Implementation of National Health Insurance in South Africa: Views of healthcare managers in a private healthcare institution

Dr David Grewar
214306879

Submitted in partial fulfilment for the degree of Masters in Health and Welfare Management (coursework) in the FACULTY OF HEALTH SCIENCES at the NELSON MANDELA METROPOLITAN UNIVERSITY

Supervisor: Prof Victor Exner
Co-supervisor: Mr Kegan Topper

April 2017
Declaration

In accordance with Rule G5.6.3, I the undersigned, David Alan Grewar, declare that the treatise for the qualification Masters in Health and Welfare Management is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

David Grewar
27 November 2016
Acknowledgements

I wish to acknowledge the following people for their invaluable contribution towards this treatise:

- My supervisor, Professor Vic Exner. After meeting with him in the latter half of 2013, I was encouraged by him to apply for the Masters in Health & Welfare Management program at NMMU. He then graciously agreed to supervise my research and was pivotal in the choice of what we both believe is a very current and relevant topic. Thank you for giving me hope Prof.

- My co-supervisor, Mr Kegan Topper, for going above and beyond what was required to ensure that this treatise is what it is. Without his help, this process would have been infinitely more trying. Thanks for the continuing ride Kegan.

- Dr Danie Venter, whose assistance in analysing the quantitative data and helping me navigate my way through the statistical element of the study was invaluable.

- Professor Pamela Hanes and Dr Sue Burton, who kindly assisted me with the development of the questionnaire.

- Ms Sanet Page, the best course-coordinator that a person could wish for.

- Dr David Morton, research coordinator at the Department of Nursing Science, NMMU, who introduced me to research and was a consistent and infinitely patient help in the process of this treatise.

- Jessica Baker, a friend and expert in her own field of social sciences, who was invaluable in her assistance.

- Melissa Kelly, for the wonderful job she did in editing this document.

- To all the participants, thank you for taking the time to respond to the survey. I am humbled.

- My parents, Steve and Belinda Grewar, for believing in me through the ups and downs of life. I draw on your strength. I look forward to celebrating with you this time around, come graduation.

- My beautiful wife, Maria, who encouraged and motivated me to chase my dreams. I am a blessed man.

- My Lord and Saviour Jesus Christ, without whom this would all be pretty pointless. A friend who has stuck and continues to stick closer than a brother.
Abstract

South Africa is in the process of reforming its healthcare system by implementing universal health coverage for its citizens. Universal health coverage is defined as the access of all people to comprehensive health services at an affordable cost with protection against catastrophic health expenditures leading to financial hardship. The system being implemented in South Africa is known as National Health Insurance (NHI) and is seen by the South African government as the key to addressing the shortcomings and disparities in the current public and private healthcare sectors.

Healthcare managers have a crucial role to play in health reform yet are often overlooked in debate over health reform.

The primary aim of this study was to better understand the views of healthcare managers, working in a private healthcare institution in South Africa, towards the implementation of the NHI. The purpose of this was to make recommendations that would assist the private healthcare institution under investigation to optimise the implementation of the NHI.

A quantitative research design was used to explore and describe the views of healthcare managers. Firstly, a literature review was conducted to gain international as well as local perspectives of healthcare practitioners on universal health coverage. Secondly, a census survey in the form of an online questionnaire was developed and distributed to 193 healthcare managers representing different managerial and medical disciplines in a private healthcare institution with facilities nation-wide. A total of 63 questionnaires were returned for analysis. Quantitative data were analysed using Microsoft Excel, Statistica and SPSS Statistics. Qualitative data in the form of written comments by the participants were analysed using interpretive analysis that involved sequential steps of familiarisation and immersion, development of themes, coding, elaboration and interpretation and checking. The qualitative element of the study was limited in nature and was used merely to enrich the quantitative findings.

The study found that there was a lack of knowledge amongst private healthcare managers concerning the NHI, poor communication from the government regarding the proposed NHI and high levels of negativity towards the ability of the government to successfully implement the NHI. However it was found that despite concerns regarding the NHI, the private healthcare managers surveyed showed a willingness to actively participate in its
implementation. Recommendations regarding policy and practise were made for private healthcare institutions as well as for the South African government in order to assist with the implementation of the NHI.
Table of Contents

Chapter 1: Overview of Study ................................................................................................................................................. 1
  1.1 Introduction: .................................................................................................................................................................. 1
  1.2 Problem statement: ........................................................................................................................................................ 2
  1.3 Research questions: ........................................................................................................................................................ 3
  1.4 Research aim: .................................................................................................................................................................. 3
  1.5 Research objectives: ........................................................................................................................................................ 4
  1.6 Concept clarification: ....................................................................................................................................................... 4
  1.7 Research design: .............................................................................................................................................................. 5
  1.8 Research methodology: ..................................................................................................................................................... 6
    1.8.1 Population: ................................................................................................................................................................. 6
    1.8.2 Recruitment of participants: ........................................................................................................................................ 6
    1.8.3 Data collection instrument: ........................................................................................................................................ 7
    1.8.4 Data collection method: .............................................................................................................................................. 7
    1.8.5 Pre-test: ......................................................................................................................................................................... 8
    1.8.6 Data analysis: ............................................................................................................................................................... 8
    1.8.7 Methods to ensure study quality: .................................................................................................................................. 9
      1.8.7.1 Validity: ................................................................................................................................................................. 9
      1.8.7.2 Reliability: ............................................................................................................................................................ 10
    1.8.8 Research ethics: ........................................................................................................................................................... 10
  1.9 Study layout: ...................................................................................................................................................................... 11
  1.10 Dissemination of results: .............................................................................................................................................. 12

Chapter 2: Literature Review ......................................................................................................................................................... 13
  2.1 Introduction: .................................................................................................................................................................... 13
  2.2 Universal healthcare: .......................................................................................................................................................... 13
  2.3 Universal healthcare and social accountability: .............................................................................................................. 16
3.3.3 Research instrument: ............................................................................. 43
3.3.4 Data collection method: ........................................................................ 46
3.3.5 Pre-test: ................................................................................................. 47
3.3.6 Data analysis: ....................................................................................... 48
3.4 Methods to ensure study quality: .............................................................. 51
  3.4.1 Validity: ............................................................................................... 51
  3.4.2 Reliability: ........................................................................................... 52
3.5 Research ethics: ....................................................................................... 53
  3.5.1 Informed consent: ............................................................................... 53
  3.5.2 Privacy: ............................................................................................... 53
  3.5.3 Anonymity: ........................................................................................ 54
3.6 Conclusion: ............................................................................................... 54

Chapter 4: Results and Discussion ................................................................ 55
  4.1 Introduction: ............................................................................................ 55
  4.2 Response rate: ......................................................................................... 55
  4.3 Quantitative data: .................................................................................... 55
    4.3.1 Section A: Demographic data: ............................................................ 55
    4.3.2 Section B: Knowledge of the NHI: ..................................................... 58
    4.3.3 Section C: Views on the NHI ............................................................... 60
  4.4 Comments section: ................................................................................ 77
    4.4.1 Views towards the NHI as a healthcare model: .................................. 77
    4.4.2 Views regarding implications of the NHI: ......................................... 77
    4.4.3 Views towards Government’s capacity to successfully implement the NHI: ............................................................... 79
  4.5 Conclusion: ............................................................................................... 80

Chapter 5: Conclusion and Recommendations ............................................. 82
  5.1 Introduction: ............................................................................................ 82
  5.2 Summary of main empirical findings: ...................................................... 83
5.3 Recommendations: ........................................................................................................... 83

5.3.1 Recommendations for private healthcare managers: .................................................. 83
5.3.2 Recommendations for private healthcare institutions: .............................................. 83
5.3.3 Recommendations for government: ............................................................................ 84
5.4 Future research: ............................................................................................................. 85
5.5 Study limitations: .......................................................................................................... 86
5.6 Conclusion: .................................................................................................................... 86

List of References: ............................................................................................................. 88

Annexure 1: Research approval by the Faculty Postgraduate Studies Committee: .......... 97
Annexure 2: Permission letter to institution authority: ....................................................... 99
Annexure 3: Permission letter to participant: .................................................................... 102
Annexure 4: Research Questionnaire: ............................................................................. 105

List of Tables

Table 1: Gender distribution of respondents (n=59) ............................................................. 56
Table 2: Age distribution of respondents (n=63) .................................................................. 56
Table 3: Distribution of respondent highest qualifications (n=63) ......................................... 56
Table 4: Distribution of respondent management position (n=61) ......................................... 57
Table 5: Distribution of respondent years of employment/consultation at institution (n=63) 57
Table 6: Sources of NHI information (n=63) ...................................................................... 58
Table 7: Distribution of respondents on whether or not they had read the Green Paper (n=63) .................................................................................................................... 59
Table 8: Frequency distributions: Principles of universal healthcare (n=63) ....................... 61
Table 9: Frequency distributions: NHI implementation capacity (n=63) ............................ 62
Table 10: Frequency distributions: Government engagement with the medical fraternity (n=63) ......................................................................................................................... 63
Table 11: Frequency distributions: Quality of care delivery (n=63) ..................................... 64
Table 12: Frequency distributions: Remuneration (n=63) .................................................... 65
Table 13: Frequency distributions: Autonomy (n=63) ................................................................. 66
Table 14: Frequency distributions: Job performance (n=63) ..................................................... 67
Table 15: Cronbach's alpha values per factor analysed (n=63) .................................................. 70
Table 16: Frequency distributions: Factors (n=63) ..................................................................... 71
Table 17: Frequency distributions: Factors (n=63) ..................................................................... 71
Table 18: Ranking statistics for factors – Descending (n=63) ....................................................... 73
Table 19: Inferential ranking of factors (n=63) .......................................................................... 73
Table 20: One sample t-Tests: Bundle factors (n=63) ................................................................. 75
Table 21: Pearson Product Moment Correlations - F1 (Implementation Capacity) to F7 (Job Performance) ........................................................................................................... 76
Chapter 1: Overview of Study

1.1 Introduction:

Equal access to healthcare is a basic human right. The World Health Organization (WHO) has defined universal health coverage as the access of all people to comprehensive health services at an affordable cost with protection against catastrophic health expenditures leading to financial hardship (WHO, 2010). History has shown that the rollout of universal health coverage is a complex and multi-faceted process and that many factors need to be taken into account when implementing it (Bodenheimer, 2003:112). It is suggested by Lagace (2009) that “healthcare managers are the missing link in debate over reform” and that their skills and ideas are needed to ensure that advances in the delivery of healthcare are sustained and improved upon.

Despite progress made since the first democratic elections of 1994, disparities in health and wealth in South Africa are among the widest in the world (Benatar, 2013:154). Adding to this problem are disparities in the healthcare system regarding differences in the quality of healthcare provided by the private versus public health sectors. The private healthcare sector is described by McLeod (2008:4) as “robust” and the public sector as “struggling”. In addition, South Africa is also plagued by a so-called quadruple burden of disease consisting of HIV/AIDS, chronic diseases/diseases of lifestyle, poverty related conditions and injuries (Mcintyre et al., 2007:8).

As a result of the above-mentioned problems, the South African government is in the early stages of implementing a universal health coverage package known as the National Health Insurance (NHI). This is seen as the solution to addressing the problems within the healthcare system. The South African Department of Health (2011:18) lists the objectives of the NHI as follows:

- Improved access for all to quality health services.
- The pooling of risks and funds to create a single fund to achieve solidarity.
- The procurement of health services on behalf of the entire population.
- The improved resourcing of the public health sector.
The NHI is a partnership between the public and private healthcare industries in South Africa. The healthcare industry in South Africa is however fragmented and there is an inherent mistrust between the two sectors (Wadee, Gilson, Blaauw, Erasmus & Mills, 2001:7). From the perspective of private healthcare practitioners, previous research shows that issues such as remuneration, government control, increased workloads, autonomy, a lack of consultation, diminished working conditions and quality of care are of grave concern in the context of the NHI (Moosa, Luiz & Carmichael, 2012:795-797; Surender, Van Niekerk, Hannah, Allan & Shung-King, 2014:1-7; Ramjee & Mcleod, 2010:179-194). A lack of training in social accountability at institutional level and a resulting deficiency in socially accountable healthcare delivery in the private sector (Boelen & Woollard, 2009:888) further hinders NHI implementation. In terms of management implications, little research has been done to accurately identify, describe and represent the core concerns and views amongst the private-health fraternity in South Africa as a whole. However, private healthcare managers will be a vital link in the successful implementation of the NHI (Lagace, 2009).

The research study undertaken has sought therefore to add to existing knowledge by describing the views of healthcare managers in a national private healthcare institution towards the implementation of the NHI in South Africa and making recommendations that will assist the institution in implementing the NHI.

1.2 Problem statement:

The implementation of universal health coverage is a complex and multi-faceted process. Research shows that this process can have major implications for healthcare professionals. As already mentioned in the introduction to the study, Lagace (2009) believes that “healthcare managers are the missing link in debate over reform” and that their skills and ideas are needed to ensure that advances in the delivery of healthcare are sustained and improved upon. Ngxulumeshe (2009:17) in citing Shortell and Kaluzny (2000) states that healthcare managers will be tasked with focusing on the national health agenda and with playing a vital role in the development of innovative, long-term solutions for the provision of affordable healthcare to the public. In addition, according to McIntyre (2010:154), an important factor in the success of the health reforms in South Africa is engagement with the very healthcare workers who are expected to work in the reformed system and implement the proposed reforms.
Cortje (2012:28) states that when healthcare providers understand the motivation behind healthcare reforms and the effect of these reforms on private practice, it will assist the South African government to respond appropriately. Cortje goes on to say that the perceptions of healthcare professionals on the acceptability and sustainability of the NHI will be vital in determining the operational strategies of the National Department of Health and that any exclusion of these private sector providers in the planning and implementation of the NHI could have a detrimental effect on its success.

Private healthcare managers will therefore play a vital role in the implementation of the NHI in their respective healthcare institutions in South Africa, including the institution under investigation. There is however a paucity of research pertaining to the views of private healthcare managers towards the implementation of the NHI in South Africa. It will thus be important to determine the views of the healthcare managers of the private institution under investigation so that recommendations can be made to its management regarding the implementation of the NHI in this institution. Although these recommendations cannot be generalized across other private healthcare institutions in South Africa due to the limited scope of the study, management in these institutions could nevertheless find them helpful in assisting in the implementation of the NHI.

1.3 Research questions:

The research questions of the study were as follows:

- What are the views of healthcare managers in a private healthcare institution towards the implementation of the NHI in South Africa?
- What knowledge do healthcare managers working in a private healthcare institution in South Africa have of the NHI, specifically the Green Paper?

1.4 Research aim:

The primary aim of this study was to better understand the views of healthcare managers working in a private healthcare institution in South Africa towards the implementation of the NHI. The purpose of this was to make recommendations that would assist the private healthcare institution under investigation to optimise the implementation of the NHI.
1.5 Research objectives:

The objectives of this study were as follows:

- To explore and describe the views of healthcare managers working in a private healthcare institution in South Africa towards the implementation of the NHI.
- To describe the knowledge of the NHI, specifically the Green Paper, amongst healthcare managers working in a private healthcare institution in South Africa.

1.6 Concept clarification:

**Universal health coverage**: Universal health coverage is defined by the World Health Organization as the access of all people to comprehensive health services at an affordable cost with protection against catastrophic health expenditures leading to financial hardship (WHO, 2010). The NHI, which is being implemented in South Africa is an example of a universal health coverage plan.

**National Health Insurance**: The National Health Insurance is a comprehensive healthcare service provided through appropriately accredited and contracted public and private providers that will ensure quality healthcare services and provide financial protection against catastrophic health expenditure for the entire population of South Africa (South African Department of Health, 2011:15). The views of healthcare managers in a private healthcare institution in South Africa towards the implementation of the NHI was the focus of this study.

**Private healthcare sector**: The private healthcare sector refers to the part of the healthcare sector which is not controlled by the state, and is run by individuals and companies for profit. This encompasses all for-profit healthcare facilities that are not owned or operated by the government (Investopedia, 2015). The healthcare institution which was investigated for this study forms part of the private healthcare sector.

**Healthcare manager**: A healthcare manager is defined as someone who plans, directs and co-ordinates healthcare services. They may manage an entire healthcare facility or a specific clinical area or department within a facility (Bureau of Labour Statistics, 2014). This study focused specifically on healthcare managers in a private healthcare institution. These healthcare managers included the national management team, business managers, clinic
managers, pharmacy managers, charge sisters, theatre unit managers, travelling clinic managers, managing general practitioners and managing dental practitioners.

View: A view is defined as “a personal opinion, belief, or attitude about a particular situation or subject” (Macmillan dictionary, 2015). Owing to the fact that the NHI has not yet been implemented in the private healthcare institution under investigation, only the views and not the perceptions or experiences of the healthcare managers could be investigated by the researcher.

Implementation: Implementation is defined as “the process of putting a decision or plan into effect; execution” (Oxford dictionary, 2015). The NHI is currently in the process of being implemented in South Africa.

1.7 Research design:

The researcher used a quantitative design in this study. The quantitative approach is defined as “a process that is systematic and objective in its ways of using numerical data from only a selected subgroup or universe (or population) to generalise the findings to the universe that is being studied” (Maree, 2007:145). There are a number of classifications for quantitative study designs but the two main classes into which they fall are experimental designs and non-experimental designs (de Vos, Strydom, Fouche & Delport, 2011:144). The study undertaken by the researcher was non-experimental in nature. Non-experimental studies can either have a descriptive, time-dimensional or correlation design (Botma, Greeff, Mulaudzi and Wright, 2010:110-115). The research design used for the quantitative aspect of this study was a simple descriptive design. This design is defined as non-experimental and is used when the variable of interest is described as it naturally occurs (Botma et al., 2010:110). A descriptive design was applicable in this case as it is used when little is known about the phenomenon (Burns & Grove, 2009:25). In the case of this study, the phenomenon of interest was the implementation of the NHI in South Africa.

A voluntary comments box was included in the questionnaire which allowed participants to add any views on the matter of the NHI. The purpose of this was in order to enrich the quantitative findings.
1.8 Research methodology:

Research methodology provides researchers with methods that they can follow in their process of acquiring knowledge (Botma et al., 2010:41). The research method includes descriptions of the population, sampling method used, data collection process and data analysis process. The application of the research method as it was applied is described below:

1.8.1 Population:

The study population is defined as the population to whom the results will be applicable as well as the population from whom the sample will be selected (Polit & Beck, 2004:645). The population used in this study were consultants and employees in management positions in a private healthcare institution in South Africa. At the time of the study this number was 233 nation-wide. The institution consists of 71 policlinics nation-wide providing a range of medical, nursing, pharmacological and dental services. Additionally the institution also has 22 basic clinics nation-wide providing more basic healthcare. As far as employee demographics are concerned, in 2014 about 30% of the approximately 1900 employees were African, 50% White, 13% Coloured and 7% Indian. Employees included for this study were the national management team, business managers, clinic managers, pharmacy managers, charge sisters, theatre unit managers, and travelling clinic managers. Doctors and dentists who function as managing medical practitioners and managing dental practitioners respectively, were also included in the study population. These doctors and dentists are not direct employees of the institution, but consultants who work under the auspices of the institution.

1.8.2 Recruitment of participants:

A census survey was conducted by the researcher as he had access to the entire study population. According to Kumar (2008:37) a census was applicable in this case as there would be little use in drawing and using a sample from the small population size of healthcare managers in the institution.

According to the head of business development for the institution, there were 233 employees that fulfilled the inclusion criteria nation-wide. These included: 10 employees on the national management team, 27 clinic and/or business managers, 5 travelling clinic managers, 13
theatre unit managers, 47 managing medical practitioners, 47 managing dental practitioners, 36 pharmacy managers and 48 charge sisters.

1.8.3 Data collection instrument:

The researcher performed a census-survey on the study population. A questionnaire was developed by the researcher for the purpose of the study. Babbie (2007:246) defines a questionnaire as “a document containing questions and/or other types of items designed to solicit information appropriate analysis”. The questionnaire used was in the form of a web-based survey that was sent to the study population electronically. It was based on the most significant headings that emerged from a review of literature by the researcher. In developing the questionnaire, the researcher solicited the assistance of his supervisor, co-supervisor, statistician, an expert on healthcare systems and an expert on the legislation and implementation of public healthcare programmes in the USA. The questionnaire comprised of three sections with a voluntary comments section at the end of the last section. The three sections were “Biographical Details”, “Knowledge of the NHI” and “Views on the NHI”

1.8.4 Data collection method:

According to Polit and Beck (2008:338), the subject of interest that is being researched must be turned into data and the quality of the data collection is vital in ensuring the accuracy of the research. The researcher sought and was granted permission from the appropriate bodies at the Nelson Mandela Metropolitan University (NMMU) to conduct the research. Once this permission was granted, the researcher sent a formal letter requesting permission to conduct the study to the head of business development for the institution under investigation. Permission for the study was also granted by the research division of this institution. The members of the study population were then sent electronic mails with the ‘Permission letter to participant’ requesting their consent to participate in the study and permission to send them the survey. A NMMU in-house computer program was used whereby the questionnaire was attached to the electronic mail as an online link. The responses of the participants were automatically stored in a password-protected database accessible only to the researcher, and only for the purposes of data analysis.
1.8.5 Pre-test:

A pre-test tests aspects of the study such as the useability of the research instrument and is normally done on a few participants that meet the inclusion criteria. This is in order to determine whether instructions in the research instrument are clear, whether there is any ambiguity in the instrument and if there are any potential embarrassing or culturally sensitive issues present in the instrument (Botma et al., 2010:275). The pre-test was conducted amongst the five healthcare management personnel at the researcher’s place of work (a healthcare facility forming part of the healthcare institution under investigation, in Port Elizabeth, South Africa). The five participants included a clinic manager, pharmacy manager, managing medical practitioner, managing dental practitioner and charge sister. This ensured that a large proportion of the management disciplines within the institution were incorporated in the pre-test. It also allowed ease of dialogue between the researcher and the pre-test participants, as de Vos et al. (2011:241) imply that the researcher needs to have a conversation with the participants of the pre-test to determine issues which may arise in the questionnaire. The findings from the pre-test were not included in the main study.

1.8.6 Data analysis:

Data analysis entails the breaking down of the collected data into principal parts in order to obtain answers to research questions. This analysis involves the categorising, ordering, manipulating and summarising of data (de Vos et al., 2011:249).

The quantitative data analysis was carried out by a statistician. The statistician made use of Microsoft Excel, Statistica and SPSS Statistics to analyse the data. Descriptive and inferential statistics were used to analyse the collected quantitative data. Descriptive statistics are used to describe the study population (Botma et al., 2010:148). The descriptive statistics used to summarize the data included frequency distributions, measures of central tendency and measures of variability. Correlation tests were performed using Pearson product-moment correlations to determine correlations between the different variables. Inferential statistics refer to statistical methods that permit inferences on whether the results obtained in the sample population would be likely to occur in the larger population (Botma et al., 2010:166-167). The two main applications of inferential statistics are the estimation of population parameters and hypothesis testing (Botma et al., 2010:170). For estimating population parameters, estimates of points or intervals in the population can be made based on the
descriptive statistics already presented (Botma et al., 2010:170-171). Hypotheses were made about single population means and were tested using the t-test. Using probability values (p-values) and Cohen’s d values it was also possible to rank the degree of positivity of the respondents towards each heading.

The researcher analysed the qualitative data from the comments section of the questionnaire according to the interpretive analysis of Terre Blanche, Durrheim and Kelly (2006) in Botma et al. (2010:226-227). The five steps incorporated in this approach are:

- Familiarisation and immersion.
- Development of themes.
- Coding.
- Elaboration.
- Interpretation and checking.

The data were also coded and analysed by an independent coder. The researcher and independent coder then met and discussed the analysis of the data before consensus was reached. The researcher presented this qualitative data as part of the findings in order to enrich the quantitative findings.

1.8.7 Methods to ensure study quality:

When using original measuring instruments, as in this study, the validity and reliability of the research instrument must be discussed (de Vos et al., 2011:110).

1.8.7.1 Validity:

According to Botma et al. (2010:174), validity gives an indication of whether the conclusions made by the study are justified based on its design and interpretation, and any threat to it could be the reason why an inference made could be incorrect. The researcher incorporated aspects of face validity and content validity in this study. Face validity is more superficial in nature since it is concerned with what the research instrument “appears” to measure whereas content validity is concerned with the representativeness of the content of the research instrument (de Vos et al., 2011:173). Face validity and content validity were enhanced through the involvement of the researcher’s supervisor, co-supervisor and statistician in the development of the study survey. Content validity was further ensured by the researcher
obtaining the assistance of two relevant experts (one an expert on healthcare systems and the other an expert in the legislation and implementation of public healthcare programmes in the USA) who assessed the questionnaire and suggested changes.

1.8.7.2 Reliability:

According to de Vos et al. (2011:177-178), reliability refers to the extent to which repeated application of the same research instrument consistently yields the same or similar results under similar circumstances for the same population, and is mainly concerned with how well something is being measured as opposed to what is being measured. Hence, the more reliable the research instruments and observations are, the more consistent and dependable the results will be.

Internal consistency reliability through the use of Cronbach’s alpha coefficient was used in this research. This reliability is based on the fact that when a number of items are formulated to measure a certain construct, there should be a high degree of similarity among them since they are measuring one common construct. The measure of this degree of similarity gives an indication of the internal reliability of the research instrument (Maree, 2007:216).

1.8.8 Research ethics:

Ethics should be an integral part of every phase and aspect of any research (Botma et al., 2010:4). The ethical principles of informed consent, privacy and anonymity adapted from de Vos et al. (2011:117-121) were applied in the following ways in the study:

1.8.8.1 Informed consent:

Each participant received a letter by electronic mail requesting their permission to participate in the study. Participants were informed that a completed and submitted online questionnaire would imply that consent was granted by themselves to participate in the study. Permission to conduct the research was also obtained from the institution employing the participants.

1.8.8.2 Privacy:

Privacy was ensured by not including questions of an intrusive or sensitive manner in the research instrument. Obtaining informed consent as well as voluntary participation in the study further protected the privacy of the participants.
1.8.8.3 Anonymity:

Anonymity in this study was ensured by not requesting the research participant’s name in the biographical section of the questionnaire used. The biographical section of the questionnaire was also voluntary and not imperative in order to successfully complete the survey. In addition, completed questionnaires remained anonymous as the online questionnaire was designed to appreciate participant anonymity, i.e. completed questionnaires that were stored in the database had no electronic mail reference to them ensuring that no-one, including the researcher, knew who responses came from.

1.9 Study layout:

Babbie (2007) in de Vos et al. (2011:278) states that a research report is the way in which the finished work is conveyed to other people, whether they are work colleagues or a worldwide audience. The study report has the following layout:

**Chapter 1: Overview of Study**
Chapter one provides an introduction and overview of the study. The research problem, research questions, research objectives, sampling method, research instrument and concept definitions are included.

**Chapter 2: Literature Review**
Chapter two outlines the conceptual framework for the study by providing a thorough literature review pertaining to the research topic.

**Chapter 3: Research Methodology**
The third chapter discusses the research process in-depth. Included in this discussion is the research design and research methodology that was employed in the study.

**Chapter 4: Results and Discussion**
In chapter four the empirical results obtained from the data are reported and discussed.

**Chapter 5: Conclusion and Recommendations**
In chapter five the results of the study are summarized and the conclusions drawn are presented. This chapter includes recommendations to facilitate the implementation of the NHI. Additionally, study limitations are included and areas for future research highlighted.
1.10 Dissemination of results:

The results of the study will be disseminated in the following ways:

- A written dissertation, of which one copy will be available at the NMMU library.
- A written dissertation which will be sent to the appropriate management at the private healthcare institution under investigation.

If the opportunity arises, the research will also be reported as an article in relevant peer-reviewed journals such as the South African Medical Journal (SAMJ). Opportunities to present the findings at conferences will also be investigated and considered by the researcher. This will include the possibility of a podium presentation at the Faculty Student Research Conference at NMMU.
Chapter 2: Literature Review

2.1 Introduction:

In light of the current implementation of the NHI in South Africa, it is important to examine health reform across the globe. South Africa has a unique history that has made the implementation of health reform a complex process with many factors to consider from health, socio-economic and political aspects. It is necessary to have an insight into the history and process of reform in South Africa to have a better understanding of the current situation in the country.

This study dealt with the views of managers towards the implementation of the NHI in South Africa and the researcher has thus attempted to glean as much information pertaining to these views as possible from an international as well as a local perspective. The in-depth review of the literature by the researcher addresses these constructs. This chapter presents and clarifies the concept of universal healthcare from an international perspective. The researcher examined international trends in health systems from the perspective of developing and developed countries. Emphasis was placed on the current state of health reform on the African continent. The history of health reform in South Africa was also explored and the various challenges necessitating the need for reform are presented. The views of healthcare practitioners towards health reform were presented from an international perspective and finally from a local perspective.

2.2 Universal healthcare:

The idea of universal health coverage goes beyond mere health and is deeply embedded in aspects of politics, ethics and international law (Sachs, 2012:944). It is stated in Article 25 of the Universal Declaration of Human Rights (United Nations General Assembly, 1948) that all persons have the right to living standards adequate for health including medical care, as well as the right to security in the case of sickness or disability. In that same year the Constitution of the World Health Organization (WHO) came into force, in which it was declared that “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition” (WHO, 1948:1). The WHO has defined universal health coverage as the access of
all people to comprehensive health services at an affordable cost with protection against catastrophic health expenditures leading to financial hardship (WHO, 2010). Worldwide, there is a growing movement towards universal health coverage (Knaul et al., 2012:1259). The fact that Dr Margaret Chan, WHO Director General, believes that universal health coverage is “the single most important concept that public health has to offer” (Chan, 2012), highlights that increasing worldwide attention is being given towards universal coverage as a way to reduce the financial burden caused by out-of-pocket health spending and increase access to key health services (Lagomarsino, Garabrant, Adyas, Muga & Otoo, 2012:933). Indeed, Savedoff and Smith (2011:1) believe that due to varying factors, all countries worldwide are being propelled towards universal healthcare systems. The result is that global healthcare systems are moving away from the traditional model of health insurance being available as a benefit to salaried employees or to the small minority who can either afford private healthcare insurance or pay for healthcare out-of-pocket (Knaul et al., 2012:1260).

According to Savedoff and Smith (2011:2-6), when analysing the historical path that countries have followed toward universal health coverage with reference to the relative role of governments and civil society, three phases are in evidence:

- Early phase: This phase is characterized by voluntary action through multiple efforts by any number of mutual aid societies, employers or charitable groups.
- Expansion phase: During this phase the role of government increases significantly.
- Universal phase: In this phase countries attain universal health coverage through various means.

Savedoff and Smith further state that these phases are neither boundaried nor imperative and that countries currently pursuing universal health coverage can benefit from the experiences of other countries.

According to Van Rensburg (2004:9-10), healthcare systems are dynamic as opposed to isolated entities and it is due to this fact that no single uniform typology or pure type exists. Van Rensburg (2004:3-5) additionally states that most healthcare systems are a combination of different classifications of healthcare system types which have been described by various authors. However, based on the analysis of national healthcare systems in literature, five universal components regarding healthcare systems are in evidence, and all healthcare systems can be described, analysed and compared in terms of these components. These five components are as follows:
- The human resource component.
- The cultural component.
- The political-administrative component.
- The financial-economic component.
- The care component.

Universal health coverage can be achieved in a variety of ways. It has been achieved in countries with very different eligibility rules, funding sources, payer-provider relations and forms of ownership (Savedoff, de Ferranti, Smith & Fan, 2012:925). However, according to Savedoff et al. (2012:926) and Carrin and James (2004:6-10), four common patterns emerge from countries that have achieved universal health coverage:

- There are widespread, varied and persistent domestic pressures for universal coverage.
- Government always plays a large role in universal health coverage, with this role taking many forms.
- The path to universal health coverage emerges more from negotiation than design.
- The provision of universal health coverage takes time.

According to Scheil-Adlung and Bonnet (2011:29-30), universal health coverage in any given country can be measured according to the following indicators:

- Legal coverage: The deficit of legal or formal coverage expressed as a percentage of the population.
- Affordability and financial protection: Out-of-pocket payments and catastrophic health expenditure as a percentage of total health expenditure.
- Availability: The availability of the health service workforce.
- Quality: The deficit in per capita health spending and the maternal mortality ratio.
2.3 Universal healthcare and social accountability:

An important aspect to consider when discussing universal healthcare is the concept of socially accountable health delivery and health services training. Social accountability refers to ensuring that there is greater equity in the delivery of services to communities, especially those that are poor and marginalized (Green-Thompson, 2013). According to Ventres and Dharamsi (2015:1728) socially accountable medical education prepares future healthcare workers to meet the main health concerns of society, specifically poor healthcare delivery in marginalized communities, using education, research and service models that engage interdisciplinary professionals, public and private organizations, and civil society.

Frenk et al. (2010:1923) state that the professional education of healthcare providers has not kept up with the challenges faced by healthcare systems world-wide due to fragmented, outdated and static curricula. As a result, ill-equipped graduates are being produced resulting in the following systemic problems:

- Mismatch of competencies to the needs of patients and populations.
- Divisions of professional statuses along gender lines.
- Narrow technical focus without a broader contextual understanding.
- Episodic encounters instead of continuous care.
- A hospice-centric approach at the expense of primary care.
- Quantitative and qualitative imbalances in the professional labour market.
- Weak leadership.

Efforts to address these problems have mostly failed, due in part to so-called “tribalism” of the healthcare professions which refers to their tendency to act in isolation from or even in competition with each other.

A global commission of professional and academic leaders from diverse countries tasked with addressing problems in deficiencies in social accountability in health professional training suggested that instructional and institutional reforms should be guided by the following outcomes: transformative learning and interdependence in education. Transformative learning is the proposed outcome of instructional reforms and is about developing leadership attributes with the purpose of producing enlightened change agents. Interdependence in education is the proposed outcome of institutional reforms and involves three fundamental shifts, namely from isolated to harmonized education and health systems;
from isolated institutions to networks, alliances and consortia; and from an inward-focused approach to the harnessing of global flows of educational content, instruction, resources and innovations (Frenk et al., 2010:1924).

Consequently, social accountability in medical education is currently being implemented around the world. The World Federation of Medical Education has introduced elements of social accountability as part of their modified medical education standards. Similar implementations are being reviewed by the International Organization of Deans of French-speaking Medical Schools and the Association of Medical Education in Europe (Boelen, Dharamsi & Gibbs, 2012:182). Health profession institutions in underserved and rural regions of Africa (including South Africa), Asia, the Americas and Australia have also been pioneering social accountability in their curricula (The Training for Health Equity Network, 2011:4-5).

2.4 Global trends in universal healthcare:

2.4.1 Developed countries:

Nearly all the world’s developed nations administer some sort of a universal healthcare plan (Fisher, 2012). This is achieved either through insurance or social security, as a national health service or through a purely socialized system. Countries such as Canada, France, Italy, Japan, Spain, Sweden and Germany are examples of developed countries incorporating the insurance or social security model. Australia and Great Britain are developed countries which have used a National Health Service model and Russia is an example of a developed country which has used a socialized healthcare model for universal healthcare (Van Rensburg, 2004:11)). One very notable exemption amongst the developed countries with universal healthcare is the USA, which is regarded as an outlier in terms of healthcare systems.

In the United Kingdom healthcare is provided through the National Health Service (NHS) which was established in 1948 and is the oldest universal healthcare system in the world. It is funded primarily through national tax. Access to healthcare is lifelong and fully portable for every citizen. Coexisting private health insurers are permitted to provide insurance that covers the same services as the NHS. The NHS is normally portrayed as the prototype of a centralized, socialized healthcare system which cannot be driven by consumer demand
beyond the government health budget. It has however gone through reforms, periodically swinging back and forth between centralization and decentralization (DiPiero, 2004:28).

In Canada, universal health coverage is provided to all citizens and is managed individually by each province. Coverage of core physician and hospital services by private insurance companies is banned, making the Canadian healthcare system unique. Supplemental insurance for perks such as private hospital rooms is however allowed. Private payments for other expenditures such as medicine, dental services, optometry and home care as well as niche areas such as work-related injuries and cosmetic surgery are common. Primary healthcare is mainly provided by private sector general practitioners (GPs) typically working in small-group practices. These providers are remunerated by the provincial or territorial insurance plan on a fee-for-service basis (Steinbrook, 2006:1662).

The healthcare system in France is based on a concept known as market-based pluralism which incorporates the philosophies of solidarity and liberalism and implies choice which fosters experimentation. Their National Health Insurance (NHI) is compulsory and everyone is covered. Patients pay directly for outpatient care and are then reimbursed by the NHI. Ninety percent of the population takes out supplementary insurance in addition to the NHI for benefits and perks not covered by the system. It is a diverse system characterised by great freedom of healthcare choice both to patients and providers. Patients can see any physician without first being referred. Funding for the NHI comes from payroll taxes, a general tax on all earnings and special taxes. As in all other countries, the French system is not without its problems but generally it receives high satisfaction marks from its population and is regarded as a world leader in terms of measures of population health status (DiPiero, 2004:28-29).

The USA is the only industrialised economy that does not have universal healthcare for all its citizens. Healthcare delivery is mainly through private managed care enterprise systems. The federal and local governments strongly influence the manner in which healthcare is provided. The healthcare system follows a free market model which is funded by a combination of private insurance and national healthcare insurance programs and healthcare is thus available as a commodity only to those who can afford to purchase it. Medicare and Medicaid represent the main forms of national health insurance schemes but are limited to a specific group of the population. The participants in these national schemes still purchase supplemental health insurance for costs which are not covered (Cortje, 2012:9). Per capita, out-of-pocket healthcare expenditure in the USA is by far the highest globally (DiPiero, 2004:27). Even so,
its history still shows persistent progress towards generalising access to healthcare (Savedoff et al., 2012:927), and under the Obama administration, the so-called Obamacare model of “managed care, managed competition” is being implemented (Poplin, 2012:109), which is a step in the direction of universal healthcare.

2.4.2 Developing countries:

As South Africa is classified as a “Developing and Transitional” country according to Roemer’s fourfold typology of national healthcare systems (Van Rensburg, 2004:13), it is more fitting in the South African context to investigate progress towards universal healthcare coverage in developing countries. Evidence suggests that the rising per-head incomes associated with developing countries leads to a demand for improved access to healthcare and reductions in out-of-pocket expenditure on healthcare (Savedoff et al., 2012:928). Developing countries that have made significant progress in implementing universal health coverage in a number of varying ways include Cuba (Keck & Reed, 2012:13-22), Mexico (Knaul et al., 2012:1259-1279), the Philippines (Obermann et al., 2006:3177-3185), Turkey (Baris, Mollahaliloglu & Aydin, 2011:579-582) and Thailand (Li, Yu, Butler, Yiengprugsawat & Yu, 2011:359-366).

Cuba, having adopted an extremely socialized healthcare model under the Castro regime, has shown the world how much can be done with very little (Keck & Reed, 2012:13-22). The model employed, with a strong emphasis on health prevention and promotion, has led to Cuba’s health indicators being comparable to, and in many cases better than, those of developed countries (Evans, Tandon, Murray & Lauer, 2001:33).

Mexico, through its ‘Seguro Populer’ national health insurance programme, has provided access to health to over 50 million Mexicans who were previously excluded from insurance. As a result of the progress made, specifically in the social protection of health to the non-salaried population, the Mexican health reform contributes knowledge to the global movement for universal health coverage (Knaul et al., 2012:1259-1279).

The Philippines has shown that social health insurance can be successfully extended in difficult political and economic conditions and holds many lessons for the development of universal health coverage schemes for other low- and middle-income countries (Obermann et al., 2006:3183-3184).
Turkey has made rapid progress in achieving health outcomes, responsiveness and fair financing since the inception of its Health Transformation Programme in 2003 (Baris et al., 2011:580-582).

In the past decade, Thailand has implemented reform aimed at achieving universal coverage and has successfully achieved its policy objectives of improving the equity and efficiency of its health system with healthcare financing that is sustainable. These initiatives have attracted worldwide interest (Li et al., 2011:363).

These are but a few examples of many developing countries that are in different stages of implementing universal health coverage in a number of different ways worldwide.

2.5 BRICS:

With South Africa being a member nation of the strategic alliance of Brazil, Russia, India, China and South Africa (BRICS), it is also pertinent to ascertain the progress of universal coverage in these countries. Collectively these five countries represent some of the world’s fastest growing large economies and nearly 40% of the earth’s population (WHO, 2014). All of the BRICS countries face common health challenges such as the burden of communicable and non-communicable diseases, inequity in healthcare service access, growing healthcare costs, large private healthcare sectors and substantial private healthcare expenditure. Each of these countries has embarked on paths to universal health coverage with no two countries going about it in the same way. Brazil and Russia started the process over two decades ago. China and India are relatively new entrants, having started reform in the last decade. South Africa only recently began its process of health reform (Rao, Petrosyan, Araujo & McIntyre, 2014:429-433).

Brazil is characterized by the Unified Health System which is a single publicly funded system that covers the entire population. It is financed through general taxation and healthcare is free (Gragnolati, Lindelow & Couttolenc, 2013:3).

Russia has a system whereby health insurance is compulsory. The health sector is mainly financed through general taxation and complemented by payroll taxation (Rao, Petrosyan, Araujo & McIntyre, 2014:429).
In India, increasing the funding of the public sector via the National Rural Health Mission and the establishment of the government-sponsored insurance for the poor has strengthened the government’s role in health (Balarajan, Selvaraj & Subramanian, 2011:511).

China has departed from its old system of healthcare by creating an important role for government in the health sector. One aim is to no longer use patients as a source of financing (Yip & Hsiao, 2009:613). Reforms have focused on primary care services strengthening and increasing insurance coverage (Li et al., 2011:360-361).

2.6 An African perspective:

From an African perspective, countries such as Ghana (Witter & Garshong, 2009:3), Kenya (Lagomarsino et al., 2012:936), Ethiopia (Wakabi, 2008:880; Shiferaw & Zolfo, 2012) and Rwanda (Saksena et al., 2011:204) have been implementing universal health reforms in a number of innovative ways with varying degrees of success.

Ghana has attracted attention with its ambitious implementation of national health insurance. Government resources as a percentage of total health expenditure have increased due to a 2.5% National Health Insurance Levy. Due to this, as well as additional supplementation by other sources, stable revenues for health have rapidly increased in this country. Despite challenges, studies have shown increased access to care and decreased out-of-pocket expenditure for insurance scheme members (Lagomarsino et al., 2012:93).

Kenya’s National Hospital Insurance Fund is Africa’s oldest government insurance programme. Since 2011 the fund has focused on reform aimed at increasing enrolment in informal populations. An innovative attempt to do this is the collection of premiums through mobile phones by partnering with mobile operator M-PESA. Separate government coverage programmes for civil servants, military personnel and teachers are also being incorporated into the fund. Administrators are also lobbying for subsidized coverage programmes for the extremely poor so that the national risk pool may be further expanded and that the country may move closer to universal coverage (Lagomarsino et al., 2012:936).

Ethiopia has been registering impressive successes in extending affordable primary healthcare services across the country. These achievements are largely due to the Health Extension Programme which was implemented in 2003 (Wakabi, 2008:880), as well as innovations such as the application of information communication technology and
telemedicine to healthcare delivery owing to the fact that 85% of the population live in remote areas (Shiferaw and Zolfo, 2012).

Rwanda has been successful in increasing population insurance coverage over a relatively short period of time, and as a result its model has drawn wide interest for strategizing the fast-tracking of universal coverage (Saksena et al., 2011:204-208).

2.7 The South African healthcare system:

2.7.1 The South African health revolution:

In 1994 history was made in South Africa when the ANC government came into power after decades of white minority rule under the Apartheid regime. However, along with this new freedom came a myriad of challenges, many of them inherited from the old government. Among these were a government debt of 45% of GDP, poor growth (negative real GDP between 1990 and 1992 and only 1.2% in 1993) and massive income inequalities – the poorest 10% of households had less than 0.5% of South Africa’s total income while the richest 10% had about 47% of the country’s total income (McIntyre, 2008).

On the healthcare front, post-apartheid South Africa inherited a dual healthcare system with huge disparities between the private and public sectors evidenced (Botha & Hendricks, 2009). The ANC began their overhaul of the healthcare sector by integrating the 14 departments of health from the Apartheid era into a single health system consisting of a Central Ministry and nine Provincial Departments of Health (ANC, 2010:6). Additional major interventions for the health sector were announced by the Mandela government in the first 100 days of government including the eradication of racially based services, free healthcare for children and pregnant women, nutrition support in schools and the building of clinics on a far-reaching scale to improve access to health services (Yach & Kistnasamy, 2007:2).

Development of a National Health Service (NHS) was central to the ANC’s plan for health sector restructuring from the outset (ANC, 1994:5). A number of policies, aimed at advancing the agenda of the National Health Insurance (NHI), were implemented and steps were taken towards the laying of a foundation of a nationalized system with regards to delivery, organization and funding of health services (Botha & Hendricks, 2009). Access to healthcare became a constitutional right and the government was responsible for providing the
conditions under which this right could be exercised (South African Bill of Rights section 27, 1996:11).

The new constitution, which was formally adopted in 1996, resulted in the formation of nine new provinces which included the four old provinces and numerous homelands. Considerable autonomy was given to each province. The public health system was structured as a single Department of Health at national level with an additional department in each of the nine provinces. Some local governments also had health departments but a lack of legislative clarity made their role in the overall health system unclear. Essentially a three-tiered system was created (Mcintyre et al., 2007, 11-13). However the fiscal federal system, which was introduced with the adoption of the final constitution in 1996, gave the provinces considerable autonomy with regards to determining their budgetary allocations between sectors and this resulted in health-spending disparities arising between provinces (McIntyre, Doherty & Gilson, 2003:55-56).

The broad policy framework and policy issues were initially defined in the White Paper for the Transformation of the Health System in South Africa in 1997 and later legislated via the National Health Act in 2004. The focus was on comprehensive primary care as the key to achieving health system transformation with an emphasis placed on the district health system as the main vehicle for increasing access to services (Mcintyre et al., 2007:16).

Progress made in the early years was quickly overshadowed by the AIDS crisis which spiralled out of control in the late 1990’s (Harrison, 2009:9). The social, economic and environmental conditions directly attributed to Apartheid such as overcrowded squatter settlements, migrant labour and deliberately underdeveloped health services for African people, provided the ideal environment for the transmission of HIV, and coupled with HIV, TB (Karim, Churchyard, Karim & Lawn, 2009:921). TB and HIV go hand-in-hand, and the TB crisis was made all the worse by the South African Government’s lack of action in responding to the AIDS crisis. The emergence of extremely drug resistant TB (XDR-TB) has only exacerbated the burden (Mooney & McIntyre, 2008:638). The Mandela cabinet’s response to the crisis was grossly inadequate and this led to the formation in 1998 of the Treatment Action Campaign which was spurred on by the need for community action for AIDS treatment. Although there was progress in TB control between 1995 and 2005, the number of cases continued to rise as a direct result of the AIDS epidemic (Karim et al., 2009:23).
The Mbeki government was marked by its association with the unorthodox AIDS-denialist theory which further placed the government at odds with the public. In 2003 the Mbeki government eventually decided to provide antiretroviral treatment for free in public health services. Had this decision been made only three years earlier, an estimated 330,000 lives could have been saved. There was still however much inefficiency and controversy during President Mbeki’s second term with regards to the government’s approach to the pandemic (Karim et al., 2009:924).

President Jacob Zuma started his first term in office in 2009 by acknowledging HIV as one of the most important challenges facing the country, and Dr Aaron Motsoaledi, the newly appointed Minister of Health, brought a renewed focus and urgency to the government’s response to the crisis. Since then there has been a dramatic change in the way that government has scaled-up its response to both the HIV/AIDS and TB pandemics (Simelela & Venter, 2014:250). However many challenges still remain. In 2011, despite only having 0.7% of the world’s population, South Africa was carrying a staggering 17% of the world’s HIV-infected people. This prevalence was 23 times the world average at that point. The TB rate at that stage was also amongst the highest in the world. At 73%, the HIV/AIDS and TB co-infection rate was also amongst the highest in the world (South African Department of Health, 2011:7).

2.7.2 The present South African health system:

South Africa is classified as having a Type 2 or pluralistic healthcare system according to Field’s classification. It is a system characterized by healthcare which is mainly a consumer good or service. The position of the physician is as an entrepreneur and member of a variety of groups or organizations. The role of professional associations is very strong. Ownership of facilities is both private and public. Payments are both direct and indirect and the role of the state is residual or indirect. According to Roemer’s classification South Africa is a developing and transitional country, but with an entrepreneurial and permissive health system policy. According to Cockerham’s model South Africa follows a free-market medicine model. According to this model both private and public systems of financing and healthcare service organizations exist; the providers are mainly private entrepreneurs; there are both privately-owned and state-owned facilities; there is no guarantee of equal access to the general public with high levels of inequality as a result; and there is the encouragement or
even enforcement of private care for patients who can afford it (Van Rensburg, 2004:11,13-14).

Presently, South Africa’s healthcare system is a mixture of a relatively robust private sector, a struggling public sector and some non-governmental not-for-profit organizations (McLeod, 2008:4). A seldom-reported part of the health system is the use of Traditional Health Practitioners, and there is also the increased use of Complementary and Alternative Medicine (CAM) (Francis & Edmeston, 2013). All of these form part of the national health system under the stewardship of the current Minister of Health, Dr Aaron Moetsoeleli, according to the National Health Act of 2003 (McLeod, 2008:4).

2.7.3 The private sector:

According to the 2013/2014 annual report of the Council for Medical Schemes, there were 317 private medical aid options for South Africans to choose from. The total number of beneficiaries using these schemes was 8 776 279 consisting of 3 878 267 principal members and 4 898 012 dependents (Council for Medical Schemes, 2014:40,46). According to the same report, as of 31 March 2014 there were also 40 Managed Care Organizations, 8757 accredited brokers and 2146 broker organizations (Council for Medical Schemes 2014:48-49). According to Ogunbanjo (2015:3), there are too many role players in the South African private medical industry and this contributes to the high costs experienced in this sector. Many medical schemes have experienced problems with sustainability over the years which the National Department of Health of South Africa has attributed to overpricing. This while the Health Professions Council of South Africa (HPCSA) has stated that it is ethical for private general practitioners and specialists to charge up to 300% above the fees recommended in the National Health Reference Price List (Cortje, 2012:4-5).

The problems faced in the private sector such as high costs, which allow few to access it, are in many ways perpetuated by the government’s failure to address healthcare issues on a primary level. An example of this is fund mismanagement - the funds are available but are not being correctly spent in the public arena (McIntyre, 2008).
2.7.4 The public sector:

The public sector operates as a three-tiered system consisting of primary care provided at clinics and secondary and tertiary care provided in feeder hospitals and specialist hospitals respectively. Treatment at primary care facilities is free and there is a nominal, income-related fee for hospital users (Francis & Edmeston, 2013). The success of the district-based system, which was one of the biggest post-1994 innovations, has been severely hampered by the failure of government to fully devolve authority as well as the erosion of efficiencies through lack of leadership and low staff morale (Harrison, 2009:32).

Problems faced at the primary clinics have a knock-on effect on the public hospitals. One of these is that many patients bypass the lower tiers and go directly to the public hospitals as a result of the local clinics not providing even the most basic treatments (Makhubu, 2012; Mojaki, Basu, Letskokgohka & Govender, 2011:109). These out-patients add extra strain to hospitals already having difficulty in attending to in-patients. As a result, the system remains under-resourced and very dysfunctional (Ashton, 2010).

Ogunbanjo (2011:399) argues that the public healthcare system in South Africa is under-resourced relative to the population size and the quadruple burden of disease. According to Saloojee (2011:67), the public health system in South Africa performs poorly due to overly centralised decision making and fragmented service delivery. In addition, Saloojee states that state hospitals are plagued by poor leadership, insufficient funding and poor financial management, a shortage of healthcare professionals, staff who are inefficient and demotivated, deteriorating infrastructure and equipment shortages.

2.7.5 The quadruple burden of disease:

South Africa is also plagued by a so-called quadruple burden of disease consisting of HIV/AIDS, chronic diseases/diseases of lifestyle, poverty related conditions and injuries (Mcintyre et al., 2007:8). As already mentioned, despite having 0.7% of the world’s population, South Africa carries about 17% of the global HIV burden (Seggie, 2011:425). The challenge of this quadruple disease burden, specifically chronic infectious diseases driven by HIV/AIDS and non-communicable diseases, is enormous and has few parallels to other countries due to sheer scale (Mayosi et al., 2009:942). Approximately 30-35% of
conditions treated as well as deaths below the age of five are related to HIV. The epidemic accounts for approximately 300 000 deaths annually (Shipley, 2010:6).

2.7.6 Inequality:

Inequality is a major problem in South Africa. Its GINI index, which represents the levels of inequality in a country, is 0.63, amongst the highest in the world (WorldBank, 2014). Writing on the history of inequality in South Africa, Terreblanche (2002), quoted by Mooney and McIntyre (2008:637), makes the following observation: “The coexistence of a new political system (controlled by an African elite) and the old economic system (still controlled by neo-liberal white elite) constitutes a dual system of democratic capitalism which is morally unjust, dysfunctional, and also unsustainable. We are forced to ask: for how long can white wealth and elitism remain entrenched; for how long can the black elite continue to indulge in black elitism; and how far can the black bourgeoisie and the black lumpenproletariat [the lowest members of society or the underclass] extend before the system cracks?”

The ongoing problem of inequality unfortunately has devastating effects on the South African healthcare system. Of the 8.3% of the GDP spent on health in South Africa, approximately half is spent in the private sector by only 16% of South Africans accessing this sector, while the other half covers the 84% of the population accessing its public health sector (Mills et al., 2012:128). Of the estimated total population of 52 million, this translates to approximately 8.78 million utilizing the private sector and 43.22 million utilizing the public sector (Ogunbanjo 2015:3).

Inequality in South Africa however is no longer drawn along racial lines as much as it is by socio-economic ones (South African Department of Health, 2011:5-6). According to Cortje (2012:2) the primary determinant of access to healthcare in South Africa for any individual is their socio-economic status. According to Ruff, Mzimba, Hendrie and Broomberg (2011:191), South Africa currently faces a divided healthcare system with clear and ever-growing disparities between the public and private health sectors with regards to access and quality. The obvious difference in performance between these two sectors mirrors the general inequalities evident in almost all aspects of South African life.
2.7.7 The Green Paper and the implementation of the NHI in South Africa:

The South African government published the so-called Green Paper on the proposed NHI in South Africa on 12 August 2011 for public comment. In it, it is contended that the two-tiered private and public system is unsustainable, destructive, very costly and highly curative or hospice-centric. The quadruple burden of disease faced by South Africa, as well as the shortage of key human resources in the health sector, specifically the public sector, is also acknowledged (South African Department of Health, 2011:7-8,10). To address these challenges, the Green paper proposes four key interventions, namely:

- Complete transformation of the healthcare service provision and delivery.
- The total overhaul of the healthcare system.
- The radical change of administration and management.
- The provision of a comprehensive package of care underpinned by a reengineered Primary Healthcare (South African Department of Health, 2011:5).

The objectives of the NHI are as follows:

- Improved access for all to quality health services.
- The pooling of risks and funds to create a single fund to achieve solidarity.
- The procurement of health services on behalf of the entire population.
- The improved resourcing of the public health sector (South African Department of Health, 2011:18).

Naidoo (2012:150) states that according to the document, primary healthcare services will be delivered through three streams:

- District-based clinical specialist support teams which will support the delivery of priority healthcare programmes at a district level.
- School health services which will be delivered by a team headed by a professional nurse, focused on providing health promotion, prevention and curative services to address the health needs of scholars.
- Municipal ward-based Public Healthcare agents having teams in each ward. Each team will be headed by a health professional with each team member allocated a certain number of families.
The main focus of these teams will be to facilitate health promotion activities with the help of the community. Accredited and contracted private providers will also be able to provide the delivery of primary healthcare within their districts. There will also be hospital-based benefits according to the designation of the hospitals which will be on district, regional, central and specialized levels. The plan will be implemented up until 2025. The first five years of this 14 year plan will be focused on building and preparing the public health sector for the new system (Obunbanjo, 2015:3).

The plan will be provided by mandatory contributions made up by all South African citizens, depending on income, employers (similar to UIF) and general revenue, pooled into a NHI fund. Healthcare will be free but co-payments will be made in instances where services rendered are not in accordance with NHI treatment protocols and guidelines; benefits provided are not covered under the NHI benefit package; individuals by-pass the NHI referral system; services are provided by unaccredited providers; and NHI services are utilized by non-insured persons (South African Department of Health, 2011:35-36). Benefits will allow for two to three visits to a provider of choice with any further or higher levels of care needing NHI approval or at the patient’s own cost. Preferred providers will primarily be in the public sector (Shipley, 2010:6). Private providers will be credited based on the profile of their practice with emphasis on the appropriateness of their services to meet specific geographical needs and economies of scale (Cortje, 2012:19).

2.7.8 Criticism and acclaim for the proposed NHI:

There is much division regarding the NHI. Proponents of the proposal believe that it will allow South Africa to meet the healthcare needs of its citizens while opponents believe that it is too expensive, complex and layered and will further damage the public healthcare system and reduce the benefits of private healthcare. They further believe that inept governance of the system by bureaucrats, who will have enormous additional power over the healthcare system, will eventually destroy it (Saloojee, 2011:67).

Criticism and concern has been levelled by both ANC alliance partners (Delihlazo, 2012) and opposition parties (Klinck, 2014) regarding the lack of progress towards the NHI thus far. McIntyre (2010:146) contends that there has been much confusion regarding the use of the term National Health Insurance and consequent misinterpretation of the intentions of the government. Mcintyre adds that the NHI should not be seen by South Africans as some sort
of insurance scheme but rather as a policy objective to provide financial protection or insurance against high healthcare costs for the South African population through a number of instruments including tax revenue and insurance schemes. Consequently the term universal coverage is more descriptive of the reform objective and less open to misinterpretation as it is consistent with a statement by the Minister of Health in a debate on the health budget in the National Assembly on 30 June 2009 in which he said that “NHI is a system of universal health coverage where every citizen is covered…, rich or poor, employed or unemployed, young or old, sick or very healthy, black or white”.

According to Ogunbanjo (2013:301), the roll out of the NHI to all 52 districts in South Africa will largely depend on three factors namely:

- The commitment of the government to shift and increase its public health sector budget, as opposed to reducing it. Government funding in the NHI has been reduced by R355 million to R884.2 million over the next three years according to South Africa’s finance minister in his 2015/2016 budget speech (Ogunbanjo 2015:3).
- The implementation of a strategy that will communicate the benefits of the NHI to the entire South African population.
- The finalizing and concluding of agreements with private health funders to curtail the cost of health in South Africa.

Ogunbanjo (2013:301) goes on to state that regarding the objectives of the NHI pilot projects, regular progress reports from the National Department of Health on the challenges and successes of these objectives are much needed but not forthcoming. The highly anticipated White Paper and discussion paper on how the NHI will be financed has still to be released (at the time of writing in September 2015, the White Paper had still not been released) (Ogunbanjo 2015:3). According to him, if the above-mentioned three factors are adhered to, the pilot NHI will provide the advocacy thrust for the rollout of the NHI throughout the rest of the country (Ogunbanjo, 2013:301). Obunbanjo (2015:3) further believes that more engagement is needed with health professionals and funders in order to make the NHI function and that as a whole, the medical fraternity in South Africa needs to come up with innovative ways to improve the efficiency of its healthcare system.
2.7.9 The pilot projects:

According to the South African National Department of Health it is appropriate to initiate the first of the three phases of the NHI through the piloting of the scheme in selected health districts (Cortje, 2012:19). These pilot projects were initiated in March 2012 in 10 health districts throughout South Africa and an 11th district was subsequently added. The selection criteria for the pilot districts were based on the performance of each district for 27 predetermined indicators in 3 categories, namely socio-economic indicators, health service performance indicators and financial and resource management indicators (Motsoaledi, 2012:11-16). Collectively these 11 health districts represent about one in five South Africans and incorporate 73 hospitals and 2496 primary healthcare facilities (SARRAH, 2014:1).

According to Dr Motsoaledi (2012:8-10) the objectives for the pilot studies are as follows:

- To focus on the most vulnerable sections of South African society.
- Reduce maternal and child mortality.
- Strengthen the public health system performance.
- Strengthen the district health system functions.
- Assess whether the health service package, primary healthcare teams and strengthened referral system will result in improved access to quality health services especially in rural and previously disadvantaged areas.
- The introduction of health service funding at district level to examine the extent to which communities are protected from financial risks of accessing care.
- To test the ability of districts to take greater responsibility linked to the purchaser-provider split stipulated by the NHI.
- To determine the cost of instituting a district health authority as the contracting agency and the implications of scaling-up similar institutional and administrative arrangements throughout South Africa.
- To assess the implementation of a Primary Healthcare service package in terms of utilization patterns, costs and affordability.

Whether real progress has been made is difficult to ascertain as there are different reports from different stakeholders regarding the success or otherwise of the pilots. Ambiguity also exists within the objectives of the government’s health plan. An example of this is found in an address made by Dr Aaron Motsoaledi to a parliamentary committee on progress made on the NHI on 5 March 2014. In this address he stated that the main concern of the Department
of Health was the development of affordable healthcare and that this had not been defined and a solution was still being sought. He further stressed that the South African public has a flawed understanding that the NHI is a medical aid for all and said that its primary purpose is to reduce the incidence of catastrophic health expenditure for ordinary citizens (Ogunbanjo 2014:84).

The government has made a number of claims regarding progress made including improvement of the quality of health services, primary healthcare reengineering, strengthening of human resources, improvement of public health infrastructure and equipment and the improvement of health information systems (Matsoso & Fryatt, 2013:156-158). According to a progress report to the parliamentary committee made by Dr Motsoaledi in March 2014, the following had been achieved up to that point in the 11 pilot districts:

- All 11 districts had district clinical specialist teams consisting of at least 3 of the expected 7 members per team (42.9%).
- The number of school health teams was 106.
- Of the expected 600 general GPs, 96 had been contracted nationally (16%).
- A total of 378 of 1976 ward-based outreach teams had been registered (28.7%).
- Downward trends in a number of key health indicators such as the incidence of severe malnutrition in children five years and younger and in-patient death rates for the same age-group (Ogunbanjo 2014:84).

The objective of contracting the above-mentioned GPs to provide sessional services within its primary healthcare clinics in the pilot districts is to bridge the divide between public and private health systems (Ogunbanjo 2014:84). However, in a briefing to Members of Parliament in February 2013, Dr Motsoaledi admitted a lack of interest in the pilot projects and stated that up until that point only 14% of the allocated NHI budget had been spent (Mediclinic, 2013).

A detailed 12 month progress report was made on the status of the NHI pilot districts in May 2014 for the National Department of Health by the Strengthening South Africa’s Response to HIV and Health (SARRAH) programme funded by the UK Department for International Development. Progress had been made in the following areas according to a summary of conclusions in the report:
• The coordination of NHI activities at district levels by district NHI coordinates.
• District health management teams had been realigned to the introduction of the NHI in most districts.
• Referral mechanisms were found to be in place in all pilot districts.
• Progress had been made in NHI implementation mainly through staff training, provision of equipment and the refurbishment of health facilities due in part to NHI conditional grants.

However challenges were found in the following areas:

• Quality improvement interventions showed mostly poor results both for primary healthcare facilities as well as hospitals.
• The planned patient transport service had been hampered by a shortage of vehicles.
• Vehicle shortages also contributed to long turnaround times for emergency transport for emergency medical services.
• Constrained skilled human resources contributed to long waiting times for emergency medical services.
• Only one district had a full complement of district clinical specialist teams with the deep rural areas especially lacking in these teams.
• There were low numbers of primary healthcare outreach teams and school health teams across all districts.
• A lack of vehicles had significantly hampered school health activities.
• Population registration with the ward-based primary healthcare outreach teams was low and had been hampered by the lack of handheld registration devices in most districts.
• Low numbers of staff posts at health facilities had resulted in the inability to meet the demands of the populations that they service.
• The initial remuneration package on offer was rejected by most GPs designated to work alongside nurses in primary healthcare facilities. A revised package was offered with varying degrees of uptake in the districts (SARRAH, 2014:1-64).
2.7.10 Social accountability in the South African context:

One of the potential barriers in the implementation of the NHI in South Africa is the suspicion of healthcare professionals towards nationalized health systems, specifically professionals in the private sector which follows a profit-driven model. This problem is currently being addressed through implementing principles of social accountability into the education of healthcare professionals in medical schools across the world (Dharamsi & Gibbs, 2012:182; The Training for Health Equity Network, 2011:4-5). According to Green-Thompson (2013) the HPCSA has recognized the need to introduce social accountability at a medical training level and has embarked on a process of introducing the principles of social accountability to the curricula of South African medical training institutions.

2.8 The role of managers in the South African healthcare system:

Due to the nature of the research population, it is appropriate to briefly examine the role of managers as well as identify current issues pertaining to healthcare managers in the South African healthcare sector.

As a manager the professional healthcare practitioner has the management functions of planning, organizing, coordinating, directing, controlling and most importantly, leading. Additional roles include staffing, decision-making, communicating, delegating, budgeting, policy-making, motivating and conflict management (Ngxukumeshe, 2009:17).

According to Coovadia et al. (2009:817) good leadership, stewardship and management of healthcare and related services are vital to the achievement of health for all. Failures in leadership and stewardship and weak management have led to inadequate policy implementation in the public sector (Cortje, 2012:23).

There is generally no management training for health practitioners in national as well as international curricula. Additionally the emphasis on becoming effective and good leaders and managers is understated (Ngxukumeshe, 2009:35).

According to Coovadia et al. (2009:830-831), management in the public sector has been centralised and highly variable. Post-1994 there was a concerted effort to include women and black persons in senior and top management teams. One of the negative consequences has been that of problems associated with the placement of inexperienced managers in senior
positions who have struggled to handle, amongst other things, the challenges associated with transformation. There is also a lack of training, support and supervision in this sector. As a result, incompetence has become a major problem with public sector management. They go on to state that differences in leadership, teamwork and managerial supervision and support have been identified as the factors accounting for major differences in fatality rates in hospitals with similar human resource and infrastructural capacities. Accountability, or the lack thereof, is also a problem in the public sector. Finally, they argue that if the national thinking on accountability is not addressed, South Africa will be unable to address and prepare for present and future health problems.

Ngxukumeshe (2009:17) asserts that in the private sector healthcare, practitioners, over and above the traditional tasks of managers, additionally take on entrepreneurial responsibility to ensure the success of their enterprises. Furthermore, aspects such as quality service, good communication skills, interpersonal skills, integrity and good healthcare provider-patient relationships are crucial in maintaining a competitive advantage in this sector. Ngxukumeshe also states that another important aspect of management is the management of healthcare through education to the community at large in order to prevent the spread of disease.

According to Cortje (2012:27) it is important that private healthcare professionals improve their managerial skills in order to facilitate organizational changes in an industry that will be more competitive as a result of the NHI. Cortje adds that the NHI will also result in increased administrative costs due to higher patient numbers which will necessitate the need to improve practice management efficiency.

2.9 The impact of universal healthcare on healthcare workers worldwide:

Research on universal healthcare should place equal priority on the opinions of physicians and not only those of the public (Kim, Park & Hahm, 2012:580). Studies of health practitioners around the world have shown that health reforms can have numerous implications for health personnel. According to Martinussen and Magnussen (2011:193), “the reorganization efforts in many Western countries in recent decades have challenged the role, identity and autonomy of medical professionals”. Franco, Bennett and Kanfer (2002:1255) conclude that “worker motivation will be affected by health sector reforms which potentially affect organizational culture, reporting structures, human resource management, channels of accountability, types of interactions with clients and communities, etcetera”. Franco et al.
(2002:1265-1266) go on to state that, as a result, the reforms need to promote worker motivation for improved health system performance and that managers will play a vital role in this process.

A study by Gollop, Whitby, Buchanan and Ketley (2004:108) into medical staff scepticism and resistance towards changes in the British NHS concluded that the support of health service staff, particularly doctors, is crucial to the spread and sustainability of the proposed modernization agenda in the NHS. The study also concluded that scepticism and resistance by staff hampers the progress of reforms and that leaders need to not only recognize the impact of healthcare worker’s attitudes, but also consider ways in which they can become positively engaged in change. Degeling, Maxwell, Kennedy and Coyle (2003:649) argue that doctors and managers should engage more directly with nursing and allied health professionals when it comes to health reform to prevent antagonism. Edwards, Marshall, McLellan and Abbasi (2003:609-610) suggest that constructive dialogue is crucial to avoid the mutual suspicion between doctors and managers. They go on to say that differences between doctor’s and manager’s approaches to issues such as accountability, the use of clinical practice guidelines, and finance, have the potential to threaten individual institutions and possibly even the NHS in the UK.

According to a study by Spanu, Baban, Bria and Dumitrascu (2013:667-668), there is often tension between healthcare professionals with managerial responsibilities and those without. The perceived lack of ability, skill and competency of those in management are a source of frustration, anger and mistrust amongst health professionals. This is exacerbated by the perception that management have different priorities from those of healthcare providers. The same study also showed that overwork of health care professionals can lead to exhaustion, a sense of being overwhelmed, feeling hard-pressed for time, lack of control and guilt at not being able to properly attend to tasks. Hurst et al. (2007:137) state that the experience of physicians may yield important insights about the impact of prioritization on clinical care in scarce settings which could contribute to health policy-making. Yet despite this, insufficient attention is paid to this fact.

In a systematic review of material contained in the publications of influential GP organizations in Australia, it was found that GPs felt that their ability to practise good quality medicine was being hampered by state regulations concerning issues such as competition,
accreditation, the increasing corporatization of practise and the like (Marjoribanks & Lewis, 2003:2236-2238).

According to Martinussen and Magnussen (2011:198-199), health reform results in increased emphasis on the economic aspects of healthcare and its implications regarding the medical principles that guide hospital activities. This has been identified as one of the reasons for health professionals resisting these types of changes. There could however be less resistance to reform if it is implemented in such a way that places physicians in a position of formal influence. The same study also showed that respondents with greater managerial responsibilities showed a more positive response to reform as opposed to those who spent more time in direct patient-related work. Delayed reimbursement from national health insurance funds could also cause healthcare providers to favour affluent clients who are able to make immediate payments, according to a study undertaken in Ghana by Dalinjong and Laar (2012:7).

A study in Thailand by Thoresen and Fielding (2011:19-20) indicated that increased utilization of health facilities in this country since the inception of universal healthcare has increased the workload on healthcare providers in certain districts with undesired results. As a result, many participants in the study felt that this had led to a subsequent decline in the quality of services delivered by the healthcare system. Furthermore, many of the interviewed healthcare providers felt that the universal coverage actually had a detrimental effect on preventative and primary healthcare as users frivolously used the system with the attitude that they no longer needed to take care of their health as healthcare professionals would now do this free of charge.

2.10 The perceptions of South African health workers and healthcare stakeholders towards the NHI:

A study by Moosa et al. (2012:795-797) focusing on the perceptions of South African GPs regarding the service delivery aspects and cost implications of the NHI in South Africa yielded the following results: 47% of GPs surveyed took a neutral stance towards the NHI, 21.5% supported the NHI and 32.5% did not. GPs appeared uncomfortable regarding the lack of clarity as well as the possible risks associated with the NHI. Most cynicism was directed towards the cost implications for themselves and there was a general underestimation of the cost implications of employing additional staff to deal with the increased patient volumes.
expected as a result of the NHI. Concern was also expressed that patients would tend to over-use medical facilities because they were free. Another concern expressed was the timeous payment by government. It was felt that improved management as well as the employing and training of more staff would be a key factor in the success of the NHI. Interestingly it was shown that, considering what the GPs would deem an acceptable annual income, the South African government could affordably use GPs in developing the primary healthcare part of the NHI in South Africa to cover its uninsured population.

Findings from a recent study in the Eastern Cape on the views of general practitioners towards the NHI by Surender et al. (2014:1-7) suggest that the South African government will have considerable difficulty in winning the support of private general practitioners on the matter of the NHI. Most concerns were pertaining to remuneration, government control, increased workloads, autonomy, lack of consultation and diminished working conditions and quality of care. The respondents felt that, whereas much attention had been given to the infrastructural and affordability aspects of the NHI, little had been paid to the role played by healthcare workers who will be implementing the reforms. It was also felt that South Africa already has a universal system due to the availability of public healthcare to all citizens and that there should be more efficient management of the existing resources rather than radical reform. Most were against the idea of the UK-style nationalized system. Another contention was that the NHI is fiscally unaffordable. The clinicians surveyed also had a greater objection to the idea of losing autonomy to the state than potentially lower remuneration.

In a study on private sector perspectives on the NHI, Ramjee and Mcleod (2010:179-194) did an analysis of key concerns and arguments raised by representatives of stakeholder organizations involved in revenue collection, pooling, purchasing and delivery of healthcare in the private sector of South Africa. Concerns regarding the following areas were highlighted:

- A lack of transparency and information sharing
- The time-line for the implementation of universal coverage
- The time-line for achieving universal coverage
- Inequity in healthcare provider distribution
- Inequity in finance
- Confusion as to whether the goal of the NHI is universal coverage for healthcare or universal coverage for health insurance
• Quality of care delivery
• Human resource and capacity constraints
• Fiscal affordability of the NHI
• Complexity and cost of administration

In conclusion, Ramjee and Mcleod (2010:191) recommended that due to the far reaching implications of the NHI, it is imperative that all stakeholders find solutions based on evidence-based arguments and not mere ideological positioning. They also added that “the atmosphere of secrecy and mistrust surrounding the reform of the healthcare system is a serious hindrance to policy implementation” and suggested that both the lack of official policy and mismanagement of the reform process need to be rectified. Despite finding that there was a lack of agreement on various aspects of the NHI, it was clear that stakeholders in the private healthcare industry in South Africa agree that reform is much needed and long overdue.

2.11 Conclusion:

Universal healthcare is a complex process that is increasingly being implemented on a worldwide basis. This process has no single formula or time frame. The fragmented South African healthcare system is fraught with problems of inequality as a direct result of Apartheid as well as questionable policy, policy-implementation and mismanagement by the ANC-led government since 1994. Additionally the quadruple burden of HIV/AIDS, chronic diseases/diseases of lifestyle, poverty related conditions and injuries has placed further strain on a system already under immense pressure. The Government has recognized the need for a total overhaul of the healthcare system and has advocated the introduction of the NHI to achieve this. Currently the implementation of the NHI is in the pilot phase. Healthcare managers have an important role to play in the management of healthcare systems. Research on the experiences of healthcare workers worldwide has revealed a myriad of opinions and challenges regarding universal healthcare systems in different countries. From a South African perspective, the limited research undertaken among healthcare workers as well as private healthcare sector stakeholders has shown high levels of uncertainty towards the feasibility of the NHI as the answer to South Africa’s healthcare crisis.
Chapter 3: Research Methodology

3.1 Introduction:

Research design refers to all the steps in the research process to achieve the anticipated outcome with the focus on the end product (de Vos et al., 2011:143). This chapter explains the process of conducting the research for this treatise. This will be done within the framework of the research design that was used, the research method that was used, methods used to ensure study quality and the ethical issues that had to be considered during the conducting of the research.

3.2 Research design:

A quantitative study design was used by the researcher. The quantitative approach is defined as “a process that is systematic and objective in its ways of using numerical data from only a selected subgroup or universe (or population) to generalise the findings to the universe that is being studied” (Maree, 2007:145). There are a number of classifications for quantitative study designs but the two main classes into which they fall are experimental designs and non-experimental designs (de Vos et al., 2011:144). In a health sciences experimental study, two comparison groups would be set up and one group (the experimental group) would be exposed to a degree of intervention or manipulation of the independent variable while the other group (the control group) would receive no intervention or be exposed to a different form of intervention. The experimental and control groups would then be compared or tested for differences with the intention of being able to say that differences in the outcome were due to the intervention (de Vos et al., 2011:145). In non-experimental designs, the units that have been selected to take part in the research are all measured on the same variables at a specific time without any manipulation (Maree, 2007:152).

The study undertaken by the researcher was of a non-experimental nature. Non-experimental studies can either have a descriptive, time-dimensional or correlation design (Botma et al., 2010:110-115). The research design used in the quantitative aspect of this study was a simple descriptive design. This design is defined as a non-experimental design which is used when the variable of interest is described as it naturally occurs (Botma et al., 2010:110). A descriptive design was applicable in this case as it is used when little is known about the
phenomenon being researched (Burns & Grove, 2009:25). According to Burns and Grove (2009:25) this study type will offer the researcher a way to “(1) discover new meaning, (2) describe what exists, (3) determine the frequency with which something occurs, and (4) categorize information.” The advantages of this particular design is that it is relatively inexpensive and takes less time to conduct. However there are disadvantages in that the information obtained is superficial and it cannot be used to infer causality or investigate a relationship between variables (Botma et al., 2010:110).

In addition, the researcher included a voluntary comments section at the end of the questionnaire. There was no limit to the length allowed for the comments by the respondents. The data generated were however limited in quantity and thus the in-depth exploration and/or description of the phenomenon synonymous with qualitative research (Botma et al., 2010:190) was not entirely possible. The data were nevertheless used to enrich the quantitative findings.

### 3.3 Research method:

Research methodology provides researchers with methods that they can follow in their process of acquiring knowledge (Botma et al., 2010:41). The research method includes descriptions of the population, sampling method used, the data collection process and the data analysis process. The application of the research method as it was applied is described below:

#### 3.3.1 Population:

The study population is defined as the population to whom the results will be applicable as well as the population from whom the sample will be selected (Polit & Beck, 2004:645). The population that was used in this study were all consultants and employees in management positions at the healthcare institution under investigation. At the time of the study there were 233 employees and consultants in management positions. The institution is a private healthcare institution in South Africa with 71 policlinics nation-wide providing a range of services including medical, nursing, pharmacological and dental services. Additionally the institution also has 22 basic clinics nation-wide providing more basic healthcare. The institution services a population of more than 160 000 whose accumulated annual visits total about 3.13 million. Statistics from 2014 showed that the institution employed around 1900
employees, excluding consultants. Of these 1900 employees, approximately 30% were African, 50% White, 13% Coloured and 7% Indian.

Employees included were the national management team, business managers, clinic managers, pharmacy managers, charge sisters, theatre unit managers, and travelling clinic managers. The institution’s national management team is a ten person team consisting of a managing director, financial director, business systems manager, national human resources manager, and six managers of different divisions. The business managers manage on a regional level. Clinic managers are in charge of individual clinics. Pharmacy managers manage the pharmacies in the clinics that have pharmacies. Charge sisters manage the nursing units of each clinic. Theatre unit managers manage the theatre units at clinics that have theatre facilities. The travelling clinic managers manage the travelling clinics that fall under the institution.

None of the doctors or dentists who work at the clinics are direct employees of the institution, but instead are consultants who work under the auspices of the institution. Those doctors and dentists who function as managing medical practitioners and managing dental practitioners respectively, were also included in the study population. These doctors and dentists practice clinically but have the additional responsibility of managing the doctors, dentists and associated staff who work within the same clinic in their particular divisions.

### 3.3.2 Recruitment of participants:

In this study the researcher had access to the entire study population and thus conducted a census survey in order to collect the data. A census survey is defined as the complete enumeration of all items in the study population. It was applicable to use in this study as there would be little use in using a sample due to the small population size (Kumar, 2008:37). Polit and Beck (2008:338) state that inclusion criteria define who should be included in the population. The inclusion criteria for this study were as follows:

- The individual must be an employee or consultant of the institution under investigation.
- The individual must be in an official management position in the institution under investigation.
According to the head of business development for the institution, there were 233 employees nation-wide who fulfilled the inclusion criteria. These included 10 employees on the national management team, 27 clinic and/or business managers, 5 travelling clinic managers, 13 theatre unit managers, 47 managing medical practitioners, 47 managing dental practitioners, 36 pharmacy managers and 48 charge sisters. Surveys were sent to 193 management employees for the main study. This was due to managers surveyed as part of the pre-test not being included in the main study, as well as the inadvertent omission of the pharmacy managers from the electronic survey mailing list.

3.3.3 Research instrument:

The researcher performed a survey on the study population. McMillan and Schumacher (2001:602) define a survey as “the assessment of the current status, opinions, beliefs, and attitudes by questionnaires or interviews from a known population”. The survey took the form of a questionnaire which was developed by the researcher. Babbie (2007:246) defines a questionnaire as “a document containing questions and/or other types of items designed to solicit information appropriate for analysis.” The purpose of a questionnaire is to obtain facts and opinions about a phenomenon from people who are informed and have knowledge of it. Questionnaires are in all likelihood the most relied upon research instruments of all (de Vos et al., 2011:186). According to de Vos et al. (2011:186-190), the use of questionnaires has a number of advantages which include:

- A large amount of data can be gathered in a relatively short period and with limited resources.
- If validity and reliability are ensured, the researcher can be confident that the data produced is of a high quality.
- Anonymity offered may improve the level of honesty with which the participant answers the questions.

There are however also disadvantages which should be considered, namely:

- Response rate may be low.
- Respondents may not be representative of the population.
- Answers may be biased.
- Questions may be left unanswered.
• In the case of a misunderstanding, there is no way for the researcher to clarify it with the respondent.
• Literacy levels of the participants could hinder their ability to understand and in turn answer questions accurately.

There are a number of different types of questionnaires than can be used including mailed questionnaires, telephonic questionnaires, hand-delivered questionnaires, self-administered questionnaires, group-administered questionnaires and electronic questionnaires. In this study the researcher sent an electronic questionnaire, in the form of a web-based survey, to the study population. An advantage of this electronic method is that data are entered directly into an online database which limits mistakes and eliminates the need to distribute paper questionnaires. Additionally data can also be easily collected in remote areas by using internet, cell phone or 3G technologies and the data are transmitted to a central database allowing immediate access (de Vos et al., 2011:189-190).

According to Botma et al. (2010:134), the development of a valid and reliable questionnaire takes skill, and careful consideration should be given to the content covered and the way in which questions are formulated. An in-depth literature review was undertaken by the researcher to assist in the development of the questionnaire. A review of the literature gives the researcher a clearer understanding of the nature and meaning of the problem that has been identified (de Vos et al., 2011:134). According to Grinnell and Unrau (2005:46) it creates a foundation for the research, based on existing knowledge and previous research. De Vos et al. (2011:137-140) state that a literature review involves the scrutiny of all relevant sources of information of which the most relevant are:

• Standard reference materials
• Computer-accessible databases
• The internet
• Scholarly books
• Articles in professional journals
• Personal interviews with authorities
• Research reports, dissertations and monographs
• Presentations at conferences, symposia and workshops
• Public documents and records of public gatherings
• Newspapers, magazines and periodicals
• Radio and television broadcasts

The researcher predominantly made use of computer-accessible databases such as EBSCOHOST, Pubmed and ScienceDirect to access information from peer-reviewed journal articles. In addition, internet sources outside of these databases were utilized predominantly through the Google Scholar search engine. Searches included:

- “GP/health worker/doctor views/perceptions/knowledge of universal health coverage/health reform/national health service/national health insurance”
- “doctors/health workers attitudes towards national health insurance”
- “doctors attitudes towards universal health”
- “health workers’ perceptions of national health service”

(Please note that a backspace denotes an individual phrase for which a specific search was done with each possible combination of subsequent phrases related to it.)

Headings pertaining to the research topic that were garnered from the literature review were identified and incorporated into the questionnaire. Owing to the fact that very little research had been done in the field of healthcare managers’ views towards the NHI, the questionnaire based on these headings was developed by the researcher. De Vos et al. (2011:238-239) assert that literature represents only a section of the knowledge of people involved in the specific field and that direct contact with experts can be helpful as they can be an excellent source of knowledge. In developing the questionnaire, the researcher incorporated the assistance of his supervisor, co-supervisor, statistician, an expert on healthcare systems and an expert on the legislation and implementation of public healthcare programmes in the USA. The questionnaire comprised of three sections with a voluntary comments section at the end of section C.

**Section A: Biographical Details**

Biological details including “Age”, “Gender”, “Education”, “Management position at your institution” and “Years of employment/consultation at your institution” were obtained. It was not compulsory for the respondents to fill in biographical details in order to complete the questionnaire.
Section B: Knowledge of the NHI

Section B consisted of four items which investigated knowledge of the NHI, specifically the Green Paper on the NHI. The section also incorporated three closed questions and one question using a five-point Likert scale. The five degrees on the Likert scale were “strongly disagree”, “disagree”, “neutral”, “agree” and “strongly agree”.

Section C: Views on the NHI

Section C consisted of 27 statements using the same five-point Likert scale in Section B to assess views of the participants on the NHI. This section was divided into seven sub-headings as follows:

2. Capacity of the State to successfully implement the NHI: Six items.
3. Government engagement with the medical fraternity during the planning phase of the NHI: Six items
4. Quality of care delivery: Two items
5. Remuneration: Three items
6. Autonomy: Three items
7. Job performance: Three items

Comments Section:

Additional data were gathered by means of a comments box which was included at the end of each questionnaire. It was provided for the participants to include any views on the NHI which they had. There was no limit as to the amount that a respondent could write in comments box. Completion thereof was not compulsory in order for participants to submit the questionnaire.

3.3.4 Data collection method:

According to Polit and Beck (2008:338), the subject of interest that is being researched must be turned into data and the quality of the data collection is vital in ensuring the accuracy of the research. The researcher first presented a research proposal to the NMMU’s Department of Nursing Science’s Departmental Research Committee. The proposal was then approved by the Faculty Research Technology and Innovation (FRTI) committee and the Faculty Post
Graduate Students Committee (FPGSC). Ethical permission was obtained from the NMMU Research Ethics Committee (Human).

With the proposal having been approved by all the relevant bodies at NMMU, the researcher then sent a formal letter requesting permission to conduct the study to the head of business development for the institution under investigation. Subsequently the umbrella organization under which the investigated institution falls also learned of the research being conducted and requested the researcher to also apply for their permission. This process was followed and permission was granted.

The researcher’s original intention was to obtain the personal electronic mail addresses of the entire study population for the purpose of sending each member the online questionnaire directly. The head of business development however advised that she would send the electronic mails on the researcher’s behalf instead, for the purposes of confidentiality. The institution was wary of the researcher having access to the recipient group’s electronic mail addresses. The researcher agreed to this and the members of the study population were then sent electronic mails by the head of business development with the ‘Permission letter to participant’ requesting their consent to participate in the study and the permission to send them the survey. A NMMU in-house computer program was used whereby the questionnaire was attached to the electronic mail as an online link. The head of business development additionally undertook to assist the researcher by informing the clinic managers at every facility of the study by electronic mail, prior to the distribution of the surveys. This was in order that potential participants might be motivated to participate by their respective clinic managers with the goal of ultimately increasing response rates. In addition, reminder electronic mails were distributed weekly to potential participants by the head of business development over a period of two months. The responses of the participants were automatically stored in a password-protected database accessible only to the researcher, and only for the purposes of data analysis.

3.3.5 Pre-test:

A pre-test tests aspects of the study such as the useability of the research instrument and is normally done on a few participants that meet the inclusion criteria. This is in order to determine whether instructions in the research instrument are clear, whether there is any ambiguity in the instrument and if there are any potential embarrassing or culturally sensitive
issues present in the instrument (Botma et al., 2010:275). The pre-test was conducted amongst the five healthcare management personnel at the researcher’s place of work (a healthcare facility forming part of the healthcare institution under investigation, in Port Elizabeth, South Africa). The five participants included a clinic manager, pharmacy manager, managing medical practitioner, managing dental practitioner and charge sister. This ensured that a large proportion of the management disciplines within the institution were incorporated in the pre-test. The researcher also had personal access to the pre-test participants which allowed ease of dialogue between them and the researcher, as de Vos et al. (2011:241) imply that the researcher needs to have a conversation with the participants of the pre-test to determine issues which may arise in the questionnaire. Feedback regarding the aspects that the questionnaire tested and its user-friendliness was positive. The pre-test participants had no difficulty in understanding any aspects of the questionnaire and as a result no changes to the questionnaire were suggested. Consequently no changes to the questionnaire were made by the researcher. As per Botma et al. (2010:275) the findings from the pre-test were not included in the main study. This in order to protect the anonymity and confidentiality of the pre-test participants as the researcher had to know their identity to allow for direct dialogue.

3.3.6 Data analysis:

Data analysis entails the organisation of the collected data into principal parts in order to obtain answers to research questions. This analysis involves the categorising, ordering, manipulating and summarising of data (de Vos et al., 2011:249).

3.3.6.1 Quantitative data analysis:

The quantitative data analysis was carried out by a statistician. The statistician made use of Microsoft Excel, Statistica and SPSS Statistics to analyse the data. Descriptive and inferential statistics were used to analyse the collected quantitative data. Descriptive statistics are used to describe the study population (Botma et al., 2010:148). The descriptive statistics used were both univariate and bivariate in nature. Univariate analysis is the analysis of single variables in a data set for the primary purpose of description which allows the researcher to make inferences about the larger population from which the sample was drawn. Measures of descriptive statistics typically used to summarize univariate data include frequency distributions, measures of central tendency and measures of variability (Botma et al.,
Bivariate analysis refers to the analysis of two variables simultaneously in order to determine the empirical relationship between them (Botma et al., 2010:160). Bivariate correlation tests can be used to determine correlations between different variables. Correlations refer to the measures of relationships between variables and can show whether two variables are related and if so, to what degree. Correlation does not imply that one variable causes another but merely that there is a relationship between the variables (Botma et al., 2010:163-165). In this study the statistician used Pearson product-moment ($r$) correlations to measure inter-variable correlation. According to Burns and Grove (2005:487) the general guidelines for interpreting the $r$ value are as follows:

- Weak linear relationship: 0.1-0.29
- Moderate linear relationship: 0.30-0.50
- Strong linear relationship: > 0.50

According to Gravetter and Wallnau (2009:534), the correlations are statistically significant at a 0.05 level if $r$ is greater than or equal to 0.248 and practically significant if $r$ is greater than or equal to 0.300. Thus correlations are both statistically and practically significant if $r$ is greater than or equal to 0.300.

Inferential statistics refer to statistical methods that permit inferences on whether the results obtained in the sample population would be likely to occur in the larger population (Botma et al., 2010:166-167). There are two specific applications for inferential statistics, namely the estimation of population parameters and hypothesis testing. For estimating population parameters, estimates of points or intervals in the population can be made based on the descriptive statistics already presented (Botma et al., 2010:170-171). Hypothesis testing is another way of making inferences from the sample to the population and is a process which starts with a researcher’s assumption about the properties of some of the study variables in a population which results in their testing the credibility of this assumption based on the data obtained from the sample. Hypotheses are commonly tested about the two location parameters, namely means and proportions, as well as about relationships between variables. Commonly tested hypotheses are as follows:

- Hypotheses about single population means.
- Hypotheses about the difference between two or more population means.
- Hypotheses about single population proportions.
- Hypotheses about the difference between two or more population proportions.
• Hypotheses about the relationship between two variables.

In each case two hypotheses are formulated namely a null hypothesis (Ho) and an alternative hypothesis (Ha). A null hypothesis is used to state the “no difference” or “no correlation” scenario and the alternative hypothesis to state that there is a difference or correlation in the case that the null hypothesis is rejected (Maree, 2011:203). In this study hypotheses were made about single population means and were tested using the $t$-test. Botma et al. (2010:173) state that the $t$-test is used by researchers to investigate the differences in group means. The assumptions for the $t$-tests are as follows:

• Interval or ratio data.
• A normal distribution.
• Homogeneity in the case of a small sample. In this case the hypothesis is non-directional and assumes an extreme score in either tail of the curve and the analysis is therefore referred to as a two-tailed test of significance.

By using probability values (p-values) and Cohen’s $d$ values it was also possible to rank the degree of positivity of the respondents towards each heading. The $p$-value indicates statistical significance (Maree, 2007:207). The term statistical significance is used to indicate that the result obtained by data analysis was meaningful and not due to chance. These tests of significance are carried out on what is termed a “level of significance” and in practice the level of significance is normally at a $p$-value of 0.01 or 0.05 (de Vos et al., 2008:274). In this case a value of $p<0.05$ was used. This means that for every $p$-value of less than 0.05 there was a greater than 95% chance that the result was due to the influence of an independent variable or combination of independent variables, and not due to chance, which is a powerful assertion. A $p$-value of 0.05 or greater would have meant that the result produced could have been due to chance (de Vos et al., 2008:274-275). However according to Maree (2007:210) statistical significance is limited because of the influence that the size of a sample can have on it. This problem was overcome by the calculation of Cohen’s $d$ values which indicate practical significance or effect size. The Cohen’s $d$ value is a standardised, scale-free measure of the magnitude of the difference or correlation being tested and is unaffected by the size of the sample (Maree, 2007:210-211). According to Gravetter and Wallnau (2009:264), Cohen’s $d$ values can be interpreted as follows: A value of 0.80 and greater indicates a strong effect size, 0.50 – 0.79 indicates a medium effect size, 0.20 – 0.49 indicates a small effect size and
values less than 0.20 indicate an effect size that is not significant. These interpretation intervals were used in this study.

3.3.6.2 Qualitative data analysis:

The researcher analysed the qualitative data from the comments section according to the interpretive analysis of Terre Blanche, Durrheim and Kelly (2006) in Botma et al. (2010:226-227). The five steps incorporated in this approach are:

- Familiarisation and immersion.
- Development of themes.
- Coding.
- Elaboration.
- Interpretation and checking.

The data were also coded and analysed by an independent coder. The researcher and independent coder then met and discussed the analysis of the data by both parties and consensus was reached. This was to ensure qualitative reliability and validity as indicated by Botma et al. (2010:231-232). The researcher presented this qualitative data as part of the findings.

3.4 Methods to ensure study quality:

When using original measuring instruments, as in this study, the validity and reliability of the research instrument must be discussed (de Vos et al., 2011:110).

3.4.1 Validity:

Validity gives an indication of whether the conclusions made by the study are justified based on its design and interpretation. Any threat to validity could be the reason for an incorrect inference (Botma et al., 2010:174). There are a number of different types of validity including face validity, content validity, criterion validity and construct validity (de Vos et al., 2011:172-177).

Face validity is more superficial in nature since it is concerned with what the research instrument “appears” to measure. Content validity is concerned with the representativeness of
the content of the research instrument and answers the following questions: “Is the instrument really measuring the concept we assume it is?” and “Does the instrument provide an adequate sample of items that represent that concept?” (de Vos et al., 2011:173). According to Rubin and Babbie (2001:194) content validity is established on the basis of judgements by researchers or other experts on whether the measure covers all the facets that make up the concept. Monette, Sullivan and DeJong (2002:115) refer to this aspect as “jury opinion” and state that although it is still subjective in nature, it is relevant due to the fact that there are more people to check on any bias or misinterpretation. The researcher’s supervisor, co-supervisor and statistician were all involved in assisting the researcher in the development of the study questionnaire to ensure validity. Content validity was further ensured by the researcher obtaining the assistance of two relevant experts (one an expert on healthcare systems and the other on expert in the legislation and implementation of public healthcare programmes in the USA) who assessed the questionnaire and suggested changes.

3.4.2 Reliability:

Reliability refers to the extent to which repeated application of the same research instrument consistently yields the same or similar results under similar circumstances for the same population. It is mainly concerned with how well something is being measured as opposed to what is being measured. Hence, the more reliable the research instruments and observations are, the more consistent and dependable the results will be (de Vos et al., 2011:177-178). Internal consistency reliability was used in this research. This reliability is based on a high degree of similarity among the items of an instrument which intends to measure a certain construct. Each item should measure this common construct. The measure of this degree of similarity gives an indication of the internal reliability of the research instrument (Maree, 2007:216).

Cronbach’s alpha coefficient was used to measure the internal reliability or consistency within each heading. Cronbach’s alpha coefficient is based on inter-term correlations. There is not consensus among statistics practitioners about how Cronbach’s alphas should be interpreted but typically a score of 0.80 and greater is classified as falling within the “Excellent” range, 0.70 – 0.79 indicates a “Good” score, 0.60 – 0.69 indicates an “Acceptable” score, 0.50 – 0.59 indicates a “Poor” score and a score less than 0.50 is deemed to fall within the “Unacceptable” range. These interpretation intervals were used by the
researcher in this study at the suggestion of the statistician that analysed the quantitative data. Thus, items that are strongly correlated to one another will have high internal consistency and the Cronbach’s alpha coefficient will be close to one whereas items that do not closely correlate will have a Cronbach’s alpha coefficient closer to zero (Maree, 2007:216).

3.5 Research ethics:

De Vos et al. (2011:114) define ethics as “a set of moral principles which is suggested by an individual or group, is subsequently widely accepted, and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students”. Ethics should be an integral part of every phase and aspect of any research (Botma et al., 2010:4).

The principles of informed consent, privacy and anonymity adapted from de Vos et al. (2011:117-121) were applied in the following ways in the study:

3.5.1 Informed consent:

Informed consent refers to the strategy employed to ensure that the participation of the participant is voluntary and that harm is avoided at all costs (Babbie, 2007:64). Each participant received a letter by electronic mail requesting their permission to participate in the study. This letter explained the purpose of the study, how the data would be captured and used, as well as the contact details of the researcher in case clarification regarding any parts of the questionnaire was needed. It was also communicated that the necessary ethical clearance had been obtained from the NMMU Research Ethics Committee (Human). Participants were also informed that a completed and submitted online questionnaire would imply that they had given their consent to participate in the study. Permission to do the research was also obtained by the institution employing the participants. This permission was granted by the head of business development at the institution and the research committee of the umbrella body under which the institution operates.

3.5.2 Privacy:

Privacy relates to the personal privacy of the participant and confidentiality relates to the handling of any data in a confidential manner (de Vos et al., 2011:119). Privacy was ensured
by excluding questions of an intrusive or sensitive nature in the research instrument. Obtaining informed consent as well as voluntary participation in the study further enhanced the privacy of the participants.

3.5.3 Anonymity:

Anonymity implies that no person, including the researcher, knows to whom any responses belong (Botma et al., 2010:17). Anonymity in this study was ensured by way of not providing any space for participants to include their names in the biographical section of the questionnaire. In addition, the biographical section of the questionnaire was entirely voluntary and not imperative for the successful completion of the survey. Furthermore, completed questionnaires remained anonymous as the online questionnaire was designed to appreciate participant anonymity, i.e. completed questionnaires that were stored in the database had no electronic mail reference to them ensuring that no-one, including the researcher, knew who responses came from.

3.6 Conclusion:

In this chapter the research methodology was discussed. A quantitative research design was used. A census survey was conducted among the study population using an electronic questionnaire. Quantitative data were analysed using descriptive and inferential methods. Qualitative data were coded, elaborated and interpreted. Various methods were incorporated into the study to ensure validity and reliability. Ethical considerations including informed consent, privacy and anonymity were ensured.
Chapter 4: Results and Discussion

4.1 Introduction:

In this chapter the empirical results of the data are presented and analysed. The main body of data was of a quantitative nature. Qualitative data were also gathered by means of a comments box at the end of the questionnaire in which respondents could express any views pertaining to the NHI as they wished.

4.2 Response rate:

The survey was sent electronically to 193 healthcare managers in the organization under investigation. The deviation from the original study population of 233 was due to the fact that participants of the pre-test were not included in the main study, as well as the inadvertent omission of the pharmacy managers from the electronic mailing list by the institution’s head of business development. As a result, the views of pharmacy managers did not form part of the study, a situation which was beyond the control of the researcher. There were 63 responses which represented a 33% response rate.

4.3 Quantitative data:

4.3.1 Section A: Demographic data:

Descriptive statistics were used to summarize the demographic data in Section A of the questionnaire. Demographic data were obtained for the following variables: Gender, Age, Education, Management position at your institution and Years of employment/consultation at your institution. It is to be noted that for the purpose of privacy and anonymity the completion of the demographic data section was voluntary.
**Gender:**

Of the 59 respondents who revealed their gender, 21 (36%) were male and 38 (64%) female. The data are summarized in table 1:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>21</td>
<td>36%</td>
</tr>
<tr>
<td>Male</td>
<td>38</td>
<td>64%</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 1: Gender distribution of respondents (n=59)*

**Age:**

Of the 63 respondents, 7 (11%) were in the 25-34 age category, 15 (24%) in the 35-44 age category, 21 (33%) in the 45-54 age category, 16 (25%) in the 55-64 age category and four (6%) were over the age of 64. The data are summarized in table 2:

<table>
<thead>
<tr>
<th>Age category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>7</td>
<td>11%</td>
</tr>
<tr>
<td>35-44</td>
<td>15</td>
<td>24%</td>
</tr>
<tr>
<td>45-54</td>
<td>21</td>
<td>33%</td>
</tr>
<tr>
<td>55-64</td>
<td>16</td>
<td>25%</td>
</tr>
<tr>
<td>Over 64</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 2: Age distribution of respondents (n=63)*

**Education:**

Of the 63 respondents, five (8%) had a grade 12 or equivalent as their highest qualification, 26 (41%) a National Certificate or equivalent, 19 (30%) a Bachelor’s degree and 13 (21%) a postgraduate degree. The data are summarized in table 3:

<table>
<thead>
<tr>
<th>Qualification category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 12 Or Equivalent</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>National Certificate Or Diploma</td>
<td>26</td>
<td>41%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>19</td>
<td>30%</td>
</tr>
<tr>
<td>Postgraduate Degree</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 3: Distribution of respondent highest qualifications (n=63)*
Management position at institution:

Of the 61 respondents, four (7%) of respondents were in primary care (top) management, five (8%) business managers, nine (15%) clinic managers, 14 (23%) charge sisters, six (10%) theatre unit managers, 13 (21%) medical managing practitioners (doctors) and 10 (16%) dental managing practitioners (dentists). As already stated, pharmacy managers did not receive the survey, which accounts for the 0% response rate among them. There was also a 0% response rate among travelling clinic managers. The data are summarized in table 4:

<table>
<thead>
<tr>
<th>Management position</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care management team member</td>
<td>4</td>
<td>7%</td>
</tr>
<tr>
<td>Business manager</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>Clinic manager</td>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>Charge sister</td>
<td>14</td>
<td>23%</td>
</tr>
<tr>
<td>Pharmacy manager</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Theatre unit manager</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Travelling clinic manager</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Medical managing practitioner</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>Dental managing practitioner</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 4: Distribution of respondent management position (n=61)*

Years of employment/consultation at institution:

Of the 63 respondents, 3 (5%) had been employed by the institution for less than one year, 10 (16%) for 1-4 years, 13 (21%) for 5-9 years, 27 (43%) for 10-19 years and 10 (16%) for more than 19 years. The data are summarized in table 5:

<table>
<thead>
<tr>
<th>Years of employment/consultation</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 1 Year</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>1-4 Years</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>5-9 Years</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>10-19 Years</td>
<td>27</td>
<td>43%</td>
</tr>
<tr>
<td>More Than 19 Years</td>
<td>10</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 5: Distribution of respondent years of employment/consultation at institution (n=63)*

It is worth noting that 43% of respondents had been employed at the institution for 10-19 years and a combined 80% for five years and more. This indicates that these employees have a strong institutional connection and thus responses to questions which have institutional
implications such as those pertaining to NHI communication and training give the researcher a good idea of the institutions’ NHI preparedness.

4.3.2 Section B: Knowledge of the NHI

Section B dealt with knowledge of the National Health Insurance and sought to specifically investigate the familiarity of the respondents with the Green Paper and their views towards it. It was compulsory for all of the respondents to fill in this section in order to successfully complete the questionnaire.

Sources of NHI information:

For the question pertaining to the sources of NHI information, respondents could choose multiple answers. Fifty six percent of NHI information was obtained from media, 37% from colleagues, 29% by word-of-mouth, 27% via professional communication, 21% by professional bodies and 11% by government communication. The data are summarized in table 6:

<table>
<thead>
<tr>
<th>Source of information</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>35</td>
<td>56%</td>
</tr>
<tr>
<td>Colleagues</td>
<td>23</td>
<td>37%</td>
</tr>
<tr>
<td>Word Of mouth</td>
<td>18</td>
<td>29%</td>
</tr>
<tr>
<td>Professional communication</td>
<td>17</td>
<td>27%</td>
</tr>
<tr>
<td>Professional bodies</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>Government communication</td>
<td>7</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 6: Sources of NHI information (n=63)

The data regarding sources of information obtained about the NHI correlate to the study by Surender et al. (2014:3) on views of the NHI from private practitioners which found that the majority of information regarding the NHI for these practitioners came via medical associations, discussions with colleagues and the media. In the case of this study the media seems to have played the dominant role in communication regarding the NHI. On the other end of the spectrum, government communication was low (11%) when compared to the other communication channels. One would expect that due to the fact that the NHI is being implemented by the South African government, this percentage would be higher.
Have you read the Green Paper on the NHI?:

Concerning the question “Have you read the Green Paper on the NHI?”, 55 (87%) of respondents had not while 8 (13%) had. The data are summarized in table 7:

<table>
<thead>
<tr>
<th>Green paper read?</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>55</td>
<td>87%</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 7: Distribution of respondents on whether or not they had they had read the Green Paper (n=63)

Considering the fact that the Green Paper is the most comprehensive government document on the NHI, one would expect that most healthcare practitioners in a management position would have read it which is not the case in this study. This would suggest that only a small percentage of respondents have an in-depth knowledge of the NHI.

Did the Green Paper influence your thinking towards the NHI?:

The question “Did the Green Paper influence your thinking towards the NHI?” was directed at the respondents who had read the Green Paper. Seven of the eight respondents who had read the Green Paper responded to this question. Three of the seven felt that reading the Green Paper had influenced their thinking towards the NHI.

Perceptions towards the Green Paper:

The question “The following best describes my perceptions towards the Green Paper” showed that 50% of the respondents who had read the Green Paper were negative towards it and the other 50% were neutral towards it. Consequently, none of respondents who had read the Green Paper had a positive attitude towards it. This shows that for the respondents who read the Green Paper, any negative preconceived perceptions towards the Green Paper were not changed by the reading thereof.
4.3.3 Section C: Views on the NHI

Section C dealt with questions on the NHI which were grouped according to headings that arose in the literature review. These headings were as follows:

1. Principles of universal healthcare
2. NHI implementation capacity
3. Government engagement with the medical fraternity during the planning phase of the NHI
4. Quality of care delivery
5. Remuneration
6. Autonomy
7. Job performance

The questions were in the form of a Likert scale with five response options for each statement, namely Strongly Disagree, Disagree, Neutral, Agree or Strongly Agree. It was compulsory for the respondents to respond to each statement in order to successfully complete the questionnaire.

4.3.3.1 Frequency distributions

The descriptive statistics in the form of frequency distributions for each heading are as follows:

1. Principles of universal healthcare:

The first four questions dealt with the heading “Principles of Universal Healthcare”. See table 8 for the frequency distributions of the data:
From this table it can be seen that 86% of respondents believe that all citizens should have equal access to quality healthcare. This view supports the study by Surender et al. (2014:1-9) on the views from private practitioners towards universal healthcare in South Africa which found that all clinicians held the view that in principle, healthcare should be available to the whole population (Surender et al., 2014:3).

Additionally, 87% of respondents felt that health prevention and promotion should be emphasized above a curative approach to health. There was thus a high degree of positivity towards these basic two tenets of universal healthcare.

However, two other basic characteristics of universal healthcare, namely the high level of government involvement and lack of consumer choice elicited a negative response with 55% disagreeing that government control of health systems in a progressive democracy is appropriate and 92% agreeing with the statement that consumer choice in healthcare is important. These two factors, which indirectly refer to state control, support the study by Surender et al. (2014:3) which found that most private sector GPs were ideologically opposed to the idea of a UK-style ‘nationalized’ system.

**2. NHI implementation capacity**

The heading “NHI implementation capacity” consisted of six questions. See the table 9 for frequency distributions of the data:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Government control of health systems is appropriate in a progressive democracy</td>
<td>2.43</td>
<td>2</td>
<td>15</td>
<td>20</td>
<td>32%</td>
<td>17</td>
<td>27%</td>
</tr>
<tr>
<td>1.2 All citizens should have equal access to quality health care</td>
<td>4.06</td>
<td>4</td>
<td>1</td>
<td>2%</td>
<td>2</td>
<td>3%</td>
<td>6</td>
</tr>
<tr>
<td>1.3 Health prevention and promotion should be emphasized above a curative approach to health</td>
<td>4.27</td>
<td>4</td>
<td>1</td>
<td>2%</td>
<td>2</td>
<td>3%</td>
<td>3</td>
</tr>
<tr>
<td>1.4 Consumer choice in health care is important</td>
<td>4.37</td>
<td>4</td>
<td>1</td>
<td>2%</td>
<td>0</td>
<td>0%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8: Frequency distributions: Principles of universal healthcare (n=63)
There were high levels of negativity towards the capacity of the Government to implement the NHI. Concerning the fiscal affordability of the NHI, only 10% of respondents believed it would be fiscally affordable. In a study on private sector perspectives on the NHI, Ramjee and Mcleod highlight the uncertainty regarding the fiscal affordability of the NHI among various role players in the private sector (Ramjee & Mcleod, 2010:187-188).

Regarding the human resource and infrastructural capacities of South Africa to successfully implement the NHI, only 15% of respondents believed that there are sufficient human resources and 11% that there are sufficient infrastructural resources. The same study by Ramjee and Mcleod found that private care stakeholders believed that there are constraints in these two areas, specifically in the area of human resources, with the major shortages in doctors and nurses the main concern (Ramjee & Mcleod, 2010:187).

Seventy seven percent of respondents believed that free healthcare would be abused by patients. A study by Moosa et al. (2012:796) on how South African GPs might choose to deal with cost implications of the NHI found that these GPs were concerned with ‘consumer moral hazard’ – the possibility that patients would consult them for trivial reasons because it would be without cost.

Eighty three percent of respondents believed that equitable allocation of patients to healthcare providers would be problematic. This supports sentiments expressed by GPs in the study by Surender et al. (2014:5) and Ramjee and Mcleod (2010:184-185).
Eighty one percent believed that facility accreditation would be challenging. This negative sentiment has strong implications specifically towards the management capacity and challenges faced by the government.

3. Government engagement with the medical fraternity during the planning phase of the NHI:

The heading “Government engagement with the medical fraternity during the planning phase of the NHI” consisted of 6 questions. See table 10 for frequency distributions of the data:

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 I have received adequate communication about the NHI from the Government</td>
<td>1.81</td>
<td>2</td>
<td>23</td>
<td>37%</td>
<td>30</td>
<td>48%</td>
<td>9</td>
</tr>
<tr>
<td>3.2 I am in need of training in preparation for the NHI</td>
<td>3.81</td>
<td>4</td>
<td>2</td>
<td>3%</td>
<td>3</td>
<td>5%</td>
<td>11</td>
</tr>
<tr>
<td>3.3 Health care workers in management positions should receive additional training in economics and management</td>
<td>3.95</td>
<td>4</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>6%</td>
<td>9</td>
</tr>
<tr>
<td>3.4 The views of the medical fraternity have been taken into consideration in the decision-making process</td>
<td>2.13</td>
<td>2</td>
<td>18</td>
<td>29%</td>
<td>27</td>
<td>43%</td>
<td>12</td>
</tr>
<tr>
<td>3.5 I am willing to actively participate in the NHI</td>
<td>3.32</td>
<td>3</td>
<td>3</td>
<td>5%</td>
<td>8</td>
<td>13%</td>
<td>22</td>
</tr>
<tr>
<td>3.6 I have an important role to play in the implementation of the NHI</td>
<td>3.35</td>
<td>3</td>
<td>3</td>
<td>5%</td>
<td>5</td>
<td>8%</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 10: Frequency distributions: Government engagement with the medical fraternity (n=63)

Training regarding the NHI implementation is lacking from the respondent’s point of view with 85% feeling that the training they had received in this area so far was inadequate and 74% believing that they were in need of more training regarding the NHI implementation. The respondents seem to value the importance of managerial training in preparation for the NHI with 79% believing that healthcare workers in management positions should receive additional training in economics and management.

A large percentage (72%) of respondents believed that the views of the medical fraternity had not been taken into consideration in the government’s decision-making process regarding the implementation of the NHI. This corresponds to views from the private sector in studies by Ramjee and Mcleod (2010:183-184) and Surender et al. (2014:6).
At the same time there was a relatively high degree of neutrality (35% neutral) regarding the role of the respondents in the implementation process with 47% willing to actively participate in the NHI. Similarly, 46% believed that they had an important part to play in the implementation of the NHI and a high 41% were neutral on the matter. The researcher believes that the relatively low 18% who were unwilling to participate in the NHI and 13% who believed that they did not have an important role to play in its implementation is noteworthy and furthermore that the government has the opportunity to convert the high levels of neutrality in these areas into positive views if it can improve on its engagement with stakeholders in the private sector.

4. Quality of care delivery:

The heading “Quality of care delivery” consisted of two questions. See table 11 for frequency distributions of the data:

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 The NHI will undermine the quality of work that will be delivered by my institution</td>
<td>3.35</td>
<td>4</td>
<td>4</td>
<td>6%</td>
<td>13</td>
<td>21%</td>
<td>11</td>
</tr>
<tr>
<td>4.2 The NHI will have detrimental implications for preventative care due to abuse of the system by users</td>
<td>3.73</td>
<td>4</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>8%</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 11: Frequency distributions: Quality of care delivery (n=63)

Regarding implications on the quality of care delivery at the respondent’s institution, views were more balanced with 27% believing that the quality of work delivered wouldn’t be affected, 17% neutral on the matter and 56% believing that there would be detrimental effects on care delivery quality as a result of NHI implementation. Several GPs in the Surender et al. study voiced concerns over the ability to continue to provide quality of care to their existing private patients due to the constraints placed by the anticipated influx of new NHI patients (Surender et al., 2014:5).

Detrimental implications for preventative care is linked to the earlier question 2.4 “Patients will over-use health facilities for trivial reasons because it is free” and would be a possible result of over-use of facilities by patients. Sixty five percent of respondents believed that this would be the case, supporting views on question 2.4. Healthcare providers interviewed in a study done in Thailand by Thoresen and Fielding (2011:19-20) believed that the introduction
of its universal healthcare coverage had resulted in a decrease in quality of care delivery which in turn had a detrimental effect on preventative and primary healthcare. Respondents in the current study appear to believe that implementation of the NHI would result in the same problems.

5. Remuneration:

The heading “Remuneration” consisted of three questions. See table 12 for frequency distributions of the data:

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 The NHI will have adverse effects on the remuneration of health care workers</td>
<td>3.73</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>10%</td>
<td>17</td>
<td>27%</td>
</tr>
<tr>
<td>5.2 Health care providers should have the right to receive payments directly from patients</td>
<td>3.67</td>
<td>4</td>
<td>6</td>
<td>10%</td>
<td>6</td>
<td>10%</td>
<td>9</td>
</tr>
<tr>
<td>5.3 I am confident the government will pay health care providers on time</td>
<td>1.83</td>
<td>2</td>
<td>30</td>
<td>48%</td>
<td>20</td>
<td>32%</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 12: Frequency distributions: Remuneration (n=63)

The majority of respondents (63%) believed that implementation of the NHI would have adverse effects on the remuneration of healthcare workers. Regarding the right of healthcare providers to receive payments directly from patients for services rendered, 67% believed that this right should exist. The majority of private GPs interviewed in the Surender et al. study voiced similar concerns (Surender et al., 2014:4-5). Only 8% of respondents believed that the government would reimburse medical practitioners on time with a high 90% believing that this would not be the case. GPs in the Ramjee and Mcleod study also expressed concerns regarding the capacity of government to pay on time (Ramjee & Mcleod, 2012:797). This response also has direct management implications in terms of state capacity to implement the NHI due to the fact that timeous payment is a management issue.
6. Autonomy:

The heading “Autonomy” consisted of three questions. See table 13 for frequency distributions of the data:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 The NHI is a threat to the autonomy of health care workers</td>
<td>3.68</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>19</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>6.2 Competition between health care providers is healthy</td>
<td>3.67</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td>6.3 Development of private practice should be encouraged</td>
<td>4.17</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>38</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 13: Frequency distributions: Autonomy (n=63)

Regarding the possibility of the NHI being a threat to the autonomy, a relatively high 30% of respondents were neutral and 60% believed that healthcare worker autonomy would be threatened. There was similar sentiment with regards to the belief that competition between healthcare workers is healthy with 19% neutral and 70% agreeing with the statement. The Surender et al. study identified autonomy as one of the concepts that private practitioners were most passionate about due to the fact that it allowed them to control their own work-life balances and methods of practise. Many felt that autonomy had already been eroded due to the managed care systems being enforced by the medical aids, and the notion of state control synonymous with NHI implementation heightened fears that this would further compromise autonomy (Surender et al., 2014:5-7).

The notion that the development of private practice should be encouraged drew a high percentage (89%) that agreed with it. Interestingly, zero respondents were against this concept which shows a leaning towards a capitalistic approach to the health sector and a rejection of a socialized model. Surender et al. (2014:7) found that only a few GPs supported the idea of a state-led NHI and that most were opposed to the measures which they viewed as threatening to their commercial and professional interests.
7. Job performance:

The heading “Job performance” consisted of three questions. See table 14 for frequency distributions of the data:

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 The NHI will have an adverse effect on health worker motivation</td>
<td>3.73</td>
<td>4</td>
<td>0</td>
<td>7</td>
<td>11%</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>7.2 The NHI will increase the workloads of health care workers</td>
<td>4.16</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2%</td>
<td>9</td>
<td>14%</td>
</tr>
<tr>
<td>7.3 The NHI will lead to elevated stress levels in health workers</td>
<td>3.98</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>6%</td>
<td>9</td>
<td>14%</td>
</tr>
</tbody>
</table>

*Table 14: Frequency distributions: Job performance (n=63)*

Regarding the effect of the NHI on worker motivation, 68% felt that it would have a negative effect with 21% neutral on the matter. Sentiments regarding increased workloads and stress levels were more pronounced. For the question ‘The NHI will increase the workloads of healthcare workers’, 84% agreed with it with only one respondent (2%) believing that this would not be the case. For the question ‘The NHI will lead to elevated stress levels in health workers’, 78% felt that this would be the case. Increased workloads leading to subsequent elevated stress levels were concerns expressed by the GPs interviewed in the study by Surender *et al.* (2014:5-6). A study on the sources of strain and stress amongst health professionals in the Romanian healthcare system by Spanu *et al.* (2013:676) showed that turbulence in the health reform process of that country over two decades had led to increased stress levels for these health professionals. The researcher believes that if this were to be the case then it could have detrimental effects on the successful implementation of the NHI.

4.3.3.2 Cronbach’s alpha coefficients:

From the questionnaire, the statistician and researcher identified seven factors incorporating 22 of the 27 statements that have direct bearing on the NHI in South Africa. These were ‘Implementation Capacity’ (six items), ‘Government Engagement’ (two items), ‘NHI Buy-in’ (four items), ‘Quality of Care’ (two items), ‘Remuneration (two items), ‘Autonomy’ (three items) and ‘Job Performance’ (three items). The reworking of the original headings in this way was in order to test each factor that was directly related to the NHI in South Africa for internal consistency, ranking, hypothesis-testing and inter-variable correlations. Thus the first
heading in Section C, ‘Principles of Universal Healthcare’, was not considered for these tests as it only tested views on the broader heading of universal healthcare and not the NHI specifically. Additionally, the original heading ‘Government engagement with the medical fraternity during the planning phase of the NHI’, was further divided into two factors, namely ‘Government Engagement’ and ‘NHI Buy-in’. With the exception of a statement in ‘Remuneration’ which wasn’t considered due to its adverse effect on the internal consistency of the heading, the other headings remained unchanged. The following factors, each with correlating questions, were identified and tested:

**Implementation Capacity:**

The factor ‘Implementation Capacity’ contained statements regarding the capacity of the South African government to successfully implement the NHI and consisted of the following six statements:

- *The NHI is financially affordable for the State to implement.*
- *South Africa has sufficient human resources to successfully implement the NHI.*
- *South Africa has sufficient infrastructural capacity to successfully implement the NHI.*
- *Patients will over-use health facilities for trivial reasons because it is free.*
- *Equitable allocation of patients to healthcare providers will be problematic.*
- *Facility accreditation will be challenging.*

**Government Engagement:**

The factor ‘Government Engagement’ referred to statements pertaining to the adequacy of government engagement and communication with the medical fraternity regarding the planning and implementation of the NHI and consisted of the following two statements:

- *I have received adequate communication about the NHI from the Government.*
- *The views of the medical fraternity have been taken into consideration in the decision-making process.*
NHI Buy-in:

The factor ‘NHI Buy-in’ referred to the willingness of the respondents to actively participate in the process of NHI implementation and consisted of the following four statements:

- I am in need of training in preparation for the NHI.
- Healthcare workers in management positions should receive additional training in economics and management.
- I am willing to actively participate in the NHI.
- I have an important role to play in the implementation of the NHI.

Quality of Care:

The factor ‘Quality of Care’ referred to the perceived impact that the NHI would have on the quality of patient care as a whole and consisted of the following two statements:

- The NHI will undermine the quality of work that will be delivered by my institution.
- The NHI will have detrimental implications for preventative care due to abuse of the system by users.

Remuneration:

The factor ‘Remuneration’ referred to perceived effects that the implementation of the NHI would have on the remuneration of the respondents and consisted of the following two statements:

- The NHI will have adverse effects on the remuneration of healthcare workers.
- Healthcare providers should have the right to receive payments directly from patients.

The responses for the statement ‘Healthcare providers should have the right to receive payments directly from patients’ which was part of the original heading ‘Remuneration’ in the questionnaire was removed from the data set for calculating the ‘Remuneration’ score. This was due to the fact that it brought the Cronbach’s alpha coefficient (which measures internal reliability) for the relevant score to a level of 0.55 which is in the ‘Poor’ category and according to the statistician who assisted the researcher, too close to the ‘Unacceptable’ category.
Autonomy:

The factor ‘Autonomy’ referred to perceived effects the implementation of the NHI would have on the autonomy of the respondents and consisted of the following three statements:

- *The NHI is a threat to the autonomy of healthcare workers.*
- *Competition between healthcare providers is healthy.*
- *Development of private practice should be encouraged.*

Job performance:

The factor ‘Job Performance’ referred to perceived effects the implementation of the NHI would have on the job performance of the respondents and consisted of the following three statements:

- *The NHI will have an adverse effect on health worker motivation.*
- *The NHI will increase the workloads of healthcare workers.*
- *The NHI will lead to elevated stress levels in health workers.*

Table 15 displays the Cronbach’s alpha coefficient for the seven factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Implementation Capacity</td>
<td>0.82</td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>0.58</td>
</tr>
<tr>
<td>F3 NHI Buy-in</td>
<td>0.57</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>0.68</td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>0.61</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>0.66</td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*Table 15: Cronbach’s alpha values per factor analysed (n=63)*

The Cronbach’s alpha coefficient for the factor ‘Implementation capacity’ of 0.82 fell within the ‘Excellent’ range (0.80+). The factor ‘Job performance’ (0.75) fell within the ‘Good’ range (0.70-0.79). ‘Quality of care’, ‘Autonomy’ (0.66) and ‘Remuneration’ (0.61) fell within the ‘Acceptable’ range (0.60-0.69). ‘Government engagement’ (0.58) and ‘NHI buy-in’ (0.57) fell into the ‘Poor’ range (0.50-0.59).

Based on the Cronbach’s alpha coefficients, the headings all had an adequate level of internal consistency.
4.3.3.3 Responses to factors:

Once the internal consistency of the responses to each factor had been determined, the researcher and statistician used the data from each heading’s frequency table to gauge whether the responses towards each factor were strongly negative, negative, neutral, positive or strongly positive. Measures of central tendency in the form of means and standard deviations were also calculated. Table 16 illustrates the frequency distributions for the seven factors as well as the measures of central tendency for the seven factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>S.D</th>
<th>Very Negative [1.00 to 1.80)</th>
<th>Negative [1.80 to 2.60)</th>
<th>Neutral [2.60 to 3.40)</th>
<th>Positive [3.40 to 4.20)</th>
<th>Very Positive [4.20 to 5.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Implementation Capacity</td>
<td>1.97</td>
<td>0.68</td>
<td>27 43%</td>
<td>26 41%</td>
<td>7 11%</td>
<td>3 5%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>1.97</td>
<td>0.74</td>
<td>22 35%</td>
<td>35 56%</td>
<td>3 5%</td>
<td>3 5%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F3 NHI Buy-in</td>
<td>3.61</td>
<td>0.59</td>
<td>0 0%</td>
<td>4 6%</td>
<td>15 24%</td>
<td>35 56%</td>
<td>9 14%</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>2.46</td>
<td>0.87</td>
<td>10 16%</td>
<td>27 43%</td>
<td>13 21%</td>
<td>13 21%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>2.05</td>
<td>0.80</td>
<td>28 44%</td>
<td>21 33%</td>
<td>10 16%</td>
<td>4 6%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>2.16</td>
<td>0.60</td>
<td>17 27%</td>
<td>26 41%</td>
<td>20 32%</td>
<td>0 0%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>2.04</td>
<td>0.69</td>
<td>21 33%</td>
<td>29 46%</td>
<td>12 19%</td>
<td>1 2%</td>
<td>0 0%</td>
</tr>
</tbody>
</table>

Table 16: Frequency distributions: Factors (n=63)

By combining the categories ‘Very negative’ and ‘Negative’ and ‘Very positive’ and ‘Positive’ the data can be condensed to illustrate ‘Negative’, ‘Neutral’ and ‘Positive’ responses. Table 17 shows the frequency distributions for these three categories across the seven headings:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>S.D</th>
<th>Negative 84%</th>
<th>Neutral 50%</th>
<th>Positive 12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Implementation Capacity</td>
<td>1.97</td>
<td>0.68</td>
<td>53 84%</td>
<td>7 11%</td>
<td>3 5%</td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>1.97</td>
<td>0.74</td>
<td>57 90%</td>
<td>3 5%</td>
<td>3 5%</td>
</tr>
<tr>
<td>F3 NHI Buy-in</td>
<td>3.61</td>
<td>0.59</td>
<td>4 6%</td>
<td>15 24%</td>
<td>44 70%</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>2.46</td>
<td>0.87</td>
<td>37 59%</td>
<td>13 21%</td>
<td>13 21%</td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>2.05</td>
<td>0.80</td>
<td>49 78%</td>
<td>10 16%</td>
<td>4 6%</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>2.16</td>
<td>0.60</td>
<td>43 68%</td>
<td>20 32%</td>
<td>0 0%</td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>2.04</td>
<td>0.69</td>
<td>50 79%</td>
<td>12 19%</td>
<td>1 2%</td>
</tr>
</tbody>
</table>

Table 17: Frequency distributions: Factors (n=63)

From this data it can be concluded that the overwhelming response to headings posed in the questionnaire was negative. The most negative response was for the factor ‘Government engagement’ (90% negative) followed by ‘Implementation capacity’ (84% negative), ‘Job performance’ (79% negative), ‘Remuneration’ (78% negative), ‘Autonomy’ (68%) and
‘Quality of Care’ (59%). These negative views reflect the findings of Ramjee and Mcleod (2010:191), Surender et al. (2014:8) and Moosa et al. (2012:797).

However for the factor ‘NHI Buy-in’ there was a 70% positive response which indicates that despite the negative sentiments expressed regarding the other six factors, the respondents were still willing to actively engage in the process of NHI implementation. This supports the positive sentiments expressed regarding the basic tenets of universal healthcare in Q1.2 and Q1.3 in the questionnaire, namely ‘All citizens should have equal access to quality healthcare’ and ‘Health prevention and promotion should be emphasized above a curative approach to health’. Surender et al. (2014:8) found that all clinicians interviewed were of the view that, in principle, healthcare should be available to the whole population. Stakeholders in the private sector analysed in the study by Ramjee and Mcleod (2010:191) agreed that health reform in South Africa is much needed and long overdue.

Although the above results suggest that there was much negative sentiment regarding the implementation of the NHI, the respondents nevertheless agreed with the basic tenets of universal healthcare and were willing to participate in the implementation of the NHI. This indicates an acknowledgement of the need for change in the South African healthcare system. The majority of the negativity rather was directed towards the South African government and its perceived inability to competently implement, manage and administrate the NHI. The factors ‘Government Engagement’ and ‘Implementation Capacity’ which dealt with statements directly related to the state both had the lowest mean of 1.97. This indicates that these two factors displayed the highest levels of negativity among the factors tested. This supports the notion that the respondents have more of a problem with the governance of the NHI than the NHI as a model of health reform.
4.3.3.4 Factors ranked:

Using probability values (p-values) and Cohen’s d values it was possible to rank the degree of positivity of the respondents towards each heading. A value of \( p<0.05 \) was used to establish statistical significance.

The minimum effect size therefore used to determine practical significance was a Cohen’s d value of greater than or equal to 0.2. Table 18 shows the ranking of the factors based on the interpretation intervals for the Cohen’s d values:

<table>
<thead>
<tr>
<th>Variables Compared</th>
<th>Rank Var 1</th>
<th>Rank Var 2</th>
<th>n</th>
<th>Mean</th>
<th>S.D</th>
<th>t-value</th>
<th>d.f.</th>
<th>p-value</th>
<th>Cohen’s d</th>
<th>Statistical</th>
<th>Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3 NHI Buy-in</td>
<td>1</td>
<td>1</td>
<td>63</td>
<td>3.61</td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>2</td>
<td>2</td>
<td>63</td>
<td>2.46</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td>2.16</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td>2.05</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td>2.04</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td>1.97</td>
<td>0.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F1 Implementation Capacity</td>
<td>3</td>
<td>3</td>
<td>63</td>
<td>1.97</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18: Ranking statistics for factors – Descending (n=63)

Table 19 shows the results for statistical and practical significance when the means of the factors (which indicate level of positivity) are compared:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rank</th>
<th>Signif. Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3 NHI Buy-in</td>
<td>1</td>
<td>1</td>
<td>3.61</td>
<td>0.59</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>2</td>
<td>2</td>
<td>2.46</td>
<td>0.87</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>3</td>
<td>3</td>
<td>2.16</td>
<td>0.60</td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>3</td>
<td>3</td>
<td>2.05</td>
<td>0.80</td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>3</td>
<td>3</td>
<td>2.04</td>
<td>0.69</td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>3</td>
<td>3</td>
<td>1.97</td>
<td>0.74</td>
</tr>
<tr>
<td>F1 Implementation Capacity</td>
<td>3</td>
<td>3</td>
<td>1.97</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Table 19: Inferential ranking of factors (n=63)

When ‘NHI Buy-in’ which had the highest mean of 3.61 is compared to ‘Quality of Care’ which had the second highest mean of 2.46, the difference between the means is both statistically (\( p=0.000 \)) and practically (\( d=1.25 \)) significant. The same applies when ‘Quality of Care’ is compared to ‘Autonomy’, which had the third highest mean of 2.16 (\( p=0.002, \ d=0.39 \)). However when ‘Autonomy’ is compared to the remaining factors ‘Remuneration’, ‘Job performance’, ‘Government Engagement’ and ‘Implementation Capacity’, the differences in the means of these factors are neither statistically nor practically significant. Thus in terms of inferential ranking of the positivity of responses towards the factors, ‘NHI
Buy-in’ ranked first, followed by ‘Quality of Care’ and then the remaining five factors which all fell into the same group. Thus it can be inferred that the study population would be most positive towards the heading ‘NHI buy-in’, followed by ‘Quality of Care’ and then ‘Autonomy’, ‘Remuneration’, ‘Job performance’, ‘Government Engagement’ and ‘Implementation Capacity’ which all fell into the same ranking group as they were indistinguishable from each other on a statistical and practical level.

4.3.3.5 Hypotheses:

The following null hypothesis and alternative hypotheses were formulated for the perceptions of the study population towards the factors tested:

- For those factors with negative mean scores (sample M < 2.60) the hypotheses are:
  
  \[ \text{H}_0: \text{m} = 2.60 \]
  
  \[ \text{H}_1: \text{m} < 2.60 \]
  
  For the null hypothesis to be true in this case, the mean score for the factor being tested would not be significantly different from a mean score of 2.60. This would indicate that the participants would have a neutral perception towards the factor being tested. If however the mean score for the factor tested is significantly less than 2.60, the alternative hypothesis would be true, indicating a negative perception towards the factor tested.

- For those variables with positive mean scores (sample M > 3.40) the hypotheses are:
  
  \[ \text{H}_0: \text{m} = 3.40 \]
  
  \[ \text{H}_1: \text{m} > 3.40 \]
  
  For the null hypothesis to be true in this case, the mean score for the factor being tested would not be significantly different from a mean score of 3.40. This would indicate that the participants would have a neutral perception towards the factor being tested. If however the mean score for the factor tested is significantly more than 3.40, the alternative hypothesis would be true, indicating a positive perception towards the factor tested.

As stated in the research methodology, the t-test was used to test these hypotheses. A significance level of 95% (p=0.05) was used to determine statistical significance.
Table 20 summarizes the mean, standard deviation, $t$-value, $p$-value and Cohen’s $d$ value for the seven factors:

<table>
<thead>
<tr>
<th>Significant</th>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>$H_1$</th>
<th>$t$</th>
<th>$p$ (d.f.=62)</th>
<th>Cohen’s $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>F1 Implementation Capacity</td>
<td>1.97</td>
<td>0.68</td>
<td>$\mu&lt;2.60$</td>
<td>-7.43</td>
<td>&lt;.0005</td>
<td>0.94</td>
</tr>
<tr>
<td>Yes</td>
<td>F2 Government Engagement</td>
<td>1.97</td>
<td>0.74</td>
<td>$\mu&lt;2.60$</td>
<td>-6.78</td>
<td>&lt;.0005</td>
<td>0.85</td>
</tr>
<tr>
<td>Yes</td>
<td>F3 NHI Buy-in</td>
<td>3.61</td>
<td>0.59</td>
<td>$\mu&gt;3.40$</td>
<td>2.80</td>
<td>.003</td>
<td>0.35</td>
</tr>
<tr>
<td>No</td>
<td>F4 Quality of Care</td>
<td>2.46</td>
<td>0.87</td>
<td>$\mu&lt;2.60$</td>
<td>-1.28</td>
<td>.103</td>
<td>n/a</td>
</tr>
<tr>
<td>Yes</td>
<td>F5 Remuneration</td>
<td>2.05</td>
<td>0.80</td>
<td>$\mu&gt;2.60$</td>
<td>-5.50</td>
<td>&lt;.0005</td>
<td>0.69</td>
</tr>
<tr>
<td>Yes</td>
<td>F6 Autonomy</td>
<td>2.16</td>
<td>0.60</td>
<td>$\mu&lt;2.60$</td>
<td>-5.80</td>
<td>&lt;.0005</td>
<td>0.73</td>
</tr>
<tr>
<td>Yes</td>
<td>F7 Job Performance</td>
<td>2.04</td>
<td>0.69</td>
<td>$\mu&lt;2.60$</td>
<td>-6.45</td>
<td>&lt;.0005</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Table 20: One sample $t$-Tests: Bundle factors ($n=63$)

From this table, for the factors ‘Implementation Capacity’, ‘Government Engagement’, ‘Remuneration’, ‘Autonomy’ and ‘Job Performance’ the null hypothesis for negative perceptions was rejected due to the mean for each factor being significantly different to 2.60 ($p<0.005$ for all these factors). Thus for these factors the alternative hypothesis for negative perceptions, $H_1: \mu < 2.60$, was accepted, implying that the average population responses to these headings would be negative.

For the factor ‘NHI buy-in’ the null hypothesis for positive perceptions was rejected due to the mean of 3.61 which was significantly different from a mean of 3.40 ($p=0.003$) and the alternative hypothesis, $H_1: \mu > 3.40$, was accepted, implying that the average population responses for these headings would be positive.

For the factor ‘Quality of Care’ the null hypothesis for negative perceptions, $H_0: \mu = 2.60$, was accepted due to the proximity of the mean value of 2.46 to 2.60 which is not statistically significant at the 95% confidence level ($p = 0.103$). Therefore responses for the factor ‘Quality of Care’ responses were neither positive nor negative.
4.3.3.6 Correlations:

Table 21 illustrates the correlations between the seven factors:

<table>
<thead>
<tr>
<th>Factors</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>F4</th>
<th>F5</th>
<th>F6</th>
<th>F7</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 Implementation Capacity</td>
<td>-</td>
<td>.467</td>
<td>.211</td>
<td>.432</td>
<td>.576</td>
<td>.283</td>
<td>.535</td>
</tr>
<tr>
<td>F2 Government Engagement</td>
<td>.467</td>
<td>-</td>
<td>.157</td>
<td>.174</td>
<td>.468</td>
<td>.372</td>
<td>.251</td>
</tr>
<tr>
<td>F3 NHI Buy-in</td>
<td>.211</td>
<td>.157</td>
<td>-</td>
<td>.246</td>
<td>.248</td>
<td>.164</td>
<td>.175</td>
</tr>
<tr>
<td>F4 Quality of Care</td>
<td>.432</td>
<td>.174</td>
<td>.246</td>
<td>-</td>
<td>.388</td>
<td>.484</td>
<td>.657</td>
</tr>
<tr>
<td>F5 Remuneration</td>
<td>.576</td>
<td>.468</td>
<td>.248</td>
<td>.388</td>
<td>-</td>
<td>.336</td>
<td>.670</td>
</tr>
<tr>
<td>F6 Autonomy</td>
<td>.283</td>
<td>.372</td>
<td>.164</td>
<td>.484</td>
<td>.336</td>
<td>-</td>
<td>.429</td>
</tr>
<tr>
<td>F7 Job Performance</td>
<td>.535</td>
<td>.251</td>
<td>.175</td>
<td>.657</td>
<td>.670</td>
<td>.429</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 21: Pearson Product Moment Correlations - F1 (Implementation Capacity) to F7 (Job Performance)

Considering the guidelines for interpreting the strength of the linear relationships based on the Pearson’s product-moment correlation \( (r) \) values, the results indicate that there were strong linear relationships between the factors ‘Implementation Capacity’ and ‘Remuneration’ \( (r = 0.576) \), ‘Implementation Capacity’ and ‘Job Performance’ \( (r = 0.535) \), ‘Quality of Care’ and ‘Job Performance’ \( (r = 0.657) \) and ‘Remuneration’ and ‘Job Performance’ \( (r = 0.670) \). Thus this would imply that positive scores for ‘Implementation Capacity’ would result in positive scores for both ‘Remuneration’ and ‘Job Performance’, with the same being true of negative scores for the same factors. This is true for all the above-mentioned headings with strong Pearson product-moment correlation values. As expected, the factor ‘NHI Buy-in’, which elicited the only positive mean response, showed weak linear relationships of less than \( r < 0.29 \) with every other factor.
4.4 Comments section:

Ten respondents added comments to the box provided at the end of the questionnaire. The researcher analysed the data according to the interpretive analysis of Terre Blanche, Durrheim and Kelly (2006) in Botma et al. (2010:226-227). The five steps incorporated in this approach are:

- Familiarisation and immersion
- Development of themes
- Coding
- Elaboration
- Interpretation and checking

Using this approach the researcher identified the following three main headings:

- Views towards the NHI as a healthcare model
- Views regarding implications of the NHI
- Views towards the government’s role in the NHI

4.4.1 Views towards the NHI as a healthcare model:

The majority of the responses which matched this heading were positive towards the NHI as a healthcare model. Respondent 16 believed that “NHI must be implemented as soon as possible” while respondent 48 stated “I do believe that it is a good concept…” These views support similar views toward the concept of universal healthcare expressed in the quantitative data. There were however some negative sentiments. Respondent 32 believed that “NHI is failing in other countries”. The idea of the NHI as a good concept was not directly tested in the questionnaire and so these sentiments add value to the study.

4.4.2 Views regarding implications of the NHI:

The majority of respondents displayed a degree of uncertainty regarding the implications of the NHI. Respondent 6 wrote that “professionals don’t know what to expect” while respondent 31 admitted that “…we on the nursing level know very little about the NHI.” Fear is possibly generated by this uncertainty as respondent 31 wrote that “most of us are scared by it.”
Concerns expressed regarding the NHI were as follows:

- **Loss of professionals**: Respondent 58 wrote that implementation of the NHI “might lead to another outflow of skills from this country.”

- **Lack of government communication**: Respondent 6 stated that “no details of implementation, remuneration of professionals, admin procedures, financing of NHI, etc, known.”

- **Uncertainty regarding the role of the private healthcare sector in the NHI**: Respondent 58 wrote that “the private healthcare sector and the staff supporting this sector will be unfavourably impacted. The inefficiency of the governmental healthcare system had to be dealt with through the overflow of patients to the private healthcare system…”

- **Increased workloads**: Respondent 31 expressed concern that “we have a very busy clinic and work very hard and are very worried about the additional work load and how it will affect our clinic.”

- **Remuneration**: Respondent 6 expressed concern over “no details of...remuneration of professionals…” while respondent 58 wrote that “the impact of billing and payments is something that is not even thought about.”

- **A drop in healthcare standards**: Respondent 1 observed “Look at the condition of State hospitals and clinics, they cannot even keep this in a properly clean working environment. Look at the service in all hospitals with BEE implemented. You cannot complain about service, there is none.” Respondent 53 wrote that the NHI will be a “watered-down system” and as a result “the people it should be serving will therefore be worse off…”

The concerns expressed regarding lack of government communication, uncertainty regarding the role of the private sector in the NHI, increased workloads, remuneration and a drop in healthcare standards reflect the responses toward these headings in the questionnaire and thus corroborate the quantitative data. Similar concerns were expressed by respondents in studies by Surender et al. (2014:1-9) and Ramjee and Mcleod (2010:179-194). The idea of the NHI possibly causing healthcare professionals to leave the country was not tested in the questionnaire and thus contributes to the study in the sense that it is another possible area of concern for the study population.
4.4.3 Views towards Government’s capacity to successfully implement the NHI:

A number of doubts were expressed regarding the government’s capacity to successfully implement the NHI. The following areas of concern were raised:

- **Management:** This area was the predominant concern raised by the respondents. Respondent 1 wrote “Look at the condition of State hospitals and clinics, they cannot even keep this in a properly clean working environment.” Respondent 6 felt that “besides SARS, no government department is functional, how will the Dept of Health cope?” Respondent 32 asserted that provincial and national government “can’t to date manage…the health system as it is.” Respondent 47 felt that “due to mismanagement…it will not work.” Respondent 48 wrote that “I am sceptical that our government is properly prepared…” Respondent 58 expressed concerns regarding the “inefficiency of the governmental healthcare system.”

- **Affordability:** Behind the heading of management, affordability was also a heading highlighted by a number of respondents. Respondent 1 wrote “Only a fraction of population are paying tax. It is not enough to provide healthcare for all. Nothing can be given to someone by the State that the State did not take from someone else.” Respondent 6 wrote “No details of…financing of NHI.” Respondent 32 wrote that the provincial and national government “can’t to date…fund the health system as it is: amongst others, the Free State health dept R700 million in the red and doctors not being paid for months all over the country.” Respondent 48 wrote that “I am sceptical that our government is…financially able to do this.” Respondent 53 wrote that “There is no money to properly implement the NHI.”

- **Corruption:** Respondent 47 wrote “Due to…corruption, it will not work.” Respondent 53 stated that the NHI would be a “system most probably full of corruption.”

The views expressed regarding government mismanagement and fiscal unaffordability reflect the responses to questions under the same headings in the questionnaire. Respondents in the study by Moosa et al. (2012:797) expressed similar concerns. The heading of government corruption was also not directly dealt with in the questionnaire, and sentiments expressed regarding the negative impact of corruption further add to the negative attitude towards the government’s role in the NHI and complement similar statements that deal with this heading.
4.5 Conclusion:

In this chapter the quantitative and qualitative data were presented and discussed. The quantitative data consisted of demographic data, data pertaining to knowledge of the Green Paper on the NHI and views on headings pertaining to the NHI. Descriptive and inferential statistics were used to analyse the quantitative data. The qualitative data garnered from the comments section of the questionnaire were also analysed and discussed so as to enrich the quantitative data obtained.

The results of the data generally supported views towards headings identified from the literature by respondents in those respective studies. The general consensus of the study by Ramjee and Mcleod (2010:179-194) on the perspectives of the private sector in South Africa towards the NHI found that despite differences in opinions on various aspects of the NHI by the private sector, respondents nevertheless agreed that reform is much needed and long overdue. This was corroborated by the empirical data of this study which suggested that although there was much negative sentiment regarding the implementation of the NHI, the respondents agreed with the basic tenets of universal healthcare and were willing to participate in the implementation of the NHI. This indicates the acknowledgement of the need for change in the South African healthcare system.

The majority of the negativity was directed towards the South African government and its perceived inability to competently implement, manage and administrate the NHI. The qualitative data indicate that this perception was due to the perceived mismanagement of the existing public healthcare system by the government. This suggests that the respondents had more of a problem with the governance of the NHI than the NHI as a conceptual model of health reform.

Negative views towards the NHI as a health reform model were due to the perceived socialist aspects of it, such as: the right of consumer choice in healthcare, competition between healthcare providers and the right of healthcare providers to receive direct payments from patients. The headings ‘Government engagement’ and ‘Implementation capacity’, which dealt with statements directly related to the state and its involvement in the NHI, ranked in the lowest group in terms of inferential ranking and both had the lowest mean of 1.97, which indicate the most negative responses on average.
Most of the concerns raised in the comments section of the questionnaire regarding the incapacity of the government were of a managerial nature. This highlights the importance of the opinions of healthcare managers in this matter and the value of the role that they would play in the successful implementation of the NHI. Views towards the government were similar to those identified in the studies by Moosa et al. (2012:795-797), Surender et al. (2014:1-7) and Ramjee and Mcleod (2010:179-194) in South Africa, as well as the international studies mentioned in the literature review.
Chapter 5: Conclusion and Recommendations

5.1 Introduction:

The significance or value of a study refers to the following eight aspects:

- Influence on the theoretical framework.
- Influence on the practice of the clinician.
- Influence on programs, methods or interventions.
- Influence on policy.
- Real-life practical problems.
- What will be improved.
- How it will be implemented (Pajares, 2007:7; Polit and Beck, 2004:132).

By condensing these different aspects, there are three broadly defined areas to which any study should aim to add value, namely knowledge (or research), practice and policy (Botma et al., 2010:285). In presenting the findings and recommendations that came from the research, the researcher kept these three aspects in mind. Another important aspect is the identification of study limitations in the discussion (Botma et al., 2010:312). These limitations will be identified.

The primary aim of this study was to better understand the views of healthcare managers working in a private healthcare institution in South Africa towards the implementation of the NHI. The purpose of this was to make recommendations that would assist the private healthcare institution under investigation to optimise the implementation of this process. In order to achieve this objective the study set out to do the following:

- Conduct a literature study to explore the concept of universal health coverage, health systems around the world, the background to the NHI in South Africa, previous research pertaining to universal coverage in other countries and studies in South Africa concerning the NHI. Managerial aspects were also included in the literature study.
- Conduct an online census survey among the healthcare managers of a private healthcare institution in South Africa.
- Analyse the data.
- Report and interpret the empirical results.
• Draw conclusions and provide recommendations based on these findings.

5.2 Summary of main empirical findings:

The empirical results of the findings can be summarized as follows:

• Views of the respondents regarding government engagement with the medical fraternity concerning the NHI were negative overall.
• Views of the respondents regarding the ability of the government to successfully implement the NHI were negative overall.
• Views of the respondents regarding the possible implications of the NHI on job performance, remuneration and autonomy were negative overall.
• Views of the respondents regarding implications of the NHI on quality of care in their institution were neutral overall.
• Views of the respondents regarding active participation in the implementation of the NHI were positive overall.

5.3 Recommendations:

5.3.1 Recommendations for private healthcare managers:

The researcher recommends that private healthcare managers familiarize themselves with the NHI. The study showed that a small proportion (13%) of the respondents had read the Green Paper on the NHI. It is not possible for any manager to inform, motivate and lead their staff if they are ill-informed of the reality of an eventual implementation of universal healthcare in South Africa in some or other form.

5.3.2 Recommendations for private healthcare institutions:

The researcher recommends that private healthcare institutions summarize the now available White paper on the NHI, distribute it to healthcare managers on all levels and encourage the familiarization with it.

The researcher recommends that private healthcare institutions hire relevant consultants with a knowledge of the NHI to train healthcare managers in aspects that have direct managerial
implications for the implementation of the NHI. The study showed that 74% of respondents felt that they were in need of training in preparation for the NHI.

The researcher recommends that private healthcare institutions either create a full-time job for a NHI specialist or task an existing manager by adding additional responsibilities regarding the NHI to their job description. Some of the tasks of this person would include the following:

- Monitor and stay current with NHI developments.
- Liaise with the government, relevant role-players and stakeholders regarding the NHI.
- Develop a policy document of the relevant institution towards the NHI. Fear associated with NHI uncertainty was one of the views identified in the qualitative data. The researcher believes that taking a definitive approach towards NHI readiness would help allay fear and uncertainty among healthcare managers.
- Develop a training program for the NHI that can be implemented for healthcare managers in-house.
- Regularly update healthcare managers within the institution and shareholders with developments in the implementation of the NHI.
- Familiarize healthcare managers and healthcare practitioners to the concept of social accountability and provide training on the implementation of this concept in healthcare delivery.

The researcher recommends that private healthcare institutions provide a platform for managers to engage and actively participate in issues pertaining to the NHI and institutional planning and preparedness for its implementation.

5.3.3 Recommendations for government:

The researcher recommends that the South African government strives to ensure that healthcare managers in the public healthcare system have the training and skill set required to competently implement policy. The study showed that the respondents were negative toward the ability of the government to successfully implement the NHI (Mean = 1.97). This included negativity toward aspects tested in the quantitative section that have managerial implications such as over-use of healthcare facilities, equitable allocation of patients to healthcare providers, facility accreditation and timeous payments by the state to service providers.
providers. Additional concerns identified in the qualitative data that have managerial implications were a perceived drop in standards and government corruption. The problems plaguing the existing public health seemed to be a reference point for the negative views as this issue was frequently mentioned in the qualitative data.

The researcher recommends that the government improves communication to the medical fraternity regarding the implementation of the NHI. The quantitative data showed that only 2% of respondents felt that government communication regarding the NHI up to that point had been adequate and it further showed that of the information that the respondents had been exposed to regarding the NHI, only 11% had been from the state. Issues in the qualitative data concerning lack of communication further supported the quantitative data.

The researcher recommends that the government ensures that it has the human resource capacity to successfully implement the NHI. This is based on the negative response to this issue in the questionnaire.

The researcher recommends that the government ensures that the implementation of the NHI is fiscally viable. This is based on fact that 79% of respondents felt that the NHI is not fiscally affordable.

5.4 Future research:

Recommendations regarding future research based on the results of this study are as follows:

The NHI is a process which is in its infancy and will continue to unfold over many years to come. Consequently it is an under-researched area and the researcher recommends that research into this area as a whole continues due to its importance to the future of the South African population as a whole.

The researcher recommends that further research be conducted in the relationship between healthcare management and universal healthcare systems. As far as the researcher could ascertain, research in this area was very limited.
5.5 Study limitations:

Study limitations identified by the researcher are as follows:

The views of respondents from this study cannot be definitively inferred to the South African private healthcare managers as a whole due to the fact that this study examined healthcare managers from a single private healthcare group in South Africa.

Findings made cannot be inferred to the pharmacy managers in this group due to an error in the electronic distribution of the questionnaires which was outside the researcher’s realm of control.

The qualitative data collected was voluntary in nature and limited due to the low response (16%) of respondents. This data did corroborate concepts identified in the quantitative section of the study and also added some new insights, but the low response rate and the influence that this had on the study must be acknowledged.

Due to the unique nature of the study topic, there was limited literature from similar studies to compare the findings of this study to.

5.6 Conclusion:

The aim of this study was to better understand the views of healthcare managers working in a private healthcare institution in South Africa towards the implementation of the National Health Insurance so that recommendations could be developed that would assist the private healthcare institution under investigation in the implementation of this process. The four main findings that the researcher believes are of consequence are the following:

- Lack of knowledge amongst private healthcare managers concerning the NHI.
- Poor communication from the government regarding the proposed NHI.
- High levels of negativity regarding the ability of the government to successfully implement the NHI.
- Strong willingness of private healthcare managers that were surveyed to actively participate in the NHI despite misgivings concerning other headings.

Consequently the researcher believes that these findings have implications both on practise and policy regarding the implementation of the NHI for private health institutions as well as
the state. Furthermore it is evident that further research is needed in this area. Among the myriad of factors that is going to ensure the success of the NHI in South Africa, strong management both from the public and private healthcare sectors is imperative for its success. There is thus a bilateral responsibility from both the state as well as the private sectors in ensuring the success of the NHI.

Regarding the responsibility of the private health sector, the researcher believes that a shift in thinking in this sector regarding the NHI is fundamental to its success and that the embracing of principles of universal healthcare, including the principle of social accountability, by this sector will facilitate this shift. Furthermore, the researcher believes that the urgency needed to be employed by private healthcare institutions in preparing for the NHI implementation at institutional level, which includes managerial aspects, cannot be overstated. The challenge lies in transforming the currently fragmented stakeholders in the South African healthcare system, with their associated attitudes of apathy and mistrust; lack of social accountability; lack of knowledge; and uncertainty regarding the NHI, into a unified, optimistic healthcare force with a simple, clear-cut vision and mission, namely to improve the lives of each and every South African citizen.
List of References:


ANC. 2010. Additional discussion documents. ANC National General Council, Durban, South Africa.


MOTSOALEDI, A. 2012. National Health Insurance – presentation on NHI pilot districts by Minister of Health (Dr Aaron Motsoaledi).


OGUNBANJO, G. 2013. What is the status quo of South Africa's National Health Insurance pilot project?: editorial. South African Family Practice, 55, 301-301.


Annexure 1: Research approval by the Faculty Postgraduate Studies Committee:

Copy to: 
Supervisor: Prof V Exner
Co-Supervisor: Mr K Toppa

Student number: 214306679

DR DA GREWAR
8 ISABEL VILLAS
GLADYS ROAD
PROVIDENTIA
PORT ELIZABETH
6070

19 June 2015

RE: OUTCOME OF PROPOSAL SUBMISSION

FINAL RESEARCH/PROJECT PROPOSAL:
THE IMPLEMENTATION OF THE NATIONAL HEALTH INSURANCE IN SOUTH AFRICA: THE VIEWS OF HEALTH CARE MANAGERS IN A PRIVATE HEALTH CARE INSTITUTION QUALIFICATION: MA (HEALTH AND WELFARE MANAGEMENT)

Please be advised that your final research project was approved by the Faculty Postgraduate Studies Committee (FPSC) subject to the following amendments/recommendations being made to the satisfaction of your Supervisors:

COMMENTS/RECOMMENDATIONS:

1. The proposal was well prepared.
2. Title
   Remove the first "the" in the title (before "implementation"), the second "the" (before "National" and the third "the" (before views).
3. Participants and sampling
   Range from 60 to 240. Be more specific. The range was wide for the output (Treatise of 20% weighting).
4. It was not clear what was meant with the following statements and which variables will be compared:
   "Inferential statistics used will include the Chi-square test which tests for the statistical significance of differences between observed and expected frequencies. The t-test will be used to determine the statistical significance of differences based on sample mean values."
5. Ethical considerations
   - Use the correct name of REC-H in the letters/consent forms.
   - Few corrections on ethics form to be made, e.g., 1 d) Specify here if other, 7 b) N/A
6. Budget
   Research committee and examiners reports? Unforeseen expenses? Specify what these expenses are, since the researcher will not be paying for examiners' reports.
7. Dissemination of results
   - Research report or dissertation?
8. **Writing style**
   - Pre-test or pilot test?
   - Pg 24
   Where are the results discussed? In Chapter 4 as well?

Faculty Postgraduate Studies Committee (FPGSC) reference number: **H15-HEA-NUR-006**.

Please be informed that this is a summary of deliberations that you must discuss with your Supervisors and make the necessary amendments.

Please forward a final electronic copy of your appendices, proposal and REC-H form to the Faculty Postgraduate Studies Committee (FPGSC) secretariat.

We wish you well with the project.

Kind regards,

Marilyn Afrikaner
FPGSC Secretariat
Annexure 2: Permission letter to institution authority:

(Adapted to protect institutional anonymity)

Dr DA Grewar
Tel: 0832277545
davidgrewar@gmail.com

1 May 2015

Ms [Name and Surname]
Head of Business Development
[Private health care institution]

Dear Ms [Surname]

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN [PRIVATE HEALTH CARE INSTITUTION]

My name is Dr David Grewar. I am a Masters student at the Nelson Mandela Metropolitan University (NMMU). The research I wish to conduct for my Master’s treatise is titled: Implementation of National Health Insurance in South Africa: Views of health care managers in a private health care institution. The research is being conducted under the supervision of Professor Victor Exner at the Faculty of Health Sciences at the NMMU.

The aim of this study is to better understand the views of South African private health care managers towards the implementation of the National Health Insurance so that recommendations can be developed that will assist [private health care institution] to better implement the NHI.

I wish to do a survey among all [private health care institution] employees and consultants that are in management positions including top management, managing practitioners, business managers, clinic managers, charge sisters, pharmacy managers and travelling clinic managers. Only after having made contact
with the clinic managers of each [private health care institution] clinic, will an electronic mail requesting consent to participate in the study be sent to each participant. The electronic mail will include a link to the questionnaire that will be completed online and submitted to a secure database. The questionnaire will take approximately 15 minutes to complete and will investigate their views concerning the implementation of the NHI.

Participation will be voluntary. Anonymity will be ensured by not including the names of the participants on the questionnaires. The email addresses of the respondents will also not be known on completion of the questionnaire. The data obtained will only be available to myself and the statistician. There will be no direct benefits to the participants. However, I suspect that the recommendations developed from the study will be of value to the [private health care institution] organization and that this will result in indirect benefits to the participants, their co-workers and their patients.

Ethical clearance to conduct the research has been obtained permission from the Research Ethics Committee (Human) at NMMU.

I am hereby seeking your consent to conduct this research at the [private health care institution] organization on a national level. The following documents have been attached:

- research proposal
- letter of permission to participant
- approval letter from the NMMU Research Ethics Committee (Human).

Upon completion of the study, I undertake to provide [private health care institution] with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me or my supervisor:

**Dr David Grewar (researcher)**
- Cell: 0832277545
- E-mail: davidgrewar@gmail.com

**Prof Victor Exner (supervisor)**
- Work: 041 5042815
- E-mail: Victor.Exner@nmmu.ac.za

Thank you for your time and consideration in this matter.

Yours sincerely,

Dr D.A Grewar
Consent Form

Implementation of National Health Insurance in South Africa: Views of health care managers in a private health care institution

I give consent for you to conduct an electronic survey amongst all members of the [private health care institution] organization in management positions.

I have read the accompanying letter explaining the purpose of the study and understand that:

- The role of the institution is voluntary.
- I may decide to withdraw the [private health care institution] organization’s participation at any time and without penalty.
- Participants will be given a letter of consent with the electronic survey and a completed survey will assume that consent was given.
- All information obtained will be treated with the strictest confidence.
- The respondent’s names and email addresses will not be identifiable and used in any written reports.
- A report of the findings will be made available to the institution.
- I may seek further information on the project from Dr David Grewar on:

Cell nr: 0832277545  
E-mail: davidgrewar@gmail.com

Name: _______________________________           Signature:_______________________________

Date:_________________________________
Annexure 3: Permission letter to participant:
(Adapted to protect institutional anonymity)

Dr DA Grewar
Tel: 0832277545
davidgrewar@gmail.com
1 May 2015

Dear Participant

REQUEST FOR PERMISSION TO INTERVIEW PARTICIPANT

My name is Dr David Grewar. I am a Masters student at the Nelson Mandela Metropolitan University (NMMU). The research I wish to conduct for my Master’s treatise is titled: Implementation of National Health Insurance in South Africa: Views of health care managers in a private health care institution. The research is being conducted under the supervision of Professor Victor Exner at the Faculty of Health Sciences at the NMMU.

The aim of this study is to better understand the views of South African private health care managers towards the implementation of the National Health Insurance so that recommendations can be developed that will assist [private health care institution] to better implement the NHI. In addition, the recommendations from the study will be of value to the [private health care institution] organization and will result in indirect benefits for yourself, your co-workers and your patients.

I am hereby seeking your consent to complete this survey. The survey will involve all [private health care institution] employees and consultants that are in management positions, including top management, managing practitioners, business managers, clinic managers, charge sisters, pharmacy managers and travelling clinic managers. Clicking on the link to the survey will direct you to the questionnaire that will be completed
online. This questionnaire will investigate your views of the NHI and the implementation thereof and will take approximately 15 minutes to complete. The completed questionnaire will be stored in a secure database.

Participation in the study is voluntary and you may stop at any point in the questionnaire. There will be no direct benefits for your participation in this study. Anonymity will be ensured in this study by way of not including any names on the questionnaire used. Instead, reference numbers will be allocated to each questionnaire. In addition, completed questionnaires will remain anonymous as the online questionnaire is designed to appreciate participant anonymity, i.e. the electronic mail address of each respondent will not be known by anyone, including the researcher and statistician.

Please note that a response to the survey will imply that informed consent was given by the respondent to participate in the study.

Ethical clearance to conduct the study has been obtained from the Research Ethics Committee (Human) at NMMU. I have also obtained consent from the [private health care institution] organization to conduct this study. Upon completion of the study, I undertake to provide [private health care institution] with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me:

Dr David Grewar (researcher)

Cell nr: 0832277545

E-mail: davidgrewar@gmail.com

Thank you for your time and consideration in this matter.

Yours sincerely,

Dr D.A Grewar
Informed Consent Form

Implementation of National Health Insurance in South Africa: Views of health care managers in a private health care institution

I give consent to participate in this electronic survey.

I have read the accompanying letter explaining the purpose of the study and understand that:

- My participation is voluntary.
- A completed and returned survey will serve to imply that consent was obtained from me to participate in this study
- All information obtained will be treated with the strictest confidence.
- My name will not be identifiable and used in any written reports.
- A report of the findings will be made available to the institution.
- I may seek further information on the project from Dr David Grewar on:

Cell nr: 0832277545

E-mail: davidgrewar@gmail.com
Annexure 4: Research Questionnaire:
(Unaltered word document representation of online questionnaire)

Implementation of National Health Insurance in South Africa:
Views of healthcare managers in a private health care institution

Section A: Biographical details

Please indicate your response by clicking on the appropriate box.

1. Gender

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>

2. Age

<table>
<thead>
<tr>
<th>18 – 24 years</th>
<th>25 – 34 years</th>
<th>35 – 44 years</th>
<th>45 – 54 years</th>
<th>55 – 64 years</th>
<th>Over 64 years</th>
</tr>
</thead>
</table>

3. Education

<table>
<thead>
<tr>
<th>Grade 12 or equivalent</th>
<th>National certificate or Diploma</th>
<th>Bachelor’s degree</th>
<th>Postgraduate degree (e.g. Honours/Masters/MBA)</th>
<th>Other (please specify):</th>
</tr>
</thead>
</table>

4. Management position at your institution: Please choose the most appropriate

| Primary Care Management Team member (e.g. National Human Resources Manager) | Business manager | Clinic manager | Charge sister | Pharmacy manager | Theatre unit manager | Travelling clinic manager | Medical managing practitioner | Dental managing practitioner | Other (please specify): |
5. Years of employment/consultation at your institution

<table>
<thead>
<tr>
<th>Years</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td></td>
</tr>
<tr>
<td>1 – 4 years</td>
<td></td>
</tr>
<tr>
<td>5 – 9 years</td>
<td></td>
</tr>
<tr>
<td>10 – 19 years</td>
<td></td>
</tr>
<tr>
<td>More than 19 years</td>
<td></td>
</tr>
</tbody>
</table>

Section B: Knowledge of the National Health Insurance (NHI):

Please click on the appropriate block:

1. Information about the provisions of the NHI has been communicated to me mainly through (tick all that apply):

- Government communication
- Professional bodies (e.g. South African Dental Association)
- Colleagues
- Media
- Word of mouth
- Professional communication (e.g. medical journal)

2. Have you read the Green Paper on the NHI?

- Yes
- No

If “Yes”, please answer questions 3 and 4. If “No”, please proceed to Section C

3. Did the Green Paper influence your thinking towards the NHI?

- Yes
- No

4. The following best describes my perceptions towards the Green Paper:

- Strongly positive
- Positive
- Neutral
- Negative
- Strongly negative
Section C: Views on the National Health Insurance (NHI):

Please indicate your response by clicking in the appropriate block for each statement.

### 1. Principles of Universal Health Care

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Government control of health systems is appropriate in a progressive democracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 All citizens should have equal access to quality health care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Health prevention and promotion should be emphasized above a curative approach to health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4 Consumer choice in health care is important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. Capacity of the State to successfully implement the NHI

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 The NHI is financially affordable for the State to implement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 South Africa has sufficient human resources to successfully implement the NHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 South Africa has sufficient infrastructural capacity to successfully implement the NHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 Patients will over-use health facilities for trivial reasons because it is free</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 Equitable allocation of patients to healthcare providers will be problematic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.6 Facility accreditation will be challenging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3. Government engagement with the medical fraternity during the planning phase of the NHI

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 I have received adequate communication about the NHI from the Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 I am in need of training in preparation for the NHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Health care workers in management positions should receive additional training in economics and management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 The views of the medical fraternity have been taken into consideration in the decision-making process</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 I am willing to actively participate in the NHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 I have an important role to play in the implementation of the NHI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Quality of care delivery</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------</td>
<td>----------</td>
<td>---------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>4.1 The NHI will undermine the quality of work that will be delivered by my institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2 The NHI will have detrimental implications for preventative care due to abuse of the system by users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Remuneration</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 The NHI will have adverse effects on the remuneration of health care workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 Health care providers should have the right to receive payments directly from patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3 I am confident the government will pay health care providers on time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Autonomy</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 The NHI is a threat to the autonomy of health care workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 Competition between health care providers is healthy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3 Development of private practice should be encouraged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Job performance</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 The NHI will have an adverse effect on health worker motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2 The NHI will increase the workloads of health care workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3 The NHI will lead to elevated stress levels in health workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use the box below if you have any comments about aspects of the proposed NHI not addressed in this section.

THANK YOU FOR COMPLETING THE QUESTIONNAIRE