaluate based on efficiency and productivity.	Evaluate based on innovation and team development.
Position in Hierarchy	Typically part of an existing hierarchical structure.	Often challenge and reshape organisational structures.
Resource	Monitor and control resources	Delegate and trust team members with

Approach to Processes	Administer policies and procedures.	Challenge and change existing processes.
Management	closely.	resources.
Skill Development	Skills are acquirable by anyone.	Skills evolve through experience.
Success Metrics	Focus on efficiency and meeting targets.	Emphasize innovation and impact on the organisation's vision.
Thinking Style	Cautious and think incrementally.	Think big, align actions with visionary thinking.
Time Horizon	Concerned with short-term goals.	Have a long-term vision and strategic focus.

Striking a balance between management and leadership often proves to be the most effective approach. Organisations require efficient management to ensure the reliable completion of tasks and visionary leadership to guide strategic direction and inspire teams (Levay, 2010). The roles of managers and leaders are not mutually exclusive and must coexist to ensure that all individuals within an organisation work toward a shared purpose.

2.2.2.2 Leadership competencies in Higher Education

In the higher education landscape, leadership competencies aim to identify the specific knowledge, skills and abilities necessary for leaders to navigate the complexities of higher education. Identification of such competencies quintessentially promote institutional excellence and foster the development of students and staff (Salee-on and Laksana, 2017). Competencies are generally designed for individuals holding administrative, managerial, or leadership positions within academic institutions (Freeman and Kochan, 2013). The multifaceted nature of leadership in higher education underscores the need for leaders who can effectively navigate a dynamic and rapidly changing environment.

One widely recognized model is the Leadership Competency Framework developed by the Association of American Colleges and Universities (Robison, 2014). Although this framework originated in America, it should be contextualised to resonate with the unique cultural, social and economic dynamics of South Africa. The concepts identified through this framework provide a baseline for further investigations in higher education leadership in other countries.

Fundamentally, the Leadership Competency Framework developed by the Association of American Colleges and Universities emphasizes a holistic approach to leadership development. Its focus lies on cognitive, interpersonal and intrapersonal skills required in the multifaceted nature of leadership in education. The framework identifies seven critical

competencies applicable to the higher education landscape. These competencies enable institutions to identify areas for professional development, assess leadership potential, and enhance overall effectiveness. The Leadership Competency Framework developed by the Association of American Colleges and Universities highlights the need for ethical and moral leadership, strong communication skills and the ability to use data driven decisions which effectively assists in efficient management of resources in line with achieving organisational goals. Moreover, it posits the importance of student-centred approaches to education, the ability to build and lead diverse teams' capabilities, adaptability and the ability to promote continuous improvement in higher education institutions. Lastly, it underscores demonstration of cultural competence, inclusivity and an understanding of global trends, given the increasing need for internationalisation in higher education (Ruben, 2019).

The adaptation of the Leadership Competency Framework developed by the Association of American Colleges and Universities framework fosters an alignment between academic programs and the demands of an evolving job market. Subsequently, this aids in promoting a culture of innovation and creativity and emphasizing ethical leadership relevant to the South African context (Eddy, 2009). Nevertheless, the indigenous leadership philosophies and practices deeply rooted in the South African context must be taken into account when implementing the Leadership Competency Framework developed by the Association of American Colleges and Universities framework (Gigliotti et al., 2017). Additionally, the framework's focus on ethical leadership is particularly relevant in the South African context, where issues of social justice, economic inequality, and political stability require leaders who prioritize the well-being of their communities.

It is crucial to recognize that the Leadership Competency Framework developed by the Association of American Colleges and Universities originates from the Western context and necessitates adjustments to align with indigenous leadership philosophies and practices deeply rooted in the South African context. Additionally, the resources needed for implementing the framework, such as training, curriculum redesign, and assessment mechanisms, may pose challenges to already limited budgets and infrastructures in some South African institutions. Therefore, careful consideration is essential regarding the resources required for implementing the framework, especially in light of potential budgetary constraints. Collaborative efforts and thoughtful contextualisation can help address potential challenges and enhance the framework's impact in the South African context.

In addition to the Leadership Competency Framework developed by the Association of American Colleges and Universities, the Leadership Foundation for Higher Education framework is worth noting. The Leadership Foundation for Higher Education framework, originating from the United Kingdom, recognizes that leadership extends beyond senior

positions to middle managers, academic staff, and professional support staff (Middlehurst et al., 2009). The five competencies identified in this framework encompass strategic visioning, fostering collaboration, promoting diversity and inclusion, ethical decision-making, and navigating complex challenges. Additionally, the Leadership Foundation for Higher Education framework's four domains emphasize personal qualities (with emphasis on self-awareness, resilience, integrity and the ability to reflect and learn from experiences), working with others (with the focus on collaboration, relationship-building). Furthermore, it highlights achieving results (with focus on driving performance, managing resources effectively and delivering positive outcomes) leadership behaviours (highlights leadership skills and behaviours such as setting direction, empowering others, and fostering a culture of inclusivity and continuous improvement).

Given South Africa's history of striving for justice, equality, and transformation, it can be argued that the Leadership Foundation for Higher Education framework is well-positioned to cultivate leaders capable of navigating the intricate socio-political, economic, and cultural dynamics unique to the country. The framework's emphasis on diversity and inclusion resonates with South Africa's commitment to addressing historical inequalities, promoting social cohesion, and ensuring representation across all segments of society (Wooldridge, 2011). Integrating these values into leadership development is perceived as a means to contribute to fostering an equitable and harmonious educational environment.

In summary, the adoption of the Leadership Foundation for Higher Education framework necessitates careful consideration of the South African context, taking into account how cultural nuances and historical legacies have shaped the higher education landscape. Meaningful implementation also requires a consideration of institutional realities. Tailoring the framework to align with South African values and address specific challenges is essential to ensure its effectiveness and relevance in the local context.

2.2.2.3 Leadership competency models in Health

The South African healthcare sector is marked by intricate challenges necessitating leadership that is adaptable to change to ensure institutional success. Leadership competency models in the healthcare setting underscore the significance of a robust foundation in clinical knowledge and expertise. Leaders are expected to possess a profound understanding of medical practices and technologies to make informed decisions and provide guidance to clinical staff (Clark and Armit, 2010). Baker (2003) asserts that patient care should remain central to healthcare leadership. He further suggests that healthcare leaders are entrusted to healthcare leaders for the well-being of patients and their communities., therefore ethical decision-making and accountability are essential practices to maintain the trust of patients and colleagues.

Over the years, several competency models have been formulated in the healthcare domain, reflecting both commonalities and distinctions influenced by their respective contexts. Some models are based on the assumption that leadership is organized, consistent, and structured, while others perceive leadership as dynamic, fluid, and unpredictable. Ruderman et al. (2011) introduced a model encompassing a leader's internal dynamics, while Hatler and Sturgeon (2013) referred to this as a leader's mindsight, enabling leaders to reflect on past experiences and behaviours for performance improvement. This section will delve into the discussion of competency models in healthcare.

2.2.2.4 The National Centre for Healthcare Leadership Competency Model

The National Centre for Healthcare Leadership developed a competency model applicable across various disciplines within the healthcare sector. The primary objective of the National Centre for Leadership Competency Model was to identify core competencies that empower leaders to achieve success (Harris, 2016). This model acknowledges the interplay between clinical expertise, managerial capabilities, and compassionate leadership. Thereby aligning them with the multifaceted demands of the healthcare industry. The success of this model is evident as some universities who have adopted it and have incorporated it as part of their competency-based leadership programmes. Buckingham (2012) indicates that it is imperative to incorporate leadership development and assessment into student curricula to establish a foundational understanding of leadership concepts. Primarily, the adoption of the National Centre for Leadership model by universities was to cultivate and enhance leadership skills in healthcare.

Harris (2016) argued that emerging leaders must be afforded the opportunity to assess their leadership strengths and identify areas that require further development. This becomes particularly relevant in the 21st century, given the escalating costs of healthcare, which necessitate strong leadership. The study conducted by Jadhav et al. (2017) emphasized that the healthcare leadership model provides greater value to the healthcare sector than a generic leadership model. They contended that a healthcare leadership model prioritizes the end user, who is the patient or healthcare consumer. Additionally, they underscored the intricate nature of the healthcare industry, which demands consensus among numerous independent stakeholders. Hence, robust leadership, exemplifying high-level competencies, is indispensable (Weiszbrod, 2020).

The National Centre for Leadership model, represented in Figure 2.1, illustrates the relationship between the three pillars essential in healthcare leadership: transformation, implementation, and relations with people. This multi-stage process for identifying competencies is critical in recognizing exceptional leadership performance in healthcare

management (Jadhav et al., 2017).

The initial version of the National Centre for Leadership Competency Model initiated a broad discussion about outcomes-based learning and assessment for both educational and professional development programs. The integration of clinical knowledge and leadership skills in the National Centre for Leadership model aligns effectively with the needs of South Africa's healthcare system, enabling leaders to address healthcare disparities and provide quality care.

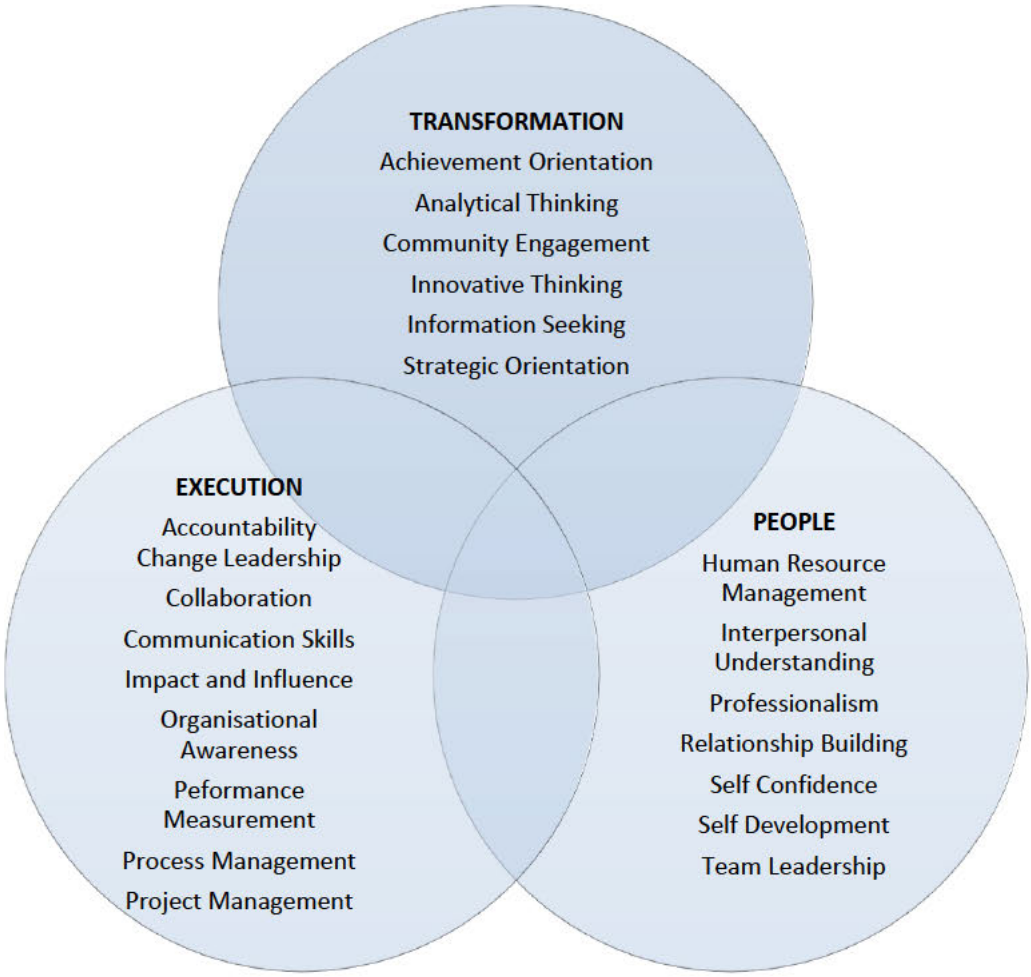

Figure 2.1: National Centre for Leadership Competency Model

Source: Harris (2016)

2.2.2.5 Public Leadership competency model

The Public Leadership Competency Model was initially developed in the early 2000s in the United States as a response to the evolving landscape of public service. This transformation necessitated leaders possessing the skills and attributes essential for effecting positive

change (Wright et al., 2000). The Public Leadership Competency Model gained prominence by providing a consistent approach to fostering and evaluating leadership skills in the public sector. Its applicability extends to healthcare due to its comprehensive framework, which emphasizes result-driven leadership for continuous quality improvement initiatives. The integration of Public Leadership Competency Model competencies into healthcare leadership roles, as perceived by Czabanowska et al. (2014), contributes to the enhancement of the public health system and services.

A collaborative effort between the Ethiopian Federal Ministry of Health and the U.S. Centres for Disease Control and Prevention led to the formation of the Leadership for Enhanced Public Health Impact in Ethiopia project. This framework was designed to address critical gaps in public health leadership in Africa (Wang et al.,2016). This project, intricately tied to the Public Leadership Competency Framework, aims to enhance the competencies of public health professionals at various levels of the healthcare system. The Public Leadership Competency Framework, depicted in Figure 2.2, provides a structured blueprint of essential competencies crucial for effective public sector leadership.

Figure 2.2: Public Leadership Competency Framework

Source: Czabanowska et al. (2014)

The framework comprises 52 competencies organized into eight domains. A brief overview of these eight domains is as follows:

System Thinking: This competency entails comprehending public health challenges and engaging with systemic changes to address them effectively. Achieving this requires synthesizing diverse viewpoints and integrating them to make decisions that benefit the organisation. Wright et al. (2012) argued that this can be realized through an understanding and demonstration of the fundamental principles of reflective and servant leadership, which involve developing selflessness and integrity. Other adaptive leadership styles can be applied as necessary. It also involves identifying opportunities for growth, innovation, development, and change within the organisation.

Political Leadership: In public entities, there are often political influences that can affect the organisation. Therefore, leaders in these environments must have the ability to anticipate potential impacts of external situations on the internal structures of the organisation. Effective techniques are essential when working with boards and governance structures to translate broad strategies into practice. Leadership in public domains necessitates building good relations and partnerships to enhance public healthcare, involvement in interdisciplinary projects, and stakeholder engagement. Marijani (2017) further emphasizes the importance of advocacy and participation in public health policy development at various levels.

Collaborative Leadership: Leading and building interdisciplinary teams successfully require an environment where opinions can be shared and valued. This involves the use of effective group behaviours such as motivating, negotiating, listening, dialoguing, encouraging, and rewarding excellence. Van Vactor (2015) further asserts that leaders are also required to exhibit traits like such as credibility, integrity, commitment, and honesty. They must also be able to manage expectations and provide opportunities for collaborative learning and quality improvement.

Leadership and Communication: Communication is crucial in any organisation, allowing individuals to work toward a common goal and facilitating the dissemination of information and responsibility at different levels. Effective leaders must demonstrate strong written and oral presentation skills and utilize various mediums to reach their target audience. They should communicate in a non-judgmental and non-threatening manner, showing sensitivity when communicating with diverse cultures and disciplines. Zulch (2014) posits that leaders should possess sound negotiation skills to defuse disputes and find suitable solutions before issues escalate.

Leading Change: The dynamic nature of public health means changes in the social, economic, and political environment can affect organisations. It is important to align organisational practices with these changes, requiring a reassessment of the mission to match the vision and the ability to adapt to necessary strategic changes. Effective management of staff through

change is crucial, making strategic decisions based on recognized values, priorities, and resources.

Emotional Intelligence and Leadership: Leaders must be aware of the impact of their behaviour on others and show empathy and concern for individuals while ensuring that institutional goals and objectives are met. They must demonstrate responsibility and accountability and respond appropriately to criticism.

Leadership, Organisational Learning, and Development: Fostering an environment of trust and opportunity encourages collaborative learning and quality improvement. Such environments are conducive to grooming and mentoring future leaders, empowering staff members to feel they make a meaningful contribution to fulfilling the mission of public health within the organisation.

Ethics and Professionalism: Healthcare professionals must adhere to ethical and regulatory standards to demonstrate commitment to the organisation's purpose and values. Leaders should declare any conflicts of interest that may affect their decision-making capacity, respect and embrace diversity within the organisation, promote and practice professional accountability and social responsibility, and reduce inequalities in access to public health (Alejos et al., 2008).

The domains articulated in Leadership for Enhanced Public Health in Ethiopia posit that leadership in public health involves a keen understanding of the complex interplay of factors within the healthcare system and the ability to promote innovative strategies and progressive development within the organisation. A key aspect of effective leadership is the anticipation and management of the impacts of external influences, necessitating strong political acumen and adeptness in engaging with various stakeholders (Wood et al., 2009). Leaders should actively advocate for policy development and demonstrate an unwavering commitment to improving public healthcare. Creating a collaborative environment built on trust and open communication is fundamental, with leaders serving as role models of integrity, credibility, and transparency. Moreover, effective communication skills and the ability to negotiate and resolve conflicts are critical for maintaining a cohesive and functional work environment . Neufeld (2014) posits that personal communication skills are critical in determining whether a leader’s message will be recalled and embraced. Therefore, adapting to a dynamic healthcare landscape and guiding staff through periods of change requires leaders who are able to articulate a clear vision to their subordinated. Fostering a supportive and empowering workplace culture are essential components of successful leadership. Demonstrating empathy, fostering accountability, and nurturing a positive and inclusive organisational climate are crucial for fostering a motivated and engaged workforce (Neufeld et al., 2010). Upholding

ethical standards, promoting diversity, and championing social responsibility are vital for ensuring the ethical practice of public health and enhancing the overall impact of healthcare initiatives

Healthcare environments are intricate, and developing a comprehensive leadership competency framework that encompasses all the necessary skills and behaviours can be a challenging endeavour. Creating a framework that adequately addresses the competencies required for effective healthcare leadership across different contexts can be complex. Implementing such a framework may face hurdles, including time and resource constraints and potential resistance from staff members accustomed to existing practices (Davidson et al., 2012). Moreover, the risk of bias favouring specific skill sets within a competency framework could unintentionally disadvantage certain leaders.

The Public Leadership Competency Framework, tailored for the public sector, emphasizes crucial competencies such as strategic thinking and stakeholder engagement while recognizing the unique challenges and responsibilities faced by public leaders. The alignment of the Leadership for Enhanced Public Health in Ethiopia project with this framework underscores its commitment to cultivating leadership excellence within the Ethiopian public health sector (Czabanowska et al., 2014). By integrating the principles of the framework, the project aims to empower public health leaders to drive positive change and impact the health and well-being of the Ethiopian population.

The Public Leadership Framework's emphasis on ethical decision-making, stakeholder engagement, and strategic thinking aligns with South Africa's public service needs, enabling leaders to navigate complex governance challenges.

2.2.2.6 Medical Leadership competency framework

The Medical Leadership Competency Framework emerged in response to debates surrounding the changing roles of doctors and their impact on healthcare delivery (Tollman et al., 2008). The Medical Leadership Competency Framework acknowledges the evolving roles of doctors in healthcare delivery, emphasizing the multifaceted nature of their work that demands not only medical expertise but also strong interpersonal skills. While earlier discussions focused on the public leadership competency model, it is essential to emphasize the distinctions between the two frameworks to grasp their equal significance within the study's context. Although there may be some overlap between the public leadership competency framework and the medical competency model, each address distinct areas pertinent to their respective fields and highlights the significance of both frameworks in their specific contexts (Nicol, 2012).

Figure 2.3: Medical Competency Model

Source: Black et al. (2009)

As illustrated in Figure 2.3, the Medical Competency Model highlights five key competencies relevant to medical doctors. Within the healthcare context, medical professionals serve as leaders in patient care management. Black et al (2009) argues that the first competency's emphasis lies on cultivating self-awareness and self-management, adhering to ethical principles and demonstrating integrity. The competency also highlights the importance of continuous personal development and the cultivation of emotional intelligence. Nicol (2012) posits that collaboration is a fundamental aspect of the healthcare system, requiring seamless teamwork between doctors, nurses, and other allied professionals. As such, building and sustaining robust working relationships and networks within the medical profession is essential (Milner et al., 2011) Effective teamwork enables individuals to collectively pursue common goals, fostering an environment where every member's contributions are valued and integrated into decision-making processes.

Furthermore, Ross and Titov (2022) posit that the third pillar of the model relates to managing services. Management of services is inclusive of strategic resource allocation and efficient utilisation and management of staff. This entails overseeing the performance of the designated department or unit, ensuring the effective implementation of service delivery objectives. This then leads to improved services, the forth pillar of the model. Addressing service delivery

challenges is of utmost importance in the healthcare sector, where limitations in resources necessitate innovative approaches to maximize output while upholding patient safety (Black et al., 2009). Leaders in the medical field are tasked with cultivating innovative strategies to enhance service provision, thereby positively impacting the well-being of the served population.

The fifth and final pillar of the model is setting direction, which speaks to reflection. Self-reflection is key to identifying areas for improvement and determining effective pathways forward (Milner et.al, 2011). A comprehensive evaluation process serves as a vital tool for critical analysis, enabling the integration of newfound knowledge into the development of strategic directions and ongoing improvement initiatives.

The emphasis on personal attributes and the need for reflection highlighted in the Medical Competency model effectively aligns with the needs of South Africa's healthcare system. With the role of medical doctors being perceived not just as professionals but leaders in patient care management, the competencies posit the importance of personal development.

2.2.3 Summary of the Theoretical Frameworks

This study necessitated the interrogation of the empirical theories that were applicable to the higher education and the healthcare landscapes. This section presented the concepts related to the decentralised centralism framework and the concept of Leadership competencies. The literature engaged reflect that the notion that over-centralisation stifle initiatives and innovation within institutions (Braun, 2011) while over decentralisation can lead to fragmentation and lack of cohesion (Brady, 2002). The decentralized centralism approach, in contrast balances the two by adopting the positive aspects of both models. Decentralised centralism facilitates the redistribution of authority, resources, administrative responsibilities and functions to local entities. Thus, enhancing local entities' participation and flexibility to respond to challenges that may emerge in sites when as when they arise.

The study drew on the leadership competencies in higher education that were discussed in this chapter. The Leadership Competency Framework developed by the Association of American Colleges and Universities and the Leadership Foundation for Higher Education leadership framework share significant similarities aimed at fostering leadership skills. Both the frameworks emphasize a core set of leadership competencies, including strategic thinking, effective communication, ethical decision-making and collaboration. Acknowledging the multifaceted nature of leadership, these competencies encompass cognitive, interpersonal, and intrapersonal skills. The frameworks underscore the significance of ethical leadership, emphasizing the navigation of complex ethical dilemmas while upholding integrity and

accountability. This focus on ethics resonates with South Africa's history of social justice and the ongoing need for equitable leadership.

Additionally, the frameworks recognize the importance of cultural awareness and a global perspective. The Leadership Foundation for Higher Education framework's emphasis on internationalisation aligns with South Africa's multicultural society, while the & model's focus on cultural competence is relevant for the diverse higher education landscape.

Considering the fundamental similarities and differences between the Leadership Foundation for Higher Education and the Leadership Competency frameworks, the leadership competency model appears to be more applicable to the South African higher education context. Its explicit focus on diversity, equity, and inclusion closely aligns with South Africa's historical and ongoing efforts to address social injustices and inequalities. The model's emphasis on ethical leadership and cultural competence resonates with the country's diverse population and complex socio-political landscape. Furthermore, the Leadership Competency framework's adaptable nature and emphasis on intercultural communication makes it well-suited to the multicultural environment of South African higher education institutions.

Against the backdrop of the healthcare context, leadership competency models presented above underscore the importance of ethical leadership, emphasizing the value of integrity, accountability, and transparency in leadership. These principles align with the values deemed essential for leadership in any field. Strategic thinking emerged as a common competency across the models, supporting long-term planning and decision-making applicable in any leadership context. Effective communication and collaboration were recurring themes in these frameworks, as leaders need to engage with diverse stakeholders, convey ideas, and build relationships regardless of the domain.

The fundamental differences between these models were rooted in the contextual variances that influenced the specified competencies. While the Leadership Competency Framework extends across industries, the Public Leadership Framework centres on the public sector, and the National Centre for Leadership model narrows its focus to healthcare. Notably, the National Centre for Leadership model places greater emphasis on clinical and healthcare business knowledge, a feature not as pronounced in the other frameworks.

The National Centre for Leadership Competency Model and the Public Leadership Competency Framework find particular relevance in the South African healthcare context. The National Centre for Leadership model's integration of clinical knowledge and leadership skills aligns well with South Africa's healthcare system demands, enabling leaders to tackle healthcare disparities and provide quality care. Additionally, the Public Leadership Framework's emphasis on ethical decision-making, stakeholder engagement, and strategic

thinking resonates with South Africa's public service needs, empowering leaders to navigate complex governance challenges. While the generic Leadership Competency Framework offers valuable universal skills, contextual nuances unique to South Africa may require some adaptation.

Table 2.2: Summary of two competency models considered for the conceptual framework

KEY DIFFERENCES BETWEEN TWO COMPETENCY FRAMEWORKS	
PUBLIC LEADERSHIP COMPETENCY FRAMEWORK	MEDICAL COMPETENCY MODEL
focuses on competencies such as strategic thinking, communication, collaboration, and stakeholder engagement,	typically focuses on competencies such as medical knowledge, patient care, interpersonal and communication skills, and professionalism.
applied in government agencies, non-profit organisations, and other public sector organisations	healthcare organisations such as hospitals, clinics, and medical schools.
developed through a process of consultation and consensus-building among stakeholders,	developed through a process of research and consultation with subject matter experts
evaluated through feedback from peers, supervisors, and stakeholders	Evaluated through assessments such as clinical skills exams, feedback from patients, and evaluations from supervisors.

The key differences of the Public Leadership and Medical Competency models are summarized on Table 2.2 . Based on the leadership frameworks discussed, the following section discusses the conceptual framework for this study.

2.3 Section Two: Conceptual Framework

2.3.1 Introduction

The review of various frameworks in section one of this chapter provided a context to which a conceptual framework would be developed for this study. Based on gaps identified in literature, the study seeks to determine if specific leadership styles, skills, and knowledge would impact the management of decentralized clinical training in KwaZulu Natal. It also seeks to establish whether adopting the decentralised centralism concept would have any effect on the competencies that were identified in the public leadership competency framework and the medical competency model.

2.3.2 Summary of the Theoretical Frameworks

The two aforementioned leadership competency models emphasize the importance of ethical leadership, emphasizing the value of integrity, accountability, and transparency in leadership. These principles align with the values deemed essential for leadership in any field. Strategic thinking emerged as a common competency across the models, supporting long-term planning and decision-making applicable in any leadership context. Effective communication and collaboration were recurring themes in these frameworks, as leaders need to engage with diverse stakeholders, convey ideas, and build relationships regardless of the domain.

Decentralized centralism, in the context of this study, involves a strategic balance of four key dynamics. The first dynamic emphasizes that a system of centralized oversight should be in place, establishing overarching standards and ensuring compliance with regulatory requirements to maintain the quality of medical training. Concurrently, granting local autonomy to individual training sites allows adaptation of curriculum and methodologies to address specific regional needs. Moreover, collaborative decision-making processes are crucial, encouraging central authorities to work closely with local stakeholders, thus incorporating diverse insights into the formulation of policies and procedures for clinical training. Lastly, a standardized approach to core elements across all decentralized sites ensures a consistent baseline of quality while accommodating flexibility in certain aspects. This comprehensive approach seeks to harmonize centralized guidance and decentralized flexibility, optimizing the effectiveness of clinical medical education.

From the gaps identified from the literature reviewed, it is evident that although specific leadership characteristics have been identified as being suitable for the healthcare system and educational context, there is limited research evident that these specific characteristics have been proven to have a relationship with decentralized medical education. This study

therefore aims to find out if there are any significant relationships between leadership characteristics and the sustainability of clinical medical training.

2.3.3 Proposed Conceptual Framework for Decentralised Clinical Training

The proposed conceptual framework for decentralized training draws on competencies highlighted in public leadership and medical models. Firstly, it emphasizes ethical leadership, instilling values such as integrity, accountability, and transparency as essential pillars. This ethical foundation forms the basis for leaders operating in diverse fields, including clinical medical training. Strategic thinking also emerges as a core competency, providing a foundation for long-term planning and decision-making. This is crucial in any leadership context, ensuring that leaders can navigate complex challenges and make informed choices.

Effective communication and collaboration remain central themes within the framework. This is because leaders should engage with a variety of stakeholders, convey ideas, and build relationships. This skill set is considered vital regardless of the specific domain and is particularly relevant in the context of clinical medical training where collaboration among diverse stakeholders is integral.

The framework then explores the notion of decentralized centralism, which is especially pertinent in clinical medical training setting. Within this framework, four key dynamics are proposed, central oversight, autonomy, decision making and standardisation. The proposed framework highlights the importance of centralized oversight. Establishing and maintaining a system of centralized oversight is crucial for ensuring overarching standards and compliance with regulatory requirements. This would preserve the quality of training provided to students. Secondly, the proposed framework emphasizes on the importance of granting autonomy to individual departments and training sites. This autonomy allows for adaptation of methodologies to address specific disciplinary needs. This decentralized flexibility acknowledges the diversity of requirements across different contexts.

Furthermore, the proposed framework encourages collaborative decision-making processes, which are essential for ensuring sustainable implementation of the decentralized training. The framework encourages that central authorities work closely with local stakeholders, who would be able to assist in incorporating diverse insights into the formulation of policies and procedures for clinical training. This inclusivity enhances the relevance and effectiveness of training programs. Finally, the proposed framework highlights the importance of standardisation. Maintaining a standardized approach to core elements across all decentralized sites ensures a consistent baseline of quality. Such elements include the curriculum, outcomes and competencies developed in line with the National Qualifications

Framework level of the qualification and the assessment criterion used in all sites. While allowing flexibility in certain aspects, this standardisation contributes to the overall coherence and reliability of the training process.

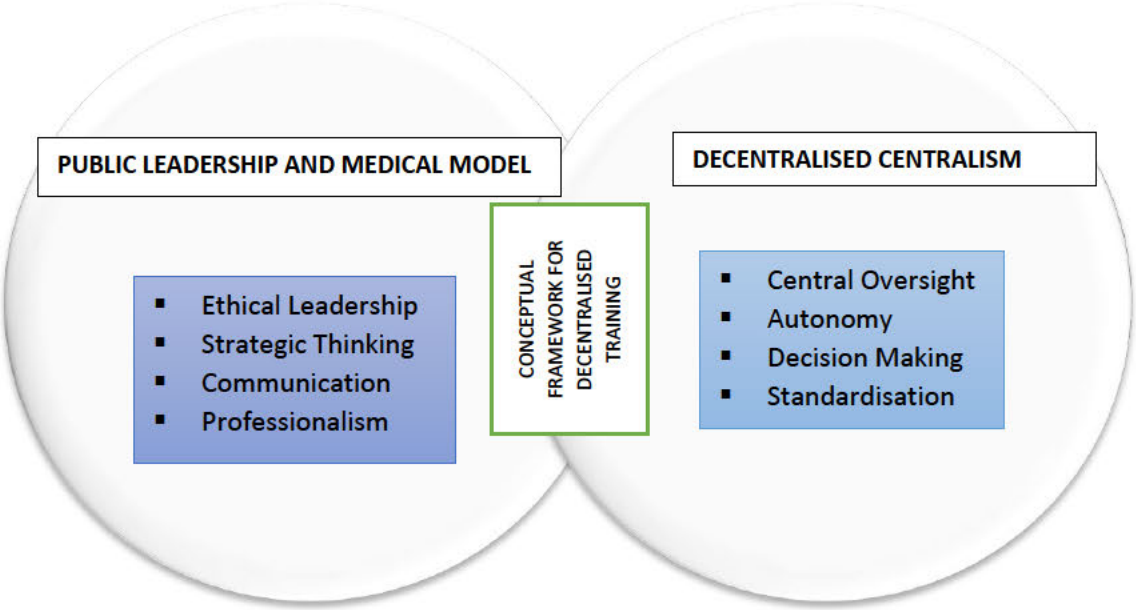

Figure 2.4:Theories utilised as a basis for the proposed Conceptual Framework

2.4 Conclusion

This chapter provided justifications for including theories in this research study. It also allowed emphasizing their indispensable role in improving research quality. It thoroughly described the frameworks employed in this study, highlighting their distinctive roles in the healthcare and education landscapes and clarifying their differences. Furthermore, it also provided insight on the proposed framework which seeks to harmonize centralized guidance with decentralized flexibility, optimizing the effectiveness of clinical medical education. This chapter also positions ethical leadership, strategic thinking, effective communication, and collaboration as key competencies, integrating them into a comprehensive approach that addresses the unique challenges of decentralized training in the field of clinical medicine. The next chapter is set to review empirical literature on decentralized training by focusing on the Healthcare and Higher Education landscapes.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

The previous chapter provided a focus on the theoretical frameworks that provided a lens to which the management of decentralised training of the medical programme could be assessed. This section the builds on the theoretical framework through the discussions empirical literature associated with this phenomenon. The literature review presented in this section aims to investigate the fundamental issues and relationships that underpin decentralised training and explores the macro and micro environments that impact on the success of such training. It was envisioned that the Literature review would also assist in identifying a gap in information around the phenomena and assist in refining the focus of inquiry (Ridley, 2012). This literature review chapter is organised into two sections: Section one focuses on empirical literature relevant to the health care system and section two focuses on the higher education landscape. These sections will both provide a context for the study.

3.2 Section One: The Health Care System

3.2.1 Healthcare International context

Health systems are defined as "all the organisations, institutions, and resources devoted to producing health actions" (WHO, 2000: xi). The World Health Organisation (WHO), state that the health care system comprises of six essential building blocks, namely: (a) Leadership/governance, (b) Health care financing, (c) Health workforce, (d) Medical products and technologies, (e) Information research, and (f) Service delivery (WHO, 2010). These six interdependent and interconnected building blocks are critical for ensuring an effective health care system (Bodenheimer et al., 2014). This study primarily focuses on the unpacking of the first three pillars, namely, Leadership and governance, Health care financing, and health workforce.

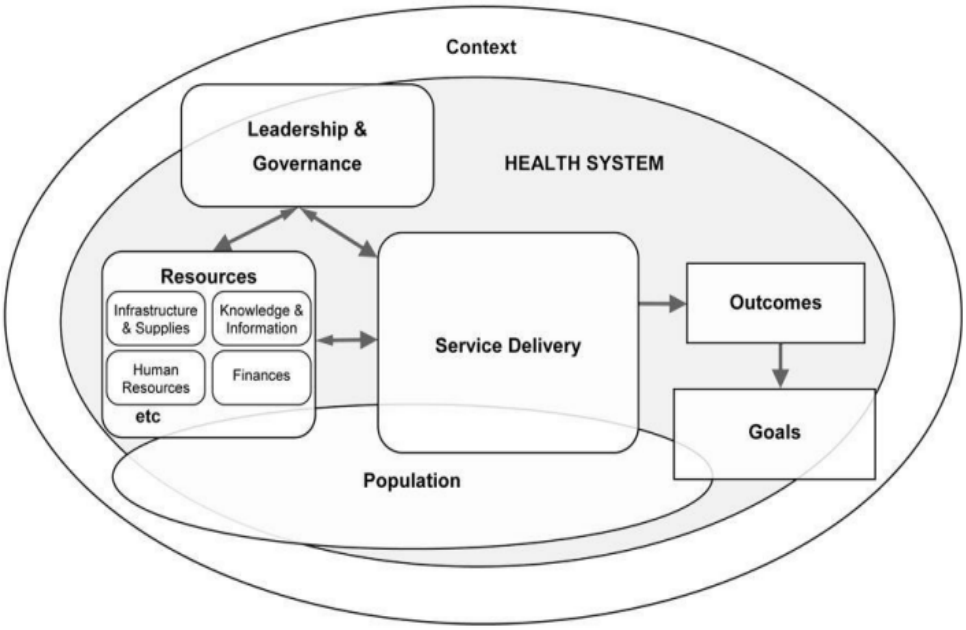

Figure 3.1:The health system dynamics framework

Source: Van Olmen et al. (2012)

The complexities and interrelationships within the health system can be comprehended through the Health System Dynamics Framework. This framework, depicted in Figure 3.1 underscores the components influencing health service delivery within a specific context (Van Olmen et al, 2012). The interaction of these elements leads to the achievement of the intended goals. At the heart of the framework lies service delivery to the population. Leadership and Governance play a vital role in ensuring the optimal utilisation of resources to meet the required outcomes. In the health ecosystem, various organisational actors, including patients, relatives, health professionals, and service providers, hold different values, interests, and cultures, potentially leading to conflicts. Sweeney and Sterman (2000) asserts that the interactions among these elements provide feedback, thereby strengthening the system.

3.2.2 Health in Africa

African countries are confronted with issues related to access, equity and healthcare management. As Mullan et al. (2011) noted, Africa bears 24% of the world's disease burden but possesses only 3% of the global health workforce. The World Health Report has also highlighted the critical shortage of human resources for health in Africa (WHO, 2015). This shortage is of paramount significance as an adequate number of healthcare professionals essential for the smooth functioning of any health system. Furthermore, the healthcare system requires an adequate number of doctors to provide assistance with clinical and public health

work, management, education and policy development.

Adindu (2010) contends that healthcare in Africa has long been a topic of concern and debate, often falling short of the recommendations established by the World Health Organization. (While this organisation provides guidelines and recommendations for improving healthcare systems globally, many African countries confront significant challenges that impede the full implementation of these recommendations. One of the recommendations advocates for Universal Health Coverage to ensure that all individuals can access essential healthcare services without incurring financial hardship. Sambo and Kirigia (2014) posit that in numerous African countries, access to quality healthcare remains limited. They further assert that factors such as underfunding, insufficient infrastructure and an unequal distribution of medical resources impact service delivery. Consequently, a substantial portion of the population lacks proper access to essential services.

The importance of a well-trained and adequate healthcare workforce for providing quality care was highlighted as an imperative. Naicker et al. (2009) posits that many African countries grapple with a shortage of skilled healthcare professionals, including doctors, nurses, and specialists. This scarcity is exacerbated by the migration of healthcare workers to countries offering better living standards, technological advancements, and political stability. This phenomenon, as described by Dodani and La Porte (2005), is known as 'brain drain,' whereby a country's investment in educating its people is lost to developed nations. The shortage of healthcare personnel often results in overburdened healthcare facilities, longer wait times, and a reduction in the quality of care (Yates, 2009).

The presence of sufficient and modern medical infrastructure and equipment to deliver healthcare services effectively was advocated for by the world organisation. Bateman (2010) argued that many African countries often possess outdated equipment and poorly maintained facilities. This, in turn, affects the quality of care and can lead to misdiagnoses and inadequate treatments. Furthermore, the World Health Organisation emphasizes the importance of preventive care and public health programs to address the burden of diseases. Some African countries face challenges in implementing comprehensive public health initiatives due to limited funding, a lack of awareness and competing priorities (Oliribe et al., 2019). The recurring challenge of funding in African countries call for sustainable and equitable healthcare financing models. Many African countries encounter difficulties in allocating sufficient funds to their healthcare systems (Hsia et al., 2012). Subsequently resulting in underfunded facilities and inadequate medical supplies which result in inconsistent quality of care.

The arguments presented indicate that healthcare in Africa often falls short of the WHO's recommendations due to a combination of factors and challenges. Such factors include

resource constraints, inadequate infrastructure and systemic challenges. It must however be recognised that while certain African countries may not fully meet World Health Organisation recommendations, efforts are being made to address these challenges (Oliribe et al., 2019). Governments and committed stakeholders are actively working to improve healthcare systems by investing in infrastructure, training healthcare professionals and implementing public health initiatives (Sambo and Kirigia, 2014). Bateman (2010) suggests that a systemic and structural challenges of complex economic, political, and social factors persist. These factors, as a result, hinder progressive healthcare

Africa has made significant strides over the years in improving health outcomes and access to quality medical services. These advancements demonstrate the resilience of African nations and their commitment towards equitable healthcare for its citizen (Selman et al., 2009). African nations have made notable progress in controlling infectious diseases and have exhibited successful vaccination campaigns (Mills et al., 2012). Moreover, efforts to improve maternal and child health have led to reductions in maternal and child mortality rates. Strengthened primary healthcare services for preventive care and early disease detection have been noted. The focusing on community-based healthcare delivery has assisted in addressing health disparities and has contributed to the reduction of the burden on higher-level facilities.

Investments in the enhancement and expansion of healthcare infrastructure, (encompassing hospitals, clinics and medical facilities) have significantly improved medical service accessibility, particularly in underserved regions (Wiseman et al.,2015). Many African countries have dedicated efforts to train and retain healthcare professionals, including doctors, nurses, and community health workers (Sambo and Kirigia, 2014). The initiative to upscale medical education as part of health sector strengthening, along with investment in augmenting human resources for health, is imperative to balance the doctor-patient ratios for better healthcare provision to the population. However, as highlighted by Mullan et al. (2011), almost all the 146 medical schools that were surveyed in their study had staff shortages in both basic and clinical sciences.

The challenge therefore lies in addressing the issue of staff retention in Africa, especially in public facilities. Wiseman et al., (2015) established the various factors that contribute to the mobility of healthcare professionals. Such factors include remuneration, limited career prospects, heavy workloads, absence of equipment and support. This is further exacerbated by the option available for health care professionals to work in private institutions where working conditions are somewhat more favourable (Mullan et al., 2011). Moreover, staff members who are well trained are prime candidates for recruitment by research organisations or by other well-resourced countries resulting in brain drain.

African nations are increasingly engaging in health research and innovation, leading to context-driven solutions that have bolstered healthcare delivery (Streid et al., 2014). Investments in research capacity have yielded advancements in diagnostics, treatments, and public health strategies. Furthermore, collaborative initiatives have facilitated knowledge exchange both nationally and internationally, fostering cross-continental research and learning opportunities, thereby expediting progress across the continent. The emergence of digital health solutions, such as telemedicine and health information systems, holds the potential to enhance healthcare access, particularly in remote areas (Naik et al., 2022). Embracing technology can significantly improve service delivery and facilitate efficient data management.

3.2.3 South African Health System

The South African healthcare system operates as a two-tiered system, consisting of both the public and a private sectors (Cameron, 2009). Alongside the public healthcare system, the private medical sector provides healthcare services to individuals who can afford private medical care or possess health insurance coverage. The public healthcare system, under the oversight of the Department of Health, primarily caters to the majority of the population, especially those who lack the financial means to access private healthcare services (Figure 3.2).

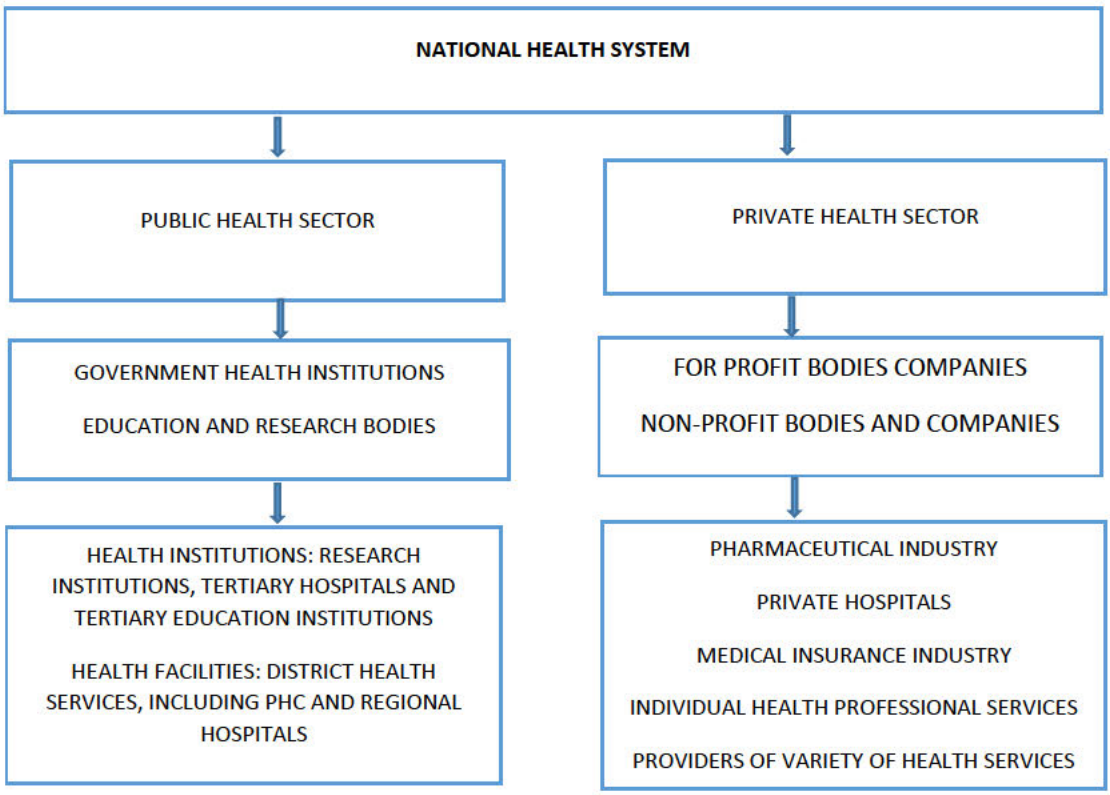

Figure 3.2:South African Health System

Source: Cameron (2009)

Funded primarily by the government through taxation and other revenue sources, the fundamental responsibility of the public health system is to ensure equitable access to healthcare services. The Department of Health achieves this through primary care, specialized treatments and educating the communities on preventative measures. This is achieved through a network of medical facilities which include public clinics, community health care centres, district hospitals, central hospitals, regional, and tertiary hospitals.

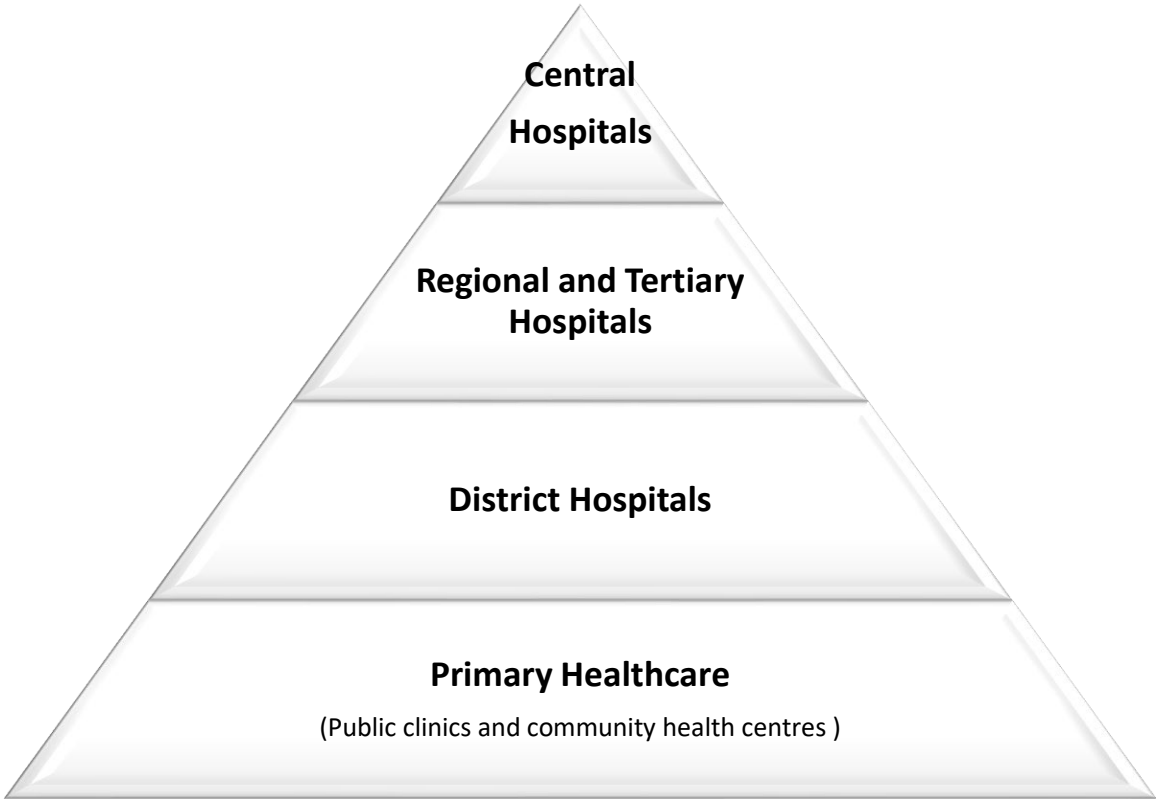

Figure 3.3: The South African Healthcare facilities

At the foundation of the public healthcare system lies primary healthcare, which provides basic medical services and preventive care to communities (Figure 3.3). Public clinics and community health centres serve as the primary access points for many citizens. In these establishments, services such as immunisations, maternal and child health, family planning, and treatment for common illnesses are offered (Department of Health, 2018). District hospitals form the next tier, offering a broader range of medical services, including minor surgeries, emergency care, and specialized outpatient services. These hospitals serve as referral points for primary healthcare facilities. Regional and Tertiary Hospitals provide more advanced medical services, including specialized surgeries, critical care, and treatment for complex medical conditions. These hospitals serve larger geographic areas and offer care to

patients referred from lower-level facilities. Central Hospitals, situated in major urban centres, are major medical institutions concentrating in specialised fields of medicine. They cater to patients with intricate medical needs.

To comprehensively comprehend the South African health sector, it is imperative to critically examine the history of the country.

3.2.3.1 South African health context

Prior to 1994, South Africa operated a segregated health system structured around racial divisions. One well-equipped system catered to the minority and a systematically under-resourced system serving the majority (van Rensburg, 2014). Following 1994, the government initiated an extensive infrastructure program resulting in the establishment of over 1500 new health facilities, to facilitate accessibility to healthcare services (Coovadia, 2009). The post-apartheid government's efforts aimed to decrease disparities in healthcare and integrate the previously separated homeland health care systems. Moreover, the government aimed to reorient services towards primary health care, in line with the universal health coverage postulated by the World Health Organisation. However, there were minimal changes in the infrastructure of healthcare training facilities to complement the expanded service sites (Mullan et.al, 2011).

Despite the political reforms after the dissolution of the apartheid regime, which led to a new trajectory of redress and equality, the country still contends with disparities in health service coverage (Ntuli et al., 2003). Although racial segregation was officially abolished according to the White Paper on the Transformation of the Health Care System (Department of Health, 1997), a different form of inequality emerged. This inequality is primarily between the affluent and underprivileged citizens (Netshitenzhe, 2012). Challenges related to health financing, favouring the privileged, were not adequately addressed. Thus, resulting in the coexistence of public and private sector healthcare.

To address these inequalities and ensure equitable service delivery nationwide, health programs have transitioned from a centrally regulated approach to a policy-driven one. However, the success of certain health programs in specific regions has been hindered by the lack of capacity to execute policies and monitor their implementation effectively. As a result, the implementation of straightforward health interventions has been suboptimal (Chopra et al., 2009). The lack of notable health improvement despite the government's response to healthcare challenges through policy and legislative changes underscores the existing implementation gap (Tollman et al., 2008).

In spite of the objectives outlined in regulatory policies, the South African public healthcare

system contends with significant pressure to meet the escalating healthcare demands with limited additional resources and funding. Consequently, the system faces a multitude of challenges, including outdated infrastructure, shortages of medical equipment, and personnel limitations (Ntuli et al., 2003). All these factors impede on the sectors' ability to provide quality care. Overcrowded and understaffed healthcare facilities exacerbate compromised patient experiences and impose burdens on healthcare professionals.

Research conducted over the past decade underscores the need for optimizing service delivery and increasing the number of Health Care Professionals across all healthcare sectors (Rosenblatt et al., 2006). The shortage of skilled medical professionals, particularly doctors and nurses, poses a significant threat to the system's capacity to cater to the population's needs. Attractive opportunities in the private sector and abroad entice these professionals away from the public healthcare system, further straining its ability to provide comprehensive care. Comparisons with other countries reveal shared challenges and unique complexities. Developing nations such as Brazil and India face similar constraints in resources and workforce shortages (Saravia and Miranda, 2004), while more developed countries such as Canada and the United Kingdom have established comprehensive publicly funded systems with universal healthcare access (Barua and Jacques, 2018). These comparisons emphasise the need for South Africa to strike a balance between aspirations and pragmatic strategies that account for its distinct context.

The continual growth in population and geographical inequalities amalgams the challenges faced by the public healthcare system. Inadequate access to healthcare facilities in rural areas and informal settlements exacerbates the gap between urban and rural populations (Gaede and Versteeg, 2011). This inequality highlights the need for equitable healthcare distribution across the nation. With the limited number of hospitals in most rural areas, overcrowding and resource constraints are inevitable. This coupled with understaffing significantly impact the quality of care delivered in public facilities. Moreover, it results in prolonged waiting times for patients who seek medical assistance. All these factors contribute to patient dissatisfaction.

While there are a number of challenges faced by the sector, it can be noted that evidence of efforts to enhance the system are noticeable in various domains. The efforts made by the Department of Health to show their commitment to providing equitable healthcare can be seen in the 10 Point Plan for improvement of the health sector (Whittaker et al., 2011). Moreover, the commitment to allocation of financial resources can be noted (Mitchell and Lassiter, 2006). Human resource management strategies that encompass training can also be observed, with the department embarking on a project of training disadvantaged students in Cuba (Motala and Van Wyk, 2016). Additionally, efforts for technological integration aimed at streamline administrative processes have been observed (Mathews and Pronovost, 2011).

3.2.3.2 Health Care Expenditure

In South Africa, the Department of Health receives budget allocations from the National government, which is subsequently distributed among the provinces. The factors affecting the distribution of the budget include the population size of the province, its healthcare requirements and existing infrastructure as well as the availability of healthcare facilities. The Provincial government is tasked with the responsibility of distributing the budget to the facilities and projects aimed at providing healthcare services to the populace. Historically, provinces with larger urban populations and higher healthcare demands received proportionally larger shares of the healthcare budget compared to smaller and less populous provinces. The report provided by Statistics South Africa which gave insight to the statistical data of the country reported that the provinces with the most substantial contributions to hospital services, as a percentage of total healthcare spending, were Gauteng (68%) and Western Cape (65%) (Stats SA, 2011).

Hospital services accounted for the largest share of provincial healthcare expenditure. In the 2019/20 fiscal year, the nine provincial administrations collectively spent R125.6 billion on hospital services, representing 61% of total healthcare expenditure (Stats SA, 2021). Health expenditures are primarily dominated by tertiary-level hospitals, with thirty percent of the overall public health expenditure directed toward super tertiary hospitals located in Johannesburg, Durban, and Cape Town (Chopra et al., 2009). While tertiary and super tertiary hospitals play a crucial role in regional referrals and the education of medical practitioners, they do not fully address the healthcare needs of the country. This is particularly with reference to the significant rise in demand for chronic care related to HIV, tuberculosis, mental illnesses, and non-communicable diseases. Inequities persist in health expenditure, with 50-60% of the total health expenditure allocated to the private sector, serving less than 15% of the country's population (McIntyre and van de Heever, 2007).

3.2.3.3 Healthcare in KwaZulu-Natal

KwaZulu-Natal exhibits a diverse landscape of urban and rural areas, each presenting distinct healthcare needs and challenges. With a population exceeding eleven million, KwaZulu Natal ranks as the second most populous province in South Africa (Stats SA, 2016). Urban centres in the province tend to have higher population densities, while rural areas are often characterized by scattered populations and limited access to healthcare services.

Comparatively, KwaZulu Natal differs from other provinces in several key aspects when it comes to healthcare challenges. Unlike KwaZulu-Natal, Gauteng boasts a well-developed healthcare infrastructure and houses some of the country's leading medical institutions and specialists. The Western Cape enjoys a relatively well-functioning public healthcare system

with internationally renowned medical facilities (Gumede et al., 2015). The Eastern Cape shares similarities with KwaZulu-Natal regarding healthcare challenges, including rural-urban disparities, workforce shortages, and underdeveloped healthcare infrastructure in some regions. Limpopo, primarily a rural province, encounters similar healthcare access and workforce distribution challenges as KwaZulu-Natal, along with disparities stemming from its vast and remote geography.

KwaZulu-Natal hosts a variety of public and private medical facilities providing healthcare services to its population, primarily concentrated in urban areas. Urban regions benefit from more favourable population-to-facility ratios compared to rural areas, where a larger portion of the population must rely on a limited number of medical facilities (Mepham et al., 2011). As stated by Willie and Maqbool (2023) rural and remote areas contend with issues related to distance from healthcare facilities and insufficient transportation due to road conditions which make it difficult to access healthcare. The uneven distribution of healthcare facilities, especially in rural areas result in higher population-to-facility ratios. It has been reported that in KwaZulu Natal, the doctor-patient ratio stands at 2.9 medical officers per 10,000 population (Gaede and Versteeg, 2011). Consequently, overcrowding in these limited facilities becomes inevitable, leading to longer waiting times, reduced care quality, and strained resources. Moreover, as patients are compelled to travel longer distances for medical care, treatments are delayed and patients present themselves to healthcare facilities when preventive services are no longer effective.

Acknowledging the challenges in the healthcare sector, initiatives such as deploying mobile healthcare units to reach remote communities and provide essential medical services have been undertaken (Department of Health, 2018). Efforts have also been made to construct and upgrade healthcare facilities in underserved regions. Recognizing the importance of investing in human capital and addressing access imbalances, the department has implemented strategies aimed at attracting and retaining healthcare professionals in rural areas, thereby improving access to skilled medical care.

3.2.4 Governance in Healthcare

Governance structures significantly influence the quality and accessibility of healthcare services and play a crucial role in determining the equity of service delivery. Effective governance is fundamental for the smooth functioning of any healthcare system. The World Health Organisation Report (2008, p.3) defines governance as *providing policy guidance for the entire health system, ensuring the coordination of actors and regulation of various functions, levels, and stakeholders within the system, optimizing the allocation of resources, and maintaining accountability towards all stakeholders.*

In South Africa, the governance structure is vital in guaranteeing access to quality healthcare services for all citizens. The South African healthcare system's governance framework comprises a mix of public and private sector entities, each contributing to the provision of healthcare services. The multifaceted relationships existing at various levels in the health ecosystem demonstrate that the government is not the sole actor in the governance of health services. While the Department of Health assumes overall oversight, consensual and transactional agreements with the private sector, international organisations and donors allow all related parties to contribute to policy development governing health service provision (South African Health Review, 2011). The government's central role lies in directing the health system through its delegated authority to deliver services on behalf of citizens entitled to public health services under the social contract between the government and its citizens (Van Olmen et al., 2012). Therefore, the government serves as a mediator and coordinator among stakeholders to promote equity, efficiency, and sustainability in the delivery of health system services (Petronytė et al., 2016).

Figure 3.4:The structures of governance in South Africa

The healthcare system operates under a decentralized structure, with the National Department of Health overseeing Provincial Health departments (Figure 3.4). The National Department of Health is responsible for setting the overall strategic direction through the formulation of healthcare policies and coordination of the healthcare system. Furthermore, its responsibility also includes allocation of resources to Provincial spheres and establishes regulatory standards.

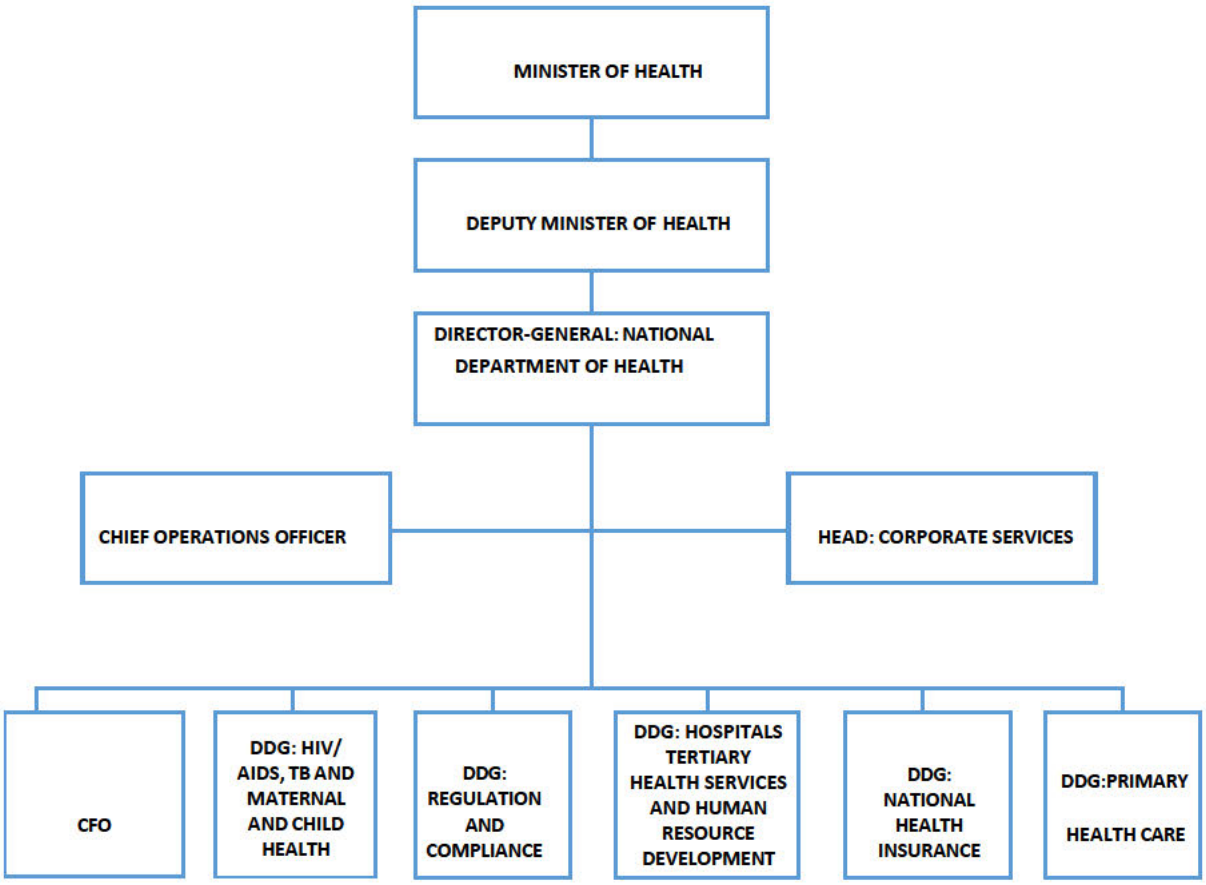

Figure 3.5: National Department of Health

Source: DOH (2018)

At the national level, the National Department of Health (NDOH) Ministry, led by the Minister of Health, is responsible for providing oversight of national health-related issues. The Director-General serves as the administrative head of the department responsible for implementing policies and managing day-to-day operations. Various directorates and divisions within the department focus on specific areas, such as primary healthcare, communicable diseases, non-communicable diseases, health infrastructure, and more (Figure 3.5). The National Health Council advises the Minister of Health on healthcare matter and facilitates coordination between national and provincial health departments. They also responsible for ensuring alignment with the National Health Insurance objectives. Additionally, there are various specialized entities under the Department of Health, including the South African Medical Research Council (SAMRC), the National Institute for Communicable Diseases, and the South African Health Products Regulatory Authority, which oversee research, disease control, and drug regulation, respectively (NDOH, 2019).

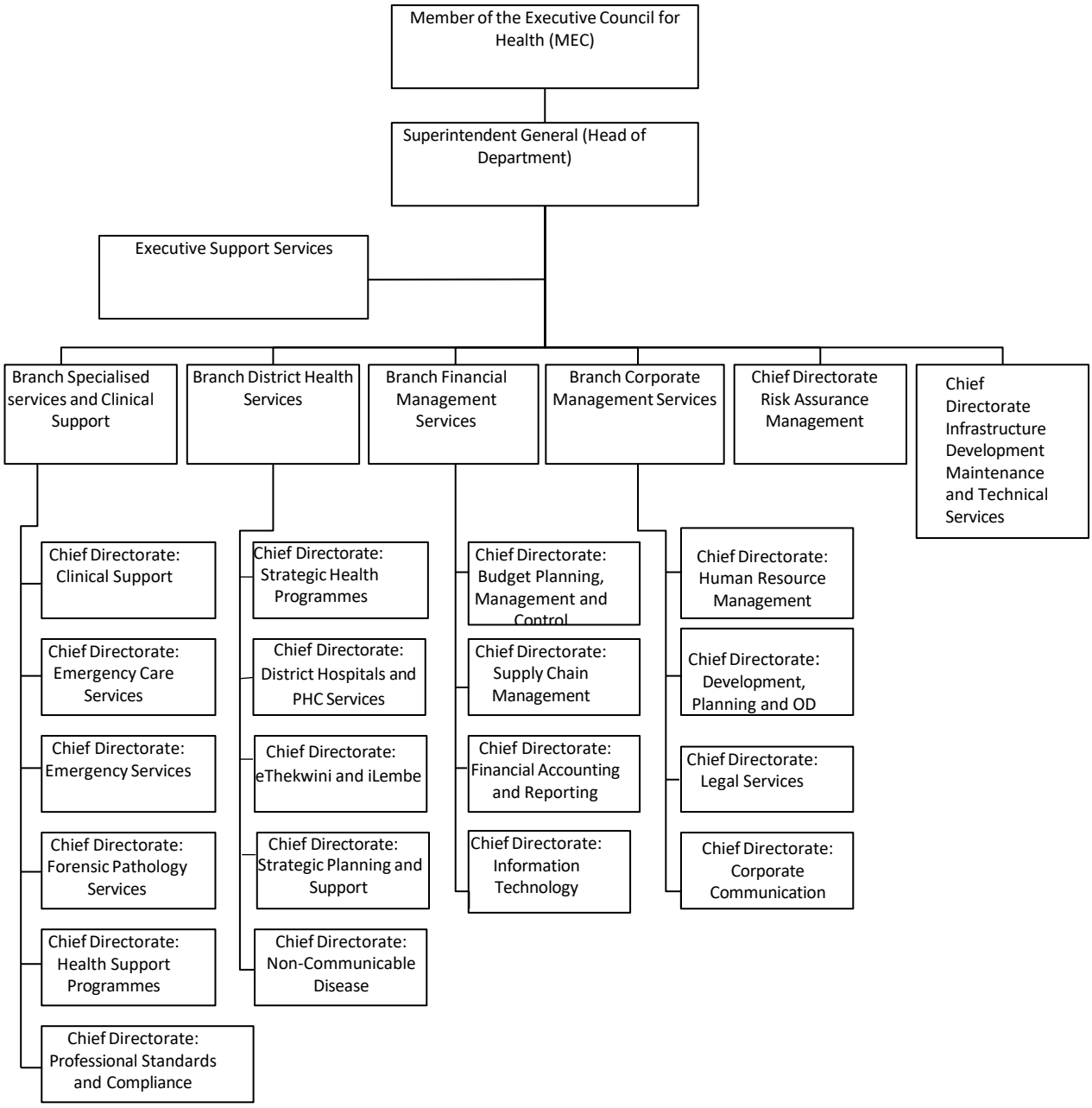

Figure 3.6: Provincial Department of Health: KwaZulu-Natal

Source: DOH (2018)

South Africa is divided into nine provinces, each with its own Department of Health. Provincial departments bear the responsibility of implementing National Health policies at the regional level (Figure 3.6). This entails managing healthcare facilities and overseeing service delivery. Healthcare services are further organized at the district level. District Health offices coordinate and manage healthcare activities within their respective areas. The National Health Act (No. 61 of 2003), in section 30 which relates to the district health system, states that services rendered in such establishments must have due regard to the principles laid down in the

Constitution of SA (Sections 27 and 195). In line with the Act, District Health Services are tailored to offer comprehensive community-based healthcare and health promotion to the public. The provision of healthcare services at District level occurs at various facility levels which include clinics, community health centres, district hospitals and tertiary hospitals. These healthcare facilities cater to different levels of care spanning from primary care to specialized treatments.

Each regional hospital is led by a Chief Executive Officer, formerly known as a Hospital Manager. The Chief Executive Officer receives support from various key roles that include the Medical Manager, Human Resource Manager, Nursing Manager, Finance Manager, Systems Manager, and Public Relations Officer.

Analyzing the governance structure of the South African healthcare system through the lens of leadership theories reveals valuable insights into how individuals guide, influence, and shape healthcare governance (Kumar, 2013). Two prominent leadership theories, transformational leadership and servant leadership, provide perspectives on how leaders can influence governance structures (Taylor, 2009). Transformational leadership theory emphasizes the role of leaders in inspiring and motivating followers to achieve exceptional outcomes. In the context of South African healthcare governance, transformational leaders at the governmental level can drive policy changes leading to positive health outcomes. By articulating a compelling vision for a healthier nation and fostering collaboration among stakeholders, transformational leaders can create a healthcare system addressing South Africa's unique challenges, such as health disparities and access to quality care. Servant leadership theory centers on the leader's dedication to serving the needs of others, translating into a focus on patient-centered care in healthcare. The South African healthcare governance structure can benefit from servant leaders prioritizing patient and community well-being. By advocating for equitable access to healthcare services, ensuring patient safety, and fostering a culture of compassion, servant leaders can establish a healthcare system placing patients at the core of its operations

3.2.5 Leadership Theories

The South African healthcare system's governance structure can be analyzed through the lens of various leadership theories. Leadership theories provide valuable insights into how individuals guide and shape through influence the governance of healthcare systems (Kumar, 2013). The organograms presented exhibit a distribution of leadership roles. Distributed leadership theory emphasizes that leadership isn't limited to a single individual but is distributed among various stakeholders (Weberg, 2013). In the context of South African healthcare governance, distributed leadership encourages collaboration among government

bodies, healthcare providers, civil society organisations, and communities. This approach nurtures shared decision-making thereby allowing those closest to healthcare challenges to contribute to policy formulation and implementation. This bottom-up approach can result in more effective solutions tailored to the unique needs of different communities.

Two prominent leadership theories, transformational leadership and servant leadership, offer perspectives on how leaders can impact governance structures (Taylor, 2009). Transformational leadership theory emphasizes the role of leaders in inspiring and motivating followers to achieve extraordinary outcomes. In the context of South African healthcare governance, transformational leaders at the governmental level have the potential to drive policy changes that result in positive health outcomes. By articulating a compelling vision for a healthier nation and fostering collaboration among stakeholders, transformational leaders can create a healthcare system that addresses the unique challenges faced by South Africa, such as health disparities and access to quality care. Servant leadership theory focuses on the leader's commitment to serving the needs of others. In the healthcare system, this translates to prioritizing patient-centred care. The South African healthcare governance structure can benefit from servant leaders who prioritize the well-being of patients and communities. By advocating for equitable access to healthcare services, ensuring patient safety, and fostering a culture of compassion, servant leaders can drive a healthcare system that places patients at the heart of its operations.

While leadership theories offer valuable insights, challenges within the South African healthcare governance structure persist which may affect the efficacy of the leadership styles employed. Inefficiencies emanating from resource disparities and historical inequalities can hinder the application of leadership theories. Neufeld et al. (2010) affirm the positive relationship between transformational leadership and performance at various levels. Transformational leaders may encounter resistance from engrained systems that affect the culture of the organisation. Servant leadership may be compromised by resource constraints which then make it challenging to serve the needs of others and provide the intended care to patients. Additionally, distributed leadership may struggle due to unequal access to decision-making platforms. The governance structure has faced challenges in terms of leadership accountability and resource management. Weaknesses in accountability mechanisms have led to issues such as mismanagement of funds and poor service delivery (Maphumulo and Bhengu, 2019).

In response to the prevailing healthcare challenges which were discussed in the preceding section, the government has introduced a healthcare charter, aiming to foster collaboration between the public and private sectors. This charter seeks to tackle issues of accessibility,

inequality, and elevate the overall quality of health services. Notably, countries with a lack of universal healthcare systems often contend with pronounced health inequalities.

3.2.6 National Health Insurance

The South African government has contended with the challenge of providing equitable and comprehensive healthcare services to its diverse population. Historically, the nation has been plagued by a two-tiered system of well-resourced private sector and poorly resourced public sector. The implementation of a National Health Insurance system has emerged as a solution to gradually transform the existing unequal and racially skewed health system (Kleinert and Horton, 2009). National Health Insurance aims to make the public sector more appealing for skilled human resources, thereby mitigating the current bias in favour of the private sector (Mills et al., 2012). The National Health Insurance endeavours to level the healthcare playing field by providing universal access to medical services, irrespective of one's socioeconomic background. The proposed National Health Insurance Bill asserts that pooling financial resources from various sources, including taxpayers and employers, will reduce the financial strain of healthcare. Subsequently, this will ensure that marginalized communities gain access to essential medical services. Moreover, this will potentially alleviate the strain on overstrained public healthcare facilities and enabling citizens to access necessary care without financial hardship. It would achieve this by the expanding medical facilities and recruiting the required skilled healthcare professionals who are able to provide specialized treatments. This influx of resources is said to improve the overall quality of healthcare services through the deployment of advanced medical technologies (NHI Bill, 2019).

Okorator (2012) raised concerns about the feasibility of implementing the , National Health Insurance system given the challenges faced by the public sector under government management over the past decade. In support, Maphumulo and Bhengu (2019) indicated that a decline in quality health care over the years has caused the public to lose trust in the healthcare system in South Africa. Their stance suggests that those who can afford to pay for medical services opt to do so instead of reliance on the public sector services. This is in line with the study conducted by Mack (2011) which highlights concerns that the government may lack the necessary capacity to administer such a multifaceted and large-scale program, potentially leading to inefficiencies caused by mismanagement of resources and corruption. Netshitenzhe, (2012) posits that significant limitations that must be considered which include financing of the National Health Insurance system in a country where a considerable portion of the population lives in poverty. Implementing the National Health Insurance system would necessitate significant financial resources, which the government will have to mobilize through increased taxation or borrowing. Given South Africa's current economic climate, it may be

challenging to secure sufficient funding for the National Health Insurance system, potentially impacting the quality of care provided under the program.

Furthermore, there were concerns about the National Health Insurance system potentially overwhelming the already strained public healthcare system. Drawing on experiences from other countries, Brazil's structural weaknesses, economic and political crises, and austerity policies that have capped public expenditure growth are threatening its sustainability and outcomes (Rodriguez-Rincon et al., 2019). In this country, structural problems persist which include gaps in organisation and governance. Additionally, low public funding and suboptimal resource allocation exists. Consequently, large regional disparities exist in access to healthcare services and health outcomes resulting with poorer regions and lower socioeconomic population groups being the most disadvantaged. Drawing from the experiences of Brazil, it can be argued that the implementation of the National Health Insurance system necessitates a significant expansion of the public healthcare system. The current overstretched and under-resourced state of the public healthcare system may pose challenges in meeting the heightened demand for healthcare services under the National Health Insurance system (Matsoso and Fryatt 2013). Thus, a careful management approach is imperative to prevent an overwhelming influx of patients from burdening healthcare facilities and professionals.

3.2.6.1 Approval of the National Health Insurance Bill

Considerable strides have been made toward the implementation of the National Health Insurance system since its initial discussions in the early 1900s. The publication of the Green Paper on National Health Insurance system in 2011 delineated the government's vision for a more equitable healthcare system, proposing the establishment of a single National Health Insurance fund to finance healthcare services and ensure access for all citizens. Subsequently, the 2017 White Paper on National Health Insurance system provided more detailed plans for the system's structure and functioning, aiming to achieve universal access to quality healthcare services through the establishment of a single-payer system. The phased implementation of the National Health Insurance system was proposed over a 14-year period, starting with pilot projects and focusing on enhancing service delivery platforms and overall quality improvement in the public sector during the initial five years. The introduction of the National Health Insurance Bill to Parliament in 2019 outlined the legal framework for the establishment and operation of the National Health Insurance Fund, financed through various sources, including taxes. However, the National Health Insurance Bill has faced criticism and debate, particularly concerning its feasibility, funding mechanisms, and potential impact on the private healthcare sector (Struweg, 2020).

The healthcare workforce is pivotal to the success of the proposed healthcare system, necessitating strategic planning and development of human resources to meet the population's needs. Training and retaining an adequate number of skilled medical personnel to meet increased demand will be pivotal in ensuring the system's success. The department must also accept that in order to attract and thereafter retain qualified and competent employees, management need to create work conditions that sustain and promote employee motivation and a sense of well-being (Fernet et al., 2012). A balanced approach that considers South Africa's unique circumstances is crucial in ensuring the National Health Insurance system's effectiveness while addressing its limitations.

The comprehensive implementation of the National Health Insurance system is anticipated to be a complex and lengthy process, necessitating meticulous planning and consideration of various factors (Tollman et al., 2008). Health organisations are intricate and the interplay between their structure and how they function have an influence on the change process required. The intricate nature of leadership in such institutions is evidenced by rapid policy changes and public regulatory framework adjustments including uncertainties stemming from managing multiple missions and stakeholders (Eddy, 2009). The success of the National Health Insurance system hinges on the effective management of the program.

3.2.7 Planning towards paradigm shift in National Imperatives

The preceding section introduced the framework which the government has adopted in order to curb the disparities that exist in the current healthcare framework. This shift necessitated for planning in order to align the priorities to the resources available for the implementation of the national imperatives. The introduction of the National Health Insurance system highlighted the need of increased human capital. Bateman (2010) posits that South Africa grapples with a shortage of doctors in its public health system, this then prompted the government to strategize solutions that could assist in addressing this challenge. Motsoledi (2013) asserts that South African universities could only admit a limited number of students based on their enrolment plans and in line with their approved accreditation for their sites. This then resulted in the number of medical students being insufficient to meet the country's healthcare demands. Further exacerbating the situation, many doctors either migrate abroad or choose to work in private sector , leaving a scarcity of practitioners in public sector. Such alternatives included building more government-based institutions of higher learning to educate medical practitioners, allow private institutions to offer the programme to students who could afford the medical fees or alternatively send students to foreign countries to study medicine.

A pivotal step in addressing the aforementioned challenges related to the supply and demand of doctors in the country was the establishment of an agreement between Cuba and South

Africa. This agreement aimed to strengthen historical ties between the two countries and to allow students to be trained in Cuba. The targeted students were predominately identified and trained to increase the number of doctors in the country, particularly in rural areas (JAM, 2013). The resultant Medical Diplomacy, perceived by Feinsilver (2010) as a model for international relations, yielded mutual benefits for both nations.

The Cuban medical diplomacy has been integral to its foreign policy since 1959, providing sustained assistance to developing countries globally (Kirk and Erisman, 2009). Offering both long-term aid and responding to short-term emergencies, Cuba extends free medical education to foreign students, contributing to the sustainability of its assistance. This medical diplomacy serves as a form of soft power, enhancing Cuba's global standing and projecting an image of development and technological prowess in a challenging geopolitical landscape (DeVos et al., 2007)

3.2.7.1 Fundament differences between the South African and Cuba Health Systems

A comparative analysis between the healthcare systems of Cuba and South Africa reveals substantial differences. Notably, both countries employ distinct healthcare models, emphasizing the need for a nuanced understanding of their respective approaches.

Cuba, is a developing country with two concurrent systems operating side by side. Its prevailing socialist economy is the most prominent of the two systems, notably recognized by the majority of its citizens. This system offers free education and healthcare to a majority of the citizens. The substantial investment directed towards education and healthcare sectors has elevated Cuba's global standing (Feinsilver, 2010). Campion and Morrissey (2013) indicated that Cuba possesses one of the world's leading healthcare systems that is characterized by an abundance of physicians, ensuring that each family has access to a readily available family doctor without charge. Despite its constrained economic resources, Cuba's healthcare system has effectively addressed issues that more affluent nations have struggled to resolve. The Cuban healthcare model is distinguished by a well-structured, prevention oriented approach which prioritises preventative measures over curative interventions.

This healthcare model comprises of community-based family physicians, assisted by nurses and other healthcare professionals, who assume the responsibility for delivering primary healthcare and preventive services to their patients (Drain and Barry, 2010). The physician-patient ratio in urban areas is 1:1000, fostering an intimate understanding of patients by their physicians. This low ratio enables patients to be categorized based on risk levels, with scheduled home visits occurring at least annually and more frequent visits for those with

chronic conditions. Referrals to Poly clinics are made as needed. Moreover, the country is renowned for its exceptionally high vaccination rates. They also have a life expectancy of 78 years and an infant mortality rate of less than 5 per 1000 births (Campion and Morrissey, 2013). These favorable health indicators can be attributed to enhanced education and nutrition, which effectively address the social determinants of health. With a literacy rate of 99%, facilitated by free education incorporating health education into the curriculum from an early age, Cuba demonstrates a commitment to holistic well-being.

In contrast to systems, such as the one prevailing in South Africa, which emphasize consumer choice and individual alternatives, the Cuban health model operates in a unique environment where eighty percent of the population is employed by the government. The government then centrally manages budgets which make it possible for the allocation of funding towards universal health coverage. The country's limited resources and technology, coupled with restricted internet connectivity, result in communication challenges with other nations, necessitating domestic production of medications (Keck and Reed, 2012). In the South African context, the use of medical aid schemes is prevalent in the working class and allow them the choice to access private medical care. Citizens who are unable to afford private medical aid then turn to the government's public healthcare system, which lacks the facilities available in private institutions. National Health Insurance system, similar to universal healthcare systems in other countries, is poised to address this issue.

3.2.7.2 Medical Training in Cuba

Cuba extends a commendable six-year medical programme to students from developing countries, tuition-free for low-income students committing to practicing medicine in underserved communities after they graduate. Due to the nature of training the Cuba-trained doctors receive, they exhibit a distinctive approach by willingly serving in impoverished communities. This includes making house calls a routine practice and being available day and night at no cost as part of their medical practice. Their holistic "treat the patient as a whole" philosophy diverges from the conventional focus on specific health issues (De Vos et al., 2007).

South African students that are selected and awarded the Nelson Mandela-Castro Fidel Medical Collaboration Programme scholarship are trained in Cuba for six years. These candidates are recruited by the Department of Health from disadvantaged communities across the country with significantly lower medical university entrance threshold (Bateman, 2010). Upon completion of the six-year programme in Cuba, they are allocated to the various South African Universities that offer medical training. As part of the re integration phase, they are required to complete eighteen months of training which assists in re-orientating them to the

South African Health context and the terminology as their studies were predominantly taught in Spanish.

3.2.7.3 Investment in Training Institution

In addition to sending to students to train in other countries, the South African government has also made initiatives aimed at increasing infrastructure for training of healthcare professionals. A University of Health and Allied Science in Limpopo was built with the objective of increasing student enrolment in medicine to address the shortage of medical doctors in the country. This university is slated to merge with the Medical University of South Africa (MEDUNSA), previously linked to the University of Limpopo. Nzimande (2014) posits that the envisioned capacity of this medical school is to train 7,000 students by 2019 and 10,000 by 2024.

The government has allocated nearly a billion rand to enhance the university's infrastructure to meet these ambitious targets. This funding encompasses new off-campus housing for clinical training, modifications to lecture theatres, and the renovation of existing buildings. Notably, the historical financial challenges faced by MEDUNSA, recording losses of up to eighty million per year, prompted the need for sustained funding to ensure its operational continuity (Nzimande, 2014). The merger between MEDUNSA and the new university is anticipated to create a financially and academically viable institution, addressing the existing gap in the country's eight medical schools, as highlighted by Motshoaledi in 2014.

3.3 Section Two: The Higher Education

3.3.1 Higher Education Context

Institutions of learning emerged in ancient civilisation as centres for philosophical, scientific and theological discussions. Perkin (2014) indicated that the medieval period witnessed the emergence of European Universities focusing on religious studies, law, and medicine. The Renaissance era sparked a renewed interest in classical knowledge, subsequently embracing disciplines such as natural science, humanities, and academic freedom during the enlightening period (Alemu, 2018). The industrial revolution further diversified education, leading to the establishment of institutions specializing in engineering, business, and vocational training. In the modern era, higher education has transformed into a global force that empowers individuals and drives innovation thereby shaping the future of humanity. Institutions offer an array of disciplines catering to diverse interests and career paths (Kerr, 1993). Research has become a defining aspect of higher education, with universities serving as hubs for scientific breakthroughs, technological advancements and innovations. The findings of research conducted in these hubs significantly impact economies and societies (Bornmann, 2013). The ongoing evolution of higher education remains closely intertwined with the challenges and opportunities presented by an ever-changing world.

The evolution of higher education in Africa mirrors the continent's dynamic history which dates back centuries. Prior to the establishment of formal universities, Africa boasted intellectual exchange hubs such as Timbuktu which attracted scholars, philosophers, and scientists from various geographical regions (Alemu, 2018). The colonial period introduced Western-style education to Africa, establishing schools and colleges primarily focused on training local elites in skills deemed useful for colonial administration. As colonial powers solidified control, universities were established, often with limited access for indigenous Africans. These institutions perpetuated colonial ideologies and primarily catered to a select few (Woldegiorgis and Doevenspeck, 2013). Post-colonialism, most African countries have prioritized expanding access to higher education. Some have established new institutions of higher learning to address skills gaps and promote national development. Despite the increase in access to higher education, challenges related to affordability and inclusivity persist. Efforts to address inequality in higher education and integrate indigenous knowledge and perspectives into the curriculum remain ongoing effort in most African countries today.

3.3.1 The South African Higher Education System

The higher education system in South Africa is marked by a blend of public and private institutions. Public Higher Education Institution are established for purposes of teaching and learning, research and community engagement. They are regulated by the Higher Education Act (Act No. 101 of 1997) and as amended by the Higher Education amendment Act (Act No. 9 of 2016). Public institutions encompass a well-established university system, comprising of traditional Universities, Universities of Technology (previously known as Technikons), and Technical Vocational Education and Training Colleges (formerly referred to as Further Education and Training Colleges). The key distinction between these establishments lies in the offerings. Traditional Universities provide a diverse range of academic programs spanning various disciplines, while universities of technology primarily focus on applied sciences, engineering and technical fields. Technical Vocational Education Colleges offer practical, hands-on training applicable to the workforce (Badat, 2010).

Inequality is a prominent feature of the South African higher education system. During the apartheid regime, the majority of universities reserved for the privileged group received substantial funding and enjoyed considerable autonomy. The homeland universities on the other hand was designated for disadvantaged groups and were faced with stringent controls and limited funding (Cooper and Subotzky, 2001). The post-apartheid era has witnessed an increase in higher education participation alongside a reduction in public funding. This necessitated a shift in the traditional modes of university organisation and management in South Africa.

3.3.2 The South African Higher Education Context

In democratic South Africa, the pivotal role of higher education extends beyond producing capable professionals; it is fundamentally about fostering critical and democratic citizenship in response to the evolving social and political landscape (McGrath and Akoojee, 2007). Undeniably, higher education plays a central role in cultivating the knowledge, competencies, and skills necessary for graduates to contribute meaningfully to economic development. The acquired skills are instrumental in addressing social equality and supporting social development, aligning with critical government objectives (Asmal, 2007). Consequently, this imperative has prompted transformative measures in academic programs and institutional cultures. These transformations encompass revisiting admission requirements and enrolment targets to provide access to individuals from previously disadvantaged backgrounds. Furthermore, higher education institutions are compelled to thoroughly reconstruct their programs, ensuring curricula align with the evolving knowledge, expertise, and skills

demanded by a dynamic economy (Daniels, 2007).

Historically, higher education institutions attracted individuals of the same class who were exposed broadly to similar socialisation influences and shared common conditions of existence (Barone, 2006). This meant that the social skills, economic backgrounds and language styles were similar, making it easier to differentiate them according to class origins. A trend was seen to emerge post 1994 as universities allowed access to those coming from different social origins and had different educational background in comparison to those who were previously accepted. An important corollary to the preceding statement is that social origins have a strong influence on students' abilities when they enter higher education. Documented literature reveals that students who were from well-resourced secondary schools had a better chance of exceptional performance in matric exit exams than those from underprivileged schools. This then placed the students from indigent schools at a disadvantage when competing for admission into institutions of higher learning. This necessitated the need to revise admission requirements in an attempt to redress inequalities of the past. Moreover, it highlighted a need for academic, financial and psychosocial support for these students (Letseka and Maile, 2008).

3.3.3 Governance in Higher Education

The Higher Education environment has been described by many scholars as complex due to the dynamic nature of these institutions and government relationships that exist (Shattock, 2006; Barnett, 2005). The complexity in governance is further compounded by the various pivotal pillars defining higher education institutions internally and externally. Subsequently, demanding diverse goals and objectives to be achieved by the higher education institutions. Governance in higher education is therefore a complex concept to define, with definitions ranging from those which speak to authority and ability to make decisions to those that speak to structure and process of decision making. Amaral et.al, (2002) posits that a single definition is incapable of capturing the multiple dimension and meaning of governance in the dynamic and complex landscape such as that of higher education. Acknowledging the complexity of governance in higher education, Marginson and Considine (2000:7) define governance as

'that it is concerned with the determination of values inside universities, their systems of decision-making and resource allocation, their mission and purpose, the patterns of authority and hierarchy, and the relationship of universities as institutions to the different academic worlds within the worlds of government, business and community without.'

This definition posits that governance encompasses internal and external relationships and the intersection between them. It further articulates that universities are structured by the inner

world of the production of knowledge and the processes thereof and the larger social and economic environment. Shattock (2010) introduces the notion of governance as operating at multiple levels. Expanding on his theory, he adds that management is the process and structure through which managers strive to achieve the institution's goals.

The massification and commodification of higher education with an emphasis on marker like behaviours among universities has emerged as one of the pillars defining governance in institutions (Lock and Lorenz, 2007). This phenomenon referred to by Slaughter and Rhoades (2004) as academic capitalism has increased the on public institution who now contend with private and for-profit higher education institutions. This has created pressure on public institutions to remain competitive at local and international levels while facing increasing cost of operation and resource constraints. In order for public institutions to remain relevant and sustainable in an academic capitalistic landscape, strong and dynamic leadership is essential.

3.3.3.1 Governance Structures in Higher Education

In South Africa, the Department of Higher Education and Training provides national strategic oversight and leadership on post- school education and training. This government department is responsible for formulating and implementing policies related to higher education. Furthermore, they enact a central role in shaping the overall direction and priorities of the sector (Badat, 2010). The Higher Education Act of 1997 serves as the legal framework for higher education in South Africa, outlining the roles and responsibilities of various stakeholders, including institutions, government bodies and accrediting agencies.

The Council on Higher Education functions as an independent statutory body responsible for monitoring and evaluating the quality of higher education in South Africa. It ensures that institutions adhere to quality assurance standards and guidelines and conducts periodic reviews of programs and institutions (Scott, 2007). Moreover, in line with the Higher Education Act of 1997, the Council on Higher Education play a monitory role and evaluate developments in higher education in order to advise the Minister on higher education matters. The Council on Higher Education discharges its quality assurance mandate through the Higher Education Quality Committee. Programme accreditation in higher education is overseen by the Council on Higher Education who work closely with South African Qualifications Authority. The National Qualifications Framework serves as a comprehensive classification system for comparing qualifications across different education and training sectors, ensuring alignment with national standards and international recognition. The role of SAQA, as stipulated in the National Qualifications Framework Act, is to advance the objectives of the National Qualifications Framework, oversee the further development and implementation of the National Qualifications Framework, and co-ordinate the Sub-Frameworks.

Public Higher Education Institutions, regulated by the Higher Education Act (Act No. 101 of 1997, Act No. 9 of 2016) operate within their Institutional Statutes which contextualize the prescriptions of the Higher Education Act, within an institution's specific context. In order for the statutes to be considered a binding secondary legislation, they are approved by the Minister prior being published in the Government Gazette (De la Rey, 2015).

3.3.3.2 Governance Structures in Universities

As prescribed in the Higher Education Act, governance structure at institutional level are constituted as the Council, the Senate, the Institutional Forum and the Student Representative Council. The Vice-chancellors assume the role of chief executive officers of universities. Their primary role being to provide oversight of the administration within their institutions through policy implementation, managing resources and representing their universities to the broader community (Sayed, 2000). Senate and Academic Boards are responsible for academic matters within universities. They achieve this through overseeing curriculum development and academic policies. They ensure the maintenance of academic standards. Students actively participate in governance through Student Representative Council's. These organisations advocate for student rights and provide input on policies developed at an institutional and national level. They mainly engage in discussions on various issues affecting students. Governance structures outlined in the universities' charters provide a framework for the decision-making process. The powers and governance structures outlined in the universities charter provide a framework for which the decision-making process takes place. The charter and statutes of the South African universities details pertinent information related to the appointment of council members and other major committees and officers (Lock and Lorenz, 2007).

Governance in South Africa's higher education sector is in a continual state of evolution, geared towards tackling the nation's distinct social and economic challenges, all the while aiming to uphold academic excellence and deliver quality education to students (Shattock, 2006). With South Africa's historical backdrop of apartheid, there exists a pronounced focus on fostering transformation and equity within higher education. Initiatives are underway to expand access to tertiary education for historically disadvantaged groups and foster diversity within institutions.

3.3.3.3 Challenges faced by the Higher Education sector

In recent years, South African universities have faced a series of student protests which have challenged issues of governance of higher education institutions. These student movements were driven by a number of reforms, which the students were of the view that they were not

being sufficiently addressed by institutions. Chief amongst those was the demand for free education. These protests highlighted the plight of students in relation to financial exclusion and debt traps which exist in the system, particularly for economically disadvantaged students. Davids and Waghid (2016) posit that students at previously disadvantaged institutions have been routinely protesting against rising fees and costs of higher education since 1994 and were mostly ignored. These protests have accentuated dissatisfaction with the current state of higher education, placing pressure on institutional leadership and governance structures amid diminishing state financial support from the national government.

Traditionally, South African public universities relied heavily on government funding. However, the shift in funding structures has necessitated the exploration of alternative income streams for sustainability (Steyn and DeVilliers, 2007). As universities are now positioned as vehicles of economic development, they face the challenge of findings means of being financially viable amid the escalating costs of education. The corporatisation of higher education has emerged as a response, leading institutions to adopt corporate models to prioritize revenue generation. This approach emphasizes the need to attract research funding from external entities and offer marketable degrees that would increase student enrolment. Moreover, the emphasis is on how the departments within the institution can generate third-stream income. While this strategy brings in additional resources to the institutions, it also raises concerns about compromised academic values and an overemphasis on profit-driven goals which may potentially impact on the quality of education (Couper and Worley, 2010).

Concurrently, discussions surrounding the decolonisation of knowledge have gained prominence in the higher education landscape (Leibowitz, 2016). South African universities are currently facing a critical juncture where their fundamental purpose and societal role are under scrutiny. The ongoing dialog about the necessity of decolonizing the curriculum and ensuring higher education is representative of the country's diverse population gained traction during the nation student protest action (Auerbach, 2017.). Simultaneously, there exists a disconnect between the skills possessed by graduates and the skills demanded by the job market. The misalignment between educational programs and industry requirements has been cited as a significant factor contributing to the country's high unemployment rate.

The financial instability of institutions impacts on their ability to retain staff resulting in staff shortages and inadequate maintenance of infrastructure. Staff attrition is more prevalent in financially disadvantaged institutions. These institutions lose their skilled academics due to better prospects in well-resourced universities or private sectors. Furthermore, others seek for better opportunities abroad contributing to the country’s brain drain quandary. Netswera and Rankhumise (2005) highlights that the supply versus demand conundrum exacerbates the shortage of qualified educators and researchers within academic institutions result in retaining

skilled professionals within these institutions increasingly costly (2005). Furthermore, there is a risk that these sought-after individuals may be enticed by the private sector, further diminishing the talent pool available for academia.

The primary role of academics in educational institutions encompasses involvement in teaching and learning, research and community engagement initiatives. The development of leadership and managerial abilities has emerged as an additional imperative in enabling smooth operation of universities. Academics are required to take up positions of leadership such as academic leaders and management of departments and clusters within their respective disciplines. Cassie et al. (2008) suggest that limited research exists that assesses the preparedness of academics in advancing into leadership and managerial positions in higher education. Additionally, the transition into the largely administrative roles of management require preparation in the areas of governance policy interpretation and confronting colleagues as part of the line management responsibilities. It also requires insight on the allocation of resources and management of finances within the department. Gmelch (2002) posits that some academic leaders face the challenge of lack of administrative experience and role conflict and ambiguity. This highlights the need for leadership and management training to be provided for academic staff interested in assuming leadership roles in order to facilitate the process of capacity building for future leadership in the higher education landscape.

This challenge is compounded by the difficulty in recruiting and retaining specialist staff, who are increasingly lured by better remuneration in the public and private sectors. Medical schools, in particular, face this issue, with the demand for specialist practitioners in hospitals surpassing the available supply (Bickel and Brown, 2005). The scarcity of incentives in academia often leads specialists to transition to private practice, posing a challenge for institutions without sufficient financial subsidies.

The highlighted challenges faced by higher education institutions call for a heightened responsiveness to the dynamic higher education landscape while preserving their autonomy and fulfilling their responsibilities to stakeholders. This necessitates strong leadership and governance structures that implement innovative and context-specific governance models and put in place effective monitoring structures and systems that would assist in them realising their intended goals (Marginson and Considine, 2000). Such leadership structures must include adept managers capable of bridging the gap between strategic decision-making and the practical implementation of those decisions at the operational level (Shattock, 2006).

3.3.4 Financial Sustainability

South Africa, like many other governments, has embraced quasi-market approaches to the management of its higher education institutions. This approach shifts universities from being state agencies to becoming public corporations with increased authorities over input and resource use with accountability for outputs and performance (Dill, 2001). The university cultures in the country have transitioned from traditional collegium models to more entrepreneurial and corporate forms of organisation (Jarzabkowski, 2002). With external audit and quality mechanisms imposing greater accountability, universities are expected to provide transparent and well-justified rationales for their resource allocation procedures. Eaton et al. (2016) posits that the funding received by public institutions of higher learning in South Africa is insufficient to cover all operational costs. Consequently, universities often seek to compensate for these shortfalls through third-stream incomes and tuition fees. Funding of public universities is managed by Department of Higher Education and Training. Furthermore, they provide financial oversight ensuring that funds are used effectively and transparently thereby holding institutions accountable for their financial decisions.

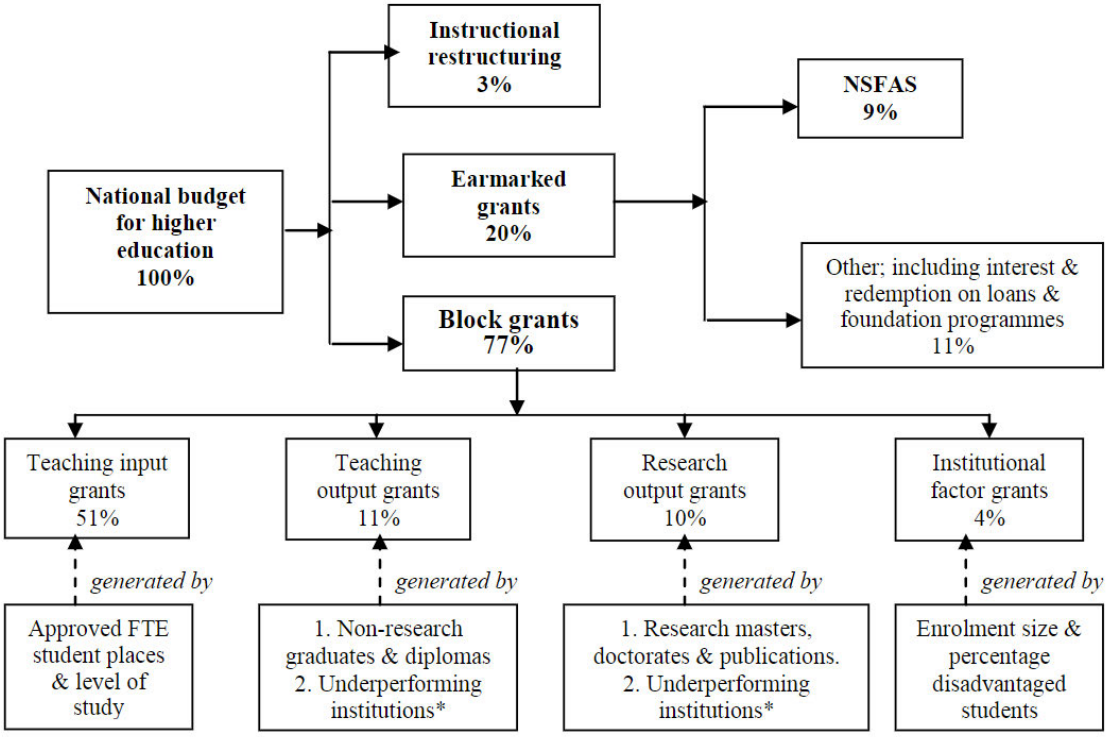

Figure 3.7:Division of government budget for higher education

Source Simkins (2016)

Steyn and DeVilliers (2007) asserts that funding higher education rests on three pillars: a policy of increased participation; greater responsiveness of the higher education sector to the changing social environment and increased cooperation between the higher education sector, the state and civil society. Illustrated in Figure 3.7 is the divisions of government's allocations and subsidies. Simkins (2016) denotes that the state allocation in higher education increased from R1.422 million in 1987 to R10.215 million in 2005. However, considering that the student numbers increased by 36% during that period, this increase was marginal (De Villiers and Steyn, 2009). Furthermore, the appropriations per FTE student decreased by 1% per annum during the period 2000 to 2009 (HESA, 2011). This explicates the clear shift adopted by institutions from first-stream income provided by the government towards second and third-stream funding.

The financial sustainability of universities in South Africa necessitated for gravitation towards the second and third stream income to generate revenue. This resulted in frequent raising of tuition fees, which is one of the main strategies public universities have resorted to mitigate declining state funding (Wangenge-Ouma and Cloete, 2008). Steyn and De Villiers (2007) posit that tuition fees at universities increased by 49% between 1986 and 2003. This fee increase was not without controversy, the dissatisfaction owing to the escalating fees manifested in the form of student protests that were experienced by some universities (HESA, 2008).

Providing financial aid to students from disadvantaged backgrounds is essential to increase access to higher education. However, funding these initiatives can strain university budgets. NSFAS merged as a way to allow those with disadvantaged backgrounds to participate in higher education. This loan essentially covers the costs of education for those who benefit from it and 40% is converted into bursaries should the students meet the minimum pass requires as stipulated in the policy. The NSFAS report (2016) indicated that the repayment of these loans remains a problem, thus questioning the sustainability of this funding source.

Research is a vital component of universities. However, securing research funding, especially in competitive fields, can be challenging. Research initiatives are further used by universities to attract third stream income. The study conducted by Steyn and De Villiers (2007) highlights that the capacity to raise third-stream income depends on the institutions' history, culture, core business and standing in communities. They further argue that Institutions with an established research tradition and those offering industry-related programmes are in a better position to engage in joint ventures with the private sector and raise third-stream income. Those who primarily provide social sciences and have weak research cultures may have challenges with

this. In agreement, Watson and Hall (2015) posit that research-focused institutions form more lucrative partnerships with industry than those that offer the humanities and social sciences.

As the competition for students increases, universities need to create a distinctive image in the market place (Polat, 2011). A positive institutional image can potentially increase its chances of attracting staff and students of a higher caliber, Universities globally are competing to attract international students and researchers. Building international partnerships and maintaining a competitive edge can strain finances. Maintaining a positive brand not only requires focus on the quality of the programmes offered but also the infrastructure the institution possesses which contribute to the overall culture of the university. Maintaining infrastructure and operations within a University requires financial resources.

Furthermore, Attracting and retaining qualified staff is important for quality education and research. Staff salaries, the benefit they receive, and their academic development can contribute to financial pressures for the university. For this reason, universities are exploring alternative revenue sources such as partnerships with industry, offering short courses and commercializing research outcomes in order to generate income. Moreover, many universities are implementing cost-cutting measures and efficiency improvements to make the most of available resources. Watson and Hall (2015) indicated that encouraging alumni and private individuals to contribute through donations and philanthropy can provide additional financial support. McGregory (2014) posits that diversifying revenue streams through online education, executive education programs, and consulting services, can contribute to financial stability of institutions.

3.3.4.1 Financial sustainability at University of KwaZulu Natal

The University of KwaZulu-Natal has articulated a sustainability strategy within its strategic plan for 2017-2021. This strategy aligns with the core values and mission of the university, emphasizing financial growth as a critical component of institutional sustainability. Sustainability, in the context of University of KwaZulu-Natal, is a forward-looking, long-term focus that encompasses various aspects linked to and integrated with teaching and learning strategies. While institutional sustainability covers a broad spectrum of factors, financial sustainability is a pivotal element in ensuring institutional stability (UKZN, 2016).

Financial sustainability for a university means that it can fund its long-term expenditures without accumulating unmanageable liabilities that could jeopardize its future (Crowther, 2018). Monitoring the institution's performance against predetermined indicators is essential, but it should also extend beyond short-term financial health and survival.

Within the framework of financial sustainability, University of KwaZulu Natal has established

specific objectives inline with its strategic priorities. These objectives include:

- Efficiency in the management of key resources.
- Delivering strategic priorities at a competitive rate.
- Developing infrastructure to accommodate the increasing number of enrolments.
- Enhancing the ability of academic units to generate surpluses for reinvestment and attract funding.

Nkoana and Ditshaba (2017) posits that a sustainability strategy must consider the challenging external environment affecting South African academic institutions. For decades, traditional universities have been key players in the national knowledge economy, enjoying public sector financing and statutory protection. However, this model has come under pressure due to changes in the political, economic, social and technological landscapes. This has resulted in a decline in their market shares as monopoly providers of knowledge. Simultaneously, there has been an increase in the number and diversity of knowledge providers in the market. This shift has empowered consumers to choose where and how they access knowledge.

In response to these challenges, universities such as University of KwaZulu-Natal need forward-looking strategies to remain competitive in a dynamic environment while preserving high-quality educational experiences for their students. The emerging market demands flexible and interdisciplinary channels for knowledge delivery that can meet users' needs in terms of timing and location. As the University of KwaZulu-Natal continues to grow, there is mounting pressure to accommodate this growth. The significant increase in headcount enrolments from post-merger has strained existing infrastructure and facilities. This growth highlights the need for proactive campus spatial planning and infrastructure development to meet future demands (UKZN, 2016).

3.3.5 Resource Allocation in Higher Education

Universities have traditionally been considered professional bureaucracies loosely coupled systems (Mintzberg, 1979) or organised anarchies that are resistant to formal direction and control (Cohen, 1974). However, the narrative has changed over the years given the increasing competition for scarce resources in the public sector and universities in particular (Watson and Hall, 2015). The higher education funding mechanism has evolved from its first introduction in 1953. Historically, the allocation of resources to South African universities was disproportionately distributed due to systemic inequalities. This resulted in some universities being well resourced over others. As the country transitioned to a democratic state, attempts were made to rectify the inequalities that existed through equitable distribution of resources.

The resource allocation model emerged as a strategic solution to promote social justice and address the historical disadvantages in the higher education landscape.

In 2003 a new funding framework was introduced. This framework enabled the distribution of government grants to academic institutions based on their ability to perform and meet the objectives, in line with the national goals and priorities (Steyn and DeVilliers, 2007). The Resource allocation model (RAM) was incorporated in the higher education space as a tool to enable academic institutions to implementing strategic directions that they may deem crucial. This origin of this model is in the management field and provides an important mechanism for compliance and control in organisations.

The Resource Allocation Model is a critical framework that determines the distribution of funds among public universities. The system is designed to allocate resources and optimise the use of available funds while acknowledging the unique challenges faced by different universities across the country. At its core, the resource allocation model seeks to redress historical inequalities by allocating a larger share of funds to institutions that were previously disadvantaged (Johnson and Turner, 2009). These institutions often served marginalized communities and faced numerous challenges in terms of infrastructure, research capacity, and student support services. By redistributing resources to these institutions, the model aims to level the playing field and provide an equal opportunity for students across the nation to access quality education.

Santos (2007) articulated that Resource Allocation Model considers various variables to determine the allocation of funds. These variables include student enrolment, research output, the number of postgraduate students, and the demographics of the student population. By considering these factors, the model attempts to incentivize universities to excel in areas such as research and postgraduate education while accommodating the diverse needs of the student body. This assists in balancing the diverse needs of an institutions academic research and units, promoting equitable access to quality education thereby contributing to the financial sustainability of institutions.

While the resource allocation model is designed to promote equity, it also respects institutional autonomy and encourages accountability. Universities have the flexibility to allocate funds based on their unique priorities, academic programs, and development plans. This arrangement encourages innovation, specialisation and responsiveness to local contexts. Simultaneously, institutions are held accountable for demonstrating positive outcomes, transparent financial management, and adherence to quality standards.

Implementing an effective resource allocation model is not without challenges. Striking the right balance between promoting equity and rewarding excellence requires continuous fine-

tuning (Brits, 2010). Universities in more affluent regions might express concerns about their reduced funding share, while others may face challenges in meeting performance metrics due to historical disadvantages.

In the context of finances within universities, centralised and decentralised are concepts used to distinguish relationships between senior management and budget centres. Budget centres are cost centres that primarily reside within the colleges in which academic departments and central divisions are housed. At the University of KwaZulu Natal, the academic departments and disciplines are housed in one of the nineteen Schools which belong to one of the four Colleges.

The degree of centralisation and decentralisation of resource allocation has specific implications related to strategic direction and locus of control. A centralised Resource Allocation Model means one where resources are authorised and allocated at senior management team from a central pool on a zero basis. This allows redeployment of resource according to strategic priorities at an overarching university level. The decentralised one on the other hand are controlled by the departments who are responsible for their own strategic direction, income generation and financial viability. In this way they have the autonomy to be responsive to strategic initiatives within their disciplines. Most universities operate within the extremes of the models defined above. Table 3.1 summarises the strategic implication of centralised and decentralised resource allocation model.

Table 3.1: Strategic implications of centralised or decentralised RAM

Source: Steyn and DeVilliers, 2007).

Indicators	**Centralised**	**Decentralised**
Strategic direction	• Longer term strategies • Higher overarching strategic direction	• Existing strengths • Higher departmental strategic responsiveness
Cross- Subsidy	• Greater cross subsidy	• Lower cross- subsidy
Locus of Control	• At the centres • Bids for central resources	Departmental Heads Budgetary performance indicators

3.3.6 Decentralisation in Education

Decentralisation in education is a transformative concept that shifts decision-making authority and responsibilities from centralized authorities to local stakeholders. Bjork (2004) argued that this approach allows for active participation in shaping educational environments as those who are at grassroot are better equipped to make decisions that align with their specific needs. Caldwell (2009) further articulates that it is a promising strategy for the creation of a more learner-centred and inclusive adaptable systems which can prepare students for the challenges of the future. By allowing for more flexible and contextually relevant solutions, decentralisation contributes to improved educational outcomes and greater equity in access to quality education. Sleegers and Wesselingh (1993) articulates the need for ensuring consistent quality across diverse contexts in order to avoid potential inequalities that can be result from decentralisation.

Tan and Ng (2007) argue that there is an increasing trend towards decentralisation in education as this concept often encourages innovation and experimentation. This implies that it allows for the space for new teaching methods and learning resources could be introduced, which are tailored to students' needs (Caldwell, 2009). This culture of innovation contributes to the evolution of best practices within the education sector. It can also improve the allocation of resources by allowing local stakeholders to allocate funds based on their specific priorities. This leads to more efficient resource utilisation, as decisions are informed by a deep understanding of local needs and challenges. However, Sleegers and Wesselingh (1993) caution that striking the right balance between local autonomy and national standards require careful planning and monitoring.

Through decentralisation, professional development and capacity building at the local level is made possible (Bjock, 2004). Educators have the opportunity to engage in collaborative learning and exchange of ideas within their communities, enhancing their teaching practices. Dyer and Rose (2005) emphasises that with greater involvement in decision-making, stakeholders hold each other accountable for the quality of education. Furthermore, it allows for transparency in operations, as they are directly answerable to their local constituencies. While decentralisation offers numerous benefits, careful planning and monitoring is required in order to ensure that local spheres do not deviate from the intended goal of the institutions.

3.3.7 Africanisation of the Curriculum

Africanisation of the curriculum is a concept that seeks to infuse African perspectives, knowledge and values into educational content and materials. Hay (2003) describes Africanisation as a conscious and deliberate assertion of nothing more or less than the right

to be African. He further implies that Africanisation places the African world view at the centre of analysis, advocating that education should be reflective and be informed by the culture, experiences and aspirations of the majority. The aim is to create a relevant curriculum that is more inclusive and representative of the African continent and its diverse people. This approach challenges the historically Eurocentric nature of education and promotes a more balanced and culturally sensitive learning experience (Le Grange, 2018).

Africanisation of the curriculum acknowledges the importance of recognizing and valuing the traditions and cultures of the African content and acknowledging the diverse indigenous languages that are in existence. Moreover, It seeks to bridge the gap between the taught curriculum and the lived experiences of African students (Hay, 2003). By integrating African perspectives, students are given the opportunity to connect with their heritage and develop a strong sense of identity and belonging. This can boost self-esteem and empowerment among African learners. Incorporating new content while maintaining the existing curriculum requires careful planning and coordination (Chikoko, 2016). Le Grange (2018) posits that educators have a social responsibility of introducing new material which is in line with this concept whilst ensuring core educational goals are met.

Botha (2007) indicates that Africanisation encourages the incorporation of African scholarship and research into educational materials. This not only enriches the curriculum but also supports the development of local knowledge. A curriculum that includes African perspectives can foster a more well-rounded global perspective among students. Prinsloo (2010) supports this notion and adds that It helps students to understand the interconnectedness of global issues and appreciate diverse viewpoints.

3.3.8 Medical Education

Duvivier et.al (2014) argued that no health care system can function well without adequately trained medical doctors. Educating such professionals demand significant growth in the number and capacity of medical education programmes. Globally, medical education is a highly regulated process that involves many years of training and education. In most countries, students must complete a medical degree offered by medical school, and then undergo internship in a clinical setting (Karle, 2010). The duration of medical school can vary from country to country but on average students spend between four to six years in university before they progress to completing several years of training as interns. Medical education systems used by most developing countries were adopted from one or more models from the developed countries. The origins of the models used in African universities were rooted on the models developed in the United Kingdom (Gukas,2007). With the expansion of knowledge, there has been an increase in the number of universities that offer a comprehensive medical

curriculum that integrate western medical knowledge to address challenges prevalent in the African context.

Table 3.2: Number of medical schools per World Health Organisation regions

Source: Mullan et al., 2011

Continent	Sub-region	Medical Schools (n)	Million inhabitants per School
Africa		208	4.91
	East Africa	43	7.51
	Central Africa	22	5.76
	North Africa	80	2.62
	Southern Africa	9	6.42
	West Africa	54	5.63
America		757	1.23
	Caribbean	66	0.56
	Central America	119	1.31
	North America	190	1.81
	South America	382	1.03
Asia		1188	3.49
	Central Asia	25	2.43
	East Asia	299	5.19
	Southeast Asia	147	4.04
	South Asia	535	3.19
	West Asia	182	1.26
Europe		415	1.79
	Eastern Europe	136	2.17
	Northern Europe	63	1.57
	Sothern Europe	113	1.41
	Western Europe	103	1.84
Oceania		29	1.23
	Australia and New Zealand	21	1.27
	Melanesia	5	1.70
	Micronesia	1	0.30
	Polynesia	2	0.16

Table 3.2 represents the number of medical schools in the World Health Organisation regions. Asia and America have the highest number of medical schools, with a relatively even distribution in subregions, however, the distribution in the African continent is skewed. Central and Southern Africa have a relatively low number of medical schools, of the nine schools in the Southern region, eight are in South Africa. At the time that the data was collected for the study, there were no medical schools in Lesotho and Namibia. Subsequent to this, a medical school was established in Namibia and Lesotho in 2009 and 2014 respectively (Eichbaum et al., 2014).

Table 3.3: Challenges associated with medical training in Africa

MEDICAL TRAINING CHALLENGES	
Cost	Medical education is expensive and can be a significant financial burden for students and their families. This can lead to a lack of diversity in the student population, as students from disadvantaged backgrounds may struggle to afford the costs of medical education.
Access	Access to medical education is limited to a small number of students due to the limited number of spaces in training institutions. This often leads to a shortage of healthcare professionals in certain regions of the country.
Curriculum	Medical education often prioritizes clinical care, which can result in a lack of emphasis on community health and primary care. This can result in a focus on treating illnesses rather than preventing them, which can lead to increased healthcare costs and poorer health outcomes. Medical education is a rapidly evolving field, and some curricula may not adequately address emerging health challenges, such as climate change, infectious diseases, and mental health.
Cultural competence	Medical education often does not provide adequate training in cultural competence, which can result in healthcare professionals who lack the necessary skills and knowledge to provide culturally appropriate care to diverse patient populations.
Interprofessional collaboration:	Medical education often does not provide adequate training in interprofessional collaboration, which can result in a lack of coordination between healthcare professionals.

The limitations associated with medical education in Africa are summarised in Table 3.3. Karle (2010) indicated that addressing the identified drawbacks require strategic investment in medical education globally and ongoing efforts to address financial barriers which impede on student access to medical universities. Furthermore, there is a need for improving the curriculum to reflect emerging health challenges and providing training in cultural competence and interprofessional collaboration.

Balancing service delivery and training students in medical education is a critical aspect of ensuring that healthcare systems have an adequate supply of competent and compassionate healthcare professionals. This is a challenge that is faced by medical schools globally and in

South Africa, and it requires a delicate balance between providing high-quality care to patients and ensuring that students receive adequate training and education. In many healthcare settings, medical schools play a vital role in providing essential services to communities, particularly in underserved areas. This can include primary care, specialty care, and emergency care. However, the provision of these services can often conflict with the need to provide adequate training opportunities for medical students.

In the midst of substantial achievements in healthcare and education reforms over the past decade, clinician-educators in developing countries are confronted with several significant challenges. These challenges encompass: (1) the reorganisation of healthcare services, particularly the enhancement of primary health services, to ensure equitable and accessible healthcare for all; (2) the realisation of desired outcomes outlined in the recently published national program training and accreditation guidelines by Health Professional Council of South Africa; (3) the limitation of public service doctors in delivering adequate healthcare services and simultaneously serving as clinician-educators for medical training programs within the public service; (4) the potential ramifications of the ongoing medical "brain drain" on the sustainability of high-quality medical training programs.

3.3.8.1 Medical Education in South Africa

In South Africa, medical education is regulated by the Health Professions Council of South Africa. Medical students are required to complete a six-year undergraduate medical degree program. Within the six years, three years are referred to as clinical years, where students get exposure to working in a clinical setting. After graduating with an undergraduate degree, students are required to complete internship training in hospital that they are placed in by the Department of Health (Reid, 2014). Once internship has been completed. medical graduates are then required to complete a year of community service in public hospitals and clinics.

The curriculum of medical education in South Africa includes both theoretical and practical training where students are required to complete clinical rotations in various specialties. The curriculum is designed to provide a solid foundation in basic medical sciences and clinical skills. It can thus be said that the process of becoming a doctor is gradual, beginning at the undergraduate studies to pre-vocational and vocational training. This process involves the acquisition of skills and knowledge which assist students to develop clinical reasoning and experience. This process forms a vital foundation for later unsupervised practise as a competent health care professional.

In recent years, there have been calls for medical education to be reformed to better address the healthcare needs of populations (Karle, 2010). These calls have focused on the need for medical education to be more responsive to the health challenges facing populations. These

necessitate health promotion and education for the citizen of South Africa and services with a focus on primary care and community health. There have also been calls for medical education to be more inclusive and to better reflect the diversity of populations and representation of marginalized communities in healthcare professions.

Clinical training of medical students largely occurs in academic health centres located close to medical schools. Several debates have emerged which question the relevance and effectiveness of training undergraduate students in highly specialised tertiary hospitals (Gukas, 2007). Kent and DeVilliers (2007) posits further deliberations related to training students in well-resourced, technology driven institutions using western-style curriculum which does not speak to the current context of the country. Moreover, Lawrence et.al (2018) argue that there is a glaring need for students to be equipped to work in impoverished environments, which is a reality in some parts of the country. Reid (2014) states that student must be exposed to the diverse breadth of the health care system in order to be well rounded medical practitioners who are conscience of the cognisant of the disease burden and social determinants of health.

In KwaZulu Natal, posts for senior specialists used to be on a Joint Medical Establishment agreement (DOH , 2018). These Joint Medical Establishment posts were occupied by consultant specialists who had joint appointments with the university and the Department of Health. The responsibility of these consultant specialists included academic teaching, supervision and clinical practice. Once these Joint Medical Establishment posts were vacated, the Department of Health froze these posts with no replacements implemented. The frozen posts resulted in staff shortages in tertiary hospital. Such shortages resulted in the rearrangement of posts to meet patient demands.

3.3.9 Decentralized Training

Decentralized training in higher education is incorporated to enable collaborative learning and knowledge sharing among students and teachers. In a decentralized learning environment, students and teachers work together across different locations and use technology to facilitate their interactions and knowledge sharing. Robinson and Slaney (2013) indicate that this provides opportunities for learners to connect with others outside their local communities and access a wider range of educational resources. Furthermore, it allows for an opportunity to collaborate on projects and assignments with a diverse group of peers. In the context of this study, the focus on decentralized training is in its application to medical education. The focus is on how it can improve training outcomes and enable collaboration among medical students, healthcare professionals, and medical educators.

Depending on the specific needs and constraints of the medical education system, there are a number of ways in which decentralised training can occur. Telemedicine allows medical students to connect with patients and healthcare professionals remotely. This decentralized approach to training can help students gain experience in providing medical care to patients from different locations (Cilliers and Flowerday, 2013). Furthermore, it enables collaboration among healthcare professionals from different locations. Collaborative training can take place through virtual environments, where students from different locations can work together on projects and cases. Through this collaboration, students are able to receive feedback from trainers and experts. Moreover, it allows students and healthcare professionals work together on real-world medical cases and projects. This type of set up required well-resourced facilities which allow for uninterrupted virtual connectivity between the parties involved.

Technological advancements have allowed for the use of online resources which assist in access training and educational resources online. Synchronous and asynchronous learning through resources such as recorded lectures, delivery of interactive modules and virtual simulations enable medical students to broaden their knowledge in the field without the need for physical proximity (Willemse et al., 2019). Decentralized training can leverage virtual and augmented reality technology to create realistic simulations of medical scenarios that students can practice on. These simulations can be accessed from anywhere, and students can collaborate on cases and debrief after the simulations in a virtual setting. Similar to the previous model, this option also requires access to the internet.

The aforementioned models can be incorporated to decentralised clinical training in order to enhance the learning experience. The utilisation of online learning platforms can provide medical students with access to a wide range of resources and learning materials, including lectures, case studies, and interactive modules. Online learning platforms also enable collaboration among students, who can share resources and support each other.

Decentralized clinical training is defined by Robinson and Slaney (2013) as a concept where medical students and healthcare professionals train in different clinical settings. This allows for collaboration with local healthcare providers to gain practical experience. Dudley et al. (2015) highlight the strength of this programme to be the experience for students to navigate different medical specialties and environments. This environment can also allow for peer to peer training, allowing for students to learn from each other, sharing knowledge and experiences.

The models of decentralized medical training summarised above can enable medical students and healthcare professionals to gain practical experience, collaborate with others, and access training and educational resources that may not be available locally. These models can help

address the challenges of medical education, such as limited resources and access to specialized trainers and experts, and can improve the quality of medical care. The emphasis of the study is on decentralised clinical training and this is where the conversation now turns.

3.3.10 Decentralised Clinical Training

Decentralized clinical training provides medical students with practical experience in different clinical settings. This has the potential to assist them become more competent and confident healthcare professionals. At the core of decentralised clinical training is student learning. As illustrated in Figure 3.8 decentralised training requires a shared vision between all stakeholders in order to achieve success. Strategic partnerships with leaders and governance structures within universities, the Department of Health and the communities that they serve is imperative is imperative. The placement of students in decentralised sites requires careful planning and resources on the part of the educational institution and the training sites where students are placed.

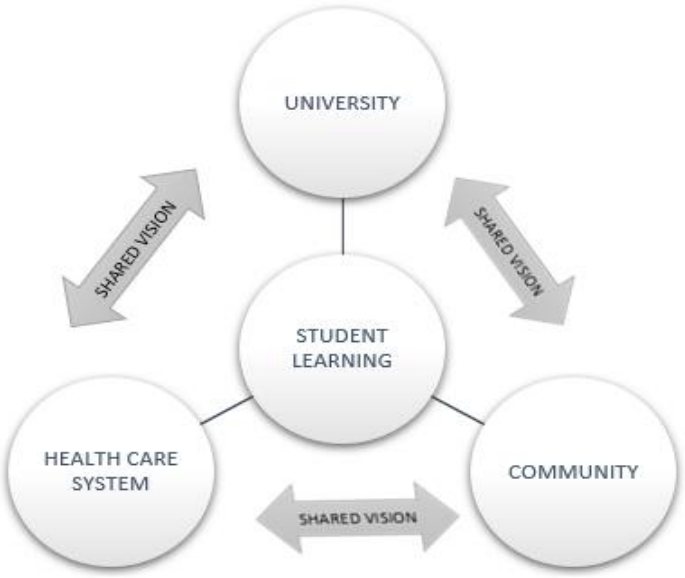

Figure 3.8: Decentralised learning as a holistic concept

Source: Lovato et al. (2009)

Decentralized training can be achieved through various methods. The widely used approach is distributed medical education. In this model, medical students are required to rotate through different clinical sites to gain the required knowledge and skill (Lovato et al., 2009). This diverse exposure allows students to experience various clinical environments and learn from different healthcare professionals, thereby gaining insights on the diverse patient populations.

Longitudinal integrated clerkships represent another approach to decentralised training. With this model, medical students are required to work with a single preceptor in a primary care setting for an extended period. The length of the placement is dependent on the design of the particular curriculum and varies between several months up to a year. This model fosters a strong relationship between students and a single preceptor, thereby providing the opportunity to follow patients over time and develop a deeper understanding of their conditions and treatment plans (Gaede and Versteeg, 2011). Kanthan and Mills (2007) asserts that collaborative training enables medical students to work with healthcare professionals in different specialties to provide patient care. This collaboration can occur through virtual environments or through in-person training sessions. Such exposure offers students a broader perspective on patient care and insights into various healthcare disciplines.

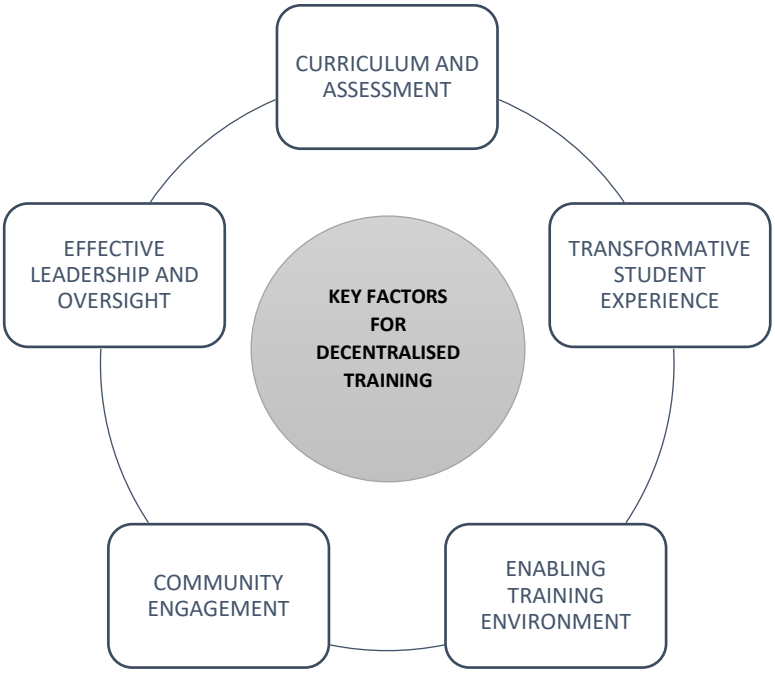

Figure 3.9: Key factors for decentralised training

Source: DeVilliers et al. (2017).

The key factors for the successful implementation of decentralized clinical training are outlined in Figure 3.9. DeVilliers et al. (2017) advocate for a shift from the existing curriculum to context-driven content that is fit for purpose. They emphasize the need for a public healthcare-focused curriculum which would be able to incorporate relevant procedures and clinical skills to address national and local healthcare needs without compromising international

comparability.

Strasser (2010) asserts that engaging and including the community is critical for the programme to succeed. Inclusion of community leaders as representatives in consultation structures of the programme would ensure that they are kept abreast of the latest developments. Furthermore, this would provide them with the platform where they can engage and provide their inputs. Effective leadership and oversight are paramount for aligning the program's mission and vision with stakeholders and ensure that health facilities become learning organisations without compromising service delivery.

3.3.11 University Approach for Decentralised Clinical Training

In preparation for the implementation of decentralized training, the university and the provincial Department of Health signed a five-year Memorandum of Understanding to collaboratively fulfil their mandates of providing clinical training to medical students and service delivery to patients. District and Provincial hospitals within different regions of KwaZulu Natal were identified to be suitable for providing clinical training to medical students. Akbari (2001) asserts that the training of medical students should take place where more patients come for consultation. This results in students having a greater exposure to patients with a variety of medical problems.

The concept of students training outside the Durban periphery was not new to the university. The Family Medicine discipline houses modules that, as part of the curriculum, require 4th and 5th-year students to rotate for a maximum of six weeks in district hospitals, surrounding clinics, healthcare centres, hospice, old age homes, and rural settings (Gaede and Versteeg, 2011). This approach has been shown to contribute positively to the development of medical doctors by enhancing attributes such as effective communication and teamwork. Graduates from programs adopting this approach are more likely to choose to work in South Africa and pursue careers in primary care disciplines, laying a foundation for the successful implementation of decentralized sites for longer periods (Ndateba, 2015).

3.3.11.1 Integration between service delivery and teaching

The integration between clinical training and service delivery necessitates careful consideration, with the primary responsibility of healthcare systems and medical schools being to provide high-quality care to patients. Sholl et al., (2016) posits that patient care should take centre stage before the educational needs of students. While clinical training offers students opportunities to work alongside healthcare professionals in clinical settings, it must not compromise patient well-being. Balancing service delivery and training in medical education requires ongoing efforts to meet the needs of both patients and students (Furco, 1996).

Table 3.4: Summary of Hospitals selected for Decentralised Training

Source: DOH (2018)

NAME OF HOSPITAL	BED CAPACITY	HOSPITAL CLASSIFICATION	ESTIMATED POPULATION
Newcastle Hospital	245	Regional	274 000
Madadeni Hospital	687	Provincial	550 675
Edendale Hospital	897	Regional	1 400 000
Greys Hospital	530	Tertiary	4 500 000
Northdale Hospital	392	District	839 327
Townhill Hospital	282	Provincial	53 623
Ngwelezane Hospital	544	Tertiary	907 519
Lower Umfolozi War Memorial	286	Regional	48 122
Port Shepstone	333	Regional	750 215
Stanger	545	Regional	600 000

The profiles of the placement sites that were selected for the implementation of the decentralised clinical training are provided for context. Illustrated in Table 3.4 are the clinical sites selected as clinical placement sites for students. The sites selected were in the main Regional, Provincial and Tertiary Hospitals. Newcastle and Madadeni Hospitals are located within the Amajuba Health District. The Pietermaritzburg complex, under the Umgungundlovu Health District consist of Edendale, Grey's, Northdale and Townhill hospitals. Ngwelezane situated in uThungulu District. Although the hospital falls under the uThungulu Health District it also serves communities from the Zululand and Umkhanyakude Districts. Umfolozi War Memorial Hospital falls under the uThungulu Health District (now referred to as the King Cetshwayo District). Port Shepstone Hospital, under the Ugu Health has three referral hospitals with for a number of clinics attached to it. Stanger hospital falls under the Ilembe Health District (KwaZulu-Natal Department of Health: Provincial Hospitals, 2018).

3.3.11.2 Educational approach adopted

The university's approach to decentralized training suggest that sites that were conducive for teaching and learning were selected. Moreover, the sites selected mimic the profiles of the current teaching hospitals used to train students in Durban. In these sites, the process of self-directed and experiential learning supported occurs. These are reinforced by bedside tutorials, ward rounds and clinic sessions which are conducted by skilled academics in order for the student to meet the required outcomes (Akbari, 2001). At discipline level, students are assigned clinical groups and the academic coordinator identify suitable clinical member who will supervise their clinical duties. Due to the nature of medical practice, the supervision can

also be provided by senior ward staff, including registrars and consultants (Emanuel, 2020). The head of a clinical Department within the hospital or a designated member of staff is responsible for the quality of the day-to-day training. Overall responsibility is exercised by the Emanuel (2020) asserts that students engage in self-directed and experiential learning, supported by bedside tutorials, ward rounds, and clinic sessions to meet required outcomes. module coordinator and discipline heads of departments who account to Academic Leaders of Teaching and Learning and the Dean and Head of School.

3.3.11.3 The Curriculum

The medical curriculum is governed by the Health Professional Council of South Africa and Council on Higher Education in accordance with the national standards and guidelines. . These guidelines outline the essential knowledge, skills, and competencies that medical students should acquire. In the quest for an appropriate model for decentralized clinical training, the Australian curriculum framework was identified as a close fit for the intended purpose. The framework provides a template defining essential competencies and capabilities necessary for quality care (Strong et al., 2017). This framework, with its emphasis on integrating theoretical knowledge and practical skills, was deemed a solid foundation for decentralized clinical training practices.

Additionally, certain South African universities have embraced the community-based education model. The aim of this model is to bridge the gap between public health educational content and the competencies required in practice (Gaede and Versteeg, 2011). The community-based education model is structured around competencies as curriculum outcomes, representing predefined abilities that encompass individual attributes, including knowledge, skills and attitudinal or personal aspects. This approach addresses criticisms of traditional teaching methods for failing to equip students with adequate skills that address social problems and being unresponsive to population needs, particularly in rural and under-resourced settings (Mtshali, 2009). The community-based education model aims to align students' training with the actual demands of their future work, fostering practical and context-sensitive skills.

3.3.11.4 Support Provided

In order to facilitate students in decentralized sites, the university has made substantial investments in electronic communication resources and online teaching and learning modalities. This commitment is further reinforced by the appointment of an Academic Development Officer tasked with identifying challenges students may face, monitoring their progress, and providing necessary support and remediation. Each discipline also has a

designated academic coordinator responsible for remedial assistance and the development of standardized plans for students. These encompass additional tutorials, seminars, mock examinations and after-hour supervision and teaching during ward rounds.

These measures aim to ensure comprehensive academic and personal support services for students, encompassing tutoring, counselling, and mentorship, thereby contributing to their overall academic success.

3.3.11.5 Assessment strategies and quality management

Objective evaluation methods are used to ensure that students are meeting the expected learning outcomes. Varied assessment of students' progress and competence within decentralized clinical settings are utilised. The university employs objective evaluation methods aligned with Miller's Pyramid of Assessment. This framework, introduced by Miller (1990), serves as a guide for evaluating clinical competence, distinguishing between knowledge at lower levels and action at higher levels. Asani (2012) indicates that to truly know whether learners are achieving what they required to achieve, they must be assessed in the setting that they are expected to deliver. This rationale underpins the concept of assessment in the workplace and the various tools and fashions that have developed around that in the last decade. Various assessment methods, such as written and practical exams, clinical evaluations, and standardized patient encounters are employed to ensure a comprehensive evaluation of students' clinical skills.

The model has been instrumental in shaping educational practices however, it's worth noting that some critics argue that Miller's Pyramid may not adequately address critical components like professionalism and ethical behaviour, which is essential in clinical practice (Williams et al., 2016). Additionally, the model may not sufficiently emphasize the integration of different components of competencies, potentially overlooking the interconnected nature of these skills. Therefore, a holistic and contextually sensitive approach is deemed necessary to enhance the existing model for a more comprehensive evaluation of clinical skills in decentralized clinical settings.

3.3.11.6 Quality control in medical education

Maintaining quality control in medical education involves accreditation processes conducted by external regulatory bodies. Periodic evaluations are conducted based on established criteria, standards and procedures (Reisch et al., 2003). The primary goal is to ensure that medical schools meet required national standards and produce competent healthcare professionals. Accreditation contributes to improving institutional functioning, strengthening service capabilities, and enhancing public confidence in medical education.

Continuous quality improvement processes are integral, involving the collection and analysis of feedback from students, staff and graduates. External experts play a crucial role in reviewing and evaluating medical education programs, providing an objective perspective. Research engagement by medical schools contributes to advancing medical knowledge and healthcare practices, with research findings often incorporated into the curriculum to expose students to the latest developments (Wong et al., 2012). Medical schools often engage in research to contribute to medical knowledge and advance healthcare practices. Incorporating research findings into the curriculum ensures that students are exposed to the latest developments.

For graduates to practice medicine, meeting certification requirements is essential (HPCSA, 2017). Licensing bodies assess competency through standardized exams and practical assessments. Challenges in increasing medical workforce capacity have been identified, including the lack of coordination between ministries of education and health, financial constraints, and the need for coordinated budgets, highlighting the importance of addressing these barriers for successful community placements.

Mullan et al. (2011) argued that the lack of coordination between ministries of education and health have previously been a barrier to the ability of medical schools to increase capacity of the workforce to support the proposed increase to the number of students trained in a given year. Tanser et al. (2006) further highlighted the need for coordinated budgets. Previous failures in community placement have been the lack of external funding resulting in poor financial support from the university, lack of commitment at discipline, faculty and institutional level.

3.3.12 Contribution of Medical Students in Healthcare

The interdependence between education and health systems, as highlighted by Frenk et al. (2010), is mutually beneficial at various levels—individuals, communities, and the health system. This aligns with the symbiotic model of medical education proposed by Worley (2002). Decentralized medical training, especially in rural areas facing geographic or resource constraints, becomes particularly valuable.

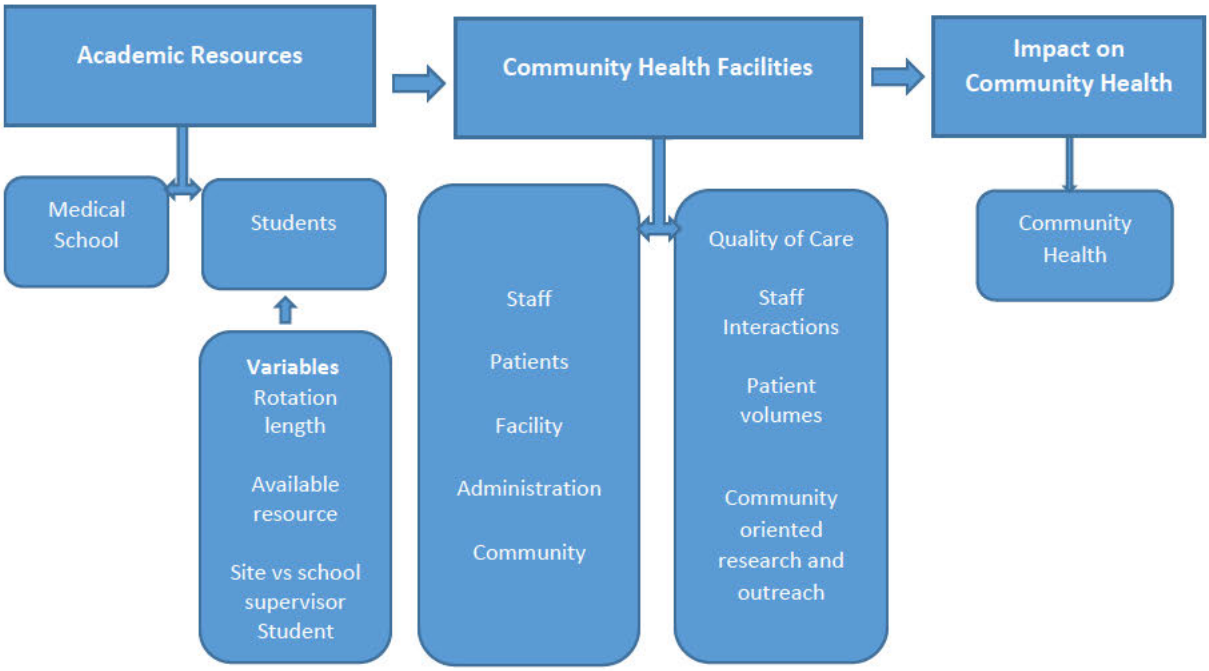

Figure 3.10: Impact of academic activities on health facilities

Source: Strasser (2010)

Theoretically, it can be argued that academic resources influence community health facilities which then ultimately contribute to improved community health. The presence of medical schools and students in community health facilities provides an opportunity for the transfer of pioneering medical knowledge and clinical skills. It also allows for exposure to the latest medical techniques and treatment methodologies which could have been discovered through research. This integration of research findings into practice can lead to the adoption of new, more effective treatments and protocols, ultimately improving patient outcomes and the overall standard of care in the community. The collaboration between medical schools and community health facilities often involves training and capacity-building programs for healthcare professionals. Through these programs, staff members in the community health facilities can develop their skills and practices (Figure 3.10).

Medical schools and students often engage in community health education and promotion, increasing awareness of preventive health measures among community members. These activities contribute to promoting healthy behaviours, implementing disease prevention strategies, and ultimately reducing the prevalence of certain diseases, thereby improving overall community health indicators (NCHL, 2011).

3.3.13 Decentralised Governance

Decentralised aim to empower local units or departments, allowing them to make decisions tailored to their specific needs and circumstances. This methodology empowers decentralized units to make independent decisions and take responsibility for their own operations, while still aligning with the overarching mission and goals of the institution.

Acknowledging that medical departments encompass various specialties with unique requirements, autonomy becomes a crucial element. This autonomy enables departments to make decisions on resource allocation, curriculum development, and patient care strategies based on their distinctive needs. Establishing clear policy guidelines is instrumental in defining the boundaries within which decentralized units operate autonomously. The leader's responsibility in decentralized governance health structures involves integral thinking and systemic methodologies in policy design, development, and delivery (Gilson, 2012). This responsibility aims to direct diverse and fragmented health services toward achieving a unified, integrated and comprehensive system. Through these guidelines, decentralized units are encouraged to take ownership of their initiatives, innovations and service delivery models within the broader framework of the institution's vision and values. Delegated decision-making authority provides the flexibility needed for timely operational decisions.

Despite decentralized decision-making, clear accountability mechanisms are necessary to ensure decisions align with overarching goals and standards. Effective governance in a decentralized system requires robust coordination mechanisms for collaboration and communication between departments. Coordination ensures consistent adherence to the institution's mission and strategic direction, fostering a cohesive approach to achieving organisational objectives. Governance further necessitates transparent and equitable processes for resource allocation, ensuring fair distribution and optimal utilisation of human and financial resources based on the specific needs and priorities of each department or unit.

Decision-making structures serve to facilitate local-level decisions while aligning with the institution's overall strategic direction. The establishment of committees within departments aids in facilitating discussions on pertinent issues. Additionally, encouraging the formation of interdisciplinary teams or committees promotes collaboration and decision-making on cross-cutting issues requiring input from multiple departments or units. These teams effectively address complex challenges, foster innovation, and ensure diverse perspectives are considered in the decision-making process.

The presence of an executive leadership body providing guidance and setting overall strategic goals is crucial. This body possesses strategic vision, technical expertise, and political, organisational, and administrative competencies, enabling transparent participation among

numerous actors (Van Olmen et al., 2012). It monitors the performance of decentralized departments. Leaders, to ensure effective governance of policy implementation, require skills such as communication and negotiation (Burian et al., 2014). Establishing clear communication channels between decentralized units and the central governing body is essential. Transparent communication ensures that local units are informed about the institution's overarching goals and policies, while the central body remains updated on the progress and challenges faced by decentralised departments.

Effective accountability mechanisms align with set goals. Regular reporting serves as a mechanism for departments to account for their activities, resource utilisation, and challenges. This facilitates timely intervention from central administration when addressing issues and encourages the sharing of best practices between departments. Feedback and evaluation systems allowing stakeholders to provide input serve as tools to promote transparency and encourage continuous improvement.

In addressing financial management within decentralized governance, a transparent and inclusive process for budget allocation and planning is imperative. This process should incorporate input from various decentralized departments, considering the specific needs and priorities of each unit while aligning with the overarching goals and financial constraints of the institution. To ensure funds are used appropriately and in accordance with established budgetary allocations and institutional policies, clear guidelines and protocols must be in place. Implementing effective resource management strategies can enhance the financial sustainability of both universities and hospitals. Establishing financial oversight and auditing at both the central and decentralized levels is essential to ensure compliance with financial regulations and standards.

Capacity-building initiatives play a pivotal role in developing the leadership skills of administrators, managers, and department heads within decentralized units. Effective leadership is crucial for guiding and coordinating the activities of decentralized teams, fostering a culture of collaboration, and promoting the achievement of institutional objectives. Such initiatives can cultivate a culture of adaptability and innovation within decentralized units, encouraging staff to embrace change, explore new ideas, and implement innovative solutions to address emerging challenges and opportunities in the fields of education or healthcare. Programs can specifically focus on enhancing the operational efficiency of decentralized units, streamlining administrative processes, optimizing resource utilisation, and implementing best practices in service delivery. Improved operational efficiency can lead to cost savings and the effective utilisation of available resources.

Promoting participation and inclusivity involves creating an environment that actively

encourages the involvement of diverse stakeholders. Representation from various stakeholder groups ensures they have opportunities to contribute their perspectives and insights on matters related to the governance of decentralized training. Recognizing and acknowledging the contributions made in such forums demonstrates the value placed on their input and participation.

3.3.14 Decentralised Strategy

Haberberg and Rieple (2001) advocate for a balanced approach, integrating deliberate planning, responsiveness to emergent opportunities and proactive management of forced challenges for effective governance. The interplay between deliberate, emergent, intended, and forced strategies significantly influences governance, operations and outcomes.

Deliberate strategies are planned, proactive initiatives implemented by centralized governing bodies to guide the direction and activities of decentralized units. While these strategies provide a structured framework for decision-making and resource allocation, their effectiveness may be limited by a lack of flexibility to adapt to changing circumstances or local needs. Overreliance on deliberate strategies can sometimes lead to a disconnect between centralized plans and the diverse requirements and contexts of decentralized units, potentially hindering innovation and responsiveness to dynamic environments.

Emergent strategies arise organically from the interactions and experiences of decentralized units within the institution. These strategies often result from the innovative and adaptive responses of units to local challenges and opportunities. While emergent strategies can promote agility and creativity, their implementation may lack consistency and alignment with the overarching mission and goals of the institution (Tollman et al., 2008). Additionally, the absence of a cohesive vision or framework for emergent strategies can lead to fragmentation and the duplication of efforts across different units.

Intended strategy refers to the planned course of action an institution intends to pursue for achieving its long-term goals. It is the formal, deliberate strategy formulated by the top management or governing body after a thorough analysis of internal and external factors. This strategy typically involves resource allocation, identification of key initiatives and the development of a structured plan guiding the organisation's activities over a specific time frame. While intended strategy serves as a blueprint, the actual outcomes may differ due to various internal and external factors.

Forced strategies are imposed on decentralized units by external factors like regulatory changes, resource constraints, or unexpected crises. While these strategies compel units to address immediate challenges or comply with external demands, they may disrupt established

processes, impeding autonomy and creativity. Overreliance on forced strategies can lead to a reactive rather than proactive approach, potentially undermining the institution's long-term strategic direction and performance.

A supportive organisational culture valuing adaptability and learning enables decentralized institutions to navigate complex environments and achieve sustainable growth. Encouraging collaboration and shared accountability among centralized and decentralized departments leverages the strengths of these strategies while mitigating their limitations.

3.3.14.1 Strategic alliance

A strategic alliance facilitates the establishment of collaborative partnerships among decentralized units or institutions, aiming to achieve mutual strategic objectives. These alliances leverage the strengths and resources of each participating entity, fostering enhanced competitive advantage, shared expertise, and increased innovation. In the realm of medical education, collaborative partnerships involving medical schools, teaching hospitals, research centres, and healthcare facilities are essential. Such alliances harness the collective expertise, resources, and strengths of each participating institution to attain common goals, thereby enhancing the quality of medical education and healthcare delivery.

However, despite the potential benefits of alliances, the careful setup and management of these partnerships are crucial. Studies indicate that alliances can be short-lived due to issues such as incompatibility, mistrust, and operational differences. Complex governance structures within alliances may introduce administrative and procedural complexities. Managing diverse stakeholders and negotiating agreements can divert resources from the primary project mission. Challenges may arise from differences in organisational culture and operational practices among alliance partners, hindering the establishment of cohesive and collaborative working relationships. Misalignments in values and decision-making processes can impede effective coordination and implementation of joint initiatives, potentially leading to inefficiencies and conflicts within the decentralized system.

Moreover, reliance on external partners for funding, technology or educational resources exposes decentralized units to vulnerabilities related to changes in alliance priorities or resources. This dependence may limit the ability to sustain long-term initiatives and independent growth. Engaging in strategic alliances may entail the loss of autonomy for decentralized units within medical education institutions, as decision-making processes and educational strategies may become influenced or directed by the terms of the alliance. This influence has the potential to restrict individual units from responding to local needs and innovating based on their unique contexts.

For an equitable exchange, there should ideally be a balance in the scale of commitment and risk-taking, along with similarities in strengths and cultural compatibility.

Over the past century, leadership has undergone extensive analysis across various disciplines, including management, social sciences and psychology. Dominant literature in these fields has concentrated on leadership styles and behaviours. External observable behaviour can serve as an indication of a leader's internal traits, values, and beliefs, and vice versa (Govender, 2013).

Traditionally, leadership has been perceived within hierarchical structures, where leaders occupy specific roles providing vision, guidance, and direction, typically from the top of the hierarchy (Burns et al., 2015; Sixsmith, 2014). The leadership process is typically controlled by a centralized authority at the organisational summit, responsible for strategic decision-making. These perspectives imply that direction on activities, roles, responsibilities, and organisational procedures primarily emanates from singular figures enjoying top-of-the-hierarchy privileges. This singular leader perspective suggests limited shared participation and group effectiveness within organisations (Sixsmith, 2014).

3.4 Gaps identified in the Literature

Tan and Ng (2007) argue that there is an increasing trend towards decentralisation in education. They further state that these educational changes are attributed to globalisation reforms, requiring countries to equip their students to meet challenges in a knowledge economy and enhance the country's competitive edge. However, there is limited literature analysing decentralized centralism in higher education, particularly in health related programmes.

The literature provided in this section provided a context for the two sectors that inform decentralized training. Even though there are various studies that have been undertaken in relation to the decentralisation in health care and decentralisation in education, the studies interrogated did not provide an insight on the management of decentralized clinical training. The focus of the studies conducted for decentralized training in other countries were primarily focused on curriculum development. Furthermore, the researcher identified a gap in research related to the management of such programmes and the leadership attributes required to make them a success.

3.5 Conclusion of Literature Review

The chapter provided a context of the study by providing insight on the strides and challenges confronted by the health and education sectors. The reviewed literature highlighted the challenge of balancing the expectations of the government, the market, and broader communities, often leading to demand overload for both sectors. Coping with divergent goals from various stakeholders to meet economic demands and public expectations while adhering to institutional policies and regulations poses a considerable challenge for both the universities and the health fraternities.

The subsequent section will provide comprehensive insights on the research approach that was used to draw out the essential issues that would aid in addressing the research questions of the study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

The preceding chapter highlighted the contextual backdrop of the paradigm shift in medical education and its implications for management. This chapter elaborates on the methodology employed to extract pertinent issues that contributed in addressing the research questions of the study. The selection of an appropriate research method was important in comprehending the pertinent issues regarding decentralised training in medical education. Moreover, the chosen approach facilitated in the uncovering of valuable insights, biases and personal perspectives during the research process. This assisted in enriching the depth of the findings.

This chapter outlines the research method adopted for this study. Using the research onion presented in Figure 4.1 as a guide, it begins by describing the research approach and design, explaining their significance in tackling the primary research questions. Subsequently, it offers a detailed explanation of the research strategy, encompassing an understanding of key elements within each phase of the research. These elements include the study population and sample selection, the research setting and time horizon, the data collection instruments, the validation and reliability of the instruments, as well as the ethical considerations of the study.

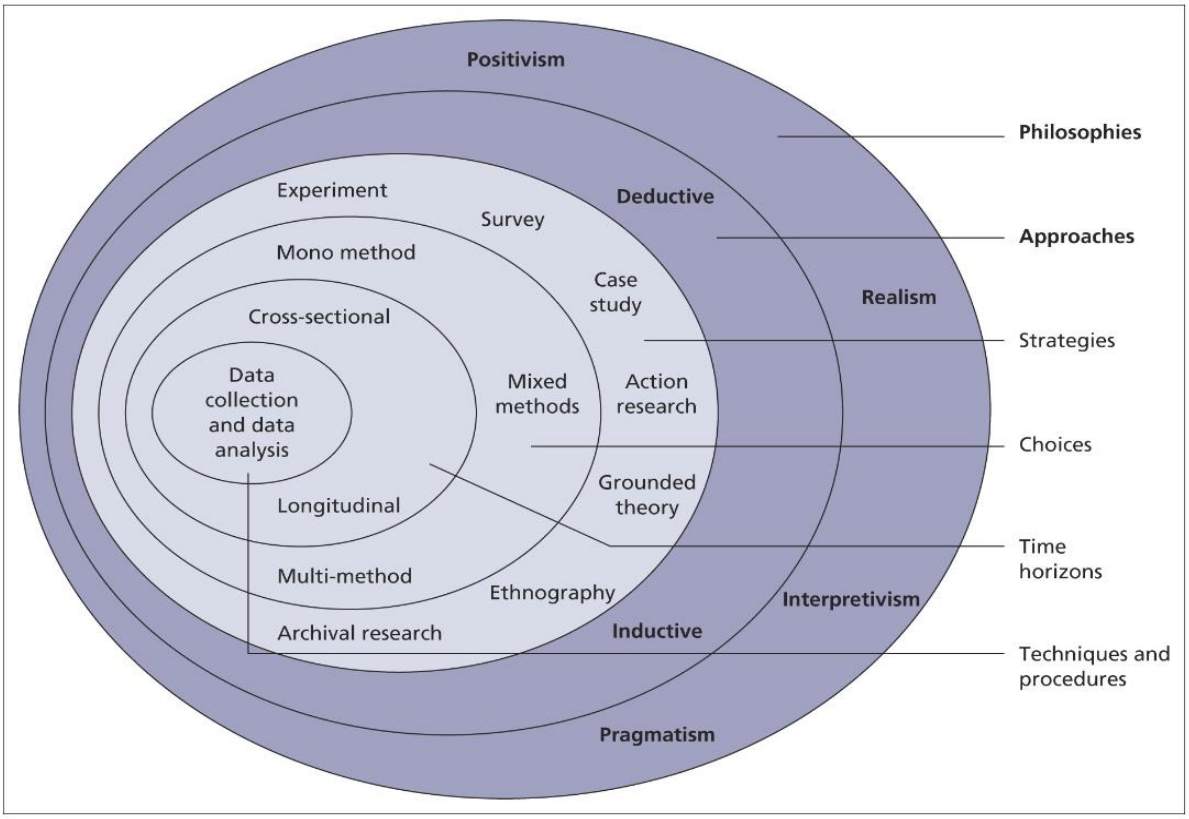

Figure 4.1: The Research Onion

Adapted from Saunders et al. (2019).

Kothari (2011) indicates that research methodology refers to the process that outlines the research strategy utilized to address the research problem. Polit and Beck (2012) define research as a systematic and step-by-step methodology that ultimately yields a solution to the identified problem. Meyer and Mayrhofer (2022) further highlights that a research design provides a logical structure for a study. It can thus be argued that the research design incorporates philosophical assumptions, research techniques, data collection methods, data analysis, and presentation techniques. Yin (2018) suggests that the research design aids in connecting the research problems to the methodology of the study, thereby validating the study's findings.

4.2 Research Philosophy

Research philosophy plays a pivotal role in shaping the methodology, interpretation, and overall trajectory of a study, serving as the fundamental underpinning upon which the research endeavour is constructed. Its importance lies in its capacity to direct and structure research activities, ensuring coherence, rigor, and relevance in the study's outcomes (Plano Clark, 2017). Philosophical assumptions give rise to paradigms, commonly referred to as worldviews, which inform the development of the study. Hence, research philosophy can be defined as the establishment of the research context, its knowledge base, and the attributes of the research (Saunders et al., 2019). Accordingly, the researcher elucidated how diverse paradigms were integrated into the research process to address the study's problem statement.

Among the various philosophies that can be adopted, the pragmatic philosophy was employed for this study owing to its adaptable and dynamic approach. Pragmatism accentuates practicality, flexibility, and real-world applicability, rendering it a valuable philosophy for tackling complex issues and generating meaningful insights (Tashakkori and Teddlie, 2002). The philosophy of pragmatism also acknowledges the interplay between subjectivity and objectivity in research. While it values empirical evidence and data-driven insights, pragmatism also recognizes the significance of subjective experiences, perspectives, and interpretations. Although one might argue that there are drawbacks that could have resulted in ambiguity in research design and analysis, the researcher ensured that a balance between multiple methods was achieved, ensuring that the pragmatic choices align with the research goals.

Easterby-Smith et al. (2012) asserted that Epistemology, Ontology, and Methodology are the three research approaches that significantly influence the way knowledge is understood, acquired, and applied. In the chosen philosophy, epistemology focuses on the practical usefulness of knowledge, ontology highlights the dynamic and context-dependent nature of

reality, and methodology encourages adaptable and flexible research approaches. These three components are interconnected and reflect the core principles of pragmatism, valuing practical outcomes, embracing diversity, and addressing challenges. These concepts are further clarified in the subsequent section.

4.3 Research Paradigm

A research paradigm encompasses the fundamental beliefs, assumptions, values, and methodologies shared by researchers within that paradigm. It provides a common lens through which researchers approach their work and make sense of their findings. Kuhn (1996) describes it as a broad framework or perspective guiding how research is conducted, interpreted, and understood within a particular field or discipline.

Four key components of a research paradigm include ontology, epistemology, methodology, and axiology. Ontology refers to a researcher's perspective on the nature of reality and what can be considered as "true" or existing. Epistemology addresses how knowledge is acquired and what constitutes valid and reliable knowledge. Methodology encompasses the methods, approaches, and techniques used for data collection and analysis, including specific techniques (such as surveys, interviews, and experiments) and broader strategies (quantitative, qualitative, mixed methods). Axiology pertains to the values and beliefs that influence the research process, including personal biases, cultural influences, and ethical considerations.

Common research paradigms include:

- Positivism: Emphasizes objectivity, empirical observation, and the use of quantitative methods to establish causal relationships and laws. It assumes that reality is objective and can be studied using scientific methods.
- Interpretivism: Focuses on understanding and interpreting the meanings individuals attribute to their experiences. Qualitative methods like interviews and observations are commonly used to explore the subjective aspects of human behavior and social phenomena.
- Critical Theory: Rooted in the critique of societal structures, it seeks to understand and challenge power dynamics, social inequalities, and ideological influences, aiming for social change and transformation.
- Pragmatism: Emphasizes practicality, flexibility, and real-world applicability, focusing on what works and is useful in solving practical problems, often combining various

methods and perspectives.

- Constructivism: Emphasizes the role of individuals in constructing their understanding of reality, exploring how people create meaning and knowledge through interactions and experiences.
- Postmodernism: Questions traditional notions of truth and reality, highlighting the influence of language, discourse, and cultural contexts in shaping our understanding of the world.

Ongoing discussions on the feasibility of combining approaches with diverse paradigmatic assumptions have been explored in previous studies (Wandtesh et al., 2013). Such discussions have been addressed through the emergence of schools of thought supporting the appropriateness of combining quantitative and qualitative approaches to address research problems (Tashakkori and Teddlie, 2009; Zandvanian and Daryapoor, 2013). Many researchers advocate the practice of triangulation, using both quantitative and qualitative approaches simultaneously to achieve a deeper understanding of the variables under study (Venkatesh et al., 2013). Therefore, numerous researchers confirm that multiple paradigms can coexist harmoniously in a study inquiry. The following section discusses the approach deemed appropriate for this study.

4.4 Research Approach and Design

4.4.1 Research Approach

The study conducted by Botma et al. (2010) emphasizes that research methods establish the boundaries within which a researcher operates to resolve a problem. It provides the structure that supports the entire study and guides the decisions on research methods and design required to plan the study effectively. The central focus of this study was to evaluate the implications of the paradigm shift in healthcare on training institutions and its management. To gain a comprehensive understanding of the research question, the study employed a mixed methods approach, integrating qualitative and quantitative research methods. This approach facilitated a more profound and nuanced comprehension of the research topic, allowing exploration of both the breadth and depth of the subject. The methodology focused on the differences between quantitative research, which is most closely allied with the positivist tradition, and qualitative research, which is most often associated with the naturalistic inquiry (Ram et al., 2015).

Three paradigms, namely pragmatism, transformative emancipatory, and critical realism, were identified as effective for mixed method research (Venkatesh et al., 2013). Pragmatism was

specifically highlighted as the most suitable paradigm for justifying the use of a mixed-method research approach, advocating for the adoption of both positivism and interpretivism as crucial components of abductive reasoning (Tashakkori and Teddlie, 2003; Green, 2013). The research question guides the choice of method and paradigm in the research inquiry, providing an empirical approach to applied business research philosophy (Saunders et al., 2019).

Plano Clark (2017) indicates that paradigms in mixed-methods research evolve during the research study, influenced by the chosen design (sequential, exploratory, or explanatory) and the phase of the research project. The mixed-methods research approach, characterized by methodological pluralism, allows for the simultaneous adoption of positivist and interpretivist epistemologies in a specific research inquiry. This approach was chosen for the current study, enabling the blending and comparison of quantitative and qualitative data to achieve a comprehensive understanding of the research question.

This study employed a convergent parallel mixed-methods research approach which required collection and analysis of both quantitative and qualitative data separately and then merging or comparing the findings in order to gain a comprehensive understanding of the research question (Plano Clark, 2017). This approach ensured that both qualitative and quantitative methods played equally crucial roles in addressing the research problem (Kerrigan, 2014). Moreover, it assisted in triangulating the results and enhanced the overall depth and breadth of the study. This will be discussed in detail in the sections to follow.

4.4.2 Quantitative Approach

Bryman (2016) highlights that quantitative methodology is employed when researchers aim to focus on measurable aspects of human behaviour, emphasizing a limited number of concepts rather than numerous ones. Researchers typically enter the study with preconceived notions about the anticipated relationships among variables. Quantitative research involves the collection of numerical data, which is subsequently analysed using various statistical tests that do not require the researcher's direct involvement. Structured data collection tools are employed to gather the data.

Tappan (2013) explains that quantitative research serves as a vital tool in knowledge development, testing theories generated during qualitative research. Quantitative research concentrates on a select number of concepts, with researchers maintaining a more distanced role during data collection. This type of research facilitates the development of data collection instruments, with numerical analysis forming the basic element of the study.

The foundation of quantitative research methodology lies in the measurement of quantities and amounts (Kumar, 2011). It investigates relationships among variables, testing objective

theories in the process. Statistical analyses are used to interpret the numerical data derived from formal data collection instruments (Creswell, 2011). Quantitative research progresses systematically, commencing from the research question and culminating in the acquisition of answers to the research queries. There are five phases within a quantitative study, including the conceptual phase, design and planning phase, empirical phase, analytic phase, and dissemination phase (Polit and Beck, 2014).

The quantitative approach was used to elicit insight from medical students on their experiences while in training in decentralized sites. A semi-structured questionnaire served as the data collection tool, enabling the generation of findings to verify and generalize the phenomenon under examination. Further details on this will be explored in the subsequent sections.

4.4.3 Qualitative Approach

The qualitative and quantitative approaches reflect distinct philosophies, underlying assumptions, and perspectives (Castellan, 2010). Qualitative research involves data generation in the form of words rather than numerical values (Looi and Wong, 2014). Castellan (2010) contends that qualitative research focuses on how individuals perceive their world, emphasizing the researcher's involvement with the phenomenon under investigation. Creswell and Creswell (2017) suggest that qualitative research is an unfolding model, occurring in a natural setting that enables the researcher to collect detailed information due to their personal engagement in data collection. Qualitative research aims to provide comprehensive explanations and descriptions of the research phenomenon, interpreting data emerging from the study (Creswell and Creswell, 2017). Leading qualitative researchers such as De Vaus (2013) and Brewer et al. (2015) assert that qualitative research fosters a broader understanding of behaviour, enabling the collection of abundant and rich information about the real lives of people and events. This approach facilitates detailed exploration within and between issues, allowing for flexibility when dealing with complex and multifaceted concepts (Rispel et al., 2011). Consequently, qualitative research enables researchers to develop a significant understanding of participant experiences, knowledge, and perceptions related to the subject matter under investigation.

In this study, the qualitative approach was utilized to gain insights from a managerial perspective. An exploratory research design was employed, given the sensitive and complex issues that required addressing and necessitated flexible approach. The exploratory research enabled the researcher to attain a better understanding and generate insights, particularly in the absence of substantial existing knowledge on the topic. Brinkmann and Kvale (2005) asserts that face-to-face interviews have traditionally been the dominant interview technique

in qualitative research, providing valuable information through both verbal and nonverbal cues. Interviews offer the advantage of allowing participants to discuss issues important to them, rather than being constrained to responding to closed questions.

Sekaran and Bougie (2016) argue that the adaptable nature of interviews assists researchers in probing for clarifications of ambiguities or confusion over concepts that may arise during the interview process. Additionally, interviewers can observe social cues, such as the interviewee's voice and body language, which can supplement the verbal responses (Brinkmann and Kvale, 2005). A pilot study was conducted to test the efficacy of the research instrument in achieving its intended purpose.

4.5 Research Design

Research design is defined as "a blueprint for the collection, measurement, and analysis of data, based on the research questions of the study" (Sekaran and Bougie, 2016). It provides a general plan outlining how the researcher intends to address the research questions of the study (Saunders et al., 2016). Research studies can be exploratory, explanatory, evaluative, or descriptive in nature. Exploratory studies are used when initial information is available, but further data is needed to develop theoretical frameworks. Causal or explanatory studies aim to determine the impact of one variable on another, causing it to change, while evaluative studies assess the effectiveness of a particular phenomenon (Bougie and Sekaran, 2019; Saunders et al., 2016).

The research design adopted for this study was descriptive and explanatory in nature (Sanders et al., 2016). Its purpose was to enable the researcher to create an accurate profile of events, individuals, or situations (Saunders et al., 2016). It sought to describe the characteristics of specific individuals or groups by obtaining data through a planned non-observational procedure (de Zeeuw, 2010). Furthermore, it aim was to depict the current state of affairs as it exists presently (Kothari, 2011). After the data was analysed, the study explored the causal relationships between variables. Within the medical education sector, this study outlined the current state of leadership, practices, and knowledge. Bougie and Sekaran (2019) suggest that descriptive studies also aid in understanding group characteristics and encourage systematic thinking in specific situations. Such studies often generate ideas for further research and facilitate decision-making processes.

4.6 Rationale for Methodology

The choice of quantitative research methodology for this study was based on its feasibility in addressing the research questions effectively. Quantitative research involves the collection of empirical data grounded in objectivity, gathered through direct or indirect sensory means, and

independent of subjective interpretations (Bryman, 2016)

4.7 Data Collection Instrument Design and Administration

4.7.1 Questionnaire Design

Questionnaire design plays a pivotal role in gathering high-quality data that supports accurate analysis, valid conclusions, and meaningful insights in research studies. Field (2003) asserts that a questionnaire is a set or sequence of questions developed to elicit information from participants through a survey. Brink et al. (2012) identified several strengths associated with the use of questionnaires over other data collection methods. Questionnaires are considered advantageous for collecting data from a large group of respondents as they can be easily distributed, either online or face-to-face. Additionally, questionnaires provide a greater sense of security to participants, ensuring anonymity and encouraging honest responses due to the minimal engagement between the respondent and the researcher. It is also relatively easier and more convenient to test the validity and reliability of questionnaires compared to other research instruments (Sekaran and Bougie, 2016). All participants complete the same sets of questions within a questionnaire, mitigating the impact of the interviewer's emotions during data collection. Considering the presented arguments, it can be concluded that questionnaires are a more economical and time-saving method. However, questionnaires also have drawbacks that may affect response rates and the quality of responses received. Participants may not be able to verify their understanding of the questions, leading to some questions being left unanswered.

To address some of the identified issues, scholars have identified guiding principles to assist researchers in creating effective questionnaires that yield reliable and valid data. They recommend crafting the questionnaire in a way that aligns with the research objectives and is applicable to the target audience. Questions should be clear, concise, and easily understandable, avoiding jargon, complex sentence structures, and ambiguous wording that could confuse respondents (Bougie and Sekaran, 2019). Moreover, questions should be formulated in an unbiased and neutral manner to prevent influencing respondents' answers, avoiding leading or loaded questions that may steer respondents toward a particular response or introduce bias into the data.

In the development of the questionnaire for this study, a five-point Likert scale was employed, primarily featuring closed-ended questions. Creswell (2013) highlights the ease of analysing responses in closed-ended questions, while also noting that constructing these questions can be more complex. Closed-ended questions allow for quicker completion compared to open-ended questions, which may require respondents to reflect and elaborate on their responses.

Kothari (2011) further points out that a major disadvantage of closed-ended questions is the potential oversight of critical responses, or superficial construction of the question itself. Consequently, the questionnaire was designed to include both closed and open-ended questions.

The instrument, comprised of twenty-seven close and open-ended questions, was divided into three sections. The first section detailed the demographic profile of the respondents, the second section consisted of questions regarding their experiences in decentralized training sites.The final section included open-ended questions, allowing respondents to provide qualitative responses on their experiences during clinical site rotations.

4.7.2 Administration of questionnaires

Kumar (2011) has outlined various methods for distributing questionnaires to participants, including email, hand delivery, personal delivery, electronic survey links, and QR codes. Each method offers unique advantages and drawbacks. Electronic surveys, for instance, provide a quick turnaround time, allowing respondents to complete the survey at their convenience, while also enabling researchers to monitor response rates and view reports in real-time. However, electronic or online surveys often yield lower response rates compared to paper-based surveys, as indicated by Nulty's (2008) review of several studies.

In the context of this study, the questionnaires were personally delivered to students at clinical sites, accompanied by a covering letter outlining the study's aims and objectives. This letter assured participants of the confidentiality and anonymity of their responses, enhancing their willingness to participate. The letter also included the researcher's contact information for any queries related to the study, as well as the contact details of the POPIA offices, should participants wish to raise any concerns regarding the study. Recognizing that students had academic and clinical commitments, the questionnaires were distributed over several days, allowing for a three-week completion timeframe. This timeframe afforded participants sufficient time to complete the survey and return it to site administrators. The researcher subsequently collected the completed questionnaires once the allocated time had elapsed.

4.7.3 Interviews

Interviews serve as a vital data collection method, providing detailed information through spoken language. Terre Blanche et al. (2006:47) define interviews as a form of 'spoken language' data collection, while Brinkmann and Kvale (2005) highlights face-to-face interviews as a dominant technique in qualitative research, facilitating the gathering of valuable information through both verbal and nonverbal cues. The interactive nature of interviews

allows for in-depth discussions on topics important to participants, moving beyond closed questions and fostering a more spontaneous exchange of ideas.

Sekaran and Bougie (2016) argue that the flexibility inherent in interviews enables researchers to clarify ambiguities or confusions that may arise during the interview process. Additionally, interviewers can observe social cues, such as the interviewee's voice and body language, providing supplementary information that enriches the verbal responses (Brinkmann and Kvale, 2005).

For this study, a semi-structured interview format was adopted. The advantage of this synchronous communication lies in the interviewee's more spontaneous responses and the potential for extended reflections, facilitated by the interactive nature of the dialogue. Structured interviews, on the other hand, involve predetermined contents and procedures, with the sequence and wording of questions determined in advance (Cohen et al., 2002). Such a rigid format would have limited the ability to modify questions in response to the direction of the interview. Consequently, the semi-structured interview format was chosen, allowing for the modification of question sequence and wording based on the flow of the interview.

A list of interview objectives was developed to ensure the gathering of relevant and valuable information for the study (see appendix 1 and 2). Open-ended questions were employed, as defined by Cohen et al. (2002:275), allowing respondents to express their views with minimal restraint. This approach aimed to capture interviewees' insights into the subject matter, enabling a comprehensive assessment of their perspectives. By allowing for unexpected or unanticipated responses, the open-ended structure facilitated the exploration of unforeseen relationships within the data.

4.7.4 Administration of Interviews

Interviews can be defined as an exchange of views between multiple individuals on a mutually interesting topic (Cohen et al., 2002). Maxwell (2005) further emphasizes the role of interviews in knowledge production through human interaction, highlighting the social context of research data. In the context of this study, interviews were conducted to gather insights from university and clinical staff in decentralized sites, aiming to understand the perceived implications of the decentralized program and its management. These interviews enabled participants to share their perspectives on the program's relevance to the South African medical community, highlight associated challenges, and express their experiences and concerns regarding program management and available resources.

Upon completion of the sampling process, participants were invited, via email, to participate in the study. The initial email included comprehensive information on the study's purpose and

relevant contact details, emphasizing participants' voluntary involvement and the option to withdraw at any time. Participants who expressed willingness to participate were contacted by phone to schedule interview appointments, ensuring convenience and minimal disruption to their daily obligations

Interviews were conducted in environments conducive to participants' comfort, with efforts made to prevent interruptions during the discussions. In instances where emergencies arose, interviews were rescheduled to accommodate the participants. The researcher made an assumption that the respondents had no reason to provide false or misleading information during the interviews. However, to minimize potential errors in data collection due to ambiguous statements, the researcher confirmed participants' responses to ensure accurate representation.

A tape recorder was utilized during the interviews to facilitate accurate transcription and analysis. While this method ensured a precise account of the interview, it may have affected the respondents' comfort levels, potentially leading to restrained responses. To mitigate this, the importance of maintaining confidentiality was emphasized, and a signed consent form was obtained from each interviewee before recording. Additionally, notes were taken during the interviews to supplement the tape-recorded data.

4.7.5 Pilot Study

Brink et al. (2012) underscore the significance of conducting a pilot study, as it enables researchers to test the practicalities of their research and assess the effectiveness of research tools in achieving study objectives. By conducting a pre-test with a small group of participants, the researcher can identify any issues with the study's design and methodology. It is important to note that the group of participants involved in the pilot study cannot be used in the main study, as emphasized by Creswell (2013)

Botma et al. (2010) further emphasize that the pilot study allows the researcher to ensure participants' clarity regarding the study's requirements, identify any potential ambiguities in the study's statements, and address any cultural insensitivities within the data collection tool. The findings from the pilot study should inform refinements to the data collection tool.

In this particular study, a two-fold pilot study was conducted, involving two distinct target groups. The first pilot study encompassed five randomly selected participants from the academic institution, who took part in a group session interview utilising the interview schedule as a guide. These participants were not included in the main study sample. The second group comprised ten students who independently completed the questionnaire. After submitting their completed questionnaires, the researcher engaged with the students to obtain their feedback

on the survey experience. Based on the students' input, two ambiguous questions were identified and subsequently rephrased, resulting in an improved questionnaire tool.

4.8 Study Population and Sample design

4.8.1 Study Population

In a research study, the population refers to a specific group of individuals sharing common characteristics that represent the larger context to which the research findings will be extrapolated (Kim et al., 2018). Since studying an entire population is often impractical, researchers typically select a subgroup, known as a sample, to gather data and draw conclusions that can be applied to the broader population (Saunders et al., 2016). Achieving representativeness in sample selection is critical as it enhances the validity, credibility, and applicability of research findings, thereby enabling meaningful insights and practical applications. Kothari (2011) further emphasizes the significance of unbiased sample selection, stressing the importance of ensuring that the sample represents the characteristics of the population to draw valid conclusions (Kothari, 2011).

In this particular study, the population of participants was divided into three distinct categories, including representatives from the academic institution, representatives from the Department of Health Hospital affiliated with clinical training, and medical students.

4.8.2 Study Site

Regarding the study site, the research was conducted in KwaZulu-Natal. The choice of this location was driven by two primary factors: first, the university in this region was chosen as a pilot for the decentralized program by the Deans of Medical Schools; second, KwaZulu-Natal is one of the South African provinces with a substantial population and underdeveloped areas, where access to healthcare is not as readily available as in urban regions.

4.8.3 Sampling Method

Sampling refers to the process of selecting a specific group of people, events, behaviours, or other elements for a study, often utilizing specific sampling techniques to determine the type and size of the sample (Meyers, 2013; Kim et al., 2018). Pandey and Pandey (2015) posit that sampling techniques fall into two broad categories: probability and non-probability sampling. Probability sampling methods involve selecting a sample in a way that each member of the population has a known, non-zero chance of being chosen, facilitating straightforward statistical inference and generalisation. Non-probability sampling methods, on the other hand, involve selecting a sample where the probability of an individual's inclusion is unknown or not

equal for all members. These techniques are typically used when probability sampling is not feasible or practical (Pandey and Pandey, 2015)

Under the non-probability sampling umbrella, different techniques are employed, including:

- Convenience sampling where the researcher selects individuals who are easily accessible or readily available.
- Purposive sampling where the researchers intentionally select specific individuals or elements based on predetermined criteria.
- Snowball sampling where participants refer other potential participants, leading to a chain of referrals.
- Quota sampling where the researchers set quotas for certain characteristics and select participants to meet those quotas.
- Maximum variation sampling where the researcher deliberately selects a sample that includes participants with diverse characteristics, viewpoints and experiences.

Each technique serves a specific purpose in selecting participants for a study, with varying degrees of representativeness and breadth of information.

While non-probability sampling may introduce various forms of bias, the research objectives of this study necessitated its use, with an awareness of potential limitations in generalizing the results. The combination of maximum variation and purposeful sampling techniques will be employed to select staff members for the study, aiming to capture a wide range of perspectives and information. Snowball sampling may also be considered to expand the participant pool based on referrals from initial subjects.

The study utilized maximum variation sampling in conjunction with purposeful sampling techniques to select the staff members participating in the research. These techniques were chosen to ensure the representativeness of the research focus (Denzin and Lincoln, 2006). Purposeful sampling is a non-random sampling method in which the researcher selects information-rich cases for an in-depth study. Information-rich cases are those that can provide a significant amount of insight into issues central to the research's purpose (Bryman, 2016). These sampling approaches were employed to ensure the collection of the broadest range of information and perspectives, given the size of the population.

Regarding student selection for the study, purposive sampling techniques was employed, specifically targeting fifth-year students with exposure to clinical training. This approach allowed for the collection of information from students with relevant experiences for the research. Van Voorhis and Morgan (2007) noted that quantitative research provides

guidelines and general rules for sample sizes essential to various statistical processes, unlike qualitative research, which lacks a standard sample size for its analysis procedures. This underscores the importance of adhering to established quantitative sample size principles for statistical analysis, marking a significant point of discussion in the context of this study.

4.8.4 Sample Size

The use of different sampling techniques is common in a mixed methods study. Sampling involves the selection of a specific group of people, events, behaviours, or other elements for a study (Meyers, 2013), with the selected individuals referred to as subjects or participants. For this particular study, three distinct population groups were identified: university staff members involved in the decentralized program, Department of Health staff affiliated with hospitals providing training, and medical students engaged in clinical rotations.

Employing a combination of qualitative and quantitative techniques in line with the mixed methods approach, questionnaires were distributed to students, ensuring flexibility in completion time. The sample size was determined using Krejcie and Morgan's formula, and the population of 236 medical students necessitated a sample of 177. Two hundred and thirty-six questionnaires were distributed, with 187 ultimately returned.

Conversely, a qualitative approach was utilized to gather insights from university and Department of Health staff members through in-depth interviews. The sample size for this qualitative segment was determined by research goals, saturation point, and the complexity of the topic, with an acceptable sample size ranging between 7-30 participants as suggested by Sekaran and Bougie (2016). A sample of 15 participants was deemed adequate, and an invitation email was sent to the identified cohort consisting of university and Department of Health staff, with 16 agreeing to be interviewed.

4.9 Data analysis

Data analysis serves as a selective process of categorizing collected data into fundamental components, revealing the characteristic elements and structure. This process allows for the researcher to engage with the data collected, gaining insight on the responses received. Given the mixed methodology of the study, both qualitative and quantitative analytical techniques were employed to derive comprehensive insights. The findings from the analyses needed to be integrated, compared and interpreted in order to draw conclusions and highlight key acumens.

Data in qualitative research can be analysed using different methods, the choice of the method used is determined by the research questions, nature of the data and the theoretical

framework of the study. In this study, Thematic analysis was used to identify recurring themes, allowing for critical conversation analysis from the interview responses. Bryman (2016) defined thematic analysis as a technique which allowed for critical conversation analysis from the responses generated from interviews. This analysis allows for classifying data, thereby laying the conceptual foundations upon which interpretation and explanations can be based.

Thematic analysis involved several stages that the researcher followed to identify, analyse, and interpret themes. Due to the iterative nature of thematic analysis, emerging themes were continually revisited and refined as the researcher gained deeper insight into the data. As a result, the process was flexible to allow for exploration and discovery. The stages included becoming familiar with the data, generation of initial codes, and organising and clustering codes that appeared to be related to similar concepts or ideas to form initial themes. These themes were then reviewed and refined to ensure they were conceptually coherent and captured the essence of the data. Additionally, the relationship between themes was explored, considering how they interact and contribute to the overall understanding of the research question. Finally, a report that detailed the identified themes was formulated, provideing supporting evidence from the data, and presenting interpretations. The NVivo 12 software facilitated the identification of emerging themes and sub-themes of the research constructs. This tool was better suited for use in this study as it offered a wider range of features for coding and analysing the data. Furthermore, it supported the integration of quantitative and qualitative data making it possible for the researched to identify emerging themes from both datasets.

Quantitative data analysis is frequently employed when researchers seek to measure variables and make predictions based on numerical data. Begum and Ahmed et al. (2015) defined quantitative data analysis as a systematic process of examining and interpreting numerical data. This type of analysis involves the use of statistical techniques and tools to draw conclusions, identify patterns and trends, and make generalisations about the population based on the sample.

Quantitative data analysis, on the other hand, involved the use of SPSS to examine numerical data systematically. Descriptive statistics were used to summarize data and identify patterns, providing valuable information. While descriptive statistics offer accessible insights, Tashakkori and Teddlie (2010) emphasized that the application of inferential statistical approaches is crucial for drawing valid conclusions and generalizing findings. Inferential statistics bridge the gap between sample data and broader population characteristics by allowing for the testing of associations between variables and the assessment of the extent of error in inferences (Chatfield, 2018). In this study, inferential statistical approaches, such as multiple regression analysis, correlation tests, Chi-Square tests were employed to draw valid conclusions and generalize findings. The utilisation of various statistical tests provided

valuable insights presented through frequency tables, pie charts, and bar graphs, among others.

4.10 Reliability and Validity

Reliability and validity are crucial concepts in research, ensuring the consistency and accuracy of the study's methods and findings. These concepts are crucial because they ensure the integrity and credibility of research study. In order for research findings to be rendered as credible, the researcher needs to ensure that the methods used in the study are consistent and replicable (Louis et al., 2011). In this study, the reliability of the data collection tool was assessed by conducting a pilot study on the same group of participants two weeks apart. The data was analysed to gauge similarities between the results. This test-retest procedure assisted the researcher in determining the reliability coefficient of the research tool.

Validity, on the other hand, refers to the accuracy with which a measurement reflects what it intends to measure (Creswell, 2013). This ensures that the conclusions drawn from the research accurately reflect the phenomenon under investigation. Ram (2013) asserts that validity indicates whether the conclusions of the study are justified based on the design and interpretation. Validity is generally divided into several subsections in order to assess different aspects of the study's accuracy and appropriateness. The content validity of an instrument is judgement-based, as there are no other means that display total objectivity on ensuring that the data collection tool optimally covers the necessary aspects of the study (Creswell, 2013). Content validity, used in the development of questionnaires and interviews, ensures that the data collection instrument covers all the necessary aspects of the study. It is efficiently used when the researcher is developing questionnaires and interviews as data collection tools. The data collection instrument for this study was designed in alignment with the concepts being investigated.

Kumar (2011) indicates that the link between the formal data collection tool and the literature review is established by construct validity. Dillman et. al (2014) argue that this type of validity is useful in exploring the relationship of the instrument 's results to the underlying theoretical concepts. Construct validity, based on the underlying theoretical concepts, was employed in the questionnaire design in alignment with the extensive literature review in the field of medical education.

The adoption of the mixed-method technique in this study enhanced validity through triangulation and the provision of more comprehensive explanations of the subject under investigation (Kerrigan, 2014). In this case, both quantitative and qualitative validation procedures and standards were considered to ensure the quality and rigor of the research. Previous studies confirm that quantitative validation procedures and standards are well-

established, unlike qualitative validation, which lacks a general consensus on procedures and standards (Johnson and Christensen, 2019).

Quality in research is determined by factors such as applicability, consistency, and neutrality, with different paradigms requiring specific approaches to address validity and reliability. Bryman (2016) asserts that the most important test of any research study is its quality. The quality of the study is said to be determined by its applicability, consistency and neutrality. The quality in relation to data from quantitative and qualitative strands was influenced by study objectives and questions.

It is important to acknowledge that there are fundamental differences between the rationalistic (quantitative) and the naturalistic (qualitative) paradigms, each requiring a paradigm-specific approach to addressing validity and reliability. In the rationalistic paradigm, the criteria for achieving accuracy are validity, reliability, and objectivity. Conversely, the criteria in the qualitative paradigm aim to ensure trustworthiness and credibility (Cohen et al., 2002). These criteria can be further distinguished into credibility, transferability, and dependability. In this qualitative study, authenticity and trustworthiness were used as vital quality indicators.

Brinkmann and Kvale (2005) recommended specific strategies to attain trustworthiness, including negative cases, peer debriefing, prolonged engagement and persistent observation, audit trails, and member checks. To ensure reliability and validity in the study, verification was conducted. This mechanism of checking and verifying information was consistently implemented throughout the data collection and interpretation process.

The quantitative approach was employed to gather insights from medical students regarding their experiences during training at decentralized sites. The semi-structured questionnaire was meticulously designed to ensure validity, reliability, and discrimination. Scholars such as Kim et al. (2018), Morse and Niehaus (2009), and Creswell et al. (2009) emphasize the significance of validity, indicating that a questionnaire should measure what it is intended to measure, with a focus on content validity, ensuring that questionnaire items relate to the constructs being measured. Additionally, they underscore the importance of reliability, which pertains to the questionnaire's ability to yield consistent results under identical conditions. Aguinis and Solarino (2019) further elaborate on reliability, incorporating the concepts of stability, equivalence, and internal consistency.

Stability signifies that consistent results will be obtained upon repeated testing using the same tool, while equivalence indicates that different researchers using the same tool will obtain similar results. Internal consistency ensures the uniformity of various items within an instrument. All these concepts were relevant to this research study. The researcher applied validity and reliability through pilot testing. Discrimination, another crucial factor in

questionnaire design, suggests that participants with varying scores on a questionnaire should exhibit differences in the construct of interest to the researcher (Johnson and Christensen, 2019). However, in this study, this specific component was not utilized.

The questionnaire design emphasized simple language and clear wording to avoid bias, with pilot testing conducted to verify the validity and reliability of the instrument. The data analysis was performed using the SPSS, and the results from the pilot study were utilized to refine the instruments. The consideration of these aspects contributes to the overall quality and integrity of the research findings

4.11 Elimination of Bias

Bias refers to any systematic error in the collection, analysis, interpretation, or publication of data that can lead to inaccurate conclusions. Sampling bias arises when the sample does not adequately represent the entire population. To minimize this, an appropriate sampling technique was employed. Selection bias occurs when the researcher inconsistently applies the criteria for selecting participants into the study sample. However, in this research, all respondents were selected based on the same set of criteria.

Survey methodology bias is introduced when questions are structured in a manner that leads respondents to answer in a predetermined way. This risk was mitigated through the use of a validated data collection tool. Social desirability bias arises when participants respond in a manner they believe will lead to social approval. By ensuring the anonymity of the questionnaire and the researcher's non-involvement in the distribution and collection of the questionnaires, this form of bias was minimized.

Confirmation bias occurs when a researcher develops a hypothesis or belief and then selectively uses participants' information to confirm that belief. To minimize this bias, absolute responses were meticulously documented and analysed without any manipulation of the collected data.

4.12 Ethical Consideration

Ethical considerations are crucial in upholding the integrity of the research process, ensuring that research contributes positively to society while respecting the rights and well-being of all stakeholders (Saunders et al., 2019). Accordingly, this study obtained ethical clearance from the University of KwaZulu-Natal Ethics committee and permissions from the Department of Health and the College of Health Sciences to conduct interviews and questionnaires with their staff and students.

Prior to their participation in the study, participants received an informed consent document.

This document offered participants adequate information about the study and outlined their rights and responsibilities should they decide to take part in the research. Creswell (2011) posits that the informed consent should address three crucial aspects: participants must be informed about what is expected of them, the researcher must provide a clear understanding of the research, and participants must have the choice to decide whether or not they want to be part of the study. In this study, participants were informed that they had the right to decline participation, and that their involvement was entirely voluntary. They were also made aware that, even if they initially consented to the study, they had the option to withdraw their consent at any point during the research. Furthermore, participants were advised that there would be no financial compensation for their participation in the study.

Louis et al. (2011) emphasized the importance of safeguarding participants' privacy in research. They highlighted the necessity of maintaining the highest level of confidentiality for the data collected during the research. In this study, all data collection instruments were securely stored in a safe location, and only the researcher had access to the data. Participants' rights to privacy were protected through the assurance of anonymity and confidentiality.

Anonymity is a critical ethical principle that must be rigorously upheld to safeguard individuals' privacy rights. It is imperative that the researcher cannot establish any connection between the respondents and the collected data (Polit and Beck, 2014). The researcher must take every possible measure to ensure that respondents' identities remain confidential throughout the study (Bryman, 2016). In this research, every questionnaire was assigned a unique coded number instead of using names. The researcher maintained a list of names with corresponding code numbers for reference purposes only, and this list was securely locked away.

The principle of confidentiality is upheld when participants' responses are kept private and are not disclosed to individuals not directly involved in the research. Various confidentiality protocols are employed by researchers to ensure the protection of participants' sensitive information (Ram et al., 2015). A breach of confidentiality occurs when a researcher permits unauthorized individuals to access the gathered data (Creswell, 2011). Kumar (2011) outlined guidelines for maintaining confidentiality, highlighting the potential psychological harm that breaches can cause to participants. These guidelines include collecting only essential personal and identifying information on data collection sheets, restricting access to data, securing the data collection tools, and anonymizing the reporting of data. In this study, the data collection tools were only accessible to the researcher.

4.13 Secondary Data

The primary data collection techniques utilized in this study comprised interviews and focus groups. Secondary data involved the examination of textual and visual materials from policy

documents, government regulations, and any other pertinent documentation to identify patterns, themes, and meanings relevant to the research question. Secondary data, as defined by Johnston (2014) refers to data collected through other studies conducted in the field by other researchers.

A review of existing documents and policies was undertaken as part of the secondary data analysis. Reviewing existing policies and documents was crucial for this study as it assisted in determining the extent to which such policies were implemented at various levels. The collected data was analysed separately and subsequently integrated. The incorporation of the second qualitative stage approach was intended to enhance the study's findings.

Additionally, a desk review of reports from individual stakeholders in medical school pertaining to decentralized training was conducted. This was essential to gather and synthesize existing knowledge and gain insights into current practices and experiences.

4.14 Scope and Limitation of Study

The delineation of a study's scope and limitations holds a paramount role in contextualising the research and establishing realistic boundaries within which it was conducted. In this research, the scope was confined to the realm of decentralised training within the geographical confines of KwaZulu-Natal. However, it is essential to acknowledge the inherent limitations within the study. The first limitation pertains to the study's delimited scope. It did not encompass decentralised training platforms offered by universities in other provinces across South Africa. Given that KwaZulu-Natal is just one of the country's nine provinces, the findings gained from this research, while informative, are not readily generalizable to regions outside the study area due to variations in contextual factors. Furthermore, the study is susceptible to the influence of external socioeconomic and political factors that may have exerted effects on the implementation and outcomes of decentralised training initiatives. Public hospitals where students undergo training have been contending with an increasing demand for healthcare services amid resource constraints in recent years. These external challenges could potentially impact the overall experiences of the participants in this study.

In the subsequent chapters, the analysis and interpretation of the data will offer a nuanced understanding of the research findings, cognizant of the study's scope and limitations.

4.15 Conclusion

This chapter has provided an overview of the research methodology utilized in this study. The adoption of a mixed-methods approach was motivated by the necessity to triangulate both quantitative and qualitative data, ensuring a comprehensive understanding of the research objectives. The research design, encompassing the research philosophy, approach, strategy,

and data collection methods, was meticulously tailored to the nature of the research questions and the data requirements. The rationale behind selecting maximum variation and purposive sampling techniques, along with details on the sample size, was thoroughly elucidated to underscore the study's rigor and the generalizability of the findings. Ethical considerations, including participant consent and data confidentiality, were integral aspects of the research process and were thoughtfully addressed.

While the chosen research methodology offers several strengths, such as facilitating a comprehensive exploration of the investigated phenomenon, it is important to acknowledge its limitations. These limitations encompass the potential for respondent bias in self-reported data and the challenges associated with generalizing findings beyond the selected sample.

The subsequent chapter will delve into a comprehensive analysis of the collected data using appropriate statistical and qualitative techniques. The research methodology expounded in this chapter lays the groundwork for the ensuing analysis and the derivation of meaningful insights, contributing to the resolution of the research questions and the attainment of the research objectives.

CHAPTER FIVE: DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1 Introduction

This chapter provides focus on data analysis and presentation of both qualitative and quantitative findings. Creswell et al. (2009) asserts that data analysis plays a critical role in any research, as it is crucial for drawing conclusions and generalizing findings to the identified problem statement. The structure of this chapter is designed to provide comprehensive responses to the research questions, ultimately achieving the research objectives. This study encompasses four key objectives. Firstly, it seeks to evaluate the existing governance structure in South African medical universities and its consequential impact on the successful implementation of decentralized programs. Additionally, it aims to conduct a comprehensive analysis of the current healthcare and medical education landscape in South Africa, emphasizing influential changes and trends shaping priorities in both sectors. Another crucial objective involves assessing the readiness of medical universities to implement decentralized training initiatives. Finally, the study endeavours to provide recommendations by proposing a context specific decentralized management framework for medical universities.

Given the usage of a mixed-method approach in this study, in-depth interviews were conducted among staff members at the university and various hospital sites for qualitative data collection. Simultaneously, questionnaires were administered to students at the selected sites to collect quantitative data. Using a convergent parallel mixed-methods design, This integration strategy enhances the credibility of both quantitative and qualitative data The bridging procedure illustrated in meta-inferences established a consensus between qualitative and quantitative results, facilitating a holistic perspective on the phenomenon under investigation. In the context of this study, qualitative research contributes to the creation of a credible theoretical integrative comprehension, while the quantitative inductive procedure synthesizes various developmental theories. This consolidation of methodologies produced rich theoretical insights and results that a singular approach would not have achieved.

5.2 Analysis of Quantitative Data

5.2.1 Demographic Profile

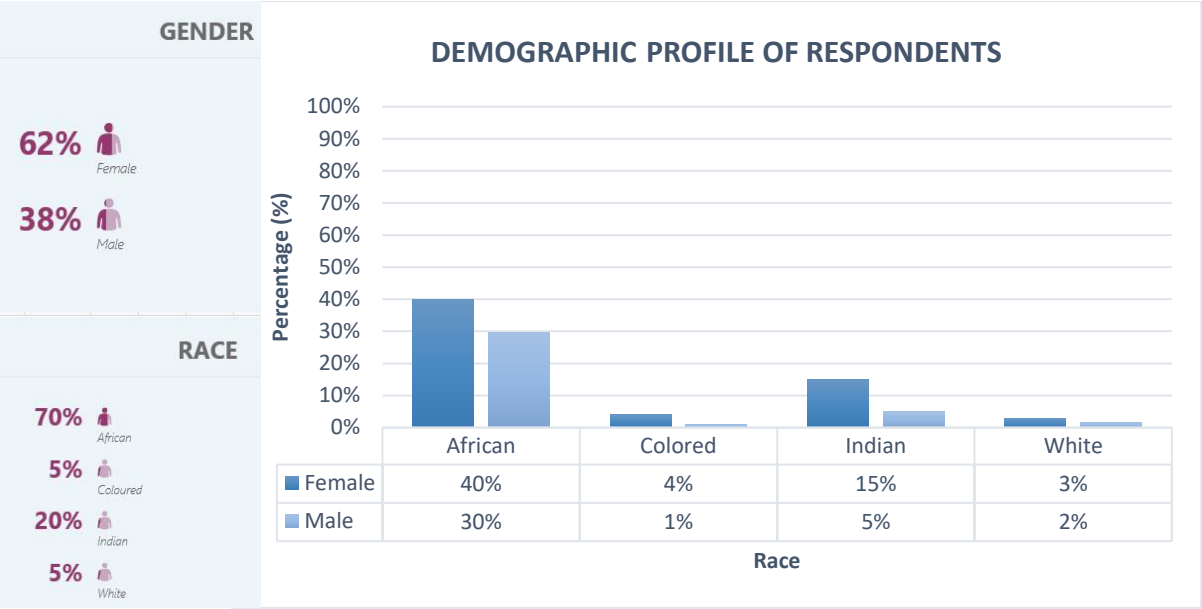

Figure 5.1: The demographic profile of respondents

Characteristics data offer both demographic information and relevant details about the study participants. Understanding the respondents' characteristics is vital in comprehending the sample composition represented in the study. This understanding is essential for determining the extent to which the results can be generalized to a larger population and for examining trends and patterns within the data. In this study, the demographic profile of the respondents mainly consisted of African participants (70%) and female participants (62%) (see Figure 5.1).

Figure 5.2 illustrates the various decentralized placement sites where respondents completed their clinical rotations. The rotational allocation of students provides them with a comprehensive and well-rounded education, preparing them for real-world challenges and their future medical careers. It is crucial to allocate students to each site based on its capacity to accommodate students. Some sites may be constrained by factors such as the availability of teaching staff, resources, and provided services, thereby influencing the number of students and their exposure to specific disciplines.

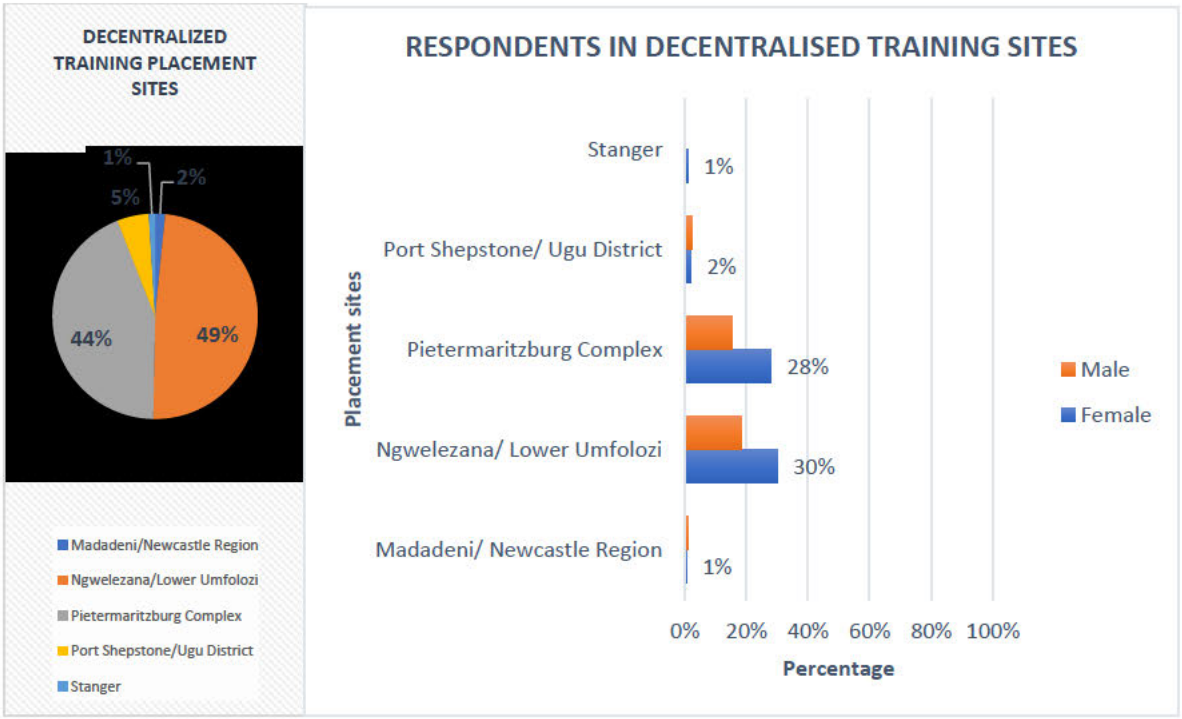

Figure 5.2: Percentage of Students in Decentralized Placement Sites

The data in Figure 5.2 indicates that the majority of respondents (49%) were accommodated in the Ngwelezana/Lower Umfolozi Region, while sites such as Stanger, Port Shepstone/Ugu District, and Madadeni/New Castle Region accommodated the least number of students that participated in the study.

Most respondents completed their clinical rotations at two primary sites: Ngwelezana/Lower Umfolozi and Pietermaritzburg Complex. This trend could be attributed to the availability of staff for student supervision and the fulfilment of overall curriculum requirements. The curriculum mandates exposure to various medical specialties, clinical skill assessments, and the achievement of specific learning objectives. The data depicted in the graphs above indicates that the Ngwelezana/Lower Umfolozi and Pietermaritzburg Complexes could accommodate a large number of students. Several factors may influence this scenario, such as the number and quality of healthcare facilities in these regions, infrastructure for student accommodation, and general student support structures, all of which are imperative for a student's overall academic success.

5.2.2 Decentralized Training Experience

5.2.2.1 Module Structure

The respondents were requested to comment on the design and organisation of their modules in decentralised training sites. Module structure is a vital component in education, enhancing the effectiveness of teaching and learning. It focuses on specific topics, outlining contents, learning objectives, and assessments, providing students with a clear, progressive learning path. The data collected from respondents' sheds insight on their perspectives on the design and organisation of modules in decentralized training sites.

Table 5.1 displays respondents' perceptions of the rotation structure in decentralized sites. The average response of 3.84, with an acceptable standard deviation of 0.78, suggests a generally positive perception of the rotation structure, indicating satisfaction with its design and organisation.

Table 5.1: Perception on the Structure of the Rotation

Structure of the Rotation

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	,5	,5	,5
Disagree	9	4,5	4,8	5,3
Neutral	40	20,0	21,4	26,7
Agree	105	52,5	56,1	82,9
Strongly Agree	32	16,0	17,1	100,0
Total	187	93,5	100,0	

Statistics

Rotation Structure

N Valid	187
Mean	3,84
Std. Deviation	,778
Variance	,605
Skewness	-,623

Figure 5.3 presents a combined percentage of respondents' perceptions regarding their experiences in various decentralized sites. The majority of responses were positive, with satisfaction levels generally exceeding 70% (including those who strongly agreed or agreed with the statement). Mixed responses were observed in sites with fewer students, leading to an increase in the number of neutral responses.

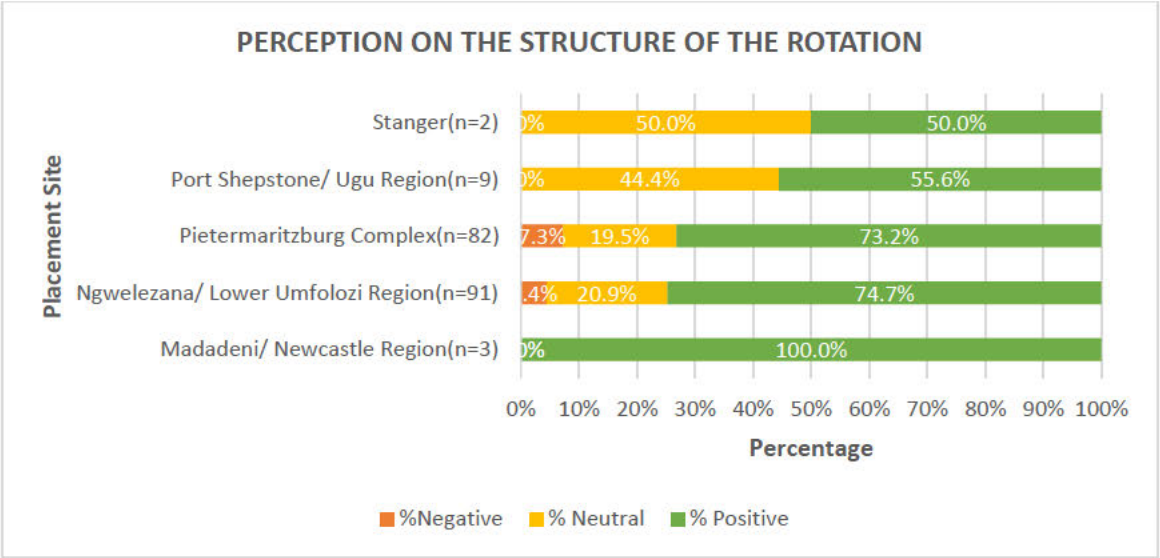

Figure 5.3: Perception on the structure of the block rotation in decentralized sites.

Table 5.2 provides insights into respondents' perceptions of the clinical exposure received in decentralized sites. Clinical exposure is a cornerstone of undergraduate medical training as it assists in bridging the gap between theoretical knowledge and practical skills. By providing the student with hands on experience, this fundamental component of medical education provides the necessary competence for health care professionals to provide quality patient care. The mean score of 4 indicates that a majority of the respondents were satisfied with the clinical exposure, accounting for 80.5% of the total respondents.

Table 5.2: Perception on Clinical exposure received in Decentralised Sites

Clinical Exposure

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	4	2,0	2,0	2,0
Neutral	33	16,5	16,7	18,7
Agree	120	60,0	60,6	79,3
Strongly Agree	41	20,5	20,7	100,0
Total	198	99,0	100,0	

Statistics

Clinical Exposure

N	Valid	198
Mean		4,00
Std. Deviation		,676
Variance		,457
Skewness		-,399

As illustrated in Figure 5.4, over 80% of the respondents from the Pietermaritzburg and Ngwelezana Regions were generally satisfied with the clinical exposure received in decentralised sites. The satisfaction level of those who were in smaller allocated in smaller

numbers ranged from either being 100% satisfied in Stanger and Madadeni Regions to being partially satisfied (55,6%) in the Port / Ugu Region. As clinical exposure involves medical students actively participating in patient care by assisting and observing seasoned healthcare professionals as they diagnose and treat patient, the lower the numbers allocated to a supervisor the better. The students are exposed to a larger number of cases as opposed to those who have a large number of students allocated per supervisor.

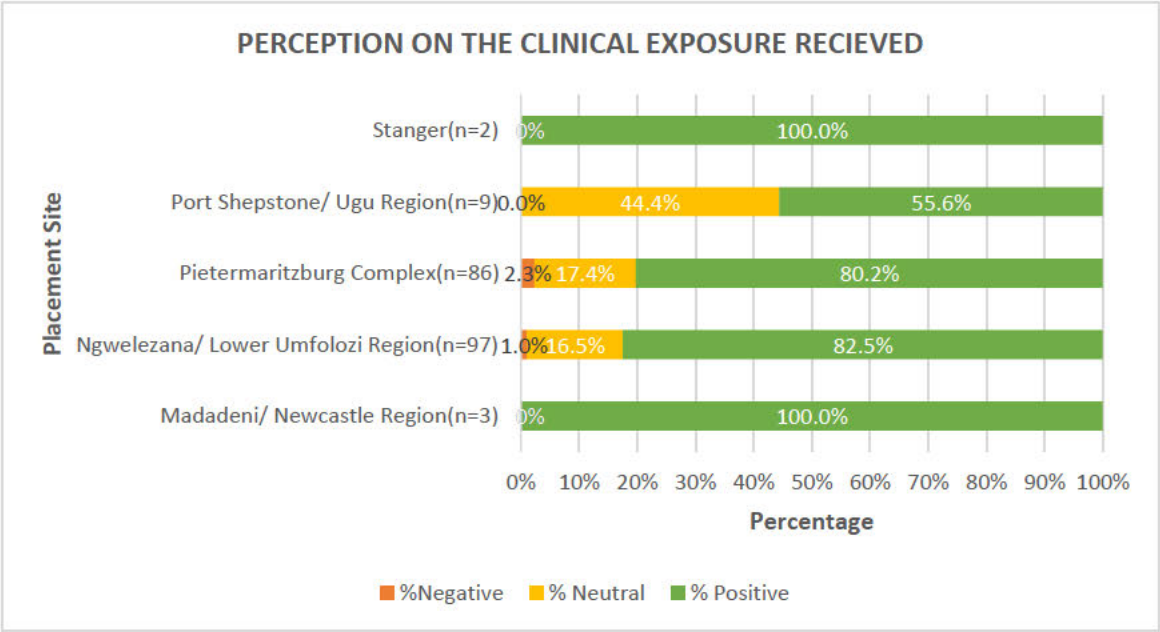

Figure 5.4:Perception on the adequacy of clinical exposure received in decentralized site

Table 5.3 provides insight into respondents' perceptions on how the balance between theory and practicals was achieved. Majority of the respondents were satisfied with how the balance was achieved in decentralized sites.

Table 5.3: Perception on the balance achieved between Theory and its Application

Balance between Theory and Application

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	1,5	1,5	1,5
Neutral	35	17,5	17,8	19,3
Agree	123	61,5	62,4	81,7
Strongly Agree	36	18,0	18,3	100,0
Total	197	98,5	100,0	

Statistics

Balance between Theory and Application

N	Valid	197
Mean		3,97
Std. Deviation		,650
Variance		,423
Skewness		-,313

Figure 5.5 demonstrates that over 75% of respondents from all training sites believed that a balance between theory and practice was achieved. This response aligns with the findings related to clinical exposure, indicating a strong correlation between the two.

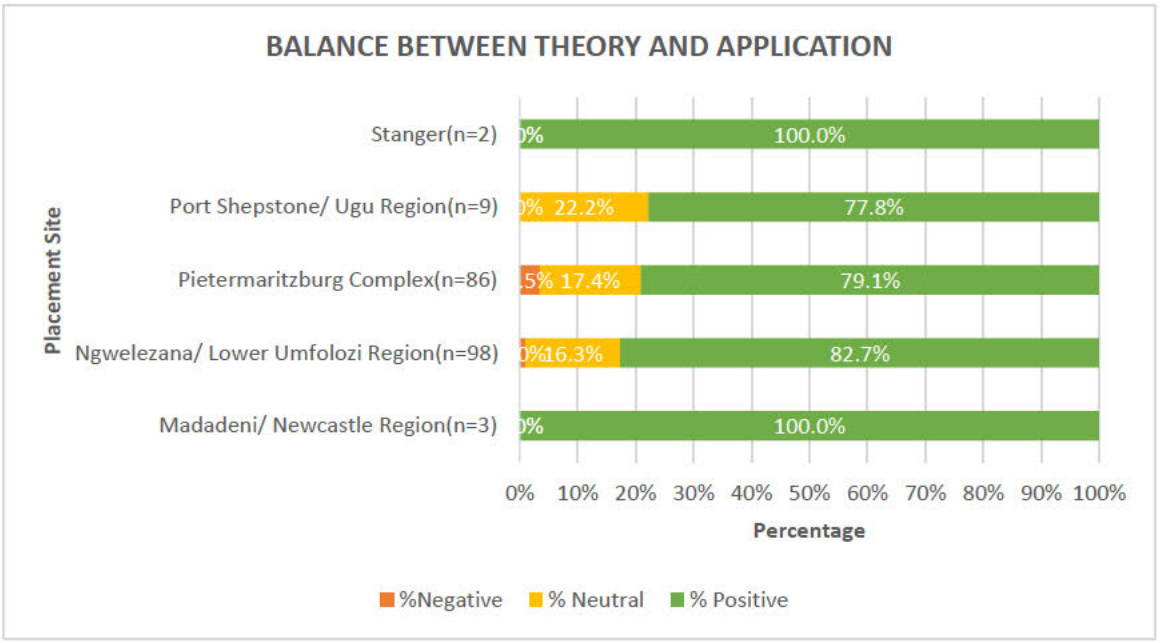

Figure 5.5: Perception on the balance between theory and its application

Table 5.4 reflects respondents' views on the guidance received when navigating the modules. Students receiving guidance in a clinical setting is essential not only for their education and personal development but also for the safety of the patient and the quality of care they receive. Clinical settings involve direct interactions with patients therefore their safety and well-being cannot be compromised at the expense of teaching a student.

Table 5.4: Perception on the guidance received by students to navigate the Modules

Guidance

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1,0	1,0	1,0
Disagree	10	5,0	5,1	6,1
Neutral	36	18,0	18,2	24,2
Agree	118	59,0	59,6	83,8
Strongly Agree	32	16,0	16,2	100,0
Total	198	99,0	100,0	

Statistics

Guidance

N	Valid	198
Mean		3,85
Std. Deviation		,785
Variance		,617
Skewness		-,870

Guidance is essential for students' education, personal development, patient safety, and the quality of care they provide. It provides an opportunity for clinical supervisors to provide constructive feedback, encouraging critical thinking and problem-solving skills while bolstering students' confidence. Figure 5.6 indicates a generally positive response related to the guidance received in most sites, with the exception of Port Shepstone/Ugu District. The Port Shepstone/Ugu District site exhibited relatively lower satisfaction levels compared to other sites, while the Pietermaritzburg Complex displayed slightly reduced satisfaction levels.

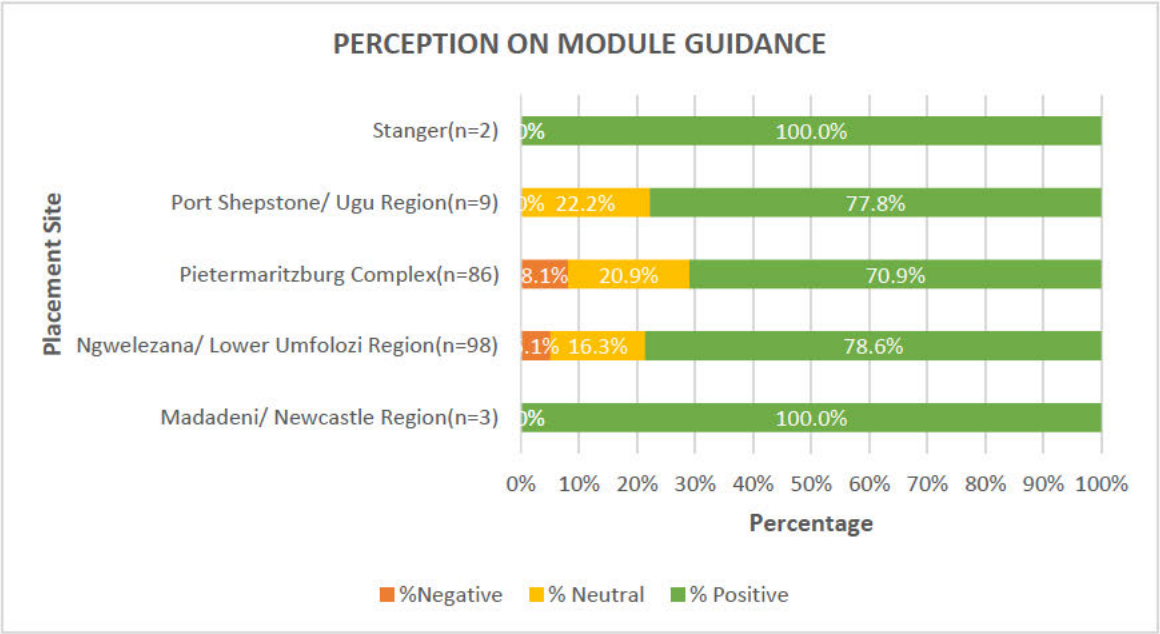

Figure 5.6: Perception on the sufficiency of guidance received to cope with the modules offered in decentralized sites

Overall, the data on module structure and delivery indicated a favourable response, with respondents generally satisfied with the structure, exposure, and guidance received in decentralized sites. However, there were notable levels of dissatisfaction in one particular site where only three students were allocated. In general, respondents allocated to the Port Shepstone/Ugu District reflected reduced levels of satisfaction regarding the rotation structure and clinical exposure.

5.2.2.2 Academic Resources and Support

It is imperative that the academic institutions provide an environment that fosters the teaching and learning endeavour. Academic resources assist in creating a supportive environment that enhance student success and academic excellence. These resources encompass a wide range of support services, materials and tools designed to assist students in achieving their educational experiences.

Table 5.5: Perception on the Knowledge and Assistance received from Academic Staff

Academic Staff: Knowledgeable and Helpful

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	6	3,0	3,0	3,0
Neutral	28	14,0	14,2	17,3
Agree	126	63,0	64,0	81,2
Strongly Agree	37	18,5	18,8	100,0
Total	197	98,5	100,0	

Statistics

Academic Staff: Knowledgeable and Helpful

N	Valid	197
Mean		3,98
Std. Deviation		,674
Variance		,454
Skewness		-,589

Table 5.5 portrays respondents' perceptions of the assistance received from academic staff. As the facilitators of the learning process, academics play an important role in providing guidance structure and resources to assist students to acquire knowledge and skills effectively. Academics are not only required to provide clarity on discipline related concepts but they are also expected to inspire and motivate thereby igniting interest and enthusiasm for learning. In a clinical context, they are also viewed as mentors and role models.

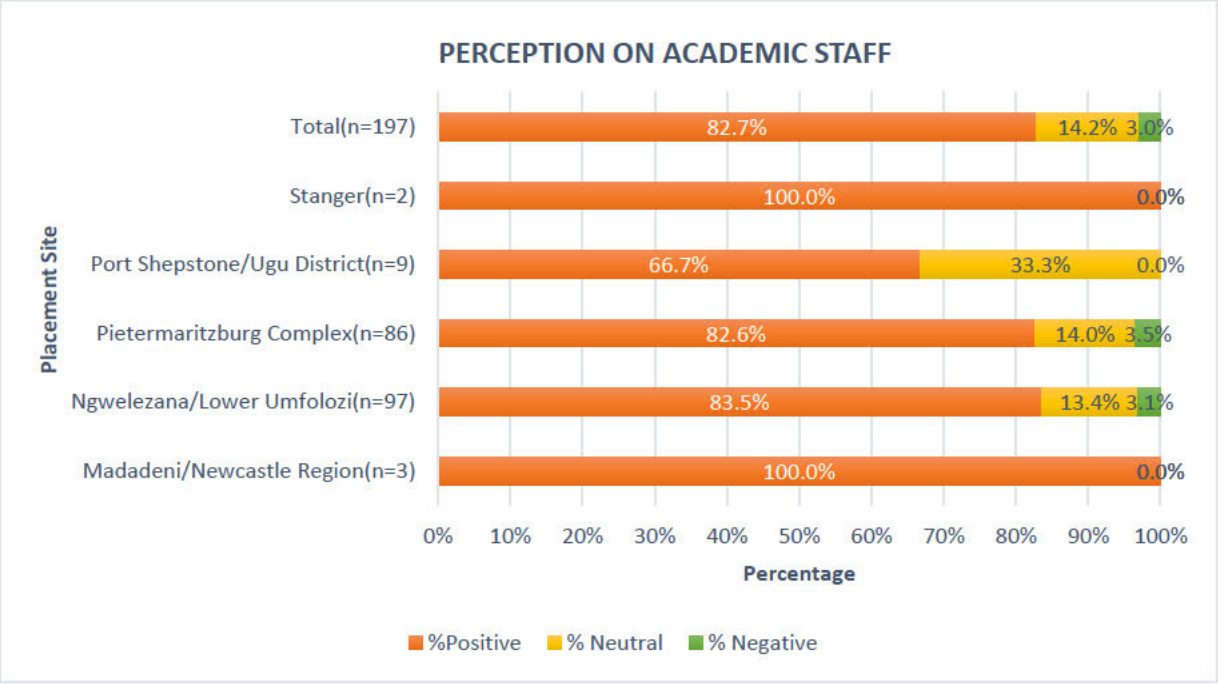

Figure 5.7: Perception on the knowledge and assistance received from academic staff

Figure 5.7 displays a positive response of over 80%, indicating that most respondents across the sites were satisfied with the knowledge base and the support received from academic staff. However, the Port Shepstone Region demonstrated a lower satisfaction level, with 33% of respondents providing a neutral response.

Table 5.6: Perception on the Complexity of Work students received in relation to their abilities

Complexity of Work

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	6	3,0	3,1	3,1
Neutral	47	23,5	24,1	27,2
Agree	118	59,0	60,5	87,7
Strongly Agree	24	12,0	12,3	100,0
Total	195	97,5	100,0	

Statistics

Complexity of Work

N	Valid	195
Mean		3,82
Std. Deviation		,676
Variance		,457
Skewness		-,372

Table 5.6 presents satisfaction levels related to the academics' ability to align the complexity of assigned work with students' abilities and learning needs. The majority of sites exhibited satisfaction levels above 70%, with the exception of the Port Shepstone Region (Figure 5.8)

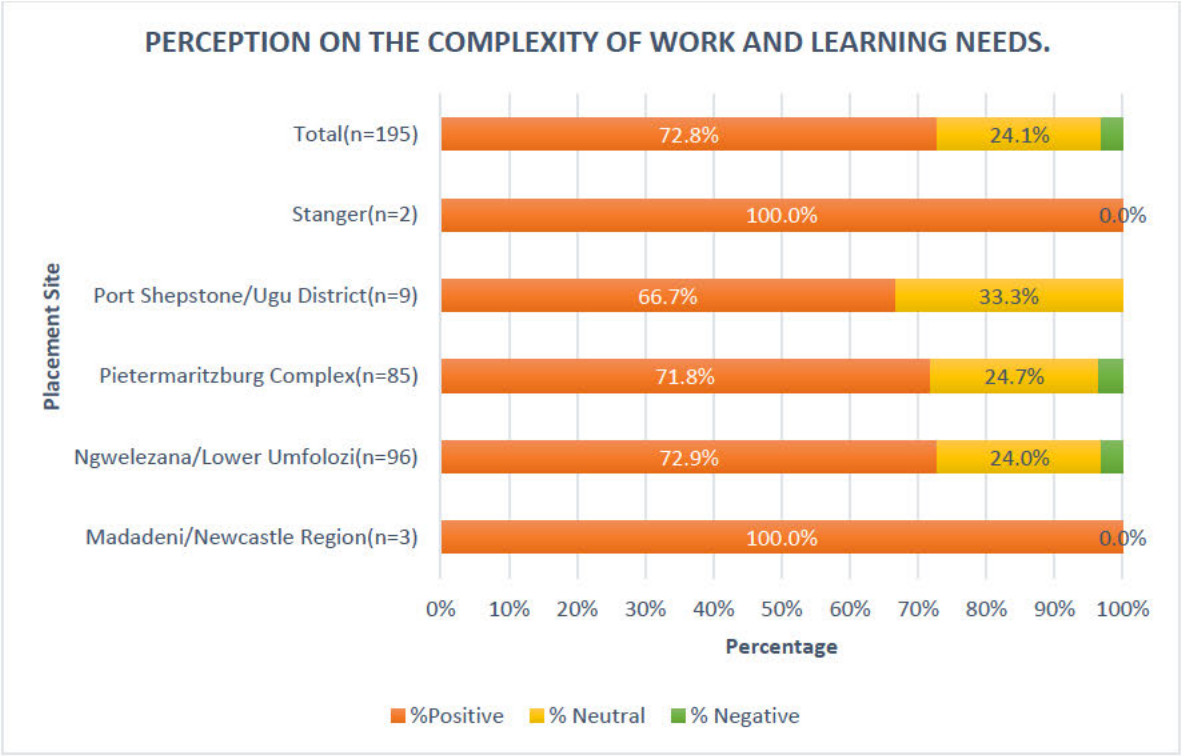

Figure 5.8: Perceptions on the lecturers' ability to ensure that the complexity of work allocated to students was calibrated with their abilities and learning needs.

Table 5.7 illustrates the perception of student participation in learning, discussions, and patient care, encompassing activities such as reading, presenting, and contributing to patient care decisions.

Table 5.7: Perception on Student Participation in Learning

Active Participation in Learning

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	1	,5	,5	,5
Neutral	24	12,0	12,3	12,8
Agree	133	66,5	68,2	81,0
Strongly Agree	37	18,5	19,0	100,0
Total	195	97,5	100,0	

Statistics

Active Participation in Learning

N	Valid	195
Mean		4,06
Std. Deviation		,576
Variance		,332
Skewness		-,162

The satisfaction level for this aspect was above 85%, suggesting that respondents were actively engaged. Notably, the data from the Port Shepstone Region indicate a need for improvement, with 33% of respondents providing neutral responses (Figure 5.9).

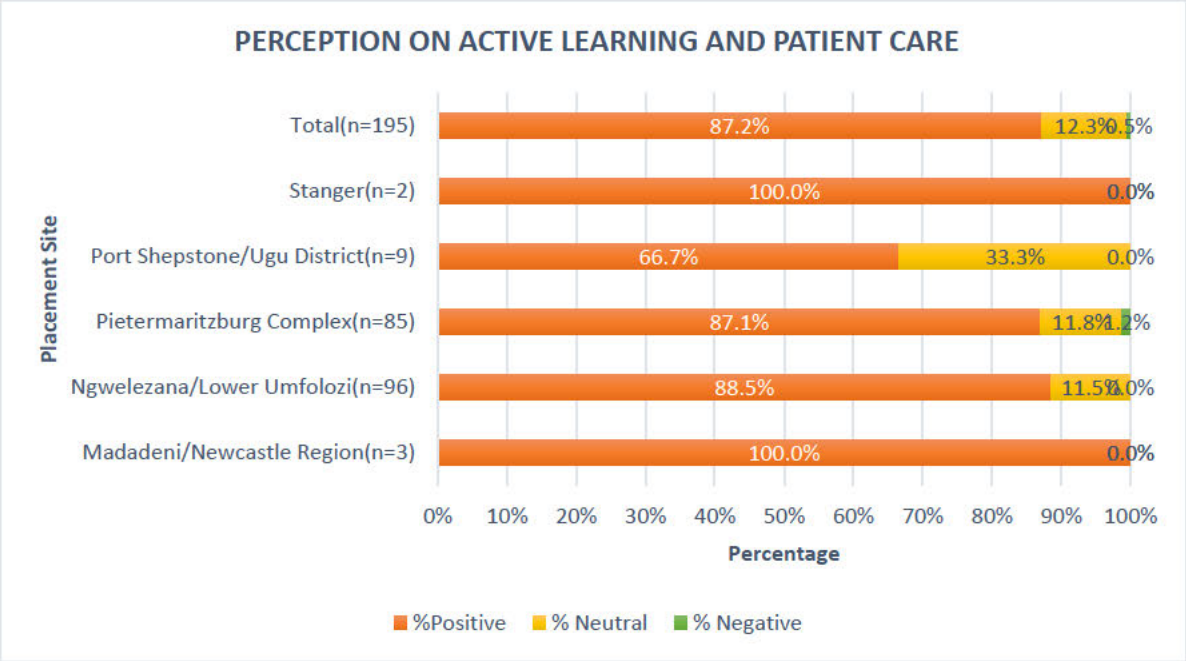

Figure 5.9: Perception on student participation in learning, discussions and patient care including reading, presenting, contributing to patient care decisions

Table 5.8 reflects the perception of academic staff's ability to understand student needs and challenges. Student centred approaches are valuable in providing a rich and comprehensive learning experience for students. As can be seen in Table 5.8, 56 % of the respondents agreed with this statement.

Table 5.8: Perception on the ability of Academic Staff to understand and address Student Needs

Academic Staff: Understanding Student Needs

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1,0	1,0	1,0
Disagree	15	7,5	7,7	8,7
Neutral	42	21,0	21,5	30,3
Agree	112	56,0	57,4	87,7
Strongly Agree	24	12,0	12,3	100,0
Total	195	97,5	100,0	

Statistics

Understanding Student Needs

N	Valid	195
Mean		3,72
Std. Deviation		,816
Variance		,665
Skewness		-,774

Student-centred approaches, while valuable for comprehensive learning experiences, may face limitations in the clinical context due to patient safety and ethical considerations. This limitation could account for the increase in neutral and negative responses across most sites (Figure 5.10). Factors such as time constraints, patient load, and the availability of suitable patients can influence the extent of student involvement, leading to varied clinical exposure.

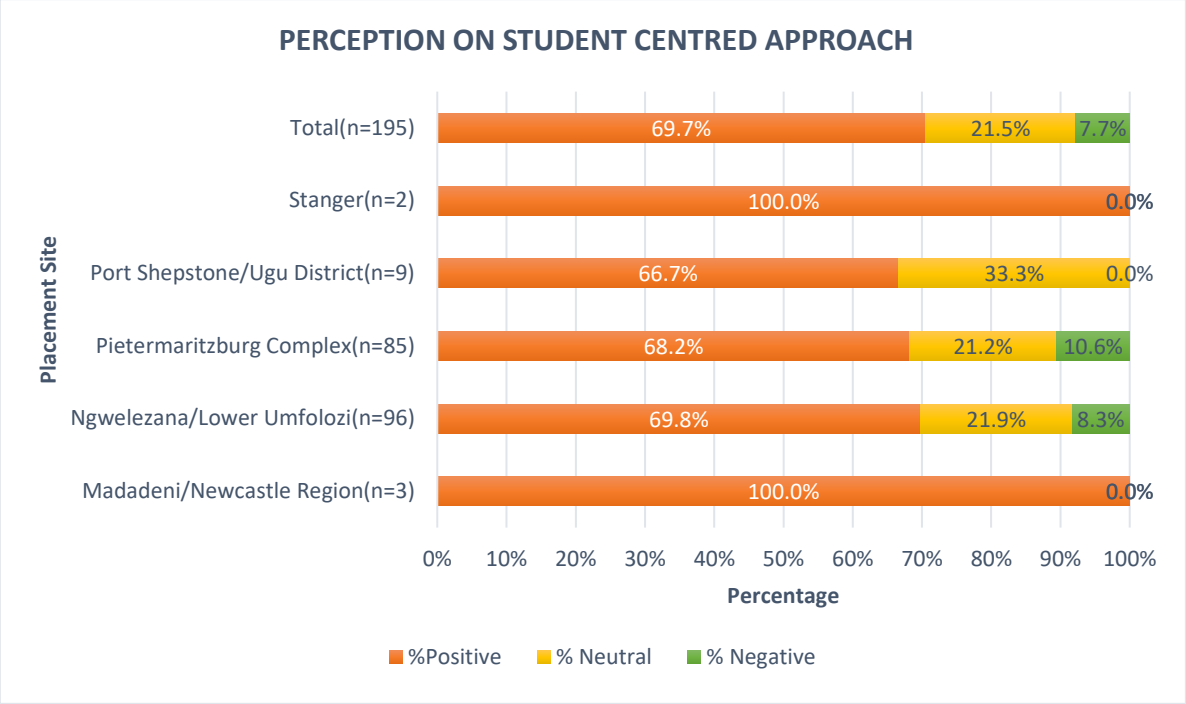

Figure 5.10: Perception on academic staff's ability to understand student needs and challenges

Overall, the respondents expressed general satisfaction with the academic support received in most clinical sites. However, the data also indicated several areas that could be improved, as evidenced by slightly elevated neutral and negative responses. These factors, including the availability of and assistance from academic staff, as well as the staff's understanding of student needs, will be further explored in the qualitative responses within this chapter.

5.2.2.3 Administrative Assistance and Clinical Support

Administrative assistance is a key component in ensuring the efficient operation of academic institutions, allowing students to concentrate on their learning and development. Medical programs require effective scheduling, resource coordination, and logistical management, all of which rely on careful planning and implementation. Similarly, clinical support from other health professionals is crucial in providing students with a comprehensive educational experience and in shaping them into well-rounded healthcare professionals. This section also alludes to the strategic thinking of the institution's leadership. In this section, the responses

from the students gave us an indication of the ability of the institution to evaluate problems and opportunities and the decisions they made to support the overall goals.

Table 5.9 combines respondents' perceptions of the support provided by nursing and allied health professional staff in decentralized sites. These professionals supervise and guide students during their clinical rotations, providing constructive feedback to ensure adherence to best practices and safety protocols.

Table 5.9: Nursing and allied health professional staff support

Support by Nursing and Allied Health Professionals

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1,0	1,0	1,0
Disagree	6	3,0	3,1	4,2
Neutral	45	22,5	23,4	27,6
Agree	110	55,0	57,3	84,9
Strongly Agree	29	14,5	15,1	100,0
Total	192	96,0	100,0	

Statistics

Nursing and Allied Health Professionals

N	Valid	192
Mean		3,82
Std. Deviation		,759
Variance		,576
Skewness		-,708

Figure 5.11 indicates that students in the Madadeni and Stanger Regions were more satisfied with the support they received from nurses and allied health professional staff compared to those in the Port Shepstone Region. The increased number of neutral responses suggests the potential for enhancing the support provided to improve student experiences. As these professionals collaborate with students in delivering patient care, teamwork, respect, and effective communication are essential for understanding the roles and responsibilities of the entire healthcare team.

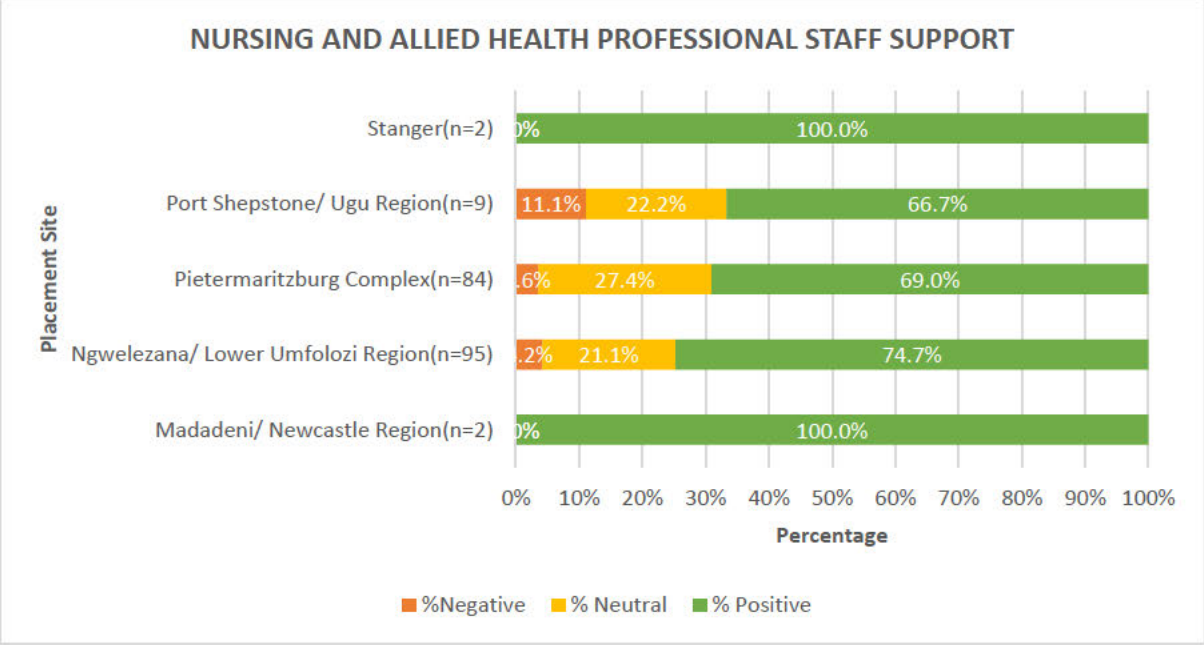

Figure 5.11: perception on the sufficiency of support received by students from the nursing and allied health professional staff

Efficient administrative processes in decentralized sites are crucial for supporting students. Ideally, these offices should facilitate efficient communication between the School or College and the students, allowing students to focus more on their studies and clinical work rather than bureaucratic administrative tasks.

Table 5.10: Support from Administrative Staff

Support from Administrative Staff

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	14	7,0	7,7	7,7
Neutral	40	20,0	21,9	29,5
Agree	108	54,0	59,0	88,5
Strongly Agree	21	10,5	11,5	100,0
Total	183	91,5	100,0	

Statistics

Support: Administrative Staff

N	Valid	183
Mean		3,74
Std. Deviation		,759
Variance		,577
Skewness		-,597

Table 5.10 illustrates the responses across all sites. The satisfaction level for administrative support received from administrators generally positive with a mean of 3,74.

Table 5.11: Queries are dealt with efficiently and promptly

Queries

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	13	6,5	7,4	7,4
Neutral	63	31,5	35,8	43,2
Agree	88	44,0	50,0	93,2
Strongly Agree	12	6,0	6,8	100,0
Total	176	88,0	100,0	

Statistics

Queries

N	Valid	176
Mean		3,56
Std. Deviation		,730
Variance		,533
Skewness		-,264

Table 5.11 reflects the respondents' overall satisfaction level with the handling of queries. Timely and efficient handling of queries is essential for maintaining academic and administrative processes. The lower satisfaction level in the efficiency of addressing queries indicates that improvements are needed in this area. The bureaucratic nature of universities, with multiple departments and decision-making layers, can lead to delays in addressing queries. Such delays can have significant consequences, impacting student satisfaction and academic performance.

While the data presented generally reflects positive responses regarding the support provided by administrative and allied health professional staff, there are notable areas that require improvement, particularly in the prompt and efficient handling of student queries. Delays in addressing these queries can significantly affect student satisfaction and academic performance

5.2.2.4 Facilities and Resources

The availability of diverse and accessible learning materials plays a central role in shaping students' success, providing the necessary resources for acquiring information and honing critical thinking skills to achieve academic excellence. This section also provides insight on the standardisation of core elements which contribute to the consistency of students' learning experiences across the various sites.

Table 5.12: Perception of student access to learning materials) in decentralized sites

Learning Material

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	,5	,5	,5
Disagree	21	10,5	11,5	12,0
Neutral	31	15,5	16,9	29,0
Agree	110	55,0	60,1	89,1
Strongly Agree	20	10,0	10,9	100,0
Total	183	91,5	100,0	

Statistics

Learning Material

N	Valid	183
Mean		3,69
Std. Deviation		,835
Variance		,697
Skewness		-,805

Table 5.12 illustrates the respondents' perceptions of student access to learning materials such as books, journal articles, and e-journals in decentralized sites. The data indicate that 65% of the students were satisfied with their access to learning materials.

Table 5.13: Student Support Services

Student Support Facilities in Hospitals

	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	1,0	1,1	1,1
Disagree	32	16,0	17,5	18,6
Neutral	26	13,0	14,2	32,8
Agree	111	55,5	60,7	93,4
Strongly Agree	12	6,0	6,6	100,0
Total	183	91,5	100,0	

Statistics

Student Support facilities in hospitals

N	Valid	183
Mean		3,54
Std. Deviation		,894
Variance		,799
Skewness		-,824

Student support facilities serve as a safety net for managing the demanding journey of medical education. These facilities not only shape students into competent and confident medical professionals but also nurture well-rounded individuals crucial to the medical field. Table 5.13 provides a summary of the responses across all sites.

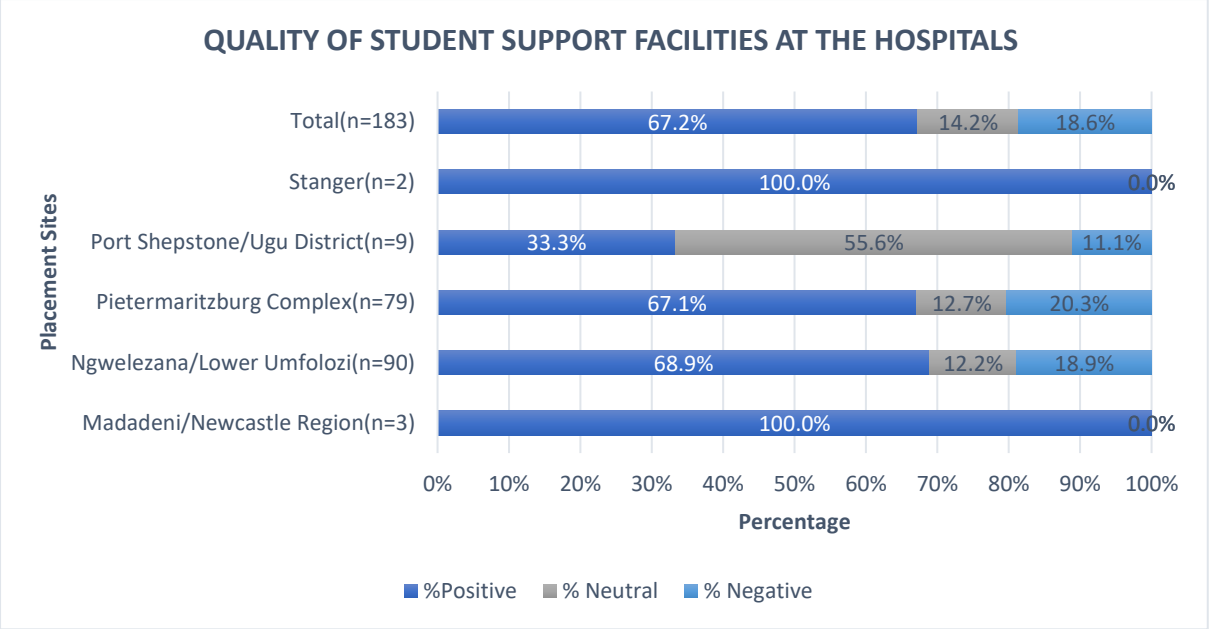

Figure 5.12: Perception on the quality of student support facilities at the hospital site (library, clinics, counselling)

The significance of mental health support, academic resources, clinical mentorship, and guidance in career development for academic success cannot be overstated. Figure 5.12 reflects that 33% of the students placed in the Port Shepstone/Ugu district were satisfied with the support facilities available to students, while the rest of the respondents provided either a neutral or negative response.

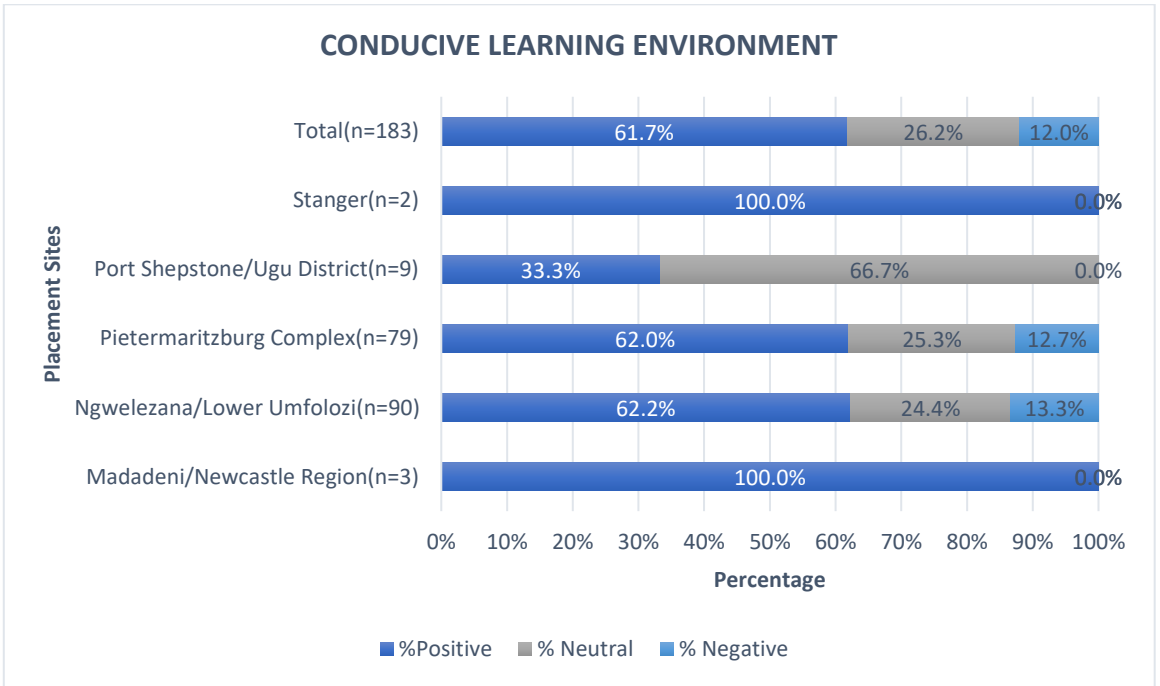

Figure 5.13: Perception on physical facilities (student residences) for a conducive learning environment

A conducive learning environment is the cornerstone of academic excellence, providing a nurturing space where students can engage with their studies, access resources, and seek support when needed. Such environments extend beyond the classroom to student residences, where students spend a significant portion of their academic journey. Student residences should provide living spaces that allow for focused learning and also foster peer support and cultural diversity, contributing to holistic personal and academic development. Figure 5.13 reflects that student accommodation in most sites could be improved, particularly in sites with a large number of students allocated. The Madadeni/Newcastle region consistently had positive results related to student residence satisfaction.

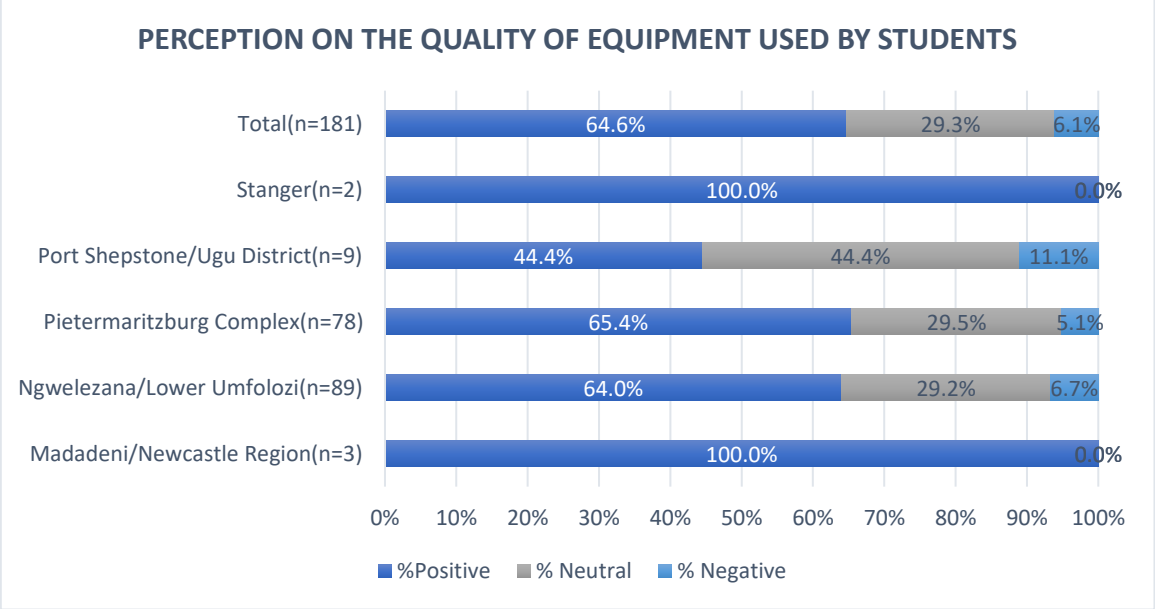

Figure 5.14: Perception on the quality and standard of the equipment required by students for studies

Medical equipment is essential for diagnosing medical conditions, monitoring patients, and providing care. Students must be proficient in using these tools to make accurate assessments and provide appropriate treatment. High-quality equipment allows students to practice and refine their clinical skills, a crucial aspect of preparing them for their future roles as healthcare professionals. As illustrated in Figure 5.14, the majority of the respondents (65% and 64%, respectively) in the Pietermaritzburg and Ngwelezana Regions indicated satisfaction with the availability and standard of the equipment required for students to succeed. Sites with a smaller number of students allocated achieved a 100% satisfaction rate in this regard.

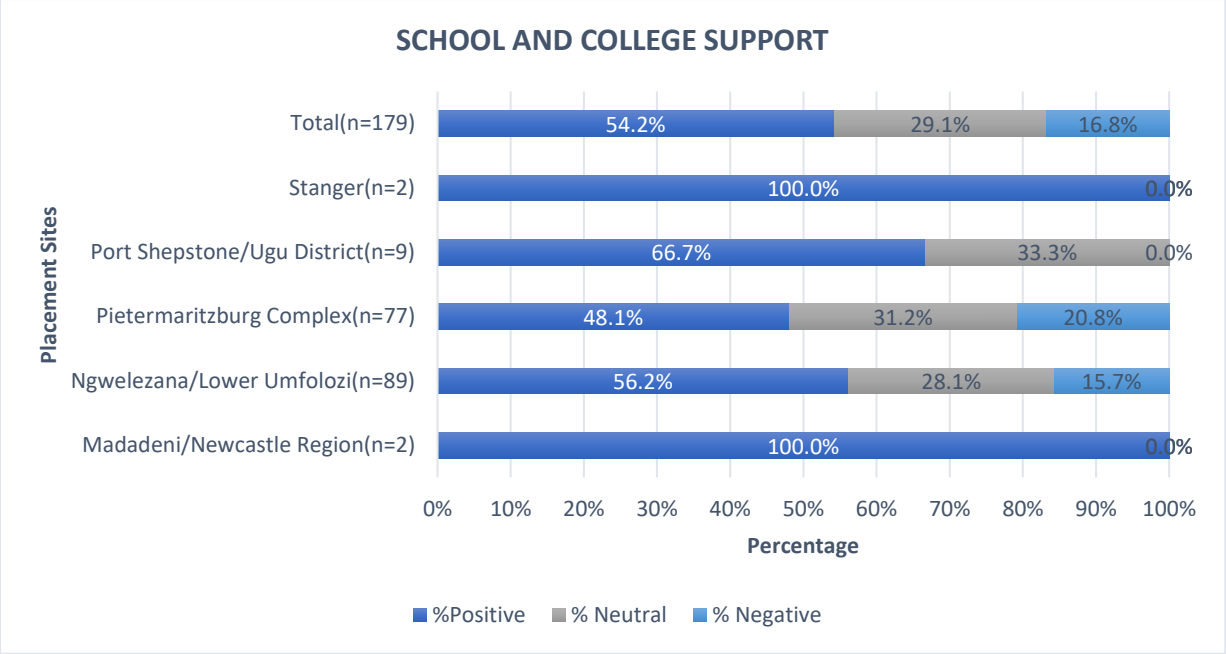

Figure 5.15: Perception on the School/Colleges' ability to provide services to students efficiently

Figure 5.15 reflects that the respondents who completed their rotations in the Pietermaritzburg complex (48%) were the least satisfied with the services provided by the School and the College.

The data presented in this section highlight the need to strengthen services related to student support, accommodation, and the efficiency of the School and College in providing services to students in decentralized sites.

5.2.2.5 Assessments

Assessment serves as a cornerstone for fostering student development and preparation for success in their chosen fields. Assessments assist in measuring students' understanding and mastery of the subject matter, providing insights into whether the students have achieved the learning objectives set by the curriculum. Additionally, assessments monitor the effectiveness of teaching methods, curriculum design, and the overall learning process, ensuring quality assurance for the programs offered at the university. Well-designed assessments can motivate students to engage deeply with the learning process, characterized by elements such as alignment with learning objectives, appropriate difficulty levels, and timely feedback, among others. The assessment practices also provide insight on whether there is an alignment between the outcomes stipulated in the curriculum against what was taught to students during the time they were in decentralized placement sites.

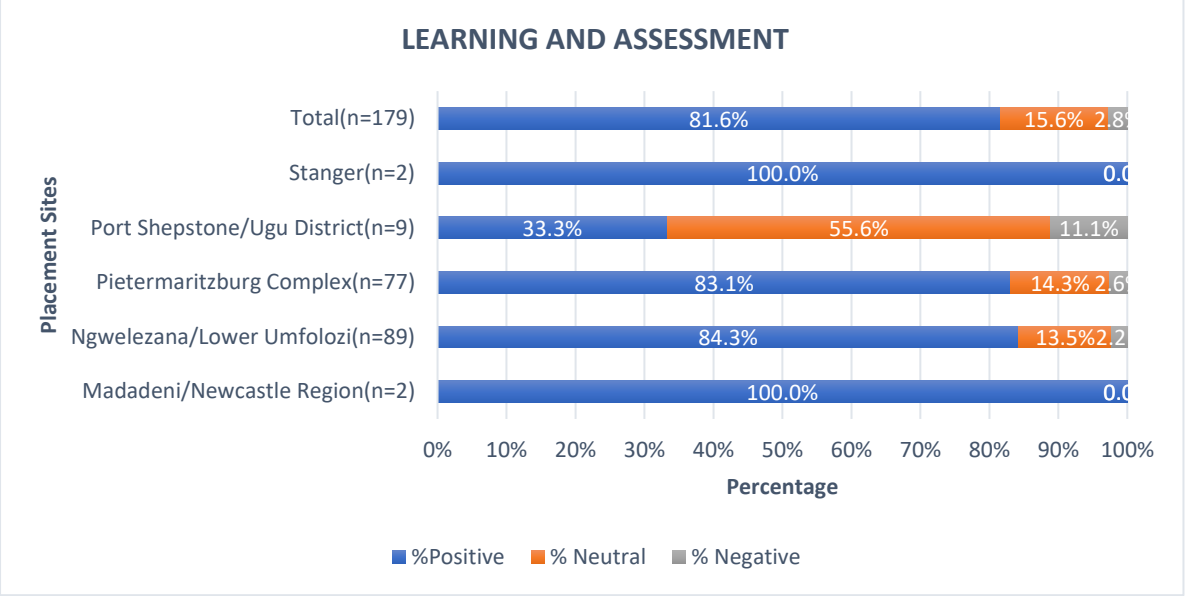

Figure 5.16: Perception on the link between what was learnt in the module and what was assessed at the end of the block rotation

Figure 5.16 demonstrates the students' perception of the alignment of the learning objectives of the module with the skills they acquired during their rotation. While most sites displayed satisfaction with the connection between what they were taught and what was assessed, the Port Shepstone Region showed a significant proportion of respondents providing neutral or negative responses, suggesting a need for improvement in this area.

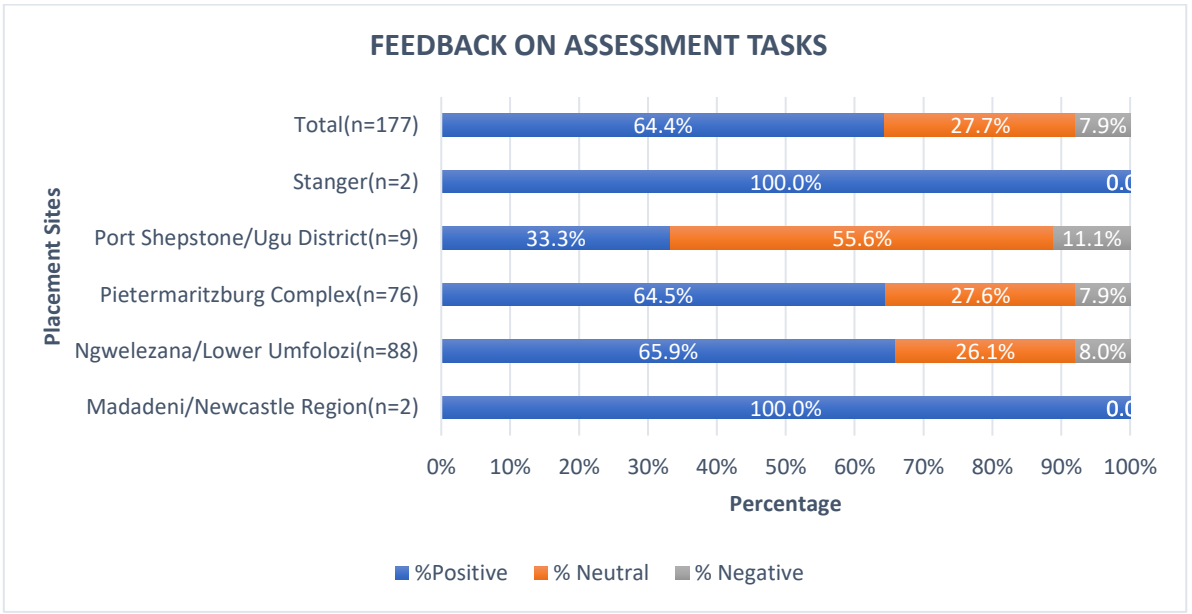

Figure 5.17: Perception on structured feedback provided to students on assessment tasks during the block rotation

Effective assessments should provide students with constructive feedback on their performance, enabling them to identify their strengths and areas for improvement. Figure 5.17 indicates that in the Port Shepstone Region, a considerable number of respondents provided neutral or negative responses regarding the structured provision of feedback. Sites such as Madadeni and Stanger, with a low number of students allocated, reflected a positive response to the feedback provided to the students.

Table 5.14: Respondents' satisfaction with the quality of teaching in decentralised sites.

Satisfaction with Decentralised Training

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	14	7,0	7,8	7,8
Neutral	35	17,5	19,6	27,4
Agree	102	51,0	57,0	84,4
Strongly Agree	28	14,0	15,6	100,0
Total	179	89,5	100,0	

Statistics

Satisfaction with Decentralised Training

N	Valid	179
Mean		3,80
Std. Deviation		,794
Variance		,630
Skewness		-,589

Table 5.14 illustrates the respondents' positive response regarding their satisfaction with the quality of teaching in the decentralized sites. While the respondents indicated a favourable experience, they also identified areas for improvement to accommodate a larger number of students in these sites.

Table 5.15: Summary of Qualitative comments received from students

SUMMARY OF QUALITATIVE COMMENTS	
Clinical exposure	*"Doing numerous procedures and gaining experience in the process"*
	"Being exposed to different conditions at their first presentation"
	"Being practical and given a chance to treat my own patients"
	"Exposure to patient care and experience of how district hospitals operate despite shortages in resources, understand how district health function"
	"I got to see the vastness of medicine and its interconnectedness"
	"The exposure to learn and do procedures that we would not have done in Durban hospitals"
Teaching and assessment	*"…patient to student ratio is lower and better"*
	"Being exposed to patients without an overcrowd of students"
	"There must be a standardised way of teaching and testing in all sites"
	"…more lectures and tutorials"
	"There isn't enough teaching in all disciplines"
	"Better Teaching facilities and resources".
	" ….Feedback to examinations".
Academic and Teaching staff	*"The consultants were well organised and knew exactly the content to be taught"*
	"The enthusiasm that the staff show in assisting with teaching and helping to improve our skills"
	"Working with humble doctors and nurses"
Administration and Student Support	*"Organise and Improve the condition of residences"*
	"Provide proper residences especially in rural areas
	"avoid moving every six weeks of the rotation".
	"feedback on issues raised"
	"Transport to the hospital"
	"Improve access to support services"
	"Improve studying facilities and support services"
	More books must be available and access to LAN
	"WIFI and electricity (Basic amenities)"
	"better communication between students and the university"

Table 5.15 presents a selection of comments from students, highlighting their experiences in decentralized sites, including strengths and areas for possible improvement. The respondents expressed satisfaction with the clinical exposure they received in decentralized sites, acknowledging the advantage of experiencing various disease profiles from initial presentation to treatment. While they appreciated the staff's enthusiasm and willingness to assist in skill development, they highlighted the shortage of teaching staff in some disciplines. The respondents also emphasized the need for standardized teaching and assessment across different sites. Some respondents commended the improved staff to student ratios, indicating that this provides an advantage to the student as there is more exposure to patients without overcrowding them, thereby increasing the level of engagement and learning. There was however concern related to the standardisation of what students get taught and are assessed on across the different sites.

There were a number of issues that the respondents flagged as possible areas of improvement, these, in the main, logistical challenges related to student support, accommodation, and transportation. The feedback emphasized the significance of creating a conducive and consistent learning environment for all students. The respondents presented a challenge related to the rotation to various sites every after six weeks, indicating that this caused a disruption in their routines as they had to move to different locations ever so often. Some respondents even suggested that they be placed in one geographical region for at least six months before being moved to another site. The respondents also reflected that accommodation could be improved in some site in order to make the space more conducive for learning. Other respondents also suggested the need to improve access to learning materials by ensuring that students are provided with basic necessities such as internet connectivity and electricity. Moreover, they indicated that sites should have a well-resourced library and a LAN. They also commented on the need for reliable transport for student to and from the various hospital sites. The feedback emphasized the significance of creating a conducive and consistent learning environment for all students.

5.2.3 Significant Relationships

The objective of this study was to assess the readiness of medical universities to implement decentralized training, with insights derived from the responses of the initial cohort of students placed in decentralized sites. The correlation analysis conducted for various factors provided valuable insights into the relationships between different variables.

Table 5.16 indicated a weak, negative linear relationship between the sites where students

were placed and their clinical exposure. The negative value suggests an inverse relationship, indicating that one variable increases as the other decreases. The absolute value (0,046) signifies that the two variables are not strongly related and that any observed pattern might be due to chance rather than a significant association. The p-value of 0.523 indicates that the observed correlation is not statistically significant.

Table 5.16: Correlation between significant variables

Correlations

		N	Correlation	Significance One-Sided p	Significance Two-Sided p
1	Placement site and Clinical exposure	198	-,046	,261	,523
2	Theory and application and Assessments	179	,540	<,001	<,001
3	Availability of Academics and Feedback provided	177	,350	<,001	<,001
4	Dealing with Queries and Service provided by School and College	174	,385	<,001	<,001
5	Student Residences and Student Support	183	,359	<,001	<,001

On the other hand, the analysis indicated a moderate, positive correlation between theory and application and assessments (Table 5.16). This suggests there is a discernable pattern between the variables where when one increases, the other also increase even though this may not be at a constant rate. The correlation is statistically significant as p<,001, implying that there is strong evidence to support the claim that the correlation between the two variables is not zero in the population from which the sample was drawn.

Similarly, the analysis demonstrated a meaningful association between the availability of academics in decentralized sites and the feedback received by students during their rotations. It can therefore be said that there is a meaningful association between the variables, the p value (p<,001) reflects a statistically significant relationship. It can thus be said that the relationship between the two variables is not likely due to random fluctuations or sampling variability. The same applies for the association between Student Residences and Student Support Services provided in decentralized sites (,0359 an p<0,001).

Furthermore, the analysis indicated a moderately positive relationship between how queries were handled and the efficiency of services provided by the school and college. The moderate

correlation (0.385) and the significant p-value (0.001) suggested a meaningful and positive association between the two variables.

5.2.4 Summary

This section provided quantitative findings from the first cohort of students placed in decentralized sites. The presented data offers insights into the students' perceptions of the shift in medical education training. The subsequent section will present the qualitative results of the study, which will complement the quantitative findings and provide a more comprehensive understanding of the program implementation.

5.3 Analysis of Qualitative Data

5.3.1 Introduction

The qualitative findings from the semi-structured questionnaire data gathered from students shed light on various aspects of the decentralized training program. These qualitative insights provided a comprehensive understanding of the research problem, complementing the quantitative data and contributing to the credibility of the research outcomes. This section presents the qualitative findings from the data gathered from the three categories of respondents who made up the sample of this study. The qualitative findings allowed for the triangulation of the data. The qualitative findings also drew out vital answers to particular questions that the quantitative constituents were not able to provide a response due to the nature of the questionnaire that was used to collect the data. Figure 5.18 presents the themes that were identified which will be deliberated upon in the subsequent sections.

Figure 5.18: Summary of emerging themes

5.3.2 Context and Magnitude of Decentralised Training

The participants demonstrated a clear understanding of the purpose and guiding principles of the decentralized training program. There were however a variety of views related to what drives the programme and what the expected outcomes would be when it is fully implemented. Some of the comments from the respondents were as follows:

Participant 1: *To address the national need for increase in the production of doctors in the country as per Ministerial request to all universities in the country*

Participant 3: *To expand the clinical teaching platform to accommodate increase in student numbers*

Participant 4: *Diversifying and broadening students' exposure to the complex and dynamic realities of the health system in the province*

Participant 5: *High levels of poverty and unemployment mean healthcare remains largely the responsibility of the state.*

Participant 6*: Majority of the graduates prefer to work in the private sector*

Participant 11: *Better equip the students for the Public Health Care model*

Participant 14: *Train them to work with the resources at their disposal*

While the respondents highlighted that the main impetus for the introduction of decentralized training was based on the needs of the country to increase the number of doctors who graduate at any given year, some saw the multi-faceted opportunities that this may create in the overall reimagining of the South African healthcare landscape. The academics that were interviewed were of the opinion the decentralisation of training students away from tertiary hospitals where they are exposed to specialized cases would give way to the integration of the Public Health Care model as mandated by the Health Ministry. They further articulated

that this would therefore pave a way for the intensifying community-based education which has been introduced to the existing curriculum as a selective module in one of the disciplines in medicine. They further indicated that this type of training would capacitate that the graduates for the world of work and would ensure that the graduates produced by the institutions are fit for purpose in addressing challenges related to the primary health care system. Moreover, with the proposed introduction of the National Health Insurance system, the graduates would be more equipped to work under such an environment.

Other respondents noted that the current climate that exist in South Africa where a substantive number of the population being unemployed and some living in poverty is indicative of a society that heavily relies on the government for their healthcare needs. They indicated that financial constraints experienced by members of the communities sometimes result in limited access to healthcare services which lead to delayed diagnosis and treatment. They further indicated that these factors contribute to a higher prevalence of preventable diseases which are left untreated which, when they are finally presented, require intensive treatments. The respondents further highlighted that importance of increasing the number of student intake in training institutions. This increase was said to be associated with the increase required to service the rising number of people within the population who make use of government health facilities. Some respondents also brought to light the issue of limited resources in hospitals, indicating that staff shortages, limited resources and high volumes of patients is often a major contributing factor to burnout among medical doctors in government hospitals.

Parallel to this, they also indicated one of the drivers for the programme the need to produce medical personnel who would be passionate about working in peri-urban and rural areas. They stated that training students in such environments can assist in developing a nuanced perspective on challenges faced by peri-urban and rural population. They indicated that this could foster empathy and a sense of commitment to addressing the healthcare disparities in these areas. Some respondents indicated that the strain in the healthcare system coupled with the working conditions results in medical doctors preferring to work in the private sector. This then implies that the government hospitals are left with higher patient to doctor ratios and increased workloads for those who decide to work in the government sector.

The respondents were requested to comment on the national imperatives that drove this initiative from a health perspective.

Participant 4: *through these public facilities, we cater for the majority of the population in this district. We sometimes have to face challenges related to overcrowding and resource limitations.*

Participant 7: *We are driving various initiatives which bring our services to the people, to date we have 17 mobile clinics and a number of Clinics attached to our hospitals.*

Participant 11: *I am not convinced that the National Health Insurance system is the right step towards addressing the country's healthcare system. Where would the money come from? The tax payers are already strained so would it be a feasible solution to impose more taxes to them?*

Participant 14: *Sure, universal health is ideal, in countries like north America it is affectively implemented and managed. However, it is a first world country and we must be cognizant of that before we apply the concept to our context.*

Participant 15: *With the traceable history of corruption and fund mismanagement in the country, I can only wonder about the sustainability of the project*

Some of the respondents indicated the rationale behind the adoption of public healthcare approach in the country in order to prevent diseases before they escalate to serious conditions which require advanced medical treatments, thereby leading to over populated health facilities. The respondents also provided views on National Health Insurance system, questioning its feasibility within the context of existing strains prevalent in the public healthcare system. Moreover, some respondents also highlighted concerns related to the financial viability of the project given the economic landscape and the diminishing pool of tax payers due to the countries high unemployment rate. Some respondents also highlighted the critical need for reinforcing accountability mechanisms and ethical leadership to be adopted at all hierarchal level of government in order for the intended national goals to be achieved.

Participant 2: *There is a rural allowance for those who wish to work in the rural hospitals. It's not always easy to make the decision to relocate, especially if you have a young family.*

Participant 15: *Working conditions are equally important for mental wellbeing. People suffer from burnout due to long hours and this impacts on their health.*

Some respondents reflected the difficulties associated with attracting doctors to work in underserved regions where there is underdeveloped infrastructure and resource limitations. Some respondents acknowledged that the compulsory community service in medical training post internship is the best possible way to encourage doctors to work in the rural hospitals and that a majority of them never return to that environment after the term is completed. The respondents also indicated that the recruitment of students from the rural areas hoping that they may come back to service their communities doesn't always bear fruit, once qualified the doctors tend to find better prospects elsewhere. The respondents also commented about on the programme-related to training students from rural communities in Cuba in anticipation that they would reintegrate and work in rural communities when they graduate. The respondent indicated that the programme which the students was too long to be rendered as making a viable contribution to expediting production of doctors in the country.

Some respondents reflected that there was a disjuncture between the perceived intention of the programme versus the current presentation of the programme which appears to be an implementation of the hospital-based approach.

5.3.3 Alignment with Educational Goals

Participant 7: *I have not seen a shift in mindset, we are still doing the same thing using different sites*

Participant 8: *The intended shift will require a complete change in the curriculum*

Participant 9: *I don't think our regional facilities are ready for training students*

Participant 10*: the proposed curriculum must deviate from the current curriculum. This will require substantial buy-in, not only from university leadership and the Department of Health but significantly by the staff and the clinicians and managers on the ground.*

The respondents emphasized on the need for a curriculum that fosters a community-based teaching approach from the foundational years. The discrepancy between the intended community-focused approach and the current implementation of the hospital-based model was highlighted, suggesting the need for a fundamental shift in the curriculum to align with the

goals of decentralized training. They further indicated that using the existing curriculum would defeat the purpose of the exercise as its delivery is strongly based on students being exposed to complex medical cases and specialized treatment procedures, which are aligned with cases referred to tertiary hospitals. This is in contrast with the primary healthcare setting where the emphasis is on a broader approach to healthcare where the focus is on preventative care and management of common non-acute health issues. The respondents pointed out the disparity between the staffing profiles and resources available in the decentralized sites compared to the well-equipped teaching hospitals traditionally utilized. This contrast underscores the need to adapt teaching methodologies and learning objectives to the realities of primary healthcare settings, recognizing the diverse skill sets and competencies required for different healthcare contexts.

Participant 11: *To build capacity in peripheral sites and gauge what would be needed if we were to introduce the proposed Community-Based Education curriculum.*

Participant 12*: Use of innovative solutions and technology to monitor and support teaching activities*

Participant 13: *Allowing prolonged periods of exposure is good for the hidden curriculum. This is important in professional development and will teach aspects which fall outside the formal curriculum*

The comparison drawn between the current Family Medicine selective programme and the proposed decentralized training highlighted the importance of drawing insights from existing successful initiatives and adapting them to suit the specific needs and requirements of each discipline within the medical field. They stated that this programme currently runs for a period of no longer six weeks, which is a shorter period in comparison to longitudinal placements which are proposed for decentralized teaching. They also stated that even though the program runs for a relatively short period, there are lessons that can be learnt and adapted to decentralized training. They also cautioned that while this may work for one discipline, it may not produce the desired result for the next. This acknowledgment of the contextual nuances and variations among disciplines highlights the necessity of tailoring strategies to the unique demands and resources available in each specific area of medical education.

The recognition of the hidden curriculum and its impact on shaping students' professional

identity and understanding of the medical profession further emphasizes the significance of creating a supportive and conducive learning environment beyond the formal curriculum. This underscores the need for strong leadership to guide the transformation process and facilitate the various shifts required for the successful implementation of decentralized training. The emphasis on considering various integral aspects crucial to the program's success serves as a critical reminder of the multifaceted nature of educational reform and the importance of a comprehensive and well-rounded approach.

5.3.4 Human Resources

The respondents provided insight on how they felt the decentralized programme could be improved. The need for capacity building among staff who are involved in teaching at decentralized sites was highlighted as an important aspect that required immediate attention. Ensuring that medical practitioners are equipped with the necessary pedagogical skills is crucial to maintain educational standards and provide high-quality teaching to students. While the university provides an Academic development programme for staff which covers areas such as Teaching and Learning in Higher Education, Assessing Learning in Higher Education, Designing and Evaluating Curricula in Higher Education and Supervising Research in Higher Education, the clinical staff may not have time to attend these courses. The constraints on clinical staff's time and their dual roles as both healthcare professionals and educators pose a significant challenge. In such cases, flexible and convenient professional development options may need to be explored to accommodate their schedules.

The respondents indicated that the shortage of staff available for teaching in decentralized sites is a fundamental issue that needs to be addressed. Collaborative efforts between the university and the Department of Health to ensure an adequate staff complement in these sites are essential. A large number of the doctors that assist in training students are not appointed by the University and may either be the employees of the Department of Health or have joint appointments. The consideration of staff employment conditions and priorities, especially for those employed by the department, is a complex matter that may require negotiation and collaboration to find workable solutions.

The shortage of staff for teaching in decentralized sites was flagged as a challenge. Availability and willingness of the Department of Health staff was highlighted as a significant factor in their involvement in teaching. The 2015 respondents indicated that the survey data on staff complements for decentralized sites provides valuable insights into the existing challenges and areas that require improvement. This data can serve as a foundation for further discussions and planning for optimizing staff resources and support.

Participant 14: … *Registrars are an alternative but even their posts have been significantly decreased.*

Participant 15: …*medical officers volunteer to supervise students*

Participant 16: *The simplistic formulation that the staff out there will take care of the students cannot be supported in an interdependent partnership like this*

Participant 3*: The survey we conducted in 2015 indicated that we needed in the access of 44 additional consultants in the identified sites however we have the required number of MOs to support decentralized training.*

Participant 5*: There are plans to make strategic appointments of specialists to clinical teaching platforms in alignment with support required. There are 53 vacant positions in the identified platforms.*

Participant 14*: Large number of staff have joint appointments with Department of Health conditions of service and a very few with University conditions of service*

Respondents reflected the importance of Establishing strong relationships with staff in decentralized sites is crucial for successful implementation of the program. Effective communication, training, and guidance are essential to support staff in their roles, particularly when resources are limited. Encouraging staff to participate in teaching by providing professional development opportunities and recognition for their contributions can enhance their motivation and investment in the educational process.

Participant 2: *…In part this may be because clinical practice and research have long dominated the attention of doctors, and teaching has been considered a lesser activity, without clear incentives or career structures.*

Participant 7*: indeed, relatively few doctors have received formal training in teaching methods, educational theories, or modes of assessment.*

Participant 9: *They may be outstanding doctors but not possess the required skills to teach and assess students*

The respondents highlighted the need of effective teaching and the value of providing opportunities for professional development and recognition in order to encourage staff to teach. They stated the need for capacity building to equip medical staff with effective teaching methodologies and strategies to engage students effectively. They also suggested that staff can be motivated to invest in their teaching abilities if there are incentives or reward systems in place that celebrate those who demonstrate exceptional teaching skills and make significant contributions to medical education. Incorporating teaching into the criteria for career advancement and promotion will more likely encourage staff to prioritize their educational contributions.

5.3.5 Communication and Stakeholder Engagement

Participant 13*: This large-scale change poses a considerable risk. There has to be a larger strategy to manage infrastructure, relations, quality and the implementation of the curriculum.*

Participant 7: *This is a mammoth task that requires all stakeholders to be onboard*

The respondents asserted that stakeholder engagement plays a pivotal role in ensuring the success of the programme. Involving regional and district facility staff in the planning and implementation process allows for a comprehensive understanding of the program and fosters a sense of shared ownership. Their insights can help identify potential risks and opportunities, thus enhancing the program's overall effectiveness.

The respondents indicated that they were aware that the collaboration between the University and the Department of Health at the district level is vital for the successful implementation of the program. The establishment of a steering committee demonstrates a commitment to the program's development and progression. The committee's work in defining the program's vision and drafting the Memorandum of Understanding is a significant step in solidifying the partnership's objectives and roles. Clarifying the roles and responsibilities of each partner in the Memorandum of Understanding contributes to a clear understanding of expectations and ensures effective collaboration between the two entities. However, ensuring that all stakeholders are well-informed about the Memorandum of Understanding is essential for cohesive implementation and alignment with the program's objectives. There were some respondents who did not have any knowledge of the Memorandum of Understanding.

Participant 15 : *….not aware of the Memorandum of Understanding between [university] and [the Department of Health], know there was a business plan that provides details the goal of the programme*

The respondents also highlighted that work is currently being done Formulating discipline-specific Memorandums of Agreement is a constructive step toward detailing the collaborative efforts between the parties and effectively utilizing resources. Additionally, the integration of Human Resource and Hospital Evaluation Reports into the planning process can provide valuable insights and inform strategic decisions regarding program implementation.

The respondents indicated that there were several workshops that involve joint collaboration between the department and the university showcases a commitment to fostering open communication and stakeholder engagement. Engaging various stakeholders, including student leadership, in these workshops not only facilitates transparency but also ensures that diverse perspectives are considered in decision-making processes. These workshops culminated into a creation of advisory committee, which is a positive step toward providing oversight, but ensuring representation of department heads within these committees can help strengthen the link between program implementation and the overall curriculum. Some respondents however stated that they were concerned that these advisory committees do not have representation of heads of departments who they felt were critical in the implementation of the programme across all sites, as they are the custodians of the curriculum.

Participant 11 : *…. we saw a need for a structure that would provide oversight*

Participant 1: *This will need to be managed as an ongoing process that is engaging, communicating and open to challenge.*

Participant 3*: …A string of regular engagements, communication and transparent management of the transition.*

Respondents indicated that there was a need to improve the level of communication between executive management and the disciplines. There was a notion that information was only communicated to certain individuals and some departments are then not aware of the latest developments related to the programme. An example made relates to the communication about the number of students returning from Cuba that would be allocated to the university. The respondents stated that, at time, the disciplines are not provided with sufficient time to prepare ahead for the students. They indicated that having such knowledge is important as

additional hospitals have to be identified timeously in order to cater for the increase in the number of students. The placements sites identified must be conducive for the placement of students and provide the required support mechanism to ensure student success. As this process must be done in collaboration with the Department of Health and has impact on work schedules, timeous preparations are crucial. This preparation includes resources required would include logistical and financial resources and Medical Consultants in line with the minimum number of students per site as indicated by the disciplines. Improved communication between executive management and the disciplines is crucial for maintaining transparency and fostering a collaborative environment. Ensuring that relevant information is disseminated to all stakeholders within a timely manner enables effective preparation and planning for program implementation. Providing ample time for preparation allows for the identification of suitable placement sites and necessary support systems for students, ensuring a conducive learning environment that supports student success. Effective collaboration with the Department of Health is essential in this process, as it facilitates the allocation of resources and the coordination of work schedules, contributing to the overall success of the program.

Participant 4: *I'm not fully aware of the plans to absorb the Cuba trained students*

Participant 6: *We have to slot the students in at last minute, sometimes they arrive after our local students have been sent off to sites.*

Participant 8*: Systems and processes introduced to achieve the goal: Implementation and management thereof, Effectiveness and feedback*

5.3.6 Teaching Challenges

Respondents from some sites reflected their challenge of frequent cancellations of lectures. They indicated that this led to student disengagement and they could observe that students perceived this as a barrier to their academic progress. The respondents also observed a negative attitude developed by students as a result of this which led to a diminished sense of trust and respect for the clinicians and administrative staff. This is perceived as lack of commitment therefore affected their credibility.

5.3.7 Standardisation in Training Sites

Respondents emphasized the need for improved commitment to teaching schedules and the establishment of trust and respect between students and faculty. Standardisation of clinical teaching and assessment across decentralized sites emerged as a concern, with emphasis placed on ensuring that students receive comprehensive exposure to meet clinical learning outcomes across disciplines. Strengthening student support, particularly in terms of resources and accommodation, was highlighted as critical for enhancing the overall learning experience and ensuring student safety.

5.3.8 Quality Improvement

Respondents indicated that various efforts to gather feedback from students and staff were noted, with various methodologies, such as debriefing sessions and questionnaires, being employed to evaluate site experiences and address logistical challenges. However, the need for proactive action in response to feedback was emphasized to foster trust and demonstrate the value placed on input from students and staff. Effective communication with students was underscored as essential in ensuring that their concerns and perspectives were taken seriously and acted upon.

Participant 4: *The students told me that they are tired of providing feedback on same issues that are never resolved.*

Participant *7: We sometimes have to communicate unscheduled changes to teaching sessions and sometimes students find out after they have made the effort to turn up for the sessions.*

Participant 14: *students perceive these last-minute changes as a lack of commitment and poor teaching skills in some teachers.*

Participant 16*: Some disciplines are well resourced in certain hospitals while some aren't, so we had to be cognizant of this when allocating students to site*

5.3.9 Infrastructure and Work Environment

Respondent stressed the importance of financial resources and human capital for the success

in implementing the programme.

Participant 8: *We all know how severely constrained some of our health facilities are in terms of resources*

Participant 10*: Funding is considerably strained both in the university and the department so we need to find systems that can produce more with less and exploit synergies between partners.*

The commitment to increase human resources for teaching in accredited clinical facilities, along with the allocation of funding through the Clinical Training Grant, demonstrated a dedicated effort to support the decentralized training program. While exact figures could not be provided, a substantive amount of money was allocated for the implementation and maintenance of the decentralized facilities. Through this grant, park homes have been erected and students are provided with free accommodation. Administrators are also appointed in each site to assist with the day to day administrative work in each site. The respondents provided varying responses related to the availability of administrative support in decentralized sites, with some indicating that there were challenges with the adequacy of administrative support and communication. The respondents also indicated that academic officers were also appointed for the decentralized site in order to provide psychosocial support for the students.

Participant 9:… *Administrative staff have been employed to assist in decentralized sites*

Participant 12:… *We are never consulted and don't know much about the resources*

Participant 13*: A pragmatic and integrated response is required to provide access to internet in remote sites*

While challenges with administrative support and communication were noted, the presence of dedicated personnel and the allocation of resources reflected a commitment to enhancing the overall educational experience in decentralized sites. The respondents reflected that the University has made several strides in providing teaching and learning and living resources for students on decentralized sites. The students were provided with routers so they could connect to the internet as there was the University WI-FI was not available on the sites. Respondents reflected finding student accommodation that meets the requirements stipulated by the University in decentralized sites remains a challenge.

Participant 2: … *it was important to build a relationship with a number of estate and rental agents*

The proximity between the hospital sites and where students are accommodated remains a challenge in some sites. In areas where were no accommodation is available, students are required to be transported from transported on a daily basis, increasing the financial burden on transport costs, but could not give specific numbers or plan on how this commitment will be achieved.

5.3.10 Authority and Responsibility of Stakeholders

The understanding of the respondents reflects that the delineation of authority and responsibility within the decentralized training program was noted as primarily concentrated at the level of the steering committee and executive leadership. However, there was a perceived lack of empowerment and engagement at the implementation level, with limited sharing of information and consultation. This highlighted the importance of fostering a more inclusive decision-making process and ensuring effective communication and collaboration between all stakeholders involved in the program.

The authority of the heads of discipline was perceived to be deficient. This was flagged as an area of concern as they are the custodians of the curriculum. They are answerable in professional bodies which conduct receives and are responsible for the accreditation of training institutions that meet the required standards.

Participant 10*: We [hospital management] have delegated authority over operational matters to facilitate quicker responses to local needs*

5.3.11 Leadership Style and Management Responsibilities

The qualitative data highlighted the need for a comprehensive review of leadership within the decentralized training programme, emphasizing the influence of various leadership styles at different levels. The respondents emphasized the presence of political leadership, particularly at the national level, with a focus on policy implementation aligned with the government's healthcare priorities. Despite the acknowledged constraints, the emphasis remained on adhering to mandated policies. The focus is on creating and implementing policies that align with the government's ideology and priorities. The respondents also noted that there were

governing bodies and boards which were established for setting strategic directions and policies.

Participant 3: *It's a mandate from higher up*

Participant 5: *That is the trajectory that we are moving towards, so we have to find a way to make it happen*

Participant 10: *HODs are the custodians, so they have to oversee the curriculum. Ultimately, they have to sign off on the sites used because they will be held responsible*

Participant 11: …*My management team has regular meetings where challenges are discussed and resolved*

Participant 13*: When you become a senior member in a department, it is assumed that you are ready to take on leadership responsibilities. Not everyone is a leader, nor do they aspire to be in leadership positions*

Participant 14*: A steering committee consisting of university and Department of Health executive leadership exists*

Participant 16: *extensive discussions at the USAf's Deans Forum were undertaken*

Administrative leadership at the departmental and hospital levels was noted as critical for the effective management of limited resources and the coordination of day-to-day operations within the program. The importance of efficient resource management and operational oversight to achieve program goals was underscored by the respondents

Additionally, academic leadership was seen as vital for ensuring the adherence to curriculum standards set by professional bodies and the Council on Higher Education. As the custodians of the curriculum, the heads of departments were identified as key stakeholders responsible for maintaining the quality of the program across all sites and ensuring alignment with accreditation requirements. The insights from the respondents highlighted the multifaceted nature of leadership within the decentralized training program and underscored the

importance of effective coordination and collaboration among different levels of leadership.

5.3.12 Systems and Processes

The qualitative data revealed areas for improvement in communication and collaboration among different leadership roles within the decentralized training program. The respondents were of the opinion that at times, the communication among role players was not sufficient. The lack of communication often resulted in misunderstandings about the priorities and duplication of work in some instances.

Participant 4: *resources are allocated in a way that doesn't align with our needs, this in my opinion is inefficiency in resource management.*

Participant 7: *We don't appear to have the same priorities, maybe it's because we are looking at things from different perspectives*

The respondents highlighted the need for regular meetings and communication channels to foster understanding and alignment of priorities among the different leadership roles. Structured communication channels would allow for regular interaction and exchange of information. Moreover, it would allow for the dissemination of decisions among the different leadership roles, making it a collaborative exercise rather than top down approach. They emphasized the importance of a shared vision in order to provide quality education and a conducive learning and working environment. They also noted that defining the roles and responsibilities at various leadership levels would assist in clearing up confusions and allow for valued contributions from the differing levels. The respondents suggested the need for development of transparent governance structures that outline the roles and responsibilities of each leadership role, including clear reporting lines and accountability measures.

The respondents indicated that there should be structured engagement with various stakeholders, which are not conducted merely as a tick box exercise, to ensure that the decisions made reflect the diverse needs and interests of the stakeholders. This will ensure that there is transparency in decision-making processes which will build trust and maintain the integrity of the process. They indicated that implementing collaborative decision-making mechanisms that involve representatives from each leadership role would ensure that the decisions taken consider diverse perspectives and align with the intended goals.

5.4 Conclusion

This chapter presented the qualitative findings from the surveyed respondents. The adopted convergent parallel mixed-methods design provided a greater and more comprehensive insight into the respondents' views regarding decentralised training in medical education. The varied responses from students and staff gave us a sense on the impact of leadership in the implementation of decentralised training in remote sites. It also provided an insight on how the educational experiences could be enhanced without compromising the quality of healthcare provided to patients. The convergent parallel mixed-methods design managed to not only outline what the respondents said, but also focused on why they said it. In this context, the qualitative part of the research enabled the researcher to understand the context of the quantitative responses received from students. The qualitative data was therefore crucial in gaining insight on factors that contributed to the experiences of the students as the end users of the entire process. The following chapter discusses the integrated results from the qualitative and quantitative phase which is part of the mixed-method research. The subsequent chapter will discuss the integrated results from both the qualitative and quantitative phases, providing a comprehensive view of the mixed-method research.

CHAPTER SIX: DISCUSSION

6.1 Introduction

The preceding chapter presented and analysed the results acquired from the respondents. This section proceeds to discuss the primary findings obtained from both the quantitative and qualitative data. The subsequent discussion on integrated results reflects the culmination of this comprehensive research endeavour. It further explains the nuanced responses from study participants. The cautious adoption of a mixed-method research design is justified not only to enhance the completeness of findings from both quantitative and qualitative techniques but also to confirm and extend the research context (Meyer and Mayrhofer, 2022) This holistic approach ensures a more thorough understanding of decentralized training in medical education. Moreover, it allows for embracing diverse perspectives and voices within the research framework.

6.2 Discussion of Emerging Themes

6.2.1 Context and Magnitude of Decentralised Training

The qualitative findings indicated that the challenges experienced by higher education institutions emphasize the necessity for responsive governance within the dynamic educational landscape. The findings also highlighted the importance of institutions retaining autonomy while fulfilling their obligations to stakeholders. Achieving this requires robust leadership and effective governance structures capable of implementing innovative models and systems. Brady and Broadbent (2007) contends that the intricate nature of universities corresponds to its complex management structures. In this complicated structure, it is important to ensure that sound leadership is not only confined to members of executive leadership but must be cascaded down to the lowest level of the organisational hierarchy.

Scholars have debated that challenge faced by many organisations emanate from the policy implementation gap that exists as a result of misalignment between the intended outcomes of the policy and the outcomes achieved. Subsequently this gap hinders the fulfilment of proposed goals. While Kirschke et al (2017) view this as policy failure, McConnell (2015) suggests that failure lies at the extreme end of a success-failure spectrum, characterized by absolute non-achievement. Therefore, policies may not always reach their maximum potential due to various organisational issues. Bob Hudson (2019) identified four broad contributors to inadequate policy implementation: a) overly optimistic expectations; b) dispersed governance in implementation; c) insufficient collaborative policymaking; and d) the influence of the

political cycle. The qualitative data findings suggest that the first three contributors, to some extent, influenced the implementation of the decentralized program.

The findings exhibited a widespread understanding and acceptance of decentralized training as a means to expand the clinical training platform. This was aligned with the imperative to increase student numbers for the Bachelor of Medicine and Bachelor of Surgery (MBChB programme at a national level. However, differing opinions emerged concerning the integration approach and plans for this initiative. Resource availability emerged as a critical factor influencing the scale and magnitude of the programme. Furthermore, the findings emphasized the necessity of having the requisite resources in place before the programme could be fully implemented in order to ensure that the quality of clinical training to students remains uncompromised.

The findings validated the presence of a dual healthcare system, encompassing both public and private sectors where one sector is more advantaged than the other. The findings also shed light on the realignment of budget allocations in favour of historically disadvantaged provinces, aligning with their larger populations and corresponding healthcare needs (DHET, 2014). Despite the challenges faced by the public sector institutions, the findings reflect noteworthy progress on the expansion of healthcare facilities which are aimed to enhance public access to healthcare. Furthermore, through the aforementioned funding, the refurbishment of existing infrastructure and the construction of new healthcare facilities in KwaZulu Natal was made possible. However, the findings reflect that a substantial portion of the Provincial budget was absorbed by tertiary-level hospitals that provide specialised services.

The findings indicate that the need for decentralized training stems from the approach adopted by the National Department of Health towards the implementation of the Public Health Care model and the introduction of the National Health Insurance system in line with improving health care provision in the country. Mash et al. (2015) highlights the pivotal role of public health care as a foundation for an effective health system in achieving universal health coverage. Additionally, they posit that in many countries, public health care is frequently neglected. As a result, in its implementation is often characterized by inadequate resources and a scarcity of healthcare providers, therefore impacting on its effectiveness.

Discussions related to the feasibility and financial viability of the National Health Insurance system were raised by the respondents amid escalating concerns related to corruption in the sphere of government. The intensifying reservations about the potential collapse of government-led initiatives was also raise questioning the success potential of the proposed national health initiative. The findings highlight the necessity for remedy towards accountable

governance structures in order to realize healthcare goals outlined in approved policies. Keinert and Horton (2009) posit three essential strategies to address health challenges. Firstly, establishing a dedicated and strengthened health workforce for the public sector. The required reinforcement encompasses the skills the health care workers possess, the resources allocated to the workforce for optimal performance and the increase in the number of staff to fulfil the identified goals. Secondly, ensuring sustainable and equitable access to health services through the National Health Insurance system, emphasizing the need for leadership and managerial positions to be awarded based on competence and accountability. Thirdly, the individuals appointed to leadership positions should be free from any agendas related to corruption, nepotism, or misguided political advances.

The qualitative findings also highlighted the scarcity of skilled professionals in the public sector due to migration of the workforce to the private institutions and the viability of self-employment prospects. The observations indicate that this challenge was particularly pronounced in rural areas, where attracting and retaining healthcare professionals in those underserved regions demonstrated to be a formidable task.

6.2.2 Communication and Stakeholder Engagement

The data highlighted disparities in information sharing and consultation processes during the development of the program's guiding principles. This may have resulted in overly optimistic expectations being created without a detailed assessment of the limitations at operational level. The findings highlighted the disproportionate the involvement between the university and department of health leadership in driving the current implementation of decentralized training. Limited involvement and consultation with the departmental heads in decision making structures were highlighted. This perceived inadequate collaboration in curriculum and student related matters may have been a contributing factor to the existing dispersed governance. El-Gohary et al. (2006) posits that stakeholder opposition was reported as the main reason for failure at implementation phase of many projects and programmes. They further highlight the importance of capturing stakeholder input, stating this as one of the most crucial components of the project development process. Flyvbjerg et al., (2003) highlights the importance of gauging stakeholder opinion and concerns to better facilitate the development of a project. When their needs are met, they would most likely work collaboratively towards a common goal as opposed to working against the established process.

Furthermore, the findings highlighted communication as a major barrier between stakeholders and the steering committee. While executive members mentioned various engagement initiatives utilized during the conceptualisation process, frontline staff perceived differently. Some of the staff interviewed noted that they had limited access to information related to the

progress of the programme. Moreover, they indicated that the information they did eventually get was disseminated primarily through informal channels. In instances where stakeholders were engaged, there was a perceived notion that their suggestions were not taken into consideration. This disempowerment on the part of the departmental leaders may have contributed to the disengagement of staff on the project. This indicates a dire need for a well thought out communication strategy that would ensure that stakeholders are kept abreast with the latest developments of the project. Zulch (2014) argued that communication is so important to project success that it has been referred to as the lifeblood of a project. Furthermore, communication allows for the team members to collaborate and integrate information as well as knowledge in order to realize project objectives. The stated gap in information dissemination potentially hindered the ability for the role players to contribute meaningfully to the decentralized training agenda.

The findings indicated that some stakeholders felt their input was disregarded. Drawing on the concept of salience theory, Aaltonen (2011) posits that prioritisation of stakeholders based on their relevance and importance to a particular organisation, or initiative. Salience theory suggests that not all stakeholders are equally significant or influential. Instead, certain stakeholders become salient because of their impact on or interest in the issues at hand. This then implies that certain individuals or groups have the ability to influence the outcomes of a project or decision over others who are perceived as less significant and their inputs may be ignored. The opinions of those who might have formal authority, or have access to resources or any other means of exerting power are at an advantage over those who possess no such power (Flyvjerg et al., 2003). This conception that some voices are more important than others often leads to a disempowered workforce and potentially hindering effective management and implementation of decentralized training. The findings did not specify any proactive measures taken to address the identified communication shortcomings. Franco et al. (2002) emphasize the significance of transparent communication and well-designed change management strategies, as lack of transparency may impede employees' understanding of organisational goals. Therefore, structured coordination is essential, incorporating clear communication protocols facilitated through regular meetings, digital communication platforms, and open forums to inform and engage stakeholders in the decision-making process.

The quantitative data findings similarly accentuated issues concerning communication and the handling of feedback received from students. Some students expressed feeling ignored at times, particularly in matters affecting their personal and academic development. While certain respondents believed their suggestions were disregarded, the data indicated that some recommendations were indeed implemented by the steering committee. The findings from some of the respondents who participated in the interviews revealed that following the

recommendations from one of the stakeholder engagement meetings, there was an establishment of advisory committees and working groups. These subsidiary committees were aimed at enhancing the decentralized training program and assist in the monitoring of its implementation. It however remains a concern that not all stakeholders are adequately represented in these newly formulated committees. The respondents indicated that these committees were largely made up of administrative staff and there was limited participation by heads of departments. Ideally, these committees should comprise representatives from both the central administrative body and decentralized departments, particularly the six major teaching specialties at the undergraduate level. As suggested by the findings, the oversight committees' responsibility would be to monitor and evaluate the performance of the decentralized program, providing guidance, support, and oversight to ensure adherence to established standards and best practices (Karlsen, 2000).

6.2.3 Human Resources

The findings highlighted the challenge of insufficient staff available for teaching. A study conducted by Bola et al. (2015) indicated a concern related to deficiency in clinical supervision for students. Furthermore, it indicated that this often results in non-compliance of the stipulations documented in the Health Professional Council of South Africa guidelines. The lack of clinical supervision is primarily due to staff shortages in may health departments within South Africa. This is further exacerbated by the maldistribution of private and public sector workers that exists. The findings from the previous chapter also indicate that there were a limited number of staff that were employed by the university, with a majority of the staff employed by the Department of Health. The limited number of university posts therefore necessitates heavy reliance on joint appointments and staff employed by the Department of Health. Hu et al. (2015) emphasized the heavy reliance of medical education on clinicians and other personnel, often without university employment or salary, prioritizing service delivery over teaching. The first priority for the clinicians is therefore to provide the service delivery to their patients before they continue with any teaching activities they may be required to perform. The findings also indicate that historically, the teaching load was shared with Registrars who could supervise students in their clinical duties. However, the reduction in registrar posts in the province has further impacted the availability of teaching staff. Barron and Padarath (2017) posit that most South African provinces have faced restrictions in filling vacant posts for medical personnel. This has been imposed to the various hospitals with the intention of cutting personnel costs. While vacant posts may exist, they were not filled due to financial constraints experienced by the public sector. The findings accentuated the need for leadership to prioritize

Joint Health Establishment agreements for staff at learning sites, advocating for a balanced approach and exploring possibilities to increase the number of qualified teaching staff.

The findings highlighted the importance of providing training and professional development opportunities for Department of Health staff willing to teach students. Hu et al. (2005) pointed out the challenge in clinical education, where many instructors lack formal training as educators, often viewing their roles as educators as a secondary career choice. This highlights the necessity of implementing capacity-building strategies to equip medical staff with effective teaching methodologies and strategies. Furthermore, the findings indicated the need to incentivize staff to invest in their teaching abilities, making teaching and learning as attractive as research. Incorporating teaching into the criteria for career advancement and promotion was seen as a feasible approach to encourage staff to prioritize their educational contributions.

6.2.4 Alignment with Educational Roles

The findings indicated that decentralized training, as currently implemented, predominantly occurs within hospitals. This is where students are provided with experiential clinical learning in a contextual environment. However, there is limited evidence supporting the alignment of the existing model with the initially proposed Primary Health Care approach. The findings underscored the imperative to restructure the curriculum by integrating community-based education, aligning with the national goal of producing medical professionals capable of effectively functioning within the primary health care system.

Furthermore, the findings highlighted that the current decentralized training model disrupts students' living and learning conditions as they are required to move from one site to the next within a six-week period. Addressing this challenge, an approach suggesting longer student placements in one site was proposed as a viable solution. Thistlethwaite et al. (2013) noted the perception of longitudinal placements as an alternative to traditional block rotations. Studies conducted in other countries, such as Australia, reflect the use of longitudinal integrated clerkships in rural clinical schools, with students spending extended periods, typically a year, in a district hospital or general practice. This training approach also incorporates repeated exposure to rural settings and recruiting students from rural areas. Some decentralized models include distributed community engaged learning, which takes place in both community and classroom settings.

The findings recommend additional research to determine the optimal duration of placements based on defined learning outcomes and program timing. Given the novelty of this concept, an assessment would be essential to evaluate potential student benefits, considering location choices and the required integration type.

Community-based education models often range from 4- to 8-week placements, involving students spending time in community health centres and rural communities. Some studies describe a blend of three clinical practice placements, including general practice placements (2–4 sessions per week), hospital placements, and remote placements (4-week placements in remote areas) during the third, fourth, and fifth years of study. Other placement models encompass urban medical schools offering 6-week rural clinical placements in primary healthcare settings (Thistlethwaite et al., 2013; Couper and Worley, 2010; Strong et al., 2017)

The findings also shed light on the ongoing debate regarding the role of universities in society and the need to decolonize the curriculum, making higher education more inclusive of South Africa's diverse population and healthcare requirements. This discourse is amplified by a disconnect between graduates' skills and the skills demanded by the job market. Osman and Proches (2020) assert that the misalignment between educational programs and industry needs may contribute to the country's unemployment rate.

6.2.5 Training Hospitals

The quantitative findings reflect that a majority of the students were placed in predominantly Tertiary hospitals, with a smaller number of students who were placed in District Hospitals. The findings also highlighted that the Pietermaritzburg Complex and Ngwelezana Hospitals are also academic hospitals that have capacity and experience in supervising and teaching Registrars. The relatively new site which didn’t have previous student exposure was Port Shepstone Region. The findings from the questionnaires indicate that there were a number of issues related to teaching and student support in this hospital, where there a habitual level of dissatisfaction was noted.

As a provincial hospital, Port Shepstone hospital has three referral hospitals with sixteen clinics attached to it, the hospital services a population which is predominantly rural with 86% living in rural areas. Furthermore, it not only provides services from the residents within its four local Municipalities but also accommodate for Eastern Cape residents that are in need of health care services (KwaZulu-Natal Department of Health: Provincial Hospitals, 2018). In contrast, Greys is a referral hospital that offers specialized services in a provincial capital city. It’s located in a relatively well-resourced district which has nine provincial and district hospitals and forty six fixed clinics and seventeen mobile clinics. Ngwelezane in the King Cetshwayo District on the other hand has a combination of healthcare facilities (two Regional hospitals, six District Hospital, one regional and fifty seven fixed Clinics and fourteen mobile Clinics.

It is therefore evident that Ngwelezana and Pietermaritzburg Complex are relatively well resourced in comparison to the Port Shepstone hospitals. This however also alludes to the

fact that the hospitals selected for the pilot could not be a true representation of the realities of allowing training to occur in district hospitals. This correlates with the qualitative data where it was stated that the emphasis on the existing curriculum is based on students being exposed to complex medical cases and specialized treatment procedures, which are aligned with cases referred to tertiary hospitals. It can however be argued that there cannot be a drastic shift from one model to the next and the adopted method is to ensure a seamless transition without affecting the quality of the education provided to students and the intended outcomes of their training programme.

6.2.6 Teaching in Decentralised Sites

The quantitative findings offer insight into the delivery of modules in decentralized sites. This indication was of significance as it exhibited whether students were provided with a framework that clearly maps out how they would build their knowledge and skills progressively, creating a logical and coherent learning path. The results indicate a positive level of satisfaction, emphasizing the significance of this structure in guiding students through their learning journey. Furthermore, the findings express a positive level of satisfaction concerning the clinical exposure they received in decentralized sites. This indication is crucial, particularly in the clinical years, as clinical exposure is a cornerstone of undergraduate medical training. In the last three years of training the emphasis on the curriculum is to equip students to be independent practitioners (Dunne, 2011). At this stage of their training, bridging the gap between theoretical knowledge and practical skills though providing the student with hands on experience is a fundamental practice in medical education. Moreover, this practice provides them with the necessary competence required for health care professionals to provide quality patient care.

Lawrence et al. (2018) posits that guidance is imperative in teaching and learning as it provides an opportunity for the clinical supervisors to provide constructive feedback to students. It also allows a space in which students are encouraged to be critical thinkers and gives them the platform to develop problem solving skills while building their confidence. The positive rating received for this aspect, along with all other aspects related to staff conduct, reflects the commitment of staff members to contribute to the training and capacitation of students. This commitment is crucial, as academics are perceived as facilitators of the learning process and play an important role in providing guidance. Moreover, they are perceived as a resource for providing students with the knowledge and skill they are required to acquire to meet the necessary competencies effectively. Academics are not only required to provide clarity on discipline related concepts but they are also expected to inspire and motivate thereby igniting interest and enthusiasm for learning. Academics are not only tasked with providing

clarity on discipline-related concepts but are also expected to inspire and motivate, igniting interest and enthusiasm for learning. Eitel et al. (2000) posit that maintaining expertise is a responsibility for any professional, especially in the face of rapid socio-economic changes in the healthcare system and the growth of information in the current digital age where information is readily available to all. In order to efficiently engage with students, academics must stay updated with the latest advancements. The findings indicate that this was the case in decentralized training sites, with students expressing satisfaction in their participation in learning, discussions, and patient care. This suggests that respondents were adequately engaged in these aspects.

6.2.7 Quality Improvement and Standardisation

The findings highlighted concerns regarding the quality of education and patient care amid the ongoing expansion of student numbers and clinical sites. While recognizing the necessity of this transition due to national imperatives, the need to approach significant changes cautiously was emphasized. It was acknowledged that the process of increasing students and expanding clinical learning sites might involve initial mistakes, with the intention to learn from these experiences and refine the system over time. Understanding and tolerance for this process were therefore advocated. Dasborough et al. (2015) acknowledged that such emotional responses to structural change are common, with employees' emotions becoming less intense over time as they transition from anticipatory to realized emotions, particularly when goals are achieved.

Eitel et al. (2000) posit that the practice of medicine is influenced by quality, cost, and legal concerns. To ensure the provision of quality services to patients, standardisation approaches in the healthcare system become crucial. This goal can be achieved through the application of total quality management principles (Dunne, 2011).

6.2.8 Impact of Students in Healthcare

The findings highlighted the positive impact of students in clinical sites, indicating that well-trained and motivated students can assist in sharing the workload by providing an additional helping hand in extended facility services. Students were seen to create vibrant, engaging environments, bringing both academic rigor and hands-on support to facilities. The presence of students was perceived to positively transform the health facility environment, not only for those they directly work with but also for nursing and allied professional staff. Despite the additional time required to supervise them, the findings illustrated that nonfinancial incentives contribute to job satisfaction, suggesting that establishing enabling environments can enhance health worker satisfaction and potentially contribute to retention even in rural and remote areas

(WHO, 2010).

While direct links between medical education and improved health outcomes remain challenging to establish, this study reveals several ways in which medical students appear to enhance the quality of care (DeVilliers et al., 2017). The findings support previous studies suggesting that medical students can influence clinical supervisors' practice by promoting inquiry and accountability, both crucial as healthcare increasingly relies on adherence to guidelines, checklists, and evidence-based practice (Atuyambe et al., 2016; Kamein, 1990). These findings hold particular relevance in low-resource settings where students can provide cost-effective improvements to the quality of care.

6.2.9 Curriculum Development

The findings emphasized the significance of curriculum transformation towards a community-based, public health-oriented approach. While this transformation is achievable, it will not be without challenges. The need for curriculum redesign may require time and commitment from the programme designers who will design the programme, aligning the changes with accreditation standards from both Council on Higher Education and Health Professional Council of South Africa. Additionally, the redesigned curriculum must also be in alignment with national health policies while also maintaining a focus on the role of internationalisation in the programmes offered by universities. Dunne (2011) argues that internationalizing the curriculum promotes equal opportunities for students, values social inclusion, and develops attitudinal and behavioural skill sets, preparing students to live and work effectively in a global context. This suggests that the training provided should capacitate students to excel regardless of the environment they are placed in to practice medicine, considering the diverse backgrounds and international aspirations of the student body.

This implies that a comprehensive research effort is essential when undertaking the exercise of curriculum design. Eitel et al. (2000) reason that there are curricular weaknesses in teaching competences crucial for emerging healthcare systems. Steiner et al. (1998) further elaborate that evidence of generally poor clinical performance among graduating students suggests the current curriculum inadequately teaches clinical skills necessary to assess and manage common problems. In order to avoid this dilemma, careful planning, consultation and benchmarking must be undertaken in order to ensure that the curriculum designed meets its intended objectives.

Furthermore, the team responsible for this transformation would be required to find ways in which they can address student concerns as change is often perceived as a problem rather than an opportunity to achieve greater heights (Brookes, 2006). Advocacy for the benefits of

the new approach and ongoing communication with all stakeholders are vital components for the successful implementation of a transformative curriculum in medical education. This transformation process requires strong leadership and coordination among the three schools, which house the various modules that make up the MBChB program, and various disciplines involved.

6.2.10 Leadership

The findings also indicated that the first pilot phase of the project provided many insights which could be used as a building block for the fully-fledged programme in the near future. Moreover, the findings suggest that there was value in the pilot phase of the project as it allowed for the ability to address and resolve issues and make changes to a program as it was underway. The findings also highlighted the challenges and complexities associated with making alterations or corrections to a project that is actively progressing, calling for the need for the teams and managers to be agile, flexible, and responsive (Zulch, 2014). These challenges necessitate for thorough assessment of situations that arise and identification of solutions that can be implemented with minimum negative impact on the overall goals of the programme. El-Gohary (2006) states that successful project management requires the ability to navigate and adjust course when needed, even when the project is already in progress. Additionally, the integration of students trained in Cuba would require accommodation and support from universities for eighteen months, with the findings indicating equitable distribution across medical universities based on available resources.

The need for transparent guiding document which provides a comprehensive structure for the program was highlighted in the findings. This would assist in ensuring that implementers possess a clear understanding of their requirements. The findings highlighted that there was a document that was developed to provide context for the program however, were of the opinion that it did not provide sufficient depth in relation to the implementation process. Establishing a guiding framework for decision-making and resource allocation would assist managers in efficiently utilizing resources while adhering to necessary standards and regulatory requirements (Amaral et al., 2002). Moreover, the findings emphasized the importance of granting decentralized departments and hospitals flexibility in resource allocation, enabling them to manage resources in a manner that best supports academic and healthcare objectives without sacrificing autonomy. Delegating authority to these units facilitates operational decision-making based on specific needs and priorities.

The findings also emphasized the need for empowered leadership across various hierarchical levels. Successful implementation of decentralized training requires collaboration among department heads, School and College Deans, School Managers, and Hospital Managers, all

empowered to lead and manage their respective areas independently. Establishing synergies between departments and fostering a common goal within the context of decentralized governance is imperative. Clearly defining the roles of each stakeholder and implementing measures to ensure accountability for performance and outcomes is crucial (Franco et al., 2005). A supportive central governance structure should provide guidance, mentorship, and resources to decentralized sections, fostering collaboration and knowledge sharing between the central administrative body and decentralized units. This collaboration allows for interdisciplinary initiatives, promoting shared learning opportunities and a culture of collaboration and knowledge exchange (Hannon et al., 2018). Sharing experiences and approaches between disciplines regarding the implementation of decentralized training would be beneficial for programme enhancement.

The findings reflected on the necessity of implementing robust reporting mechanisms to facilitate information flow between central and decentralized sites. These reports ought to be made accessible to stakeholders and persons of interest. The value of the reports which detail a comprehensive overview of achievements and challenges is immeasurable for new programme as it allows for opportunities for various teams and departments to learn from each other. Moreover, it assists central governance to monitor compliance against their established guidelines. Such guidelines should be formulated in consultation with decentralized management and leadership teams (Gilson, 2012). To ensure effective reporting, clear and measurable objectives aligned with program goals must be developed and agreed upon (Burian et al., 2014). These objectives can then serve as benchmarks for evaluating contributions toward academic excellence, research outcomes and patient care.

Eboreime et al. (2018) asserts that a degree of central oversight is essential in ensuring quality in implementation of decentralized programme. This necessity stems from the notion that it is at times difficult to be actively involved in the process while also providing oversight and adherence to established goals. While this encourages a culture of self-regulation and continuous improvement in decentralized sites and department, the role of central governance is equally important in ensuring that the established quality standards are maintained (Reddy and Govender, 2013). Central oversight can assess operational efficiency through regular reviews and audits, ensuring standardized operations across decentralized sites to uphold consistent student experiences regardless of placement. Furthermore, the findings underscored the value of feedback mechanisms enabling input on overall program performance, fostering transparency and continuous improvement within the institution

Additionally, the findings highlighted the importance of acknowledging and rewarding decentralized sites and staff within these facilities that exhibit exceptional performance. Incentives such as awards, grants, or additional resources can cultivate a culture of

accountability and continuous improvement within the institution. Alhassan et al. (2013) highlighted the need to integrate comprehensive staff motivation interventions into the quality improvement strategies of government-owned healthcare facilities, considering the challenging working conditions faced by these staff members compared to their counterparts in the private sector. Literature further emphasizes increasing levels of dissatisfaction, burnout, and attrition among clinicians and other staff members volunteering their time and expertise for teaching purposes (Hu et al., 2015; Dahlstrom et al., 2005; Ries et al., 2012). Wisener and Eva (2018) argued that the effectiveness of incentives depends on their interaction with underlying motivational mechanisms, which vary across tasks, individuals, and contexts.

The findings also pointed to the necessity of fostering a culture of integrated planning and decision-making among leadership roles to ensure strategic alignment. This finding highlighted the emergence of integrated leadership as a concept that could be incorporated into the decentralised training model. This leadership approach integrates diverse leadership competencies and perspectives to create a holistic and effective leadership strategy. Fernandez et al. (2010) asserts that this approach differs from traditional leadership approaches by emphasizing the amalgamation of diverse leadership styles and skills to effectively address the multifaceted challenges of contemporary organisations. In contrast to transactional leadership's focus on structured processes and rewards, integrated leadership goes beyond by incorporating transformational, collaborative, and strategic elements. While it shares some common ground with transformational, servant, and authentic leadership by valuing inspiration, authenticity, and servant principles, integrated leadership extends beyond these approaches, offering a more comprehensive framework that encompasses adaptability, collaboration, strategic thinking, and a broader array of competencies. It stands out for its holistic perspective and the ability to navigate the complexities of today's dynamic organisational landscapes by integrating various leadership elements into a cohesive and adaptive leadership style. In the context of decentralized training, integrated leadership can assist in facilitating a cooperative and supportive environment which would enable optimum functioning of departments and clinical sites. This is essential for maintaining not only the quality and efficiency of the training programme but also healthy relationships within and between departments. Moreover, it would be able foster a harmonized balance between centralized guidance and decentralized flexibility by ensuring collaboratively aligned strategies that consider both overarching objectives and the specific needs of individual decentralized units.

The findings also indicated the need for amplified involvement of representatives from various decentralized departments in the decisions made by central administration.

Through joint strategic planning sessions and working groups, the stakeholders would be able to contribute their insights and expertise to the development of cohesive and comprehensive institutional strategies. Braun (2011) posits that involving decentralized departments in decision-making is a key aspect of balancing central oversight with local autonomy. While it might seem counterintuitive for the central administration to be told what to do, effective decision-making often benefits from incorporating insights from various levels of the organisation. This approach allows decentralized departments to contribute their expertise and address discipline and regional specific needs in order to provide valuable input into the decision-making process.

However, the challenge lies in maintaining a balance between central guidance and local input. It's essential to establish clear frameworks and communication channels to ensure that decentralized departments contribute constructively without impeding the central administration's overarching responsibilities (Karlsen, 2000). This approach seeks to optimize the effectiveness of decision-making by leveraging both centralized standards and decentralized expertise, enhancing the overall quality and relevance of decisions.

6.2.11 Capacitation in Medical Universities for the Implementation of Decentralised Training

The findings indicated that there was commitment form the Department of Health and the University to increase human resources for teaching in the healthcare facilities that have been earmarked for decentralised clinical training. This increase would assist in providing an additional number of clinicians that would be available to teach students in the identified clinical sites. While the interviewees in management alluded to the prospect of increasing the number of staff available in the various sites, some interviewees expressed that they are currently faced with a challenge related to clinical staff shortage in decentralized sites. It can be said that the collaborative efforts between the university and the Department of Health to ensure an adequate staff complement in these sites is ongoing and may take time due to the nature of the recruitment, selection and appointment route followed by both institutions. The findings also indicated that there were a number of vacant positions in various clinical sites and within the university. The ongoing collaboration between the two institutions may result in expediting the appointment process for vacant posts in order to secure the required number of clinical staff to teach and supervise students. Wiseman et al., (2015) stated that factors such as remuneration and working conditions in the public sector make it challenging to attract and retain proficient clinical professionals. The possible joint appointments could possibly attract clinicians who have an interest in engaging with academic matters and developing in the area of teaching and research.

The findings from the study indicated that the funding from the clinical training grant was secured by the College of Health Sciences. The clinical training grants are awarded according to the criteria outlined in the Department of Higher Education and Training Ministerial Statement on Clinical Training Grants. The statement articulates that the grant is awarded to Universities that offer health science related programs in which the academic and administrative responsibilities are solely the responsibility of that particular university. Moreover, the health science programmes considered for the grant are those which have clinical training as a requirement and necessitate for students to have access to public health facilities and patients within the province they are situated in (DHET, 2010). In accordance with the published budgets, the University received the highest amount over two consecutive periods i.e. 2015/2016 and 2016/2017 (Table 6.1). The budget was allocated in accordance to a published model, this model takes into cognizant the of student data related to the enrolment numbers and the time spent in clinical training sites and level of study (DHET, 2014).

Table 6.1: Earmarked Clinical Training Grant for 2015/16 and 2016/17

Adapted from DHET Ministerial University Funding (2014)

	2015/16	2016/17		2015/16	2016/17
UNIVERSITY	**(R000)**	**(R000)**	**UNIVERSITY**	**(R000)**	**(R000)**
Cape Town	37 055	34 615	Rhodes	911	1 151
Fort Hare	5 474	5 920	Sefako Makgatho	39 253	38 096
Free State	29 567	29 567	South Africa	0	0
Johannesburg	6 736	6 813	Stellenbosch	36 777	37 061
KwaZulu-Natal	72 144	73 501	Venda	3 495	3 974
Limpopo	4 728	5 728	Walter Sisulu	15 438	17 335
Nelson Mandela	7 859	9 262	Western Cape	27 344	28 033
North West	9 369	11 029	Witwatersrand	59 983	66 927
Pretoria	42 760	47 087	Zululand	5 128	5 365

The findings reflect that the grant was used for the appointment of administrators to each site in order to assist with the day to day administrative work. The data collected reflects no evidence to suggest that clinical appointments were made using this financial resource even though there is a provision made. The grant allows for costs related to clinical training including hiring of clinical supervisors as per the occupation specific dispensation data obtained from the National treasury (DHET, 2010). Sambo and Kirigia (2014) posit that factors such as underfunding and unequal distribution of medical resources impact the expansion of medical training facilities, it is evident that this is not always the case. The figure presented reflect that funding is available from the government to support the clinical expansion initiative.

The findings highlighted the need for heightened coordination between the Department of Health and the University. Girma et al. (2016) highlighted that inadequate coordination between ministries of education and health poses a significant barrier to the capacity expansion of the health workforce in medical schools. With the funding for medical schools to provide training being received through the ministry of higher education and the ministry of health serving as the primary employer of graduates, it is expected that there would be greater coordination between the ministries. Mullan et al. (2011) asserts that in many African countries, poorly coordinated planning for budgets, priorities, and outcomes between these ministries have led to the adoption of an inappropriate curricula and the production of doctors who struggle to find employment within the country. In countries such as Mali and Sudan, the annual number of medical graduates far exceeds the country's capacity to hire new physicians, despite the evident need for health services (Girma et al., 2016). Notably, ministries of education appear to play a more active role in setting medical school priorities compared to ministries of health, highlighting the need for greater coordination between the ministries.

6.2.12 Infrastructure

The findings indicate that there is some progress that has been made towards infrastructure improvements. Park homes have been erected in some decentralised sites and the sourcing of accommodation conducive for learning has been productive. Sambo and Kirigia, (2014) asserts that governments and committed stakeholders are actively working to improve healthcare systems by investing in infrastructure and addressing training healthcare professionals. This is prevalent in the decentralised sites utilized by the university, with most sites having undergone infrastructure developments in the past 4 years (DOH, 2018). To ensure a transformative student experience, further investments must be made towards the decentralised program. As the decentralized training allows for community immersion and promotes interprofessional collaborations, the program is of value for providing students with broader exposure. This comprehensive approach necessitates strengthened student support mechanisms to help students adapt to new environments. Adequate resources, such as libraries and conducive learning spaces, are crucial. Creating an enabling training environment requires appropriately trained clinical educators and sufficient infrastructure and equipment at decentralized sites. A favourable student-to-trainer ratio is essential, necessitating an increase in practitioners available for student training (Couper and Worley, 2010). Exposure to an appropriate patient mix aligned with curriculum objectives is also vital.

The findings reflect that selecting appropriate sites and identifying suitable clinical educators are crucial to the success of the programme from an educational perspective. Furthermore,

standardizing the curriculum across all sites and fostering a community of practice among stakeholders are also essential aspects.

6.3 Relevance of Data to Study Objectives

6.3.1 The present state of governance in medical universities and the impact of governance to the successful implementation of the decentralised programme

In this section, the findings align with the objectives of the study, aiding in assessing the extent to which the findings addressed the research objectives. The first objective of the study was to understand the state of governance in institutions that offered medical training in order to ascertain how this would impact on the implementation of the decentralized training agenda. The qualitative findings highlighted the challenges faced by higher education institutions, highlighting the need for adaptive governance in the dynamic educational landscape. The landscape is termed as dynamic due to the intertwined factors at play, with the constant changes in societal needs and shifts in educational paradigms. Moreover, the national imperatives dictated by the Ministries of Health and Higher Education and training require institutions to be adaptive to stay relevant and comply with the required changes. Additionally, factors such as globalisation, economic trends and advancements in research all contribute to the nature of higher education.

In the findings, an emphasis was placed on the importance of institutions maintaining autonomy while meeting obligations to stakeholders. This necessitates robust leadership and effective governance structures for implementing innovative models. Furthermore, this balancing act involves the alignment of institutional goals with stakeholder expectation and stakeholder engagement in collaborative decision-making processes in order to ensure transparency. Brady and Broadbent (2007) posits that the intricate nature of universities requires sound leadership at all organisational levels. Watson and Hall (2015) posits that the intricate nature of universities demands sound leadership at all organisational levels. This aligns with the study's findings, underscoring the importance of strengthened governance structures and cascaded leadership extending to the operational structures of the institution.

The findings highlighted a gap in policy implementation to degree, indicating a disparity between intended objectives and the actual implementation on the ground (Tollman et al., 2008). This was primarily a result of the challenges and obstacles faced on the ground which resulted in the inability to fully meet the requirements stipulated in the policy. Such challenges included sufficiency of the required resources due to various factors including external influences beyond the control of those coordinating the programme. Bob Hudson (2019) identified contributors to inadequate policy implementation to be inclusive of overly optimistic expectations, dispersed governance, insufficient collaborative policymaking, and the influence of the political cycle. The qualitative data suggested that these factors, to some extent,

influenced the decentralized program's implementation.

Aligned with this objective, communication was identified as a factor that may impeded on the effectiveness of the implementation of the decentralized programme. The findings noted disparities in information sharing and consultation processes during the program's development. The limited communication and engagement with departments is perceived to have potentially been the reason related to the creation of exceedingly optimistic expectations of the program without a detailed operational assessment.

The findings also indicated that there was, to a degree, limited collaboration between university and health department leadership in decision-making structures. This may have contributed to dispersed governance. El-Gohary et al. (2006) highlight stakeholder opposition as a major reason for project failure, emphasizing the importance of capturing stakeholder input for successful project development. In line with this, the findings highlighted the displeasure of a majority of heads of clinical disciplines about the manner in which the project was planned and this may be the contributing factor towards their lack of fervor about the programme.

As communication emerged as a major barrier, the need for a well-thought-out communication strategy to keep stakeholders informed and engaged was realised. Franco et al. (2005) stressed that transparent communication and change management strategies are important for project success. Furthermore, there should be emphasis on the importance of structured coordination through regular meetings and open forums.

Stakeholder input perception and disregard were noted, aligning with salience theory, suggesting that certain stakeholders exerted more influence based on their relevance and importance. The findings also indicated that priority was given to publicizing the programme through media coverage over addressing operational issues that emerged. This dynamic may have contributed to the disempowerment of certain staff members who were of the opinion that the programme was not effectively managed. The qualitative findings underscored that there were limited proactive measures put in place to address communication shortcomings.

Quantitative data echoed similar sentiments related to communication issues, with some students feeling ignored as their issues and recommendations were not generally addressed. Moreover, the findings emphasized that there was limited representation of stakeholders in advisory committees, which raised concerns. This alludes to the need for balanced involvement of all stakeholders. The first pilot phase of the project provided valuable insights, serving as a foundation for the fully-fledged program in the future. The findings underscored the significance of the pilot phase in addressing issues, making real-time changes, and addressing the challenges associated with altering an actively progressing project. This

emphasized the importance of teams and managers being agile, flexible, and responsive in their approach. Moreover, this also necessitates a thorough assessment of arising situations and identification of necessary adjustments to minimize negative impacts on program goals. This can be achieved through building team coherence with an embedded culture of discipline and heightened sense of team work.

Transparent guidelines defining a comprehensive program structure were deemed necessary, providing implementers with a clear understanding of requirements. While a document existed to provide context for the program, the findings indicated that it lacked sufficient depth regarding the implementation process. Establishing a guiding framework for decision-making and resource allocation would assist managers in efficiently utilizing resources while adhering to necessary standards and regulatory requirements.

Empowered leadership across hierarchical levels was identified as a prerequisite for successful decentralized training implementation. Collaboration among department heads, School and College Deans, School Managers, and Hospital Managers, all empowered to lead and manage independently, was highlighted. Establishing synergies between departments and fostering a common goal within decentralized governance was deemed imperative. Clearly defining roles and implementing measures for accountability were considered crucial for effective implementation (Tollman et al., 2008).

Robust reporting mechanisms were emphasized to facilitate information flow between central and decentralized sites, with accessible reports providing a comprehensive overview of achievements and challenges. This information is invaluable for new programs, offering opportunities for learning between teams and departments, monitoring compliance, and setting clear and measurable objectives aligned with program goals.

Central oversight, essential for ensuring quality in decentralized programs, was underscored. While promoting a culture of self-regulation and continuous improvement at decentralized sites, central governance plays a vital role in maintaining established quality standards through regular reviews and audits. Feedback mechanisms were highlighted for input on overall program performance, fostering transparency and continuous improvement.

Acknowledging and rewarding exceptional performance within decentralized sites and staff was emphasized as crucial. Incentives such as awards, grants, or additional resources could cultivate a culture of accountability and continuous improvement. Considering the challenging working conditions faced by healthcare staff in government-owned facilities, integrating comprehensive staff motivation interventions into quality improvement strategies was recommended.

Fostering a culture of integrated planning and decision-making among leadership roles was

seen as necessary for strategic alignment. Integrated leadership, incorporating diverse competencies and perspectives, was proposed as an effective approach (Brookes, 2006). This comprehensive leadership style integrates transformational, collaborative, and strategic elements, ensuring a holistic perspective and adaptability in navigating organisational challenges.

Amplified involvement of representatives from decentralized departments in central decision-making was advocated. Joint strategic planning sessions and working groups were proposed to facilitate constructive contributions from various levels of the organisation. Balancing central guidance with local input requires clear frameworks and communication channels to optimize decision-making effectiveness.

6.3.2 The current context of the South African healthcare system and medical education with emphasis on the significant changes and trends that have shaped priorities for both sectors

In relation to this objective, the findings demonstrated a widespread recognition and acceptance of decentralized training as a means to expand the clinical training platform. Moreover, it was perceived as the most practical method of aligning the institution with the national imperative of increasing student numbers for the MBChB program. Differing opinions merged regarding the integration approach and plans for this initiative. Resource availability arose as a critical factor influencing the scale and magnitude of the program, emphasizing the need to have the necessary resources in place to ensure the quality of clinical training remains uncompromised.

The findings corroborated the existence of a dual system in the health care sector comprising public and private sectors. Funded primarily through government sources to provide for the majority of the population, the public health sector is challenged with a strained system with limited resources. These challenges impede on the efforts to provide equitable access to healthcare services. Success has however been achieved in increasing the network of health care facilities such as clinics and health care centres. Moreover, there are developments which are aimed at increasing the capacity of hospitals in the various districts in order to accommodate the growing population numbers. The findings indicate that deployment of mobile healthcare units are some of the initiatives used which are aimed at improving health care access to the public communities.

The findings also confirm the policy driven approach for the adoption of public health care which preparations are being made to accommodate it stage. Parallel to this, several discussions have been undertaken to facilitate the introduction of National Health Insurance

system. Such discussions have highlighted its feasibility given the existing strain on the public healthcare system. Moreover, the findings question the and the financial viability of this system given the country's economic climate. While the Bill is in its final stages for approval, the concern related to increase taxes for the employed citizens still exists. Moreover, the inefficiencies in government spending and questionable service delivery further exacerbated the concern due to the increase in corruption observed over the years which has resulted in the collapse of many government led initiatives. The findings reflect that weaknesses in accountability mechanisms within the governance structures of government have resulted in mismanagement of funds and service delivery issues. Strengthening accountability and addressing resource disparities are crucial for effective healthcare governance All these would necessitate central hospitals becoming a competence of national sphere of government which will require new governance structures. Coupled with this, the funding model should promote good governance, academic excellence and support to lower level care. Keinert and Horton (2009)

The shortage of skilled professionals contributes to the strained system. The supply against the demand of medical practitioners resulted in the migration of people to job prospects with better remunerative opportunities and conducive working environments such as those offered in the private sector. Furthermore, such institutions are well resourced in contrast to the public sector where there are resource limitations and outdated infrastructure.

The findings reflect that, similar to Limpopo and the Eastern Cape, KwaZulu Natal faces challenges related to rural-urban disparities. A limited number of medical practitioners are attracted to working in rural areas, this results in workforce shortages in those areas. Moreover, the underdeveloped healthcare infrastructure, particularly in rural regions, make it an unattractive space to work in, especially when one has a family who require access to schools and other resources. The findings reflect that financial incentives in a form of an allowance have been provided for staff to attract and retain healthcare professionals in rural areas.

The findings indicated a shift in the budget allocations in favour of the previously disadvantaged provinces with larger population sizes in line with their healthcare requirements. This funding has also made it possible for the revamping of existing infrastructure and building of new clinics and community centres in collaboration with the Department of Public Works. However, a considerable amount of the budget is said to be taken up by tertiary-level hospitals.

The findings reflect that institutions with heavily reliance on government funding found themselves challenged with issues of financial sustainability. Furthermore, the need for

generation of other income streams and streamlining of their processes emerged as a necessity. The findings also confirmed that financial instability has far reaching effects on staff retention. The findings indicate that it was difficult for the university to match industry-based salaries offered to specialists, resulting in a limited number of candidates interested in working for the university.

The findings also reflected the need for upskilling of academics transitioning into leadership roles. Leadership and management training are crucial for academic staff assuming leadership roles, facilitating capacity building for future leadership. Brookes, 2006 posits that organisations should maximize the use of employees' actual and potential skills. Capacitating them to take on various roles within the organisation is one of the ways in which this can be achieved. This proactive approach would help them prepared for the future expected and unexpected turnover of key employees. Algahtani (2014) asserts that the succession planning process supports the goals of an organisation towards productivity and effectiveness. In the context of this study, staff in decentralised sites would be provided with more decision-making space in critical management domains. It is therefore crucial that these individuals are capacitated to perform such tasks, bearing in mind that they may be trained as doctors but not necessarily managers.

6.3.3 Capacitation in medical universities for the implement decentralised training

The findings suggest a commitment from both the Department of Health and the University to augment human resources for teaching in accredited clinical facilities. This collaborative effort aims to address challenges related to clinical staff shortages in decentralized sites, though some interviewees acknowledge the existing challenges in recruitment, selection, and appointment processes. The ongoing collaboration may expedite the appointment process for vacant positions, potentially attracting clinicians interested in academic engagement and research, especially through joint appointments.

The study's findings indicate the secured funding from the clinical training grant by the College of Health Sciences (DHET, 2014). These grants adhere to specific criteria outlined in the Department of Higher Education and Training Ministerial Statement on Clinical Training Grants, and the allocation is based on a published model considering student enrolment, time spent in clinical training, and the level of study. The grant appears to be a valuable financial resource, with the University receiving the highest amounts over consecutive periods. However, the study reveals that while the grant was used for administrative appointments, there is no evidence of clinical appointments using this financial resource, highlighting a potential gap in resource utilisation.

Effective coordination between the Department of Health and the University is emphasized in the findings. Poor coordination between ministries of education and health is identified as a significant barrier to capacity expansion in the health workforce. The study suggests that greater coordination is needed between these ministries to avoid curriculum mismatches and produce graduates who can find employment within the country. The findings underscore the importance of collaborative planning for budgets, priorities, and outcomes between ministries.

Progress in infrastructure improvements is noted in the findings, with park homes erected in some decentralized sites and efforts to source accommodation conducive to learning. This aligns with broader investments in healthcare systems, reflecting a commitment to enhancing infrastructure and training healthcare professionals. However, the study emphasizes that further investments are required to ensure a transformative student experience in the decentralized program. This includes strengthening student support mechanisms, providing adequate resources, creating conducive learning spaces, and maintaining an appropriate student-to-trainer ratio. The findings highlight the need for ongoing efforts to improve infrastructure and support systems for the success of the decentralized training program.

Staff shortages for teaching were identified, requiring leadership to prioritize Joint Health Establishment agreements and explore ways to increase qualified teaching staff.

The current decentralized training model's alignment with the Primary Health Care approach was questioned, prompting a need for curriculum restructuring. Longer student placements and community-based education integration were proposed solutions, requiring additional research for optimal duration and outcomes. The findings highlighted ongoing debates on curriculum decolonisation and the need for higher education to address diverse population needs. This supported the sentiments shared by Leibowitz, (2016) in the reform of curriculum transformation.

Concerns about education and patient care quality amid student number and clinical site expansion emphasized the importance of cautious transitions. Training opportunities for Department of Health staff, incentivizing teaching, and acknowledging the positive impact of students in clinical sites were highlighted. The study suggested ways in which medical students enhance the quality of care and emphasized the significance of curriculum transformation towards a community-based, public health-oriented approach. However, challenges in redesigning the curriculum were acknowledged, requiring time, commitment, and ongoing communication with stakeholders for successful implementation. Leadership and coordination among schools and disciplines were deemed essential for this transformative process in medical education.

6.3.4 A decentralised management framework for the KwaZulu Natal medical university.

The study drew on theoretical frameworks in order to formulate a conceptual framework for decentralized training. The competencies drawn up from the public leadership competency model and the medical competency models assisted in understanding leadership and management within the decentralized training phenomenon. The decentralized centralism framework then provided a basis assessing decentralised clinical medical training against its four key dynamics. The findings then gave us an indication on the possible competencies that could e included in the decentralized training model.

In relation to ethical leadership, the findings suggest that this is an important aspect in all leadership qualities, emphasising that it should be entrenched to every leader within the institution. The findings reflect that lack of ethical behaviour often result in failures in implementing projects. Plinio (2009) asserts that the way in which the leaders behave sets a tone and builds the culture of the organisation. Moreover, this translates to the development and empowerment of people in that particular setting which translates an increase in efficiency and quality of service provided to the public which they serve. Unethical behaviour of leaders and managers often erodes trust within their teams and organisation which has a dire result on the moral and productivity of the individuals within that organisation. Additionally, unethical behaviours have a legal consequence and can damage the reputation of both the leaders and the entities they represent. Kavanagh and Ashkanasy (2006) who suggested that this may be done through a number of processes including staff selection, socialisation, removal of deviating members, cultural communication mechanisms and role modelling of appropriate behaviours.

Ethical leadership is also linked to personal values which were the second competency identified in the conceptual framework. The findings of the study presented a strong emphasis on the need for accountability and transparency. The leaders and managers are not only accountable to themselves and their teams but also to the stakeholders (Brookes, 2006). The findings highlighted the critical need for reinforcing accountability mechanisms and ethical leadership to be adopted at all hierarchal level of government departments and the institution in order for the intended national goals to be achieved. The findings further reflect on the importance of clear reporting lines and accountability measures to be put in place in order to ensure that all managers, leaders and staff are held accountable for their actions. Moreover, clearly defining the roles of each stakeholder and implementing measures to ensure accountability for performance and outcomes is crucial. The findings also suggest the need for encouraging collaboration and shared accountability among centralized and decentralized

departments as this can cultivate a culture of accountability and continuous improvement within the institution. Weaknesses in accountability mechanisms have led to issues such as mismanagement of funds and poor service delivery (Maphumulo and Bhengu, 2019).

The findings reflect the importance of maintaining transparency and fostering a collaborative environment. Franco et al. (2005) posits that the lack of transparency may impede employees' understanding of organisational goals. Alhassan et al. (2013) asserts that lack of transparency within an organisation potentially hinders the desired efficiencies required for successful implementation of the strategies developed. The findings also emphasize the importance of transparency in operations. Furthermore, they also indicate that engaging various stakeholders, including student leadership, is important in facilitating transparency and ensuring that diverse perspectives are considered in decision-making processes.

In relation to the competency related to strategic thinking, the findings reflect that fostering a culture of integrated planning and decision-making among leadership roles was seen as necessary for strategic alignment. Moreover, the findings suggested that joint strategic planning sessions through working groups could facilitate constructive contributions from various levels of the organisation. Strategic thinking emerged as an important competency as it allows for planning ahead in order to strategically distribute resources based on the needs and performance of the departments and hospitals, ensuring effective and efficient resource utilisation in achieving overall institutional objectives. The findings also reflected the formulation of a discipline specific Memorandum of Agreement was a constructive step toward detailing the collaborative efforts between the parties and effectively utilizing resources. Additionally, the integration of Human Resource and Hospital Evaluation Reports into the planning process can provide valuable insights and inform strategic decisions regarding program implementation.

In relation to the competency which speaks to communication, the findings strongly emphasized that need for improved communication between executive management and the disciplines Furthermore, they highlighted the need for effective communication with students in order to ensure that they are kept abreast with issues related to their training and feedback on the concerns and perspectives they have communicated. The findings also suggest that lack of communication often results in misunderstandings about the priorities and hinders in the creation of a shared vision. The findings also highlighted the need for a structured communication strategy which would allow for regular interaction and exchange of information. The channels that could be utilized include regular meetings and communication channels to foster understanding and alignment of priorities among the different leadership roles (Brookes, 2006). Such engagements must take into consideration that excessive meetings can interrupt workflow, thereby affecting productivity. Moreover, important information may be diluted as a

result of too many meetings, resulting in them not addressing their intended purpose. Establishing clear communication channels between decentralized units and the central governing body is essential. Transparent communication ensures that local units are informed about the institution's overarching goals and policies, while the central body remains updated on the progress and challenges faced by decentralized departments.

The four dynamics of the centralized decentralism framework provided insight for the management of the programme. decentralized centralism can refer to a form of governance where power is distributed among multiple levels of government, but there is still a central authority that coordinates and oversees the overall operation of the system (ref). This approach aims to balance the benefits of decentralisation, such as greater local control and responsiveness, with the advantages of centralisation, such as the ability to implement and enforce policies consistently across a large geographic area.

In relation to central oversight, the findings reflect the need for well-defined roles and responsibilities of central governance. Moreover, they also emphasis on the need of balancing central oversight with department and hospital autonomy. The finding suggest that centralized oversight can monitor and assess the performance of local departments or units, identifying best practices, areas for improvement, and opportunities for collaboration across the institution and its training sites.

In terms of autonomy, integrated leadership acknowledges the importance of autonomy within decentralized structures. Leaders can draw on principles from transformational leadership to inspire and motivate teams independently while incorporating elements of servant leadership to provide support and resources as needed.

In relation to collaborative decision making the findings call for a balancing act which involves the alignment of institutional goals with stakeholder expectation and stakeholder engagement in collaborative decision-making processes. To ensure coordinated learning efforts, leaders can draw on collaborative leadership principles. This involves creating platforms for decentralized teams to share insights, best practices, and lessons learned, fostering a collaborative learning environment that benefits the entire organisation. The findings suggest that through decentralized decision-making, higher education institutions can delegate decision-making authority to various levels within the institution, such as departments, schools, or colleges. This delegation can foster innovation, creativity, and responsiveness to local needs and circumstances (Beckmann, 2002). At the clinical level, training authority can be decentralized by delegating it to local training centres, departments, or units, while maintaining central coordination and oversight, fostering innovation, creativity, and responsiveness to local demands and conditions.

The findings also assert that coordinated curriculum planning is vital. To ensure consistency and coherence in the overall academic program, higher education institutions can establish a centralized curriculum committee working in tandem with local departments or schools to synchronize course offerings and program requirements. Similarly, in clinical training, central coordination can collaborate with local training centres, departments, or units to synchronize course offerings and training requisites. This can be accomplished through regular communication, the sharing of best practices, and periodic assessments. These efforts also speak to the Standardisation of the training provided to students in all sites.

6.4 Conclusion

The chapter provided an integrated discussion of results obtained from both the quantitative and qualitative phases. This approach allowed for a comprehensive analysis, refining congruent findings and addressing conflicts. The integrated results were carefully examined through the lens of specific respondents involved in the study. Moving forward, the subsequent section will offer a summarized overview of the findings, draw conclusions, and provide recommendations based on the comprehensive insights gathered throughout the study.

CHAPTER SEVEN: SUMMARY, RECOMMENDATIONS AND CONCLUSION

7.1 Introduction

In this chapter, the study concludes by aligning the findings with the predetermined objectives. As delineated in the preceding chapter, the conclusions and recommendations are linked to the outcomes of the study. This chapter also describes the limitations of the study and suggests potential avenues for future research.

The specified study objectives related to decentralized training in medical education, with a focus on KwaZulu Natal as a case study, have been methodically investigated, and the findings have been reached. Initially, the research aimed to apply existing models—the decentralized centralism framework and the modified leadership competency model—to assess the leadership and management requirements and effectiveness in decentralized clinical training. These models highlighted observable leadership actions that could be used to identify leadership skills required within the context of this study. Moreover, these models also assisted in facilitating the required leadership development for managers and leaders in the medical education setting.

Through the use of interviews grounded in the dimensions established by the frameworks, it was possible to gauge leadership behaviours that currently existed. Parallel to this, the feedback questionnaire from students offered insights into students' perceptions of all aspects related to their experience in decentralized sites. This includes the leadership provided, teaching, learning, and all other aspects that enrich the student experiences. This feedback was crucial as it assisted in identifying areas for development to enable the institution to reassess their strategies and cultivate their leaders and managers.

The final research objective was to contribute to the formulation of a decentralized training model for leadership tailored to the South African healthcare context. This involved determining competencies through the frameworks adopted in the study and comparing responses from staff in both institutions—the University and the Department of Health in KwaZulu-Natal—and students. This ultimately led to the development of a contextually relevant leadership model to fortify leadership in training healthcare professionals.

7.2 Summary of the Study

The summary of the study per objective is as follows:

Objective 1: The present state of governance in medical universities and the impact of governance to the successful implementation of the decentralised programme.

This objective sought to establish the state of governance in universities offering medical training to assess the impact that institutional governance would have on the implementation of decentralized training programs in selected clinical sites. While there was a positive response to the overall governance of the institution, certain areas were underscored as potential areas for improvement.

The study notably highlights strengths associated with the paradigm shift to decentralized training, emphasizing heightened clinical exposure allowing students to assist and observe seasoned healthcare professionals in diagnosing and treating patients. It also underscores improved staff-to-student ratios due to a lower number of students allocated to a clinical supervisor and the commitment of leadership and staff to the program's success.

Conversely, the study identifies opportunities for program improvement, including strengthened collaborative decision-making, stakeholder inclusion and engagement, transparent communication of current and future plans, robust reporting mechanisms, and the ability to create a common purpose to avoid policy implementation gaps (Tollman et al., 2008). Transparent guidelines are emphasized to delineate roles and responsibilities of central and decentralized administration. The central role involves providing oversight, assessing operational efficiencies, and offering support and guidance to decentralized units for fostering interdisciplinary collaboration and ensuring standardized curriculum delivery across all sites.

The study also underscores the importance of providing departments and decentralized sites with the necessary authority and capacity to fulfil their mandated responsibilities. Incentivizing staff through acknowledgment and rewarding of decentralized sites exhibiting exceptional performance is recommended. Furthermore, integrated leadership is highlighted as a concept that could be incorporated into the decentralized training model.

To summarise the findings against this objective, the study provided a nuanced understanding of the governance landscape within medical training institutions. While affirming positive strides, it also pinpointed areas for refinement, ultimately contributing to a comprehensive evaluation of the governance impact on decentralized training endeavours, emphasise the multifaceted aspects of implementing decentralized training, emphasizing the need for thoughtful planning, resource allocation, empowered leadership, transparent communication, and a balance between central oversight and decentralized input to ensure the program's

success.

Objective 2: The current context of the South African healthcare system and medical education with emphasis on the significant changes and trends that have shaped priorities for both sectors.

In addressing this objective, the study embarked on a comprehensive examination of the nuanced trends within the public and higher education sectors, shedding light on their respective priorities and divergences. The study highlighted challenges faced by the public sector in providing equitable access due to strained resources. Efforts to expand healthcare facilities and deploy mobile clinics were noted to enhance accessibility. Policy-driven adoption of Public Health Care model and preparations for the National Health Insurance system emerged as priorities influencing the paradigm shift in medical education.

Governance issues and corruption were identified as concerns impacting resource management, emphasizing the need for heightened leadership ethics and measures to ensure program success. Rural-urban disparities and the shortage of medical personnel willing to work in remote areas were recognized, with plans for longitudinal student placements in such sites requiring further engagement. Budget reallocation favouring historically disadvantaged provinces was acknowledged, but resource deficits still persist in some sites.

On the higher education side, the study emphasized the need to upskill novice academics transitioning into leadership roles. Leadership and management training for academic staff assuming such roles were deemed crucial for capacity building. Financial sustainability challenges for universities highlighted the necessity of considering sustainability models for the future. While the Department of Higher Education and Training provides funding for clinical training, proactive mechanisms are needed for program survival in the absence of this grant. The study stressed the importance of generating alternative income streams and streamlining processes for long-term program sustainability. The far-reaching effects of funding on staff retention were also underscored.

To summarise against this objective, the study advocates for an augmented focus on accountability and resource management in healthcare governance. The study underscores the need for enhanced accountability and resource management in healthcare governance. It also emphasizes the importance of sustainability models for the future operation of the program, especially considering the proposed increase in student numbers in future. Finally, the findings highlight the significance of formal management education in honing leadership competencies within academic and clinical spaces.

Objective 3: Capacitation in medical universities for the implement decentralised training.

This objective examined the universities' capacity for the successful implementation of the decentralized training agenda. The study indicates that the university was adequately capacitated with necessary funding, provided in the form of a grant from the Department of Higher Education and Training. This financial support facilitated the development of plans for site preparation to receive students. Although strides were made in providing required resources for students, a challenge arose regarding the availability of clinical staff for teaching and supervision, particularly in newly established sites not previously used for teaching. The study highlighted that the current sites managed well with the allocated number of students. However, it emphasized the need for further planning and investment to enhance the capacity of sites to accommodate additional students in the future.

Objective 4: A decentralised management framework the for KwaZulu Natal medical university.

This objective necessitated the development of a management model for decentralized training based on the study's findings. Establishing this framework is crucial for fortifying the leadership aspects of the decentralized program. While various positive initiatives were undertaken to ensure the success of the decentralized training pilot project, the study's key findings, as highlighted earlier, reveal deficiencies in some competencies identified in the conceptual framework. Addressing these deficiencies could result in an enhanced program.

In the absence of an existing management model for decentralized training in the medical context, the proposed model is positioned to provide valuable insights. It enables leaders and managers to discern their strengths and areas requiring improvement. The implementation of such a model is anticipated to effectively address the identified leadership gaps within the healthcare institutions under study and establish a foundation for future studies. In essence, the development of this management model transcends a mere corrective measure; it represents a proactive and forward-thinking approach to enhance the leadership landscape within the decentralized medical training framework. It holds the promise of not only addressing current challenges but also serving as a catalyst for continuous improvement and adaptability in the ever-evolving landscape of medical education and healthcare delivery.

7.3 Summary of the Proposed Conceptual Framework

The first part of this chapter demonstrated that the study objectives were achieved through an extensive analysis of the collected data. This data was compared and contrasted with available peer reviewed empirical studies. In congruence with past studies, the researcher identified macro and micro factors that influence the functioning of the healthcare system and academic institutions that offer medical training for future doctors. The use of the proposed conceptual framework enabled the researcher to make conclusions based on the findings of the study. A summary of the study's finding against the proposed pillars of the conceptual model led to the recommendations presented in Figure 7.1..

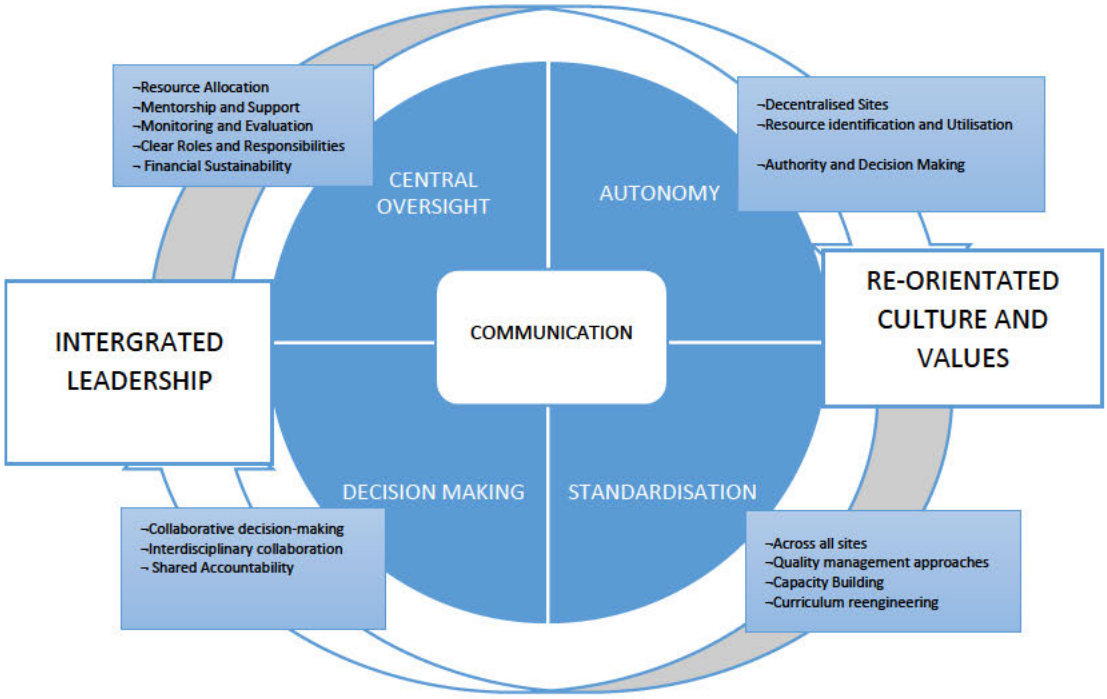

Figure 7.1: Summary of the seven pillars based on the proposed Conceptual Framework

Leadership and Management Style

A critical factor that defines an institution is the type of leadership and management that exists. Within an organisation, each manager has a specific leadership style that resonates with them while others adopt the style that best supports the culture of the organisation. Large institutions adopt a style that best aligns with their vision and mission statement in order to intuitively foster an organisational culture. cultures are underpinned by deep assumptions that are patterned and shared. Sathe and Davidson (2000) suggest that evidence supports the fact that culture change consists of changing people's minds as well as their behaviour. The manner in which the culture change for each individual is evoked also has a significant impact

on the result and the consequences for each individual.

This study acknowledges the diversity and flexibility required in a multi-faceted institution with multiple macro and micro forces at play. The study identified the competencies in integrated leadership as the best alternative to address the context of decentralised clinical training, given the complex nature of its governance. The recommended leadership style draws on various leadership theories, therefore allowing for its application depending on the requirements of the departments and hospitals used for decentralised training. Adaptability is a key aspect of integrated leadership theory. With this style as leaders can integrate principles from situational leadership to assess and adapt their leadership styles based on the changing needs of decentralized teams. This ensures a flexible approach to navigate dynamic healthcare environments where the various hierarchy level of an organisation require different approaches to management. Through the use of this leadership style, the alignment of decentralized teams can be achieved by incorporating visionary leadership to communicate an overarching vision and values. The principles from transformational leadership are required to inspire and motivate teams while the elements of servant leadership provide support and resources as they are required and Collaborative leadership could be used to encourage teams to collaborate and work together while transactional leadership ensures streamlined processes and coordination mechanisms.

Leadership stance required for decentralised is that which is able to adapt to changing demands of the programme. The incorporation of the competencies identified in the conceptual framework such as strategic and adaptive thinking is important. Furthermore, the study also emphasizes the importance of ethical leadership which would allow for values such as integrity, accountability, and transparency as essential pillars for leaders and managers in the decentralised setting. The integration of the aforementioned competencies would allow for cohesive efforts across decentralized units and assists in creating a culture where individuals within a team feel valued. Neufeld et al., (2010) asserts that research findings have consistently noted that leadership behaviours influence the manner in which the organisation would perform and that strong leaders provide better results than their weaker counterparts.

Reoriented Culture and Values

The study highlighted issues related to the functioning of the various aspects with the decentralised system which were fragmented and lacked cohesiveness. This alluded to the need for a reorientation of the existing organisational culture. Organisational culture impacts on the organisational functioning. These shared norms and behavioural expectations give the organisation its identity which is formed through the interaction of a societal culture, its

structures and characteristics of individuals and groups. Donders et al., (2015) states that this then forms the personality of an organisation. The study highlighted the need for a conducive environment which would enable the employees to have shared values with the executive management. Hatch's and Schultz (2002) model of organisational culture change emphasizes the roles of both leaders and followers in creating and changing organisational culture. In this respect, and as Michela and Burke (2000) emphasize, to change culture, one must first understand it. This alludes to creating a culture through concerted effort of management in with the intention of ensuring that the goals of the organisation are achieved and the motivation of staff exists.

As the public health care system is multifaceted, a standardized culture may permeate throughout the system. However, the varying disciplines and hospitals may have their own adopted culture based on the leadership style adopted in that particular environment. By communicating the goals, leadership can influence and mould staff towards an environment where everyone wants to contribute towards goal attainment.

As part of the creating a culture, it is important that new managers are provided with adequate support as they transition from being ordinary workers to managers. This highlights the need for measures such as mentorship (Birken et al., 2015).

Communication Strategies

Central among the pillars identified for decentralised training framework was the need for effective communication. Communication is central to the success of any organisation as it determines how well the various structures and connected and integrated. Establishing clear communication channels between decentralized units and the central governing body is essential. Transparent communication ensures that local units are informed about the institution's overarching goals and policies, while the central body remains updated on the progress and challenges faced by decentralized departments. As organisations and employees become increasingly dispersed, communication becomes the principal means by which individuals exercise leadership (Neufeld et al., 2010)—in essence, “leadership is enacted through communication”

Effective communication is also an integral part of leadership and management as they are required to engage with a variety of stakeholders, convey ideas, and build relationships. This skill set is considered vital regardless of the specific domain and is particularly relevant in the context of clinical medical training where collaboration among diverse stakeholders is integral. Franco et al. (2005) highlights the importance of transparent communication in managing change within the organisation. Efficient communication strategies are crucial for project

success.

Central Oversight

The study positioned that one of the disadvantages of decentralisation is that it can lead to fragmentation and lack of cohesion. Maintaining central authority within the decentralised training framework is crucial for the success of the programme (Beckmann, 2002). Central oversight in the programme would ensure that the responsibility of coordinating and overseeing the overall system's operation within the programme are efficiently executed. The role of central governance in the context of the study is envisioned to perform a vital task of monitoring and evaluation of the established quality standards throughout the sites. This oversight can be performed through regular reviews and audits, which will encourage the decentralised sites to constantly reflect on their practices. Moreover, it would allow for a culture of self-regulation and continuous improvement to exist at decentralized sites.

The close interaction between central governance and decentralised sites would allow for the flow of information between the two structures, ensuring that the feedback mechanisms are strengthened. This also contributes to creating a culture of sharing challenges so they could be addressed timeously. With this approach, central governance structure would be able to provide guidance and mentorship to decentralised site, or equip them with the necessary tools which would provide them with the support they require. Furthermore, resource allocation would be made possible depending on the need of the decentralized sections (Jarzabkowski, 2002). This approach would foster collaboration and knowledge sharing between the central administrative body and decentralized units.

The role of the central entity would also be to ensure that the project financial sustainable. This is an important element to the success of projects as lack of funding and poor financial support from the university and the Department of Health would result in the failure of the decentralized training project. With the coordination of central governance, financial sustainability models must be drawn up in consultation with relevant stakeholders. Central would also have the responsibility of ensuring that funds are used appropriately utilised and in accordance with established budgetary allocations. Furthermore, this practice should align with policies from both institutions and clear guidelines and protocols must be in place. Establishing financial oversight and auditing at both the central and decentralized levels is essential to ensure compliance with financial regulations and standards. Implementing effective resource management strategies can enhance the financial sustainability of both universities and hospitals (Brady, 2002).

Resource allocation was identified to be another function that central governance would be

able to oversee. The allocation of resources would be conducted based on their assessment of the requirements presented by decentralised sites and the findings from their reviews and audit interactions with the departments and disciplines (Folliet and Leclercq, 2000). The identification and recruitment of the human resources would depend on the nature of their posts in line with the relevant policies, depending on whether the staff is employed by the University, the Department, or both.

The study also envisions the role of central to also include providing oversight and ensure that transparent guidelines which delineate roles and responsibilities of central and decentralized administration are developed.

Autonomy

The proposed framework posits that a degree of self-governance is important to the sustainability of decentralised training. Their autonomy must be provided with a level of authority which would provide them with the responsibility of making decisions and resolve challenges that may arise within their domain. This autonomy allows leaders within the decentralised disciplines to assess the specific needs of their departments and of the sites where students will be sent (Bjork, 2004). This flexibility allows for interdisciplinary team collaboration and consultation in developing shared strategies which would be adopted the departments for effective implementation of decentralized training.

The autonomy in the decentralised structures provides that decentralised entities to identify their resource requirements and communicate this with central governance (Gyoreva, 2018). Being closer to the ground, they are in the best position to identify their staffing requirements and the skills training required for successfully achieving the training goals. This can avoid the issue related to staff shortages and insufficient training. It provides an opportunity for multi-skilling of staff in the domain where it is required thereby build the necessary capacity which is required of people in academic and managerial positions.

Decision making

The study emphasized the importance of collaborative decision making as there are challenges associated with the programme being overly dependent on one person or a small group of driven individuals. Sharing the decision-making process allows for stakeholder input and increases collaboration and satisfactions with the decisions taken (Segars, 1998). This strategy is not without challenges as it could lead to conflicts if there are differences of opinions and can be time consuming. That is why it is important that central governance provides the

necessary oversight in order to ensure that this process is efficiently managed without deviating from the intended objectives. Adoption of this strategy also reinforces the confidence that leadership has on their team which results in strengthened relationship, inter-disciplinary decentralized units for fostering interdisciplinary collaboration and ensuring a collaborative culture.

Standardisation

The framework asserts that standardisation is essential in decentralised training as it allows for the management of quality of programme offered to students. Dunne (2011) asserts that through standardized practice, quality management systems infuse the quality mandate through sets of learning experiences that support students in pursuit of their qualifications. Maintaining quality control in medical education often involves accreditation processes conducted by external regulatory bodies. Periodic evaluations are conducted based on standards and procedures that are established by the relevant bodies (CHE, 2004). A mechanism of ensuring that the decentralised training platforms adhere to the standards stipulated by the professional body are therefore crucial. One aspect of ensuring standardisation among the decentralised sites used is to ensure that the sites are well resourced to meet the required standard that are set for the programme. There is also a need for ensuring that standardized operations across decentralized sites to uphold consistent student experiences regardless of placement.

Ensuring standardisation should be driven by central through the formulation of relevant documents which speak to quality standards and operational efficiencies. They also need to offering support and guidance to standardized curriculum delivery across all sites. The role of decentralised sites would then be to adhere to those standards and developing a culture of self-regulation through its established structures and systems.

7.4 Recommendation from the Study

Based on the findings, the study recommends the following:

Change Management

The complex mutually dependent relationship that exists between the university and the Department of Health necessities a fair distribution of power and responsibilities in order to meet the needs of the decentralised programme. This Involves leaders from both entities being equitably involved in the decision-making processes related to decentralised training. Commitment and accountability are key elements in ensuring that the relationship between the two entities is not affected (Watson and Hall, 2015). The study recommends that the leaders understand that they set the tone for the decentralised agenda to be effectively implemented and sustained. If there is a commitment to put in the required effort into the collaboration, the leaders within the institutions can create an environment of openness and responsiveness.

Utilising the synergies that exist between the two entities, interaction should be encouraged at multiple levels of the existing structures through a combination of participation of existing committees and structures identified for a specific purpose structure. Recognising the complex and multi-layered structure of the university and the Department of Health, many potential points of contact exist within these structures. The study therefore acknowledges the need for of key liaison people between the two sectors to span boundaries, solve problems and maintain goodwill. The central oversight provided by these key liaison individuals, who possess the required leadership qualities, will assist in setting the agenda for the programme and assist the decentralised structures in navigating through the change process. Understanding that the change process depends on the individual perceptions about the manner in which the process is handled towards re-engineering of the culture, Kavanagh and Ashkanasy (2006) posit that how change occurs within organisations is influenced by the fact that cultures are underpinned by deep assumptions that are patterned and shared.

Communication and Reporting

The study highlighted the importance of communication in decentralized structures. The study recommends for the development of a coordinated communications policy for decentralized training. This document would assist in setting expectations and manage the flow of information within the related departments and stakeholders. This document can also provide parameters for the communication strategies developed by the different departments within the decentralized structure based on their context specific needs and available resources.

Due to the geographical differences that exist within the decentralized programme, barriers to communication often exists. Ingram and Gilding (2002) posit that the use of technology can assist in enhancing the manner in which stakeholders communicate amongst each other. The policy developed and central and its aligning communication strategies developed at decentralized sites can only be effective if there is a commitment among the involved stakeholders to adopt and implement the detailed guidelines (Zulch, 2014).

The study also recommends that robust reporting mechanisms are put in place to facilitate information flow between central and decentralized sites. Accessibility to reports on the performance of the decentralized sites is pertinent for decision-making and allows for the central oversight structure to investigate and solve any identified issues in a timely manner. Moreover, the reports from the decentralized departments will in turn allow for the central structure to provide a comprehensive report on the performance of the programme. Farneti and Guthrie (2009) indicate that there is value in providing sustainability reports which seeks to present performance against the broader concepts, not limiting reporting to trends in performance. This would involve discussing the performance of the programme in the context of the limits and demands placed on environmental or social resources at the sector, local and regional levels. The value of the reports which detail a comprehensive overview of achievements and challenges is immeasurable for new programme as it allows for opportunities for various teams and departments to learn from each other.

The study also recommends that closing the loop in order to preserve the integrity of the of feedback process is adopted as part of the quality assurance mechanism in decentralized training. Acknowledging to the voices of student and staff alike would give them a sense of confidence that their voice matters (Gyoreva, 2018).

Structures and Authority in Decentralised Training

Recognising the entwined intricacies of structures and departments that are involved in ensuring that the implementation of the decentralized training agenda is made possible, the recommends that sites are provided with a level of autonomy in line with the required deliverables. The autonomy should be accompanied with a level of authority and powers to execute plans, while also maintaining managerial integrity (Beckmann, 2002). This would allow for the decentralized entities to perform optimally and facilitates operational decisions made based on specific needs and priorities of the various disciplines. The flexibility within a decentralized structure allows for resource identification and management of programmes that that best supports academic and healthcare endeavours (Goedegebuure and Hayden, 2007).

In order for the delegation of authority to be effective, the study recommends that clear

hierarchical structures are documented and communicated to stakeholders. This would ensure that the various managers and heads of departments from the university and the Department of Health understand their relationships with each other within the decentralized training team. A clear understanding of the structures would assist in defining the roles and responsibility of each member within the team. Furthermore, this would allow for appropriate accountability measures to be put in place, in line with the level of authority delegated.

The established hierarchical structures would also be able to define the relationships between central and decentralized entities, allowing for a clear depiction of the governance framework established (Hannon, 2018). The success of the program is dependent on the balance achieved through collaboration between central and decentralized structures.

Human and Financial Resources

Understanding the role human capital management plays in ensuring that institutions attract and retain talent that assists the institution to achieve its objectives, the study recommends that strategic plans are formulated which would allow for an increase in the number of academic staff in all decentralized. Additionally, the study recommends the practice of acknowledging and rewarding decentralized sites and staff within these facilities that exhibit exceptional performance (Deeming, 2004). This, and other staff retention strategies could be used to increase job satisfaction and morale. Cultivating a conducive culture of learning and personal development would allow for continuous improvement and advancement of the decentralized programme.

The study also recommended for the need a financial sustainability strategy to be developed. This is against the backdrop of the prevailing trends of financial constraints observed in government funding (Crowther, 2018). The study acknowledged the need for the generation of third-stream income generation in order to keep universities viable. The increased resources that are associated with a fully implemented decentralized training programme requires long-term planning. Depending on the government as a sole investor to the project may impede on the future success of the programme.

7.5 Limitations and Direction for Future Research

7.5.1 Limitations

The findings of this study must be considered against the following limitations:

- The research presented to this study was limited to the decentralised training experiences in the geographical area of KwaZulu-Natal. The study did not encompass decentralised training platforms offered by universities in other provinces across South Africa. As KwaZulu-Natal is one of the country's nine provinces, the findings gained from this research are not readily generalizable to other provinces outside the study area due to variations in contextual factors. The information provided in this study can serve as a basis for further studies in other provinces in order to provide a holistic South African perspective on decentralised training for medical education.
- The study was susceptible to the influence of external socioeconomic and political factors that may have affected the implementation of the decentralised training initiatives. These factors are as a result of the challenges related to the demand for healthcare services amongst resource constraints faced by public hospitals. These external challenges could have potentially impacted the overall experiences of the participants on decentralised training and were out of the researchers' control.
- The study's cross-sectional design, while providing a snapshot of the representative subset at a specific time, introduces limitations related to the temporal aspect. The timing of this snapshot might not comprehensively capture the dynamic nature of decentralized training programs. To attain a more nuanced understanding of behavioural patterns and program evolution, longitudinal studies that track participants over an extended period could offer valuable insights into changes and trends.
- Additionally, the study's focus on the first cohort of students to be exposed to decentralised training in 2016 imposes constraints on the generalizability of findings to subsequent cohorts. Over time, program enhancements and refinements may have been implemented, influencing the experiences and outcomes of students in later cohorts. A broader sampling strategy encompassing multiple cohorts could provide a more comprehensive understanding of the program's long-term impact

7.5.2 Future Research

The findings of the study identified some areas for future study.

- As the study was conducted in the KwaZulu-Natal Province, similar studies which inquire on the management in decentralized training should be replicated in other provinces. Those studies, together with this study, would be able to provide a holistic understanding of the managerial aspect of decentralized training. Furthermore, the conclusions reached from all the studies would assist in development of a managerial framework which could be adaptable to all disciplines within the health science.
- The study identified the inconsistency in the nature of the hospitals that students were sent for clinical placements. The hospitals selected predominantly established sites that had previous teaching exposure and student engagement initiatives. The nature of these hospitals differs from the hospital which are intended for use in the future which will be able to absorb the increased student intake. As the students were primarily sent to Tertiary hospitals, this may not be a true representation of the realities that prevail if training which occurs in District hospitals, as emphasized in the qualitative data. The existing curriculum emphasizes exposure to complex medical cases and specialized treatment procedures aligned with cases referred to tertiary hospitals. Further studies therefore need to be undertaken which compare the training offered in institutions of a similar nature in relation to its context and experience i.e. District or Provincial hospitals only. This would allow a thorough assessment of the capability and capacities of the various hospital categories.
- The study recommends for additional research to be conducted in order to determine the optimal duration of student placements in clinical sites within the various regions. This area of study should provide an assessment on the suitability of adapting the traditional rotation approach to decentralized clinical training. The studies should also provide insight on suitable approaches that could be adapted for decentralized training which aligns with the defined learning outcomes of decentralized medical training. Given the novelty of this concept, an assessment would be essential to evaluate potential student benefits, considering location choices and the required integration type.
- The study also recommends further studies to be undertaken in the realm of curriculum redesign and transformation. The reengineering of the medical curriculum in alignment with national health policies are crucial in the setting a direction for the implementation of decentralized training. Such studies could also provide insight for programme

developers on how they could incorporate the role of internationalisation in the programmes offered by universities while not losing sight of addressing the learning outcomes determined by the context of the country.

- Further studies can be conducted encompassing a broader sampling strategy of students experiences in decentralized training. These longitudinal studies conducted over a longer period of time could provide a more comprehensive understanding of the program's long-term impact. These longitudinal studies that track participants over an extended period could offer valuable insights into changes and trends which can allow for a better assessment on the impact of the programme.
- Building on this study, further studies on the structure of leadership and management of central and decentralized entities within the decentralized training model are recommended. Such studies should allow for an in-depth assessment on the managerial aspect from the perspective of the various institutions within South Africa that offer medical training. The results from such studies would assist in benchmark.

7.6 Conclusion

The study discussed various leadership competency models in order to identify suitable competencies that would resonate with this study. The study also presented the concept of centralisation and decentralisation, detailing its characteristics and the environments to which they could be applied. The theoretical framework on decentraised centralism and the public leadership competency framework, discussed in their respective sections, were selected as the lens which connected this study to existing knowledge. The study allowed for indigenous leadership philosophies and practices deeply rooted in the South African context to be considered when these models were selected. The factors that shape the health and higher education landscapes were discussed, these assisted in giving context to the research findings. The integration of the results with the chosen frameworks with the research findings allowed for the researcher to identify competencies required in the management of decentralized training.

To this end, the study proposes a framework which could be adopted by institutions that offer healthcare programmes which can be modified to suit their specific contexts. It resonates with the imperative of developing sustainable models to navigate future operational landscapes, especially in anticipation of the increase in student numbers expected in the subsequent years. It also highlights the essential role of formal management education as a basis in enhancing leadership competencies within the complex structures that exist in academic and clinical

environments.

Even though there are various studies that have been undertaken in relation to the decentralised training in healthcare in developed countries, their focus is primarily on curriculum development. The researcher identified a gap in research related to the management of such programmes and the leadership attributes required to make them a success. It is anticipated that by building on this study, further studies on the structure of leadership and management of decentralized training in developing countries would be conducted. This is based on the intricate nature of the challenges faced by developing countries which may not prevail in developed countries. This insight would assist in the development of strategies that would be aimed at strengthening management and leadership in clinical training.

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APPENDIX 1

SEMI STRUCTURED INTERVIEW SCHEDULE

UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Dear Respondent,

DBA/PHD Research Project
Researcher: Nonhlanhla Mqadi ([redacted])
Supervisors: Prof. Nzimakwe and Dr. Zondi (031 260 2606)
Research Office: Ms. P Ximba 031-2603587

I, **Nonhlanhla Precious Mqadi** a Doctor of Business Administration student, at the Graduate School of Business and Leadership, of the University of KwaZulu-Natal invite you to participate in a research project entitled Paradigm shift in South African Medical Education: A Management Model for Decentralized Training in KwaZulu-Natal.

The aim of this study is to interrogate and develop a Decentralised Teaching management framework for the KwaZulu Natal medical university. Through your participation I hope to understand the importance of leadership and management in executing a successful decentralised programme. The results of this study are intended to provide a framework which will assist in setting the decentralised training agenda for the University of KwaZulu-Natal, building necessary capacity and facilitating communication between the relevant stakeholders.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this interview. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

The interview will be recorded for transcription purposes and the duration of the interview is approximately 60 to 90 minutes. All meeting times will be scheduled prior to the interview, at time mutually agreeable to the investigator and the interviewee. Your participation is strictly voluntary, you may refuse to answer questions or discuss topics at your discretion. Your personal identity will not be made explicit in any written report or commentary that is submitted for publication.

Sincerely
Miss NP Mqadi

Signature_____ Date_____

UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

DBA/PHD Research Project
Researcher: Nonhlanhla Mqadi ([redacted])
Supervisor: Prof. Nzimakwe (031 260 2606)
Research Office: Ms P Ximba 031-2603587

CONSENT

I……...(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT…….. DATE……..

This page is to be retained by researcher

AREAS OF DISCUSSION (SEMI-STRUCTURED QUESTIONS)

1. The current reality - context and magnitude of the decentralised agenda
2. The strategic direction and its alignment to achieving the goals set out by the Ministry.
    i. From your perspective, how does strategic thinking contribute to effective decision-making in clinical medical education?
    ii. Can you share instances where a strategic approach was employed to address challenges or enhance the quality of training?
3. Communication strategy
    i. Stakeholder engagement
        a. Who are the stakeholders
        b. The extent to which they are engaged in decision making processes
        c. Involvement in shaping policies/procedures
    ii. Leadership styles
        a. How do you perceive the role of leadership in this context?
        b. Leadership style that resonates with the program requirements
        c. The dynamics of leadership that exist
    iii. Management responsibilities
        a. Communication strategies with students
        b. Extent of collaboration among role players
4. What Systems and processes are introduced to achieve the goal?
    i. Implementation and management thereof
    ii. Effectiveness and feedback
5. Needs and expectations of interested parties
    i. Leadership and management perspective
    ii. Employee perspective
    iii. End user perspective
    iv. Training and capacity building
6. Infrastructure and work environment
7. Central oversight and local autonomy
    i. The role of centralized oversight in maintaining the quality of medical training
    ii. Perspectives on the standardization of training practices
    iii. Level of autonomy granted to individual training sites and departments
    iv. Adaptation in curriculum or methodologies?

APPENDIX 2

QUESTIONNAIRE

UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Dear Respondent,

DBA/PHD Research Project
Researcher: Nonhlanhla Mqadi ([redacted])
Supervisor: Prof. Nzimakwe (031 260 2606)
Research Office: Ms. P Ximba 031-2603587

I, **Nonhlanhla Precious Mqadi** a Doctor of Business Administration student, at the Graduate School of Business and Leadership, of the University of KwaZulu-Natal invite you to participate in a research project entitled Paradigm shift in South African Medical Education: A Management Model for Decentralized Training in KwaZulu-Natal.

The aim of this study is to interrogate and develop a Decentralised Teaching management framework for the KwaZulu Natal University. Through your participation I hope to understand the importance of leadership and management in executing a successful decentralised programme. The results of this study are intended to provide a framework which will assist in setting the decentralised training agenda for the University of KwaZulu-Natal, building necessary capacity and facilitating communication between the relevant stakeholders.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about fifteen minutes to complete. I hope you will take the time to complete this survey.

Sincerely
Miss NP Mqadi

Signature_____ Date_____

UNIVERSITY OF KWAZULU-NATAL

GRADUATE SCHOOL OF BUSINESS & LEADERSHIP

STUDENT EXPERIENCE QUESTIONNAIRE: DECENTRALIZED CLINICAL TRAINING

INSTRUCTIONS

1. Fill in only ONE answer for each question.
2. Use a soft PENCIL only.
3. Darken the circle completely.

CORRECT MARK ● INCORRECT MARKS ✓ ✗ ◒ ○

SECTION A: DEMOGRAPHICAL INFORMATION

SECTION A: DEMOGRAPHIC PROFILE	
1. Gender	
Male ○	Female ○

2. Race				
African ○	Colored ○	Indian ○	White ○	Other ○

3. Which decentralised site have you been placed in?	
Ngwelezana/Lower Umfolozi ○	Port Shepstone/Ugu District ○
Madadeni/Newcastle Region ○	Pietermaritzburg complex ○

SECTION B: DECENTRALISED TRAINING EXPERIENCE					
Module	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
4. I thought that the block was well structured.	○	○	○	○	○
5 I received adequate exposure	○	○	○	○	○
6. There was a good balance between theory and its application	○	○	○	○	○
7. I was given sufficient guidance to cope with this module	○	○	○	○	○
Academic staff	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
8. Academic staff were knowledgeable and helpful	○	○	○	○	○
9. The lecturers ensured that the complexity of my work was calibrated with my abilities and learning needs.	○	○	○	○	○
10. I was required to participate actively in learning,	○	○	○	○	○

discussions and in patient care, e.g. Reading, presenting, contributing to patient care decisions					
11. The academics were readily accessible and approachable for academic support and advice	○	○	○	○	○
12. Academic staff understood the needs of the students	○	○	○	○	○
13. Academic staff were not too busy to respond to a request for assistance	○	○	○	○	○
Support Staff	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
14. Nursing and allied health professional staff support was sufficient	○	○	○	○	○
15. When I have problems, administrative staff show sincere interest in solving it	○	○	○	○	○
16. Queries are dealt with efficiently and promptly	○	○	○	○	○
Facilities	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
17. I had sufficient access to learning materials (books, journal articles, e-journals)	○	○	○	○	○
18. The quality of student support facilities at the hospital site was sufficient (library, clinics, counselling)	○	○	○	○	○
19. The physical facilities (student residences) were conducive for learning	○	○	○	○	○
20. The equipment needed to do well in my studies was of good standard	○	○	○	○	○
21. The School/College provided its services at the time they promised to do so	○	○	○	○	○
Assessment	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**
22. There was a good link between what was learnt in the module and what was assessed	○	○	○	○	○
23. I was provided with structured feedback to assessment tasks during the module.	○	○	○	○	○

24. Overall I am satisfied with the quality of teaching in decentralised sites.	◯	◯	◯	◯	◯

SECTION C: COMMENTS

25. What did you enjoy the most in your decentralised teaching experience?

26. What would you improve on the managerial aspect of the decentralised sites

27. Any other comment on aspects that have positively impacted your learning experience?

Thank you for taking the time to fill in this questionnaire

APPENDIX 3

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

10 July 2017

Ms Nonhlanhla Precious Mqadi (212561805)
Graduate School of Business & Leadership
Westville Campus

Dear Ms Mqadi,

Protocol reference number: HSS/0498/017D
Project title: Paradigm shift in South African Medical Education: A Management Model for Decentralized Training in KwaZulu-Natal

Approval Notification – Expedited Application

With regards to your response received on 07 June 2017 to our letter of **23** May 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

[redacted]

Dr Shamila Naidoo (Deputy Chair)

/ms

cc Supervisor: Professor TI Nzimakwe and Dr WB Zondi
cc Academic Leader Research: Dr Muhammad Hoque
cc School Administrator: Ms Zarina Bullyraj

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
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DIRECTORATE:
Health Research & Knowledge Management (HKRM)

Reference: HRKM208/17
KZ_2017RP42_974

06 June 2017

Dear Ms N P Mqadi
(University of KwaZulu-Natal)

Subject: Approval of a Research Proposal

1. The research proposal titled **'Paradigm Shift in South African Medical Education: A Management Model for Decentralised Training in KwaZulu-Natal'** was reviewed by the KwaZulu-Natal Department of Health (KZN-DoH).

   The proposal is hereby **approved** for research to be undertaken at Greys, Edendale, Northdale, Townhill, Madadeni, Newcastle, Dundee, Estcourt, Ladysmith, Ngwelezana, Lower Umfolozi War Memorial, Mbongolwane, Catherine Booth, Eshowe, Nkandla, Ekombe and St Mary's KwaMagwaza Hospitals & Nseleni Community Health Clinic.

2. You are requested to take note of the following:
   a. Make the necessary arrangement with the identified facility before commencing with your research project.
   b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.

3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Ms G Khumalo on 033-395 3189.

Yours Sincerely

[redacted]

Dr E Lutge
Chairperson, Health Research Committee
Date: 07/06/17

Fighting Disease, Fighting Poverty, Giving Hope

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

26 April 2017

Ms Nonhlanhla Precious Mqadi
Graduate School of Business and Leadership
College of Law and Management Studies
Westville Campus
UKZN
Email: mqadin1@ukzn.ac.za

Dear Ms Mqadi

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Paradigm Shift in South African Medical Education: A Management Model for Decentralised Training in KwaZulu-Natal".

It is noted that you will be constituting your sample by handing out questionnaires, and/or conducting interviews with staff and students from the College of Health Science on the NRMSM Campus.

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

[redacted]

MR SS MOKOENA
REGISTRAR