Pharmacists’ perception of the implementation of the National Health Insurance in South Africa

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ABSTRACT

South Africa is currently in the process of implementing the National Health Insurance (NHI). The aim of this study was to determine pharmacists' perception of the implementation of the NHI.

A quantitative design was followed by utilising an online, structured questionnaire as the data collection method. The questionnaire was sent to 122 respondents that are pharmacists and hold managerial positions in different pharmaceutical societies and associations, as well as in corporate community pharmacies. The response rate was 18.2%. The data were captured by using Excel® and subsequently analysed using descriptive statistics such as frequencies, percentages, means and standard deviations. In order to establish the opinions and attitudes of the respondents, a Likert scale that offered respondents six pre-coded responses that ranged from one (1) being “completely disagree” to six (6) being “completely agree”, was used.

The study found that 72.7% of the respondents were of the opinion that the NHI is not the appropriate solution to rectify the inadequate public health system. The respondents were, however, divided on whether the problems the health system is facing can be improved without the implementation of the NHI, but they agreed that targeted action should be taken to deal with current issues (4.81±1.25). In the opinion of the respondents, South Africa does not have the know-how, expertise and knowledge to reform the health system (2.64±1.14) and in addition they indicated that the South African economy cannot afford the implementation of the NHI (1.86±1.32). Furthermore, the respondents felt that should the NHI not be implemented in a proper manner, it will possibly put even more strain on the health system (5.36±1.14) that could lead to further inequalities in healthcare (4.91±1.19). The respondents also suggested that co-payments for medicines and service delivery should be included in the NHI policy as it will prevent the over-use of the healthcare service and thereby reduce moral hazard (66.7%).

The study revealed that pharmacists’ are underutilised in the current health system. According to the respondents the implementation of the NHI creates the opportunity to utilise the pharmacists’ scarce skills more effectively (72.7%). The respondents were also of the opinion that the pharmacy profession could contribute to the reform of the health system by means of disease management programmes, medicines information services and patient compliance initiatives (5.68±0.48). With the implementation of the NHI, pharmacists’ primary dispensing role will be minimised and the main focus will be on preventative and curative patient care.

A worrying factor is the fact that 68.2% of the respondents indicated that with the implementation of the NHI, the monetary input from the remainder of the population that chooses to continue to use private medical schemes will not be sufficient to support community
pharmacies. The respondents, however, felt that community pharmacies should be included as additional medicine distribution points in the NHI system (4.95±1.21) and that this inclusion will promote equity (4.86±0.99). Furthermore, 72.7% of the respondents concluded that it would be financially beneficial for community pharmacies to contract with the NHI.

There was consensus (95.5%) that scarce pharmaceutical services should be provided in a Primary Health Care clinic of a community pharmacy as this could lead to better preventative disease management and for the greater part lessen the quadruple burden of disease that South Africa is facing. The respondents also concluded that pharmacists’ practising in community pharmacies could expand their scope of practice by completing the Primary Care Drug Therapy qualification (81.1%), which will enable them to diagnose and prescribe treatment for all patients of the NHI and private medical aids. It is the opinion of the respondents that this could, in-turn, provide community pharmacies with the human resources required to run a Primary Health Care clinic which could provide scarce pharmaceutical services to all patients (86.4%). The strain that will be put on the NHI facilities by the massive amounts of patients that will be dependent on these facilities will also be lessened (77.3%).

In conclusion, it is clear that the respondents did not agree that the NHI is necessarily the best option to reform the healthcare system, but they do, however, feel optimistic that it will create the opportunity to utilise pharmacists’ scarce skills more effectively.

**Key terms:** National Health Insurance, South African health system, health sector reform, public health sector, private health sector, pharmacist, community pharmacy, Primary Care Drug Therapy
Suid-Afrika is tans in die proses om Nasionale Gesondheidsversekering (NGV) te implementeer. Die doel van hierdie studie was om aptekers se persepsie ten opsigte van die implementering van die NGV te bepaal.

In hierdie studie is 'n kwantitatiewe navorsingsontwerp gevolg deur gebruik te maak van 'n aanlyn-, gestruktuurde vraelys as die metode van data-insameling. Die vraelys is aan 122 respondentte wat aptekers is en ook as bestuurders van die verskillende farmaseutiese rade en verenigings, asook korporatiewe gemeenskapsapteke optree, gestuur. Die responskoers was 18.2%. Datavaslegging het plaasgevind deur gebruik te maak van Excel® gevolg deur die gebruik van beskrywende statistiek wat frekwensies, persentasies, gemiddeldes en standaardafwykings ingesluit het. Met die oog op die bepaling van die menings en gevoel van die respondente is 'n Likert-skaal gebruik wat ses vooraf-gekodeerde opsies aangebied het. Die opsies het gewissel van een (1) "stem glad nie saam nie" tot ses (6) "stem heeltemal saam".

Die studie het bevind dat 72.7% van die respondente van mening is dat die NGV nie die regte oplossing vir die gebrekkige publieke gesondheidsorgstelsel is nie. Die respondentte was egter verdeel oor die feit of die huidige probleme wat die gesondheidsorgstelsel in die gesig staar opgelos kan word sonder die implementering van die NGV (4.81±1.25). Daar was konsensus onder die respondentte dat daar van geteikende optrede gebruik gemaak moet word om die huidige probleme op te los (4.81±1.25). Dit was die gevoel van die respondentte dat Suid-Afrika nie oor die kundigheid en kennis beskik om die gesondheidsorgstelsel te hervorm nie (2.64±1.14) en dat die Suid-Afrikaanse ekonomie nie die implementering van die NGV kan bekoostig nie (1.86±1.32). Die respondentte was ook van mening dat indien die NGV nie op die regte manier geïmplementeer word nie, dit moontlik selfs meer druk op die gesondheidsorgstelsel sal plaas (5.36±1.14) en tot verdere ongelykhede in gesondheidsorg sal lei (4.91±1.19). Verder het die respondentte gevoel dat bybetalings op medisyne en dienste gelewer in die Nasionale Gesondheidsversekeringsbeleid ingesluit moet word om die oorgebruik van gesondheidsorgdienste te beperk en sodoende morele gevaar te verminder (66.7%).

Die studie het getoon dat aptekers in die huidige gesondheidsorgstelsel onderbenut word. Die respondentte was van mening dat die implementering van die NGV die geleentheid sal skep om aptekers se skaars vaardighede meer doeltreffend te benut (72.7%) en dat die aptekersprofessie deur middel van siektebestuurprogramme, medisyne-inligtingsdienste en pasiëntmeewerkendheidsinisiatiewe, kan bydra (5.68±0.48). Met die implementering van die NGV sal die aptekers se primêre resepteringsrol tot 'n minimum beperk word en die hooffokus sal op voorkomende en genesende pasiëntesorg wees.
Dit is kommerwekkend dat die respondente gevoel het dat die implementering van NGV sal veroorsaak dat die res van die bevolking wat verkiës om gebruik te maak van private mediese fondse, se geldelike bydrae onvoldoende sal wees om gemeenskapsapteke te ondersteun (68.2%). Die respondente was egter van mening dat gemeenskapsapteke ingesluit moet word as bykomende medisyneverspreidingspunte in die Nasionale Gesondheidsversekeringstelsel (4.95±1.21) en dat die insluiting daarvan gelykheid sal bevorder (4.86±0.99). Die gevolgtrekking van die respondente was dat gemeenskapsapteke finansieel baat sal vind deur kontrakte met die NGV te sluit (72.7%).

Daar was konsensus dat skaars farmaseutiese dienste wat aangewend word in 'n primêre gesondheidsorgkliniek van 'n gemeenskapsapteek kan lei tot beter voorkomende siektebestuur en die vier-dubbele siektelas wat Suid-Afrika in die gesig staar kan verminder (95.5%). Die respondente was ook van mening dat praktiserende aptekers in gemeenskapsapteke hul praktekbestek kan uitbrei deur die Primêre Gesondheidsorg Terapiekursus te voltooi wat hulle in staat sal stel om te diagnoseer en behandeling voor te skryf vir privaat mediese fonds pasiënte asook NGV-pasiënte (81.1%). Verder was die respondente van mening dat die voltooiing van hierdie bepaalde kursus gemeenskapsapteke sal voorsien van die nodige menslike hulpbronne om 'n primêre gesondheidsorgkliniek te bedryf wat farmaseutiese dienste kan lever aan pasiënte van die NGV en van privaat mediese fondse (86.4%). Die lading wat op die Nasionale Gesondheidsversekeringsfasiliteite geplaas gaan word deur groot hoeveelhede pasiënte wat daarvan afhanklik gaan wees, sal ook hierdeur verminder word (77.3%).

Ter opsomming is dit duidelik dat die respondente nie saamstem dat die NGV noodwendig die mees aanvaarbare opsie is om die gesondheidsstelsel te hervorm nie. Hulle voel egter optimisties dat die implementering daarvan die geleentheid sal skep om die apteker se skaars vaardighede meer doeltreffend te benut.

Sleutel terme: Nasionale Gesondheidsversekering, Suid-Afrikaanse gesondheidsstelsel, gesondheidsektorhervorming, publieke gesondheidsektor, privaat gesondheidsektor, apteker, gemeenskapsapteek, Primêre Gesondheidsorg Terapiekursus
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<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<td>ARV</td>
<td>Antiretroviral</td>
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<td>AsgiSA</td>
<td>Accelerated and Shared Growth Initiative for South Africa</td>
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<td>ANC</td>
<td>African National Congress</td>
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<td>APSSA</td>
<td>Academy of Pharmaceutical Sciences of South Africa</td>
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<td>CCMDP</td>
<td>Central Chronic Medicine and Dispensing Programme</td>
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<td>CDC</td>
<td>Centres for Disease Control and Prevention</td>
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<td>CP</td>
<td>Community pharmacy</td>
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<td>DRG</td>
<td>Diagnosis Related Group</td>
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<td>DoH</td>
<td>Department of Health, South Africa</td>
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<td>EMS</td>
<td>Emergency Medical Services</td>
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<td>FPD</td>
<td>Foundation for Professional Development, South Africa</td>
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<td>FDC</td>
<td>Fixed-dose combination</td>
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<td>GEAR</td>
<td>Growth, Employment and Redistribution</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>General Households Survey</td>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HMO</td>
<td>Health maintenance organisation</td>
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<td>HST</td>
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<td>Independent Community Pharmacy Association, South Africa</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>NDP</td>
<td>National Development Plan</td>
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<td>NEC</td>
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<td>NHI</td>
<td>National Health Insurance</td>
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<td>National Health Insurance Fund</td>
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<td>NHIRD</td>
<td>National Health Information Repository and Data Warehousing</td>
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<td>National Laboratory Health Services</td>
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<td>OHSC</td>
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<td>OOP</td>
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<td>PCDT</td>
<td>Primary Care Drug Therapy</td>
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<td>PIASA</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>Pharmaceutical Society of South Africa</td>
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<td>PuP</td>
<td>Pick-up-point</td>
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<td>RDP</td>
<td>Reconstruction and Development Programme</td>
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<td>SA</td>
<td>South Africa</td>
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<td>SAAHIP</td>
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<td>SAAPI</td>
<td>South African Association of Pharmacists in Industry</td>
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<td>SAMA</td>
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<td>SAPC</td>
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<td>SAPSF</td>
<td>South African Pharmacy Students' Federation</td>
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<td>SARS</td>
<td>South African Revenue Services</td>
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<td>South African Society of Clinical Pharmacy</td>
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<td>SD</td>
<td>Standard deviation</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>SMDG</td>
<td>Sustainable Millennium Development Goal</td>
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<td>SSH</td>
<td>Social Security Health system</td>
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<td>Tuberculosis</td>
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<td>University of the Free State</td>
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<td>UHC</td>
<td>Universal Health Coverage</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UPFS</td>
<td>Uniform Patient Fee Schedule</td>
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<td>UNISA</td>
<td>University of South Africa</td>
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<td>USA</td>
<td>United States of America</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WHA</td>
<td>World Health Assembly</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WISN</td>
<td>Workload Indicators of Staffing Need</td>
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</table>
GLOSSARY OF TERMS

**Co-payments:** “These are user charges or fees levied for consultations with health professionals, medical or investigative procedures, medicines and other supplies, and for laboratory tests. They include charges levied by private health insurance companies to insured persons which must be paid directly through out-of-pocket payments to providers at the time they use health services because these costs are not covered by their specific benefit option.” (Department of Health, 2011:56)

**Financial Risk Protection:** “The provision of adequate financial protection to all households from catastrophic health-related expenditures. This will ensure that they do not suffer financial hardship and/or are not deterred from using needed health services. This involves minimising or eliminating the barriers that households face when accessing health services, such as the requirement to pay for needed care on the spot.” (Department of Health, 2011:56-57)

**National Health Insurance:** “An approach to health system financing that is structured to ensure universal access to a defined, comprehensive package of health services for all citizens, irrespective of their social, economic and/or any other consideration that affects their status.” (Department of Health, 2011:56)

**Pooling of Funds:** “A process of collecting and combining mobilised financial resources so as to spread the health-related financial risks across a wider pool. It involves the accumulation and management of financial resources to ensure that the financial risk of having to pay for health care is shared by all members of the pool. In universal health systems, risk-pooling or pooling of financial resources occur where payments for healthcare are made in advance of an illness, these payments are pooled in some way and used to fund health services for everyone who is covered – treatment and rehabilitation for the sick and disabled, and prevention and promotion for everyone. The pooled funds can be either from direct tax revenues or a combination of some sort i.e. direct tax allocations supplemented by mandatory, payroll-related contributions.” (Department of Health, 2011:57-58)

**Primary Health Care:** “The provision of health promotion, preventive, curative and rehabilitative care as close to the household and community as is possible. This approach to health services provision and delivery is based on the recognition that the promotion and protection of health is essential to human welfare and sustained economic and social development. Therefore, health care and health services are rendered in a manner that integrally takes into account the circumstances in which people live, work and interact.” (Department of Health, 2011:58)
**Universal Coverage:** “The progressive development of the health system, including its financing mechanisms, into one that ensures that everyone has access to quality, needed health services and where everyone is accorded protection from financial hardships linked to accessing these health services. This does not imply that the State must provide everything and anything to the population. Instead, it implies that everyone must be given an equitable and timely opportunity to access needed health services, which must include an appropriate mix of promotion, prevention, curative and rehabilitation care. The World Health Organization defines a universal health system as one that provides all citizens with adequate health care at an affordable cost.” (Department of Health, 2011:59)
CHAPTER 1: INTRODUCTION AND STUDY OVERVIEW

This chapter represents the introduction and overview of the study. It contains an overview of the background, problem statement, research questions, research aim, specific research objectives, methodology and ethical considerations. The chapter concludes with the general division of chapters.

1.1 Introduction

In 1978, at an international conference on the topic of healthcare, held in Alma-Ata, promises were made that equitable healthcare systems would be perused to provide access to healthcare services for all (Declaration of Alma-Ata, 1978). The concept of primary health care (PHC) was introduced at this conference and the attendants accepted this concept as a way that universally available healthcare can be achieved. An undertaking was then made that by the year 2000, healthcare for all should be attained (Denill et al., 1999:6). These commitments were once again acknowledged in Ottawa (WHO, 1986).

In terms of Section 27 of the Constitution of the Republic of South Africa (SA) (South Africa, 1996:1255), every individual has the right to access healthcare services and the South African government has attempted to implement the principles of the Constitution, as well as that of Alma-Ata, for many years. Nevertheless, for the best part of the last twenty years the quality of the healthcare services that was delivered to and received by South African citizens was majorly determined by income, geographical location and particularly race and ethnicity (Dhai & Etheredge, 2011:143).

South Africa has a population of around 54,002,000 people (Statistics South Africa, 2014:3) and is categorised by the World Bank as an upper-middle income country (World Bank, 2016) based on its gross domestic product (GDP) of 350,085 million United States (US) dollars ($) (World Bank, 2015b), translating to R5,484,816 million¹. South Africa is currently spending 8.4% of its GDP on healthcare (World Bank, 2015c), compared to other upper-middle income countries such as Turkey, Algeria, Botswana and Bulgaria that spend 5.6%, 6.6%, 5.4% and 7.6% respectively, on healthcare (World Bank, 2016a; World Bank, 2015b).

Despite the fact that SA is spending more than other upper-middle countries, the health outcome for patients in SA are poor according to the Department of Health (DoH) (2011:9). Life expectancy for South Africans at birth is also at a dire 59 years (WHO, 2014f) and the current

¹ Calculation was based on XE Currency converter where one US$ is equal to R15.6671 (XE Currency Converter, 2016).
The burden of disease that SA faces is believed to be fourfold and characterised as a quadruple burden of disease. The burden of disease includes (Coovadia et al., 2009; Dhai, 2011:48-50):

- elevated levels of communicable diseases which include human immunodeficiency virus (HIV) and tuberculosis (TB);
- elevated maternal and under-five mortality levels;
- an increasing burden of non-communicable diseases; and
- the burden related to elevated rates of violence and injury.

Kuan and Chen (2013:921) mentioned that medical expense has gradually escalated and that it is a risk that challenges the sustenance of households. The rise in medical expenses has resulted in individuals having to either save more money, find alternative ways to gain necessary funds, or tolerate their medical condition and consume less healthcare services. There is currently a significant inequality in the health status of individuals between those living in developing and developed countries and also within countries (World Bank, 2015b). According to the World Bank (2015a), access to essential healthcare services is not available to about 400 million individuals around the world. Socially, politically and economically, this fact is unacceptable and it is a common concern to all countries (World Bank, 2015b).

The WHO has been advocating Universal Health Coverage (UHC) as a very important goal that all countries should reach (WHO, 2005; WHO, 2008a/b; WHO 2010; WHO, 2013). The WHO urges countries to implement a healthcare financing system that is pooled and prepaid which will elevate access to quality healthcare and protect individuals from financial hardships as a result of out-of-pocket (OOP) payments (WHO, 2005; WHO 2010; WHO, 2013; WHO, 2014a).

The global movement toward UHC gained momentum in recent years with the World Health Assembly (WHA) and the United Nations (UN) General Assembly calling on countries to “urgently and significantly scale up efforts to accelerate the transition towards universal access to affordable and quality healthcare services” (UN, 2012; World Bank, 2015b). Consistent with the Sustainable Development Goals (SDGs), which will guide the agenda after 2015, UHC aims to achieve better outcomes for health and development (World Bank, 2015b). Sustainable Millennium Development Goal (SMDG) number three also advocates the implementation of UHC by 2030. This target is to “achieve universal health coverage, including financial risk protection, access to quality essential healthcare services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all” (World Bank, 2015a; World Bank, 2015b).
Rapid developing countries such Brazil, Russia, China and India, who were facing a growing request for healthcare and other welfare services, have made significant strides in achieving UHC (Hu et al., 2008:73-74, Rao et al., 2014:429). In a group study performed by the World Bank (2015a), it was found that in 24 developing countries running a program of UHC; 2.4 billion individuals were covered, translating to almost a third of the world’s population. The World Bank also states that these programs are large, transformational and most have been implemented in the past ten years. By covering gaps in the way healthcare services for poor individuals are financed, these programs are changing the way that healthcare systems function.

The South African DOH has recently joined ranks with the rest of the world and proposed that SA adapts its own form of UHC, namely National Health Insurance (NHI) (Department of Health, 2011:1,15). NHI is intended to reform the healthcare system and can be described as a financing system that will address inequalities in the healthcare system and ensure that all citizens of SA have access to appropriate, efficient and quality healthcare services (Department of Health, 2011:4,15-16). The implementation of the NHI will have a major impact on service delivery structures and influence both management and administrative systems in the healthcare system (Department of Health, 2011:4).

1.2 Background

The current healthcare financing system of SA is split into a public sector (provided by the state) and a private sector (Gilson & McIntyre, 2007b). The current state of the healthcare system is inequitable with the minority of South African citizens having disproportionate access to private healthcare (Department of Health, 2011:4). The public and private sectors are categorised by different types of contracting mechanisms and governing frameworks. The discrepancies between the two sectors are displayed in their ownership, the provision and distribution of care and the financing mechanisms (Van Rensburg et al., 1992:26).

The public health sector of SA is large, under-resourced and serves the majority of the population (Haagensen, 2010:2). The public health system is the responsibility of the national, provincial and local government tiers and this system is primarily funded through taxation. A small fraction is also funded by local governments and user fees (Gilson & McIntyre, 2007a:1). Pharmaceutical structures in the public sector include public hospital pharmacies, which include both military and correctional service hospitals, community health centres and clinics. These structures are owned by the government and the provision and distribution of services are state regulated. The availability of these structures depends on whether or not the state regards these facilities as necessary and whether or not the state can fund them (Van Rensburg et al., 1992:28).
The public sector does not provide highly specialised healthcare services and these are only available in the private sector to those who can afford it. The public sector faces various challenges that are both systematic and operational. These challenges include (Department of Health, 2011:9; Haagensen, 2010:2):

- unbalanced resource distribution between the two sectors;
- financial mismanagement of assigned resources;
- disproportion of financial resources between the two sectors,
- unsatisfactory services;
- inadequate hospital conditions;
- long waiting times;
- safety and security of patients and staff;
- decrepit infrastructure, staff attitudes; and
- mismanagement of funds and shortages relating to human resources and supplies.

According to Haagensen (2010:21) existing problems for public sector healthcare employees include increased working hours and reduced salaries. Public sector hospital pharmacists are confronted with countless problems resulting in pharmaceutical services being encumbered by a shortage of pharmacy employees on a daily basis (Malan, 2005:2). The working environment for the public sector hospital pharmacist is troubling and the Disciplinary Committee of the South African Pharmacy Council (SAPC) has accused these pharmacists of dispensing mistakes in previous years (Beukes, 2002). The Disciplinary Committee of the SAPC conveyed that the workload of public sector pharmacists is worrying as it is twice the standard average (Beukes, 2002).

In addition to the problems Haagensen (2010:21) mentioned for public sector healthcare professionals, Rothmann and Malan (2007) expressed that the work environment for public hospital pharmacists’ causes them to experience high levels of stress and numerous factors hinder them from performing their duties. These factors include (Rothmann & Malan, 2007:241):

- some personnel do not fulfil their responsibilities;
- unavailable medication;
• unsatisfactory support from supervisors;

• not enough staff to manage the workload;

• other personnel having uncooperative attitudes; and

• poor quality or unsatisfactory equipment.

Pharmaceutical structures in the private sector include private retail pharmacies, private hospitals and specialised institutions. In the private sector, healthcare delivery is primarily provided by private entrepreneurs and there is minimum government control in the financing of these services. Compensation for the services provided is either on a basis of fee-for-service or the patient’s medical scheme or hospital cash plan (Van Rensburg et al., 1992:28; Gilson & McIntyre, 2007a:1; Department of Health, 2011:11). The private sector has difficulties that mainly relate to the costs of services. These include elevated service tariffs; continuous overservicing of patients on a fee-for-service basis; and provider-encouraged utilisation of services (Haagensen, 2010:2).

The current inadequate state of the health system and the numerous problems the two health sectors separately face is the result of South African Government’s tried and tested attempts to reform the health system. Reforming the healthcare financing system in SA dates back to as early as 1928 (Dhai, 2011:48). Figure 1.1 illustrates the development of healthcare reform in SA (compiled from Van Rensburg & Pelser, 2004:112; Department of Health, 2011:12-15; Stuckler et al., 2011:170; Department of Health, 2015).
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Figure 1.1: The development of healthcare reform in South Africa

According to the South African DoH (Department of Health, 2011:4), the growing need for access to quality healthcare services in SA is indefinitely surpassing the availability of healthcare services. It is furthermore exacerbated by disproportionate access to healthcare and social inequality. Therefore, the government has proposed the implementation of the NHI financing system. The history of healthcare reform as portrayed in Figure 1.1 has led up to the introduction of the NHI as described in two primary policy proposals, namely the Green Paper (Department of Health, 2011) and White Paper on NHI (Department of Health, 2015).
The Green Paper on NHI (Department of Health, 2011) was published on 12 August 2011 by the Minister of Health, Dr Aaron Motsoaledi, in the Government Gazette and the final policy document, the White Paper on NHI (Department of Health, 2015), was released on Thursday, 10 December 2015. The Green Paper originally proposed the key interventions (Department of Health, 2011:5) principles (Department of Health, 2011:16-18) and objectives (Department of Health, 2011:18, 41) for the development and implementation of the NHI in SA. The amendments to the Green Paper were published in the White Paper (Department of Health, 2015:18-19,29).

Figure 1.2 portrayed the proposed interventions, objectives and principles of both the Green Paper and the White Paper (compiled from Department of Health, 2011:5,16-18,41; Department of Health, 2015:18-19,29).

![Interventions, objectives and principles for the development of the National Health Insurance in South Africa](image.png)
Figure 1.2 provides the interventions, objectives and principles proposed for the reform of the South African health system and these are all interconnected and essential for the successful implementation of the NHI. The NHI has been described in the Green Paper (Department of Health, 2011:15-16) as a financing system that will ensure that all citizens of SA are provided with essential healthcare. All South African citizens will be provided equal access to healthcare, unrelated to a person’s employment or social standing and the aptitude to financially contribute to the NHI fund. Addressing the inequalities in the healthcare system and the provision of access to appropriate, quality and efficient healthcare services is the main intention of the NHI. The NHI will cover the entire population’s health and will decrease the liability carried by those who pay OOP for their required healthcare services (Department of Health, 2011:4).

The Green Paper (Department of Health, 2011:41) depicted that the NHI Fund (NHIF) will be administered publicly and established as a single-payer public-owned body that will be managed with sub-national offices that negotiate contracts with appropriately accredited and contracted healthcare providers. The NHI will be supervised by the Minister of Health (Department of Health, 2011:42-43). The White Paper (Department of Health, 2015:69) also stipulated that the NHIF will have particular units, which include a Planning and Benefits Design Unit; Price Determination Unit; Accreditation Unit; Purchasing and Contracting Unit; Procurement Unit; Provider Payment Unit; Performance Monitoring Unit; and Risk and Fraud Prevention Unit.

The Green Paper (Department of Health, 2011:43) noted that membership to the NHI will be obligatory and payments compulsory. Travel insurance for tourists, foreign students and short-term residents will have to be acquired and proof of entry into SA will have to be provided. Approved International Human Rights Instruments and the Refugees Act (1998) will make provision for the coverage of asylum seekers and refugees (Department of Health, 2011:23). Registered citizens will have exclusive access to the NHI service package and the Department of Home Affairs will provide this information to the NHI Fund (Department of Health, 2011:43).

Both the Green- (Department of Health, 2011:43) and White Paper (Department of Health, 2015:1) stipulate that registered citizens will receive a NHI card which will grant convenient access to healthcare services and enable easy access to personal information. The NHI card will be exactly alike for all individuals (Department of Health, 2011:43).

The Green Paper (Department of Health, 2011:43), explained that individuals could also choose to continue with voluntary membership to private medical schemes, nonetheless membership and payments to the NHIF will still be required. The White Paper (Department of Health, 2015:11) also added that at a later period the Medical Schemes Act will be adjusted in such a way that medical schemes may provide top-up cover for NHI services. The number of medical
schemes is expected to decrease from the present number of 83 to a significantly smaller number (Department of Health, 2015:90).

The NHI will include a fair and rational comprehensive package of healthcare services that range from personal care to health prevention and promotion and the NHI will provide care at all levels (PHC, specialised secondary care, highly specialised tertiary and quaternary care) (Department of Health, 2011:26,41). All healthcare services will not be covered by the NHI package and the services that will be covered include preventative, promotive, curative and rehabilitative services. The White Paper (Department of Health, 2015:34) provided a more specific description of the healthcare services that will be covered.

These services include (Department of Health, 2015:34):

- “preventive, community outreach and promotion services;
- reproductive health services;
- maternal health services;
- paediatric and child health services;
- HIV and acquired immune deficiency syndrome (AIDS) and TB services;
- health counselling and testing services;
- chronic disease management services;
- optometry services;
- speech and hearing services;
- mental health services including substance abuse;
- oral health services;
- emergency medical services (EMS);
- prescription medicines;
- rehabilitation care;
- palliative services; and
• diagnostic radiology and pathology services.

In the current health system, emphasis is not placed on disease prevention, but rather the curing of disease. The proposed system will be more focussed on disease prevention and health promotion (Department of Health, 2011:1).

The NHI will be implemented in three phases over a fourteen year period (Department of Health, 2011:44; Department of Health, 2015:2). During the first five years of the implementation of the NHI, the priority will be to strengthen the healthcare system and to improve the service delivery platform (Department of Health, 2011:52; Thulare, 2013:30). Strengthening of the healthcare system will occur in the following areas (Department of Health, 2011:52):

• improving quality;
• health-facilities and districts management;
• developing the infrastructure;
• planning, advancement and management of human resources; support systems and the management of information;
• establishing the NHIF; and
• equipment and medical devices.

The Green Paper (Department of Health, 2011:52) explained that pilot sites for the implementation of the NHI have been based on selection criteria that involve burden of disease, demographic factors, socio-economic factors, district management capacity and health systems delivery. Through district-based health interventions, high maternal and child mortality rates will be reduced and in order to be ready for the full implementation of the NHI, the public sector’s performance and functioning will be strengthened (Department of Health, 2011:52).

Furthermore, the inventive methods of joining the PHC resources of the private sector for use in the public sector will be assessed with regard to their “feasibility, acceptability, effectiveness and affordability”, as well as their availability. The establishment of a district mechanism of financing will also examine the degree of protection against financial risks related to the costs of healthcare services in communities (Thulare, 2013:14).

These pilot sites have been launched since April 2012 and Figure 1.3 (compiled from Matsoso & Fryatt, 2013:156) displays the different provinces and districts that they were launched in.
These pilot sites illustrated in Figure 1.3 provide an opportunity to assess whether a strengthened referral system, the PHC teams and the healthcare service package provided, improved access to quality healthcare services (Department of Health, 2011:45).

The implementation of a model of UHC has some possible advantages and disadvantages. Some of these advantages may include that (Phillip, 2009; Department of Health, 2011:19; White, 2011; Ireland, 2013; Formosa Post; 2016):

- Exaggerated costs related to hospital stays, tests and unnecessary procedures might be averted;

- Lower prices for medicines could be negotiated as they can be procured in bulk;

- The focus of General practitioners (GP’s) and other healthcare professionals may then centre on patient care rather than dealing with insurance companies;

- Poor individuals could apply their money in such a way that they contribute to their own welfare and create employment opportunities for other individuals; and
The help-seeking-behaviour of patients might be modified to consult a GP more regularly.

The improvement of patient's help-seeking-behaviour should be beneficial to the cause of disease prevention, rather than cure and an increase in the effectiveness and productiveness of a country's workforce could be achieved as a result of a healthier population (Department of Health, 2011:19). A healthier population transmutes into more effective and productive workers and a country's GDP per capita is increased by 4% each year for each year the life expectancy increases (Bloom et al., 2004:5). A healthier workforce could well result in foreign direct investment opportunities and investments in healthcare can be seen as essential 'safety nets' which could counter 'poverty traps' (Department of Health, 2011:20). In terms of these advantages, the South African health system and economy could see benefits with the implementation of the NHI that relate to cost-saving, simpler administration, increased health outcomes for patients and economic improvement.

There are a number of factors on the other hand that could provide obstacles for the implementation of a model of UHC. The fact that the system functions under government control poses a great obstacle (Phillip, 2009). A prerequisite for these systems to function successfully is that the public should have confidence in their government. Another obstacle is that UHC essentially removes competition in the public sector and can therefore curb innovation and improvement (Phillip, 2009). Other obstacles include that GP's may provide poor quality care as a result of having to attend to large numbers of patients; progress in the development of pharmaceuticals and biotechnology may be delayed and the waiting times for patients may also be increased (Ireland, 2013, Phillip, 2009; White, 2011).

The South African government’s track record of scandal, inability to handle social programmes, corruption, bribery and mismanagement of programmes and funds could particularly hinder the public's acceptance of the NHI (Department of Health, 2011:6, Haywood, 2011; Amado et al., 2012:7). Healthcare resource availability is another concern because the current health infrastructure is inadequate with enormous inequalities between private and public healthcare facilities (Department of Health, 2011:6). This fact is further worsened by high levels of emigration to other countries resulting in the draining of SA’s human resources (Coovadia et al., 2009:828,830).

Lastly, financing of such a system is a very important consideration. Funding will need to be obtained from more taxation and that alone might not be enough (Amado et al., 2012:8). The Green Paper (Department of Health, 2011:43) stated that all South African citizens will have set monetary contributions to the NHIF.
1.3 Problem statement

Schneider et al. (2007:305) are of the opinion that some of the most important post-apartheid era achievements include the unification of the health system and amendments related to the racial, gender and professional profile of health administration. Schneider et al. (2007:305) continue to explain that many of the health systems inherent structural problems are still present and things appear to have worsened in regards to the accessibility of competent providers and pressure on the health system (Schneider et al., 2007:305). It would therefore seem that the health system still faces the challenge of reducing disparities and inequities, which are still particularly evident when comparing the quality of services delivered in the public and private health sectors in the nine different provinces, rural and urban areas and between population groups of different socio-economic standings and race, gender and age (Schneider et al., 2007:305).

For instance, the General Households Survey (GHS) of Statistics SA (2011:15-17) showed that 89.8% of households indicated that they would use the nearest health facilities, unless they had to travel elsewhere as a result of the waiting period being too long (16.0%), or if essential medicines were not available (11.1%), or if employees turned the patient away, or were rude or uncaring (3.5%).

The percentage of the population that was covered by medical schemes has increased by 0.4% since 2002 to reach a total of 16% of the population in 2011 (Statistics South Africa, 2011:15-17). This resulted in almost a million more individuals being covered by medical schemes than in 2002 (Statistics South Africa, 2011:15-17). It is also evident that among the different population groups, Caucasians were the most likely to belong to a medical scheme with 69.7% being members of a medical assistance plan. In terms of the remainder of the population, approximately 41.1% of Indians / Asians, 20.3% of Coloureds and 8.9% of black Africans were covered by a medical scheme. Nearly 22.8% of South African households had at least one member who belonged to a medical aid scheme (Statistics South Africa, 2011:15-17). Public clinics and hospitals were preferred by the majority of households with 70.7% in comparison to 24.3% preferring to consult a private GP (Statistics South Africa, 2011:15-17). From these statistics (Statistics South Africa, 2011:15-17), it can be concluded that the greater percentage of the population does not have a medical scheme and that the majority of the population relies on the inadequate public health system.

For this reason, calls to implement UHC as a way to improve health equity in SA was being heard from local health developers and activists (Gwatkin & Ergo, 2011:2160). Therefore, the South African government has proposed the implementation of UHC in the form of the NHI financing system. The DoH (2014) maintains that “there are still serious challenges mainly
caused by a skewed healthcare financing system. Without NHI, the burden of disease in the country will not be reduced because the majority of the population — and the section suffering the greatest ill health — will not access good quality healthcare” (Department of Health, 2014).

The Pharmaceutical Industry Association of South Africa (PIASA) (2011:9) asserts that the implementation of the NHI would be in the interest of all South Africans to ensure universal access to appropriate and quality medicines. This can be achieved by reaching a balance that ensures a consistent quantity of medicines at an affordable price to taxpayers, patients and the healthcare system, as well as having a maintainable, feasible and constant pharmaceutical industry.

It is essential for the population and health professionals that discussions should take place regarding the implementation of the NHI in South Africa. Shisana et al. (2006) performed a study to determine the opinions of the general public towards the implementation of the NHI in SA and concluded that the majority of the participants were in favour of the NHI. Nearly 25% of the participants were not able to make commentary statements on the provided questions and this suggests that there is a need to provide public education and improve communication regarding this topic. Evans and Sishana (2012) determined the public’s perception of the NHI in 2012 by comparing male and female perceptions in different population groups. In general this study found that great levels of support were exhibited for the NHI with an excess of 80% of respondents indicating that they favoured the NHI system compared to the present health system. The majority of respondents also indicated that the NHI ought to be set as a national priority (Evans & Shisana, 2012:920). These two studies suggest that the public, in general, supports the implementation of the NHI in SA.

In a recent survey conducted by the Professional Provident Society (PPS) (2014), nearly 700 medical professionals completed a questionnaire to determine their confidence in various aspects of NHI. The study found that 62% of public sector and 57% of private sector respondents agreed with the principle behind the scheme. Nonetheless, when asked whether they thought NHI was the appropriate solution to improve the inadequate public health system, only 23% of public sector respondents and 14% of private sector respondents agreed (PPS, 2014). This shows that the public sector’s medical professionals have slightly more confidence than the private sector’s medical professionals on the implementation of NHI.

The successful implementation of the NHI in SA is threatened by various factors that include fraud, poor-quality facilities and the mishandling of resources (Department of Health, 2015:74-75). It could also be rationalised that instead of developing another system on weak foundations, current facilities and resources should rather be repaired and used properly. For the NHI to be successful, the public needs to have confidence in the government’s intentions
and trust that their money will be used properly. In order to secure public ‘buy-in’, the government needs to be more transparent and challenges such as employee attitudes, cleanliness and long waiting times need to be addressed. If these changes fail to be made, the NHI may be unsuccessful in its aim to provide improved healthcare and equitable resource allocation as the public’s confidence will possibly not be inspired (Amado et al., 2012:3).

Gwatkin and Ergo (2011:2160) warned that UHC is much more difficult to implement than to support and that the majority of South Africans who are less privileged might also not gain a lot until the transition has been completed. Gwatkin and Ergo also cautioned that if the time period for the upsurge in inequality is prolonged or made permanent, it will result in reduced instead of enhanced health equality (Gwatkin & Ergo, 2011:2160).

In SA, the pharmacist forms part of a multi-disciplinary healthcare team and consequently the implementation of the NHI would influence the pharmacist directly, both as consumer and supplier of health services, in numerous ways pertaining to his/her scope of practice (PSSA, 2012:7). The healthcare system is not capable of functioning without medicines and pharmacists serve an important role in helping to assure that the use of medicines results in the highest likelihood of achieving desired health and economic outcomes (Higby, 1996:18-45).

Depending on their scope of practice, pharmacists instruct and advise patients on the appropriate and safe use of medication and they have a particular set of scarce skills such as performing blood pressure, glucose, cholesterol, screenings and lung function tests. Pharmacists practise in the public and private sector and are also employed in various other sectors, including pharmaceutical manufacturing, wholesalers, research, academia and the military environment (Higby, 1996:18-45; Schondelmeyer, 2009). The Government Gazette (SAPC, 2011) of 1 July 2011 outlined that pharmacists can also acquire the Primary Care Drug Therapy (PCDT) course which licenses them, in terms of Section 22A(15) of the Medicines and Related Substances Act 101 of 1965, to diagnose and treat patients based on a specific list of Schedule-3 and 4 medicines.

The SAPC (2009) describes pharmacy as a “dynamic, information-driven and patient-orientated profession whereby the pharmacist, through his competence and skills is committed to meeting the healthcare needs of the people of South Africa, by being the:

- custodian of medicines;
- formulator, manufacturer, distributor and controller of safe, effective and quality medicine;
- advisor on the safe, rational and appropriate use of medicine;
• provider of essential clinical services including screening and referral services;

• provider of healthcare education and information;

• provider of pharmaceutical care by taking responsibility for the outcome of therapy and by being actively involved in the design, implementation and monitoring of pharmaceutical plans; and

• provider of cost-effective and efficient pharmaceutical services.”

The SAPC (2009) concludes that “the profession is committed to high standards of competence, professionalism and co-operation with other healthcare personnel in order to serve the interests of the patient and the community”.

The Pharmaceutical Society of South Africa (PSSA) maintains that the profession of pharmacy can play an important role in the attempts to manage the deteriorating quadruple burden of disease that SA is currently experiencing. The PSSA also states that the public's health could be advantaged, even with the considerable shortage of specific human resources, by utilising the pharmacists’ scarce skills more effectively. The significant amount of funds that are currently spent on healthcare can therefore be better utilised through the sensible use of pharmacists’ skills. The PSSA concludes that medicine supply management continues to be a crucial issue and that pharmacists are often underutilised in the clinical environment (PSSA, 2012:7).

SA also has a National Drug Policy which provides a detailed description of how pharmaceutical services are managed in SA (Department of Health, 1996:3). It provides ways for role players, which include suppliers of medicines, healthcare providers, government institutions and non-governmental organisations, to contribute towards ensuring the provision of cost-effective, safe and quality medicines to the South African population. Through the establishment of a suitable pharmaceutical infrastructure, it provides a logical system for improving the effectiveness of the pharmaceutical sector. The development and implementation of an appropriate programme for developing human resources in healthcare is also promoted (Department of Health, 1996:3). Figure 1.4 illustrates the components of the National Drug Policy (Department of Health, 1996:5-25).
There is currently a lack of information about pharmacists' perceptions of the NHI in SA. The Green Paper also made no mention of medicine, except for the references to originator medicines and co-payments (PIASA, 2011:4; Department of Health, 2011:35). With reference to the National Drug Policy, which describes all the aspects of the pharmacy profession in great detail, the Green Paper on the NHI on the other hand does not discuss the important aspects thereof. It is of vital importance that these aspects regarding how the pharmacy profession will fit into the NHI framework, be addressed.

The research questions that therefore needed to be answered were: What is the perception of South African pharmacists on different management levels toward the implementation of the
NHI? Will the implementation of the NHI change the pharmacists’ scope of practice? Does the pharmacist foresee any obstacles in the implementation of the NHI?

This study shed light from a pharmaceutical professional’s point of view, which could potentially contribute to the debate on NHI, and illuminate the role of the pharmacist within NHI. This study will not have an effect on whether or not NHI is implemented, but could possibly empower policy makers to advocate on behalf of the pharmacy profession.

1.4 Research aim and objectives

1.4.1 Literature review objectives

Neuman (2014:126) states that a literature review is usually performed to establish a understanding of the body of knowledge; establish credibility; indicate the direction of former research and shows how the current project connects to it; assimilate and review what is understood in a specific area; and gain knowledge from others and kindle new concepts.

The objectives of the literature review for this study were to:

- compare international forms of UHC that have been implemented in other countries;
- describe the current health system in SA;
- identify why there is a need for reformation of the South African health system; and
- identify why the NHI is proposed to reform the South African health system.

1.4.2 Overall research aim

The aim of this study is to determine the perception of the pharmacist on different management levels toward the implementation of the NHI in SA.

1.4.3 Specific research objectives for the empirical investigation

The specific research objectives of this study were to:

- determine whether pharmacists have perceived knowledge on the working of NHI;
- illuminate the role of the pharmacist within NHI;
- determine whether pharmacists foresee any possible obstacles with the implementation of NHI in SA; and
• determine the possible role of community pharmacies (CPs) within the NHI.

1.5 Research methodology

This section incorporates a discussion of the research method employed during the empirical investigation of the study and describes the research design. In order to achieve the principal aim of the study, a structured questionnaire was used to collect data and this section describes the data collection tool, the study population and the requirement techniques that were used for the data- and statistical analysis.

1.5.1 Study design

A quantitative, non-experimental, descriptive, cross-sectional survey research study design was used to conduct this study by means of a structured questionnaire. According to Given (2008:713), quantitative research relates to methods of empirical investigations that gather, analyse and present data statistically. With quantitative research, concepts are generalised more extensively, it predicts results and investigates relationships in data (Sibanda, 2009:3). Quantitative research can be divided into experimental and non-experimental designs and, for the purposes of this study; a non-experimental quantitative approach was followed.

Non-experimental designs can be distinctly distinguished from other designs (Creswell, 2009:102). With non-experimental designs there is no intervention because the independent variable is not manipulated and neither is the setting controlled. Non-experimental designs are performed in a normal situation and occurrences are observed as they happen. The main purpose of non-experimental designs is to explain the phenomena and to investigate, describe and clarify the relationships between the variables (Creswell, 2009:102). These variables can be measured in order to be analysed using statistical procedures (Punch, 2009:3).

Descriptive study designs are usually used in studies where more information is required in a particular phenomenon. This type of design describes the variables in order to answer the research question. There is also no intention of establishing a cause-effect relationship (Creswell, 2009:102). Descriptive designs involve the gathering of information from a study population's representative sample (Creswell, 2009:103).

Cross-sectional studies are carried out to examine data at a specific point in time or over a brief time period and they are used to collect data on one occasion from different respondents. Cross-sectional studies are generally used when the purpose of the study is descriptive, often in the form of a survey (Creswell, 2009:105; Mann, 2003:56).
1.5.2 Setting and/or data source

In this study, a structured questionnaire was developed, validated and used to collect data from respondents included in the target population. Therefore, the respondents were the data source. Respondents, who were employed across the country, could complete the questionnaire in the privacy of their home, office, etc.

1.5.3 Reliability and validity of sources

A questionnaire protocol evaluation (face and content validity of questionnaire) was conducted in order to validate the questionnaire. This method enables the researcher to determine whether the questions asked were reasonable, clear-cut and relevant (Bowling, 2009:167). This process is discussed in more detail under section 1.5.8.1.4 (see questionnaire evaluation).

1.5.4 Target population

The term target population refers to a large, specifically defined group of a lot of cases from which a researcher extracts a sample to generalise results (Neuman, 2014:252). The target population included pharmacists on the management level of the followings organisations: the PSSA, the SASOCP; the ICPA; and the SAPC, as well as management-level pharmacists of corporate pharmacy groups.

1.5.5 Study population

The study population included registered South African pharmacists on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA and the SAPC, and also pharmacists who were dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups that included Dis-Chem, SPAR, Medirite and Clicks. Table 1.1 provides a detailed description of the study population.
Table 1.1: Description of the study population

<table>
<thead>
<tr>
<th>Society / council / association / corporate group</th>
<th>Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSSA</td>
<td>All pharmacists in the PSSA’s head office.</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the National Executive Committee (NEC).</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the South African Association for Community Pharmacists (SAACP) executive committee.</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the South African Association for Hospital and Institutional Pharmacists (SAAHIP) executive committee.</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the South African Association for Pharmacists in Industry (SAAPI) executive committee.</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the Academy of Pharmaceutical Sciences of South Africa (APSSA) executive committee.</td>
</tr>
<tr>
<td></td>
<td>All pharmacists in the thirteen branch committees of the PSSA.</td>
</tr>
<tr>
<td>SASOCP</td>
<td>All pharmacists in the South African Society of Clinical Pharmacy (SASOCP) committee.</td>
</tr>
<tr>
<td>SAPC</td>
<td>All pharmacists who are council members of the SAPC.</td>
</tr>
<tr>
<td>ICPA</td>
<td>All pharmacists who are council members of the ICPA.</td>
</tr>
<tr>
<td>Dis-Chem</td>
<td>All pharmacists who are dispensary category managers in the Dis-Chem Group.</td>
</tr>
<tr>
<td>SPAR</td>
<td>All pharmacists who are national pharmacy group managers and regional office managers in the SPAR Pharmacy Group.</td>
</tr>
<tr>
<td>Medirite</td>
<td>All pharmacists who are dispensary category managers in the Medirite group.</td>
</tr>
<tr>
<td>Clicks</td>
<td>All pharmacists who are dispensary category managers in the Clicks Group.</td>
</tr>
</tbody>
</table>

The only sector of the PSSA that was excluded from the study is the South African Pharmacy Students’ Federation (SAPSF). The reason for this exclusion was that students’ are not yet registered pharmacists. Respondents were asked to participate in the study regardless of age, sex, language, race, marital status, years of experience or ethnicity. The respondents needed to have a qualification in Pharmacy, serve on the management of the PSSA’s different branches and sectors, the SASOCP, the ICPA, and the SAPC, or be a pharmacist and a dispensary category manager, national pharmacy group manager or a regional office manager of the selected corporate community pharmacy groups.
1.5.6 Sampling

1.5.6.1 Type and process description

Stratified purposive sampling entails that the selection of participants takes place according to pre-selected criteria that are relevant to a specific research question (Nieuwenhuis, 2007:79). Stratified purposive sampling was applied to choose the sample, which included registered South African pharmacists on management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups.

1.5.6.2 The inclusion and exclusion criteria

In order for a respondent to be included in the study, they had to adhere to specific inclusion criteria. The qualifying criteria are provided in Table 1.2

Table 1.2: Inclusion criteria

<table>
<thead>
<tr>
<th>Inclusion criteria of respondents</th>
<th>AND / OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>The respondent must have a qualification in Pharmacy.</td>
<td>AND</td>
</tr>
<tr>
<td>The respondent must be a registered South African pharmacist.</td>
<td>AND</td>
</tr>
<tr>
<td>The respondent must be on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA and the SAPC.</td>
<td>OR</td>
</tr>
<tr>
<td>The respondent must be a dispensary category manager, national pharmacy group manager or regional office manager of the selected corporate community pharmacy groups.</td>
<td></td>
</tr>
</tbody>
</table>

Respondents who did not adhere to the inclusion criteria were excluded from the study based on the exclusion criteria provided in Table 1.3.

Table 1.3: Exclusion criteria

<table>
<thead>
<tr>
<th>Exclusion criteria of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the respondent did not have a qualification in Pharmacy.</td>
</tr>
<tr>
<td>If the respondent was not a registered South African pharmacist.</td>
</tr>
<tr>
<td>If the respondent was not on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA and the SAPC.</td>
</tr>
<tr>
<td>If the respondent was not a dispensary category manager, national pharmacy group manager or regional office manager of the selected corporate community pharmacy groups.</td>
</tr>
<tr>
<td>Pharmacists in the corporate community pharmacy group were also excluded if their corporate group declined to participate in the study.</td>
</tr>
</tbody>
</table>
1.5.6.3 The process of obtaining the sample

Pharmacists on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups were invited to participate in the study by means of an email containing a link to the structured questionnaire. The questionnaire was sent out via email during November 2015 with a request from the study mediator to complete the questionnaire.

1.5.6.4 Describe and verify sample size

Pharmacists who form part of the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups of the selected corporate community pharmacy groups were used as respondents in the study. The number of respondents was determined regardless of age, sex, language, marital status, years of experience, race or ethnicity and came to a total number of 122 respondents.

1.5.7 Recruitment

Pharmacists on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups received an email inviting them to participate in the study. A template was developed in which the respondent could give consent that his / her email address may be obtained. This template was sent to the manager / branch director / chairperson of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and to the executive directors of the corporate community pharmacy groups.

The manager / branch director / chairperson of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC and the executive directors of the corporate community pharmacy groups then revealed the email addresses of those respondents who indicated to the researcher that their email addresses may be used. Some of the respondents’ email addresses were obtained from the Internet, which is public domain and supported by Act no. 4 of 2013, the Protection of Personal Information Act. More information regarding this Act was given under section 1.62 (see Recruitment). The questionnaire was then sent to each respondent via email via the study mediator.
1.5.8 Data collection tool

Data collection tools, also referred to as research instruments, refer to the methods used to collect data (Smith, 1997:216). In this study, a structured questionnaire was used to collect data. Fink (2009:1) defines a questionnaire as a method of information gathering that is used to describe, compare and explain individual or societal feelings, knowledge, values, behaviour and preferences. The New Dictionary of Social Work (1995:51) describes a questionnaire as a “set of questions on a form which is completed by the respondent in respect of a research project”. The questions can be open or closed with a choice to answer either “yes” or “no” and respondents could also be requested to react to statements included in the questionnaire.

The purpose of a questionnaire could be described as a method to acquire views and facts regarding a specific phenomenon from individuals who have knowledge on the related matter. Particular benefits to using a questionnaire include that (Maree & Pietersen, 2013:201):

- it is a convenient method;
- in a brief period of time great volumes of information can be gathered from a significant number of individuals;
- with only a limited effect on the questionnaires reliability and validity, it can be completed by either the researcher or other individuals;
- it is a relatively cost-effective method; and
- through the assistance of software packages or by the researcher him- or herself, the quantification of results from questionnaires is generally simple and quick.

The questionnaire was sent out using the EvaSys system. EvaSys is a procedure of the University of the Free State (UFS) and is described as a web-based survey program used for the development and distribution of questionnaires. The EvaSys system requires the following information: the approved research proposal, ethics committee approval for both the proposal and the questionnaire, and an Excel list of all email addresses of respondents. The questionnaire was sent out by means of email. This method entails that an email is sent to each respondent containing a link to access the questionnaire. The respondents can complete the questionnaire, temporarily save the questionnaire, and then later access the saved questionnaire again to complete it by clicking on the link in the email. Once the questionnaire is submitted, all the results are immediately available on the EvaSys system and the link will no longer be active. The final results, the response rate and a method summary are then sent back to the researcher. The administrator of the EvaSys therefore acted as the mediator of this study.
1.5.8.1 Questionnaire development

A survey is a structured questionnaire that is given to a sample of the population to acquire specific information for a research study (Fink, 2008:1). A structured questionnaire was developed, validated and sent out via email to the selected respondents.

The following aspects need to be considered when designing or constructing a questionnaire: information needed; format of the questionnaire; question types; questionnaire evaluation and questionnaire administration.

1.5.8.1.1 Information needed

The information that needs to be obtained determines the nature of the questionnaire. The questionnaire must consist of all the questions that are necessary to collect the required information. It is important that the questionnaire is complete in order to avoid a situation later where essential information is missing.

1.5.8.1.2 Format of the questionnaire

The arrangement of questions in a questionnaire is very important and the questions need to be arranged in a logical and relevant manner. The order that questions are placed in the questionnaire can affect the interest of a respondent to participate in a study and also the quality of the information being gathered. The questionnaire for this study was constructed with the aim to ensure the minimum confusion and retain the interest of respondents to ensure proper completion. The questionnaire must have a cover letter where the researcher of the study identifies him- or herself. In order to motivate the respondents to give their cooperation, a brief description of the purpose of the study must also be given in the cover letter. According to McMurty (1993:279), “a straightforward, easy-to-read cover letter may improve return rates and response accuracy more than any other single factor, while a vague or highly technical letter can have the opposite effect”.

The accompanying letter included (Brink et al., 2012:39-41):

- an introduction of the research activities;
- the title of the research project;
- the purpose of study;
- the value or importance of the study;
- the target population of the study;
• a warning of any risks that participation in the study may have;
• confirmation of confidentiality and anonymity;
• an offer from the researcher to be available for questioning regarding the questionnaire;
• contact information for the respondents’ participating; and
• a signing line for the date and signatures of the respondents’ and the researcher.

In order to avoid any misunderstanding, instructions must be provided to the respondent in the case of mailed questionnaires about the manner in which each question should be completed. For the purpose of this study, a cover letter that includes an informed consent form will be e-mailed along with each questionnaire. The cover letter will explain all the details of the study.

1.5.8.1.3 Question types

Numerous question types exist from which the researcher can choose in order to obtain the desired information. Table 1.4 lists the different types of questions and provides a brief description.

**Table 1.4: Question types**

<table>
<thead>
<tr>
<th>Type of question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open questions</td>
<td>Open questions offer the respondent the chance to write any response in the provided open space. Open questions are useful in situations where little is known about a variable and they make it possible for researchers to gain information and have a better understanding of the variable (De Vos et al., 2011:160).</td>
</tr>
<tr>
<td>Closed questions</td>
<td>Closed questions offer the respondent the option to choose from one or more provided responses. The closed question is usually used in situations where a great amount of information exists and that the possible response options are obvious (De Vos et al., 2011:160-161). According to McMurty (1993:168), as many as possible closed questions must be used in the questionnaire, although there will always be information that is difficult to generate by using closed questions.</td>
</tr>
<tr>
<td>Dichotomous questions</td>
<td>Dichotomous questions offer the respondent only two response options, for example “yes” or “no”. The use of dichotomous questions must be kept at a minimum as a result of them excessively lengthening the questionnaire and the fact that follow-up is required in order to explore both responses (De Vos et al., 2011:161).</td>
</tr>
<tr>
<td>Multiple-choice questions</td>
<td>Multiple choice questions offer the respondent the option to choose from three or more provided response options (De Vos et al., 2011:161). Multiple choice questions are generally used to gain information that could be divided into either fast or hard categories (De Vos et al., 2011:162).</td>
</tr>
</tbody>
</table>
Table 1.4: Question types (continued)

<table>
<thead>
<tr>
<th>Type of question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinal questions</td>
<td>Ordinal questions are used in situations where values could be assigned to a series of facets in order to place them in a certain order (De Vos et al., 2011:162).</td>
</tr>
<tr>
<td>Completion questions</td>
<td>Completion questions are a type of open question used to collect data that has too many response options to classify meaningfully (De Vos et al., 2011:162).</td>
</tr>
<tr>
<td>Scaled questions</td>
<td>Scaled questions are a type of multiple-choice question that is useful to obtain information about non-exact and more responsive aspects (De Vos et al., 2011:163-164). The scale of measurement will ultimately dictate the statistical procedures that can be used in processing the data (Neuman, 2011:157-159). In some questions in the questionnaires that will be used in this study, scales will be used to measure participants' opinions and the way they interpret certain aspects (De Vos et al., 2011:163-164).</td>
</tr>
<tr>
<td>Statements</td>
<td>Statements are mostly used to obtain data about attitudes, dispositions and opinions. A statement related to the specific matter is presented to the respondent and the response options are offered dichotomously or scaled (De Vos et al., 2011:164).</td>
</tr>
<tr>
<td>Follow-up questions</td>
<td>Follow-up questions are used to obtain more information about a response in a previous question and it leads to more in-depth knowledge on a particular topic (De Vos et al., 2011:165).</td>
</tr>
</tbody>
</table>

With the construction of the questionnaire, a combination of the above-mentioned types of questions explained in Table 5 was used. The following principles should also be considered during the construction of the questionnaire and the following should be avoided according to Neuman (2014:321-325):

- the use of jargon, abbreviations and slang;
- the use of overlapping or unbalanced response categories;
- ambiguity, vagueness and confusion;
- the use of double negatives;
- the use of emotional language and prestige bias;
- asking about distant future intentions;
- the use of double-barrelled language;
- false premises;
- the use of leading questions; and
- the use of questions beyond the respondents’ capabilities.

1.5.8.1.4 Questionnaire evaluation

A questionnaire protocol evaluation (face and content validity of questionnaire) was conducted to validate the questionnaire to determine the amount of time needed to complete the questionnaire. This method indicates to researchers whether the questions being asked are reasonable, clear-cut and relevant (Bowling, 2009:167). Before a questionnaire is used in the main investigation, the newly-constructed questionnaire, in semi-final format, should be thoroughly tested in order to ensure the immediate rectification of errors at little cost. Following the protocol evaluation and once all the required modifications have been applied, then only can the questionnaire be offered to the entire study sample. An open space should also be left for comments or the respondents’ evaluation of the questionnaire. In this manner, the researcher obtains a general impression of the practicality of the questionnaire and the data that should be obtained (De Vos et al., 2011:195).

To achieve this, the questionnaire was given to respondents who met the same criteria as those in the study population. If a questionnaire is properly structured, administered and validated, only essential information is collected and the information collected is objective and reliable. The questionnaire was reviewed for content validation by personnel from the North-West University’s School of Pharmacy, the executive director of the PSSA’s SAACP, and pharmacists in both the public and private healthcare sector in the North West Province. The face validity of the questionnaire was evaluated by the statistical analysts.

The questionnaire was evaluated based on validity and reliability and these terms are described below.

- Reliability

The term reliability refers to the consistency and dependability of the results produced from research that used a measuring instrument to produce a consistent result when the unit being measured did not change and measurement occurred repeatedly over a period of time (Brink, 2009:163, 207; Leedy & Ormrod, 2010:29). According to Neuman (2014:212-213), measurement reliability suggests that there is no variation in the numerical results as a result of the “characteristics of the measurement process” or the “measurement instrument itself”. Because it is not possible to control all the factors affecting reliability, no research tool can be 100% effective.
The reliability of a research instrument can be affected by the following factors (Kumar, 2011:182):

- the wording of questions;
- the physical setting;
- the respondent’s mood;
- the regression effect of an instrument; and
- the nature of the interaction.

Measurement reliability is divided into three types, namely:

- **Stability reliability** refers to the measurement reliability throughout a period of time where consistent results at different points in time are brought forth. This is based on the assumption that there is no change in what is being measured (Neuman, 2014:212). Stability reliability therefore refers to consistency over time (Brink, 2009:164).

- **Representative reliability** refers to the measurement reliability across subpopulations or different types of cases that bring forth consistent results for various social groups (Neuman, 2014:212).

- **Equivalence reliability** refers to the measurement reliability across multiple indicators that bring forth consistent results using different specific indicators. This is based on the assumption that all of them measure the same construct. Equivalence consistency is relevant to this study and focuses on the level to which all items on a research instrument measure the same variable. Therefore, a measure of the degree of similarity is an indication of the internal reliability of the research instrument. In this study, the respondents will complete the questionnaires according to their own knowledge and experience (Neuman, 2014:213).

- **Validity**

According to Neuman (2014:218), measurement validity refers to how well an empirical indicator and the conceptual definition of the construct that the indicator is supposed to measure ‘fit’ together. In other words, measurement reliability seeks to ascertain whether a research instrument measures what it is supposed to measure (Brink, 2009:159). There are two types of validity, namely internal and external validity. For the purposes of this study, only internal validity will be discussed. There are several types of internal validity, namely:
• **Face validity** is a type of measurement validity in which an indicator ‘makes sense’ as a measure of a construct in the judgement of others (Neuman, 2014:218). Brink (2009:160) and Neuman (2011:212) state that the first task the researcher should perform is face validity in order to establish the accuracy of the method of data collection. It is also the easiest and most straightforward form of validity. Face validity is intended to estimate whether the instrument measures what it is supposed to measure. The researcher may find the procedure to be of value in the instrument development process with regard to determining the readability and clarity of the questionnaire content (Brink, 2009:160). In this study, numerous people with experience in the field were involved during the developmental phase of the questionnaires to judge the face validity.

• **Content validity** is a type of measurement validity that requires that a measure represents all aspects of the conceptual definition of a construct (Neuman, 2014:218). It is, according to Brink (2009:160), a measurement of how correctly the instrument represents all the components of the variable being measured. In this study, a structured questionnaire will be used to collect data from registered South African pharmacists on management levels of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups.

• The questionnaires will include open and closed questions, which will be included to give the respondents the opportunity to express their own opinion regarding certain issues and for respondents to answer sensitive questions. The contents of the questionnaires will also be evaluated by numerous people with experience in the field during the developmental phase of the questionnaires.

• **Criterion validity** refers to a practical approach in order to establish a relationship between the scores on the instrument in question and other external criteria. According to Brink (2009:160), the researcher can determine the validity of the instrument by comparing it to another measure that is already known.

• **Concurrent validity** is a measurement validity that relies on a pre-existing and already accepted measure to verify the indicator of a construct; the researcher can therefore establish whether a research instrument measures what it is supposed to measure by comparing it to another measure that is already known to be valid (Brink, 2009:160-161; Neuman, 2014:218).

• **Predictive validity** is a measurement validity that relies on the occurrence of a future event or behaviour that is logically consistent to verify the indicator of a construct (Neuman,
In other words, predictive validity involves the comparison of the research instrument results acquired from a certain population with a measure that is expected to occur in the future (Brink, 2009:160).

- **Construct validity** is a type of measurement validity that uses various indicators and has two subtypes. It therefore indicates how well the indicators of one construct converge or how well the indicators of different constructs diverge (Neuman, 2014:218). Construct validity is a very important type of validity and is also the most frequently used form of validity. According to Brink (2009:162, 200), construct validity measures the relationship between the research instrument and the related theory and it is also referred to as the ability of a research instrument to measure the construct that it is intended to measure.

- **Convergent validity** is a type of measurement validity for multiple indicators based on the idea that indicators of one construct will act alike or converge (Neuman, 2014:218).

- **Discriminant validity** is a type of measurement validity for multiple indicators based on the idea that indicators of different constructs diverge (Neuman, 2014:218).

Internal validity is threatened by the following factors:

- **The selection of participants**: Bias can result from the selection of two groups of respondents that are not equal to one another in age, motivation, education, etc. (Brink, 2009:72).

- **Attrition**: Attrition is the differential loss of respondents from one or more of the groups on a non-random basis (Brink, 2009:73).

- **History**: History can be described as unanticipated events that can occur while the questionnaire is in progress (Brink, 2009:72).

- **Statistical regression**: An affect operating where respondents are selected on the basis of extreme scores and regress or go back toward the mean of that variable (Brink, 2009:73).

- **Instrumentation**: Can occur where there is change in the questionnaire instrument or changes in the administrators or scorers (Brink, 2009:73).

- **Maturation**: Maturation refers to processes that occur within participants and inevitably occurs as a function of time (Brink, 2009:72).

- **Testing**: The effect of taking one questionnaire upon the responses and outcomes of a subsequent one (Brink, 2009:73).
The validation process involves testing the instrument in the population for which it will be used. For the purposes of this study, the respondents were able to complete the questionnaires in their own time, and therefore trustworthiness will not be compromised by the researcher’s own impressions and ideals.

1.5.8.1.5 Questionnaire administration

A structured questionnaire was developed, validated and sent out via e-mail to the selected respondents by the study mediator. Pharmacists on management level of the PSSA’s different branches and sectors, SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the different corporate community pharmacy groups received an e-mail inviting them to participate in the study. The respondents’ e-mail addresses were obtained from the manager or chairperson of the PSSA’s different branches and sectors, SASOCP, the ICPA, the SAPC and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the different corporate community pharmacy groups.

A study mediator was appointed who sent out and received the completed questionnaires. In this way, follow-up was made possible without affecting respondents’ anonymity. Once the study mediator received the completed questionnaires, the data from the questionnaires were converted to Microsoft Excel® and sent back to the researcher and project leader. The returned data from the study mediator was saved on the researcher’s computer, which was password protected and in a locked room at all times and all hard copies were kept in a locked cupboard in the researcher’s office. The period of safekeeping is five years, after which all information and data will be destroyed in the appropriate manner.

1.5.9 Data analysis

The questionnaire had to be compiled in a certain manner in order to be analysed by a computer. The questionnaire used in this study was tailored for data analysis on a computer and the questionnaire was therefore constructed using the computer program Microsoft Excel®.

In Figure 1.5 this study’s proposed data analysis plan is illustrated.
Figure 1.5: Data analysis plan

Figure 1.5 illustrates this study’s data analysis plan and the tests that could be performed are described under section 1.5.10 (see statistical analysis) in more detail.

Process involved with the data analysis of open questions

In analysing the open questions of the questionnaire, the following method was used:

- The administrator of the EvaSys system grouped each of the open questions responses together.
- The research team independently read through all the responses to each question in the questionnaire in order to determine emerging themes. By reviewing the responses from the questionnaire independently the influence of the researcher’s own bias on the data was minimised.
- The researchers, in collaboration with the research team, then developed categories that included themes which emerged from the initial review of responses to the questionnaire.
• Each response was assigned to a category or categories and once the categories had been established the research team assigned each comment to one or several categories. This method is known as “coding”.

• The research team made use Microsoft Excel® to help with the mechanics of coding.

• This was done by arranging all the responses in one column and labelling each comment in the adjacent column with the appropriate category. The research team could then establish if our categories were appropriate.

• The research team then reviewed the major themes. After all the responses had been coded and the categories refined, both were reviewed to establish which of the categories had the most responses and thus represented the major themes for the specific questions.

• The research team then summarised all the findings in the form of descriptive text incorporating some of the comments that exemplified the major themes.

1.5.10 Statistical analysis

In this study, descriptive a statistics was used to analyse data. The gathered data in this study were analysed using the program Microsoft Excel®. Microsoft Excel® is a suitable programme to use for entering and manipulating data and to quickly summarise data. However, Microsoft Excel’s® analytical tools are limited (Sibanda, 2009:30).

1.5.10.1 Descriptive statistics

According to Fink (2009:78), descriptive statistics outline information about the sample and the responses to the questions in the questionnaire. Descriptive statistics together with simple graphics analysis form the foundation of almost all quantitative analyses of questionnaire data. Frequency or frequencies distributions (numbers and percentages), measures of variation (range and standard deviation) and the measures of central tendency (the mean, median and mode) are applied when using descriptive statistics. This involves the arranging and summarising of data through tabulation (frequency tables), graphic representation (for example pie charts and bar graphs) and the calculation of descriptive measures. In this way, the characteristic trends of the experimental data are clearly shown. In short, it is the group of statistics that organises and summarises numerical data obtained from populations and samples (Brink, 2009:201).
• **Percentage (%)**

A percentage defined is a proportion of a subgroup to a total group, expressed as a percentage ranging from 0 to 100%. It is therefore a proportion multiplied by 100% (Brink, 2009:206).

• **Mean (\(\bar{x}\))**

The mean, also known as the arithmetic mean (average) (\(\bar{x}\)), is calculated by adding all the units in a set of data and then dividing it by the total number of units that have been added together (Fink, 2009:79).

The sample average can be calculated by using the following formula (Fink, 2009:79):

\[
A = \frac{1}{n} \cdot \sum_{i=1}^{n} x_i
\]

Where:

- \(A\): Average or arithmetic mean.
- \(n\): The number of terms (for example the number of items or numbers being averaged).
- \(x_i\): The value of each individual term in the list of numbers being averaged.

• **Standard deviation (SD)**

Standard deviation (SD) is the most complex equation to calculate and is described by Neuman (2011:391) as “a measure of dispersion for one variable that indicates an average distance between the scores and the mean”. In other words, it is the average distance that the average score is from the mean. Sometimes, instead of the SD, variance can be used, which is simply the square root of the SD (Fink, 2009:82). It is therefore a measure of variance (Brink, 2009:208). The SD and variance can only be calculated from continuous data (Fink, 2009:82).

The SD can be determined by the following equation (Pagano & Gauvreau, 2000:46):

\[
sd = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n - 1}}
\]

Where:

- \(\sigma\): Standard deviation
- \(\Sigma\): Sum of
\( \bar{x} \): Average of the variable

\( n \): Number of observations

The \( SD \) can be used when calculating the average to demonstrate the spread of data from the average.

1.5.10.2 Type I and Type II errors

A researcher can make two kinds of logical errors, namely:

- A Type I error, or alpha error, is made when the researcher mistakenly states that a relationship exists when in fact none exists; therefore, a false rejection of a null hypothesis. This error is controlled by restricting its probability to some small value, the significance value = 0.05 (Bowling, 2009:190, Neuman, 2014:424):

- A Type II error, or beta error, is made when the researcher states that a relationship does not exist when in fact it does; therefore, a false acceptance of a null hypothesis. This error can be restricted when the sample size is appropriately large (Neuman, 2014:424). The difference between the two groups' mean scores does not fall within the rejection region when a Type II error is made (Fink, 2009:85).

A null hypothesis is a hypothesis maintaining that there is no significant effect of an independent variable on a dependant variable (Neuman, 2014:185).

1.6 Ethical considerations

In this section the relevant ethical considerations were discussed.

1.6.1 Basic principles of ethical research

According to Kumar (2011:242), certain behaviours in research are considered unethical in any profession. These types of behaviours include causing harm to individuals, breaching confidentiality, using information improperly and introducing bias. The researcher is responsible for conducting research in an ethical manner and failure to do so undermines the scientific process and may have negative consequences for the researcher and the participants in the study.

Brink (2009:31) mentions that there are three fundamental ethical principles that should guide researchers. They are: respect for the participants; respect for beneficence; and respect for justice. These principles are based on any individual’s human rights and the researcher needs to protect these rights during research. These human rights include the right to self-
determination, to anonymity and confidentiality, to fair treatment, to privacy and to be protected from discomfort and harm (Brink, 2009:31-32).

### 1.6.2 Recruitment

Pharmacists on the management level of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national pharmacy group managers or regional office managers of the selected corporate community pharmacy groups received an e-mail inviting them to participate in the study with a link attached to the questionnaire. Some of the respondents’ e-mail addresses were available on the Internet and e-mail addresses that were available may be used according to Act no. 4 of 2013, the Protection of Personal Information Act, which states that:

“A data respondent has the right to have his, her or its personal information processed in accordance with the conditions for the lawful processing of personal information as referred to in Chapter 3, including the right—

(a) to be notified that—

(i) personal information about him, her or it is being collected as provided for in terms of section 18; or

(ii) his, her or its personal information has been accessed or acquired by an unauthorised person as provided for in terms of section 22;

(b) to establish whether a responsible party holds personal information of that data respondent and to request access to his, her or its personal information as provided for in terms of section 23;

(c) to request, where necessary, the correction, destruction or deletion of his, her or its personal information as provided for in terms of section 24;

(d) to object, on reasonable grounds relating to his, her or its particular situation to the processing of his, her or its personal information as provided for in terms of section 11(3)(a);

(e) to object to the processing of his, her or its personal information—

(i) at any time for purposes of direct marketing in terms of section 11(3)(b); or

(ii) in terms of section 69(3)(c);
(f) not to have his, her or its personal information processed for purposes of direct marketing by means of unsolicited electronic communications except as referred to in section 69(1);

(g) not to be respondent, under certain circumstances, to a decision which is based solely on the basis of the automated processing of his, her or its personal information intended to provide a profile of such person as provided for in terms of section 71;

(h) to submit a complaint to the Regulator regarding the alleged interference with the protection of the personal information of any data respondent or to submit a complaint to the Regulator in respect of a determination of an adjudicator as provided for in terms of section 74; and

(i) to institute civil proceedings regarding the alleged interference with the protection of his, her or its personal information as provided for in section 99” (Protection of Personal Information Act no. 4, 2013:16).

The respondents were e-mailed according to Act no. 4 of 2013 (Protection of Personal Information Act), and asked whether the questionnaire may be sent to them in which they simply reply “yes” or “no”. Otherwise, the manager / branch director / chairperson / executive director of the specific group of respondents were asked to disclose the respondents’ e-mail addresses to the researcher. A template was developed in which the respondent could give consent that his / her e-mail address may be obtained if it was not available on the Internet or if the manager / branch director / chairperson were not willing to disclose the e-mail addresses without this form of consent.

This template was sent to the manager / branch director / chairperson of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and to the executive directors’ of the corporate community pharmacy groups. The manager / branch director / chairperson of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and the executive directors of the corporate community pharmacy groups were then able to reveal the e-mail addresses to the researcher without the consent of the respondent or if they chose, with the consent of the respondent. Each respondent was then individually e-mailed a link to the questionnaire via the study mediator. The respondents could then decide whether to complete the questionnaire or ignore it.

By making their e-mail addresses available, the respondents were not obligated by any means to complete the questionnaire and informed consent for the completion of the questionnaire was required and discussed under point 9.3. Recruitment of the participants took place from June 2014 to May 2015.
1.6.3 Permission or consent

All the respondents received an email from the study mediator that included an informed consent document and a link attached to the questionnaire. The respondents had to give informed consent in which they stated that they were willing to participate, and that the information they disclosed were allowed to be used. Ethical approval (NWU-00053-15-S1) for the research project was obtained from the Health Research Ethics Committee (HREC) of the Faculty of Health Sciences at the North-West University, Potchefstroom.

1.6.4 Anonymity

Anonymity implies that no one should be able to identify a respondent after the questionnaire has been completed (De Vos et al., 2011:120). According to Babbie (2007:65), the term anonymous should not be used to imply confidentiality. The mediator for this study was the administrator of the EvaSys system. All the respondents received an email from the study mediator with a link attached to the questionnaire. Once the questionnaire was completed and submitted, all the results were immediately available on the EvaSys system and the link no longer worked. The study mediator was not be able to see which respondent provided what response and thus no link could be made between a respondent and a specific questionnaire by any member of the research team. Therefore anonymity of the respondent was ensured.

The process of obtaining the respondents’ e-mail addresses is thoroughly discussed in point 1.6.8.3 (see Permission or informed consent).

1.6.5 Confidentiality

According to De Vos et al. (2011:119), confidentiality refers to the handling of information in a confidential manner. Confidentiality can be considered a continuance of privacy by making an agreement that limits others access to a person’s private information. Only the researcher, the project leader, the statistical analyst and the study mediator had access to the data obtained from the study and the respondents e-mail addresses. All information and data were managed in a strictly professional and confidential manner. Therefore, the respondents’ confidentiality was ensured.

The questionnaire clearly indicated that participation is voluntary and that no harm would come to the respondent if he / she chose not to participate in the study. The respondents could also withdraw from the study at any stage without penalty.
1.6.6 Data storage

The respondents e-mail addresses and the returned data from the study mediator were saved on the researcher's computer, which was password protected and in a locked room at all times. All hard copies were kept in a locked cupboard in the researcher's office.

The period of safekeeping is five years, after which all information and data will be destroyed in the appropriate manner. All information was managed in a strictly professional and confidential manner.

1.6.7 Respect for recruited participants and study communities

After the statistical analysis of the data, the results were compiled and sent to the corresponding managers to thank them for their participation in the study. They were allowed to share the results with the respondents of the study.

1.6.8 Benefit-risk ratio

1.6.8.1 Anticipated risks and precautions

The risks in this study were minimal since anonymity was ensured. Participation in this study was voluntary and no harm could come to the respondent if he / she chose not to participate in the study. To protect the respondents' information, only the researcher, project leader and study mediator had access to the respondents' e-mail addresses, which was only used by the study mediator. The respondents' e-mail addresses were used in the analysis of the data of the study.

The returned data from the study mediator were saved on the researcher's computer, which was password protected and in a locked room at all times. All information was managed in a strictly professional and confidential manner. There were certain risks that needed to be taken into consideration. They included that the respondents could choose not to complete their questionnaires, they could misunderstand the questions directed at them and incomplete questionnaires could be returned, leading to insufficient data.

1.6.8.2 Anticipated benefits of the study

1.6.8.2.1 Direct benefits

There were no direct benefits for the respondent.

1.6.8.2.2 Indirect benefits

The additional or indirect benefits for the respondent were the opportunity to share their views and practical wisdom to contribute to the debate on NHI. The greater benefit is that of moving
forward with the NHI, where a more in-depth understanding of the pharmacist's role within the NHI could be described and possible obstacles or challenges in the implementation of the NHI could be identified. This study may contribute to the debate on the NHI and illuminate the perceived role of pharmacists within the NHI. Therefore, the benefits outweighed the risks in this study.

1.6.8.3 Permission or informed consent

Each respondent was individually e-mailed by the mediator of this project and asked to give their informed consent and to complete the questionnaire. If the respondent gave his / her informed consent, they stated that they were willing to participate, and that the information they disclosed would be allowed to be used. The respondents’ could voluntarily participate in the study by filling out the questionnaire and returning the completed questionnaire via e-mail. There was a paragraph in the cover letter of the questionnaire entailing the details of the study and how the respondents’ privacy will be protected.

To protect the respondents’ information, only the researcher, project leader and mediator of the study had access to the participants’ e-mail addresses. The returned data from the mediator was saved on the researcher's computer, which was password protected and in a locked room at all times. All information was managed in a strictly professional and confidential manner. The questionnaire clearly indicated that participation is optional and no harm would come to the respondent if he / she chose not to participate in the study.

The participant could also withdraw from the study at any time without any consequences by informing the researcher or the mediator. The contact information of both the researcher and project leaders of the study were also included in the cover letter of the questionnaire.

1.6.8.4 Level of ethical risk

In this study, there was minimal ethical risk. Only the researcher, project leader and study mediator had access to the respondents’ email addresses and the study mediator converted all the data to Microsoft Excel® before it was sent back to the researcher. Therefore, anonymity was ensured and the respondents could not be identified. The returned data was also saved on the researcher's computer, which was password protected and in a locked room at all times. All information was managed in a strictly professional and confidential manner. Participation in this study was voluntary and no harm could come to the respondent if he / she chose not to participate in the study.
1.7 Chapter division

This dissertation is divided into four chapters as follows:

Chapter 1: Introduction and study overview

Chapter 2: Literature review

Chapter 3: Results and discussion

Chapter 4: Conclusions, recommendations and limitations

1.8 Chapter summary

In this chapter a brief literature review was provided in order to support the purpose of the study and methodology and ethical considerations were also provided. The next chapter contains a comprehensive literature review on the concepts of Universal Health Coverage and the National Health Insurance, specifically relating to SA.
CHAPTER 2: LITERATURE REVIEW

In this chapter, information regarding the background of this study's literature review is provided. The specific objectives of this review were to compare international forms of UHC that have been implemented in other countries, to describe the current health system in SA, to identify why there is a need to reform the South African health system and to demonstrate why the NHI was proposed as the method of reform. The majority of these objectives have already been thoroughly discussed or touched on in the previous chapter, and this chapter thus allows for a further discussion pertaining to these objectives. In order to reach these objectives, numerous sources throughout an extended period of time were consulted and a number of topics regarding UHC and the NHI were addressed in this review.

2 Universal Health Coverage and National Health Insurance

2.1 Universal Health Coverage

2.1.1 Definition and objectives

According to the WHO (2014a), UHC is a way of “ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship”.

In a summary prepared by the WHO (2014i) UHC is described in terms of the meaning, which individuals it entails, what health services are covered and how these are covered. Table 2.1 describes these terms (WHO, 2014i).

Table 2.1: Definition of Universal Health Coverage

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning</td>
<td>It is described as a financing mechanism that ensures access to healthcare services of high quality for all people, without experiencing financial difficulty. Access ought to be provided based on individual need, rather than the ability to pay.</td>
</tr>
<tr>
<td>Who</td>
<td>Everyone, which include the most vulnerable and poorest individuals.</td>
</tr>
<tr>
<td>What</td>
<td>Services that are covered include a comprehensive selection of essential healthcare services. These services basically include prevention, treatment, pain control and hospital care.</td>
</tr>
<tr>
<td>How</td>
<td>Healthcare costs are shared among entire population and not just the sick. These costs are shared through a system of risk-pooling and pre-payment.</td>
</tr>
</tbody>
</table>
The concept of UHC is abbreviated for both the terms “Universal Health Coverage” and “Universal Health Care” (Stuckler et al., 2010:2). While these two terms essentially mean the same, they are applied in different situations. The term “Universal Health Coverage” typically relates to low- and middle-income countries as a result of the necessary range of healthcare services among the poorest countries cannot be assured by the population coverage (Stuckler et al., 2010:2). The term “Universal Health Care”, on the other hand, is mostly associated with high-income countries in describing policies (Stuckler et al., 2010:2).

Three objectives of UHC could be derived from the definition and these include (WHO, 2014a):

- to ensure equal access to healthcare services;
- to ensure the provision of high quality healthcare services; and
- to ensure protection financial liability.

### 2.1.2 Essentials

The essentials of UHC provide the building blocks for UHC and these factors are all important when implementing UHC. These essentials include health financing, health workforce, essential medicines and health products, health statistics and information systems, national health policies and service delivery and safety (WHO, 2016a). Table 2.2 provides a brief description of these essentials.

**Table 2.2: Essentials of Universal Health Coverage**

<table>
<thead>
<tr>
<th>Essential</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health financing</td>
<td>Adequate financing with pooling of risk is required (WHO, 2016i). This includes the pooling of funds, revenue raising, designing the benefits package and the purchasing of services (WHO, 2016b).</td>
</tr>
<tr>
<td>Health workforce</td>
<td>A workforce that is well-trained and adequately remunerated is required (WHO, 2016i). A central and critical role is played by healthcare professionals in providing essential healthcare services (based on the PHC approach) to individuals, families and communities through improved access and quality healthcare for the entire population. These services in-turn promote health and prevent diseases (WHO, 2016e).</td>
</tr>
<tr>
<td>Essential medicines and health products</td>
<td>In order to achieve UHC and obtain a functional healthcare system, affordable access to quality medicines and medical devices is a critical factor (WHO, 2016c). A functioning healthcare system requires quality-assured, effective and safe medicines, medical devices and vaccines, including in-vitro diagnostics (WHO, 2016d). It is also important to consider the logistics that get vaccines, medicines and technologies to where they are required (WHO, 2016i).</td>
</tr>
<tr>
<td>Essential</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Health statistics and information systems</td>
<td>Health statistics and information systems are important because that is what policy and management decisions are based on (WHO, 2016i). Strong country information systems need to generate information on health informing planning, resource allocation and accountability (WHO, 2016g). It is fundamental for health sector reviews, public health decision making, programme monitoring and evaluation and planning and resource allocation (WHO, 2016f).</td>
</tr>
<tr>
<td>National health policies</td>
<td>National health strategies, policies and plans play an important part in outlining the economic resolutions, vision, principal concerns and strategies to improve and maintain health in various countries. They are also used to provide guidance and consistency to efforts made in order to improve health (WHO, 2016h). Leadership that sets and enforces the rules of the game, harnesses the energies of all stakeholders, which includes communities and other sectors and provides clear direction is needed in all countries (WHO, 2016i).</td>
</tr>
<tr>
<td>Service delivery and safety</td>
<td>Health services provided must be safe, of good quality and not cause harm (WHO, 2016j). Well-maintained facilities are organised as part of a service delivery and referral network (WHO, 2016i).</td>
</tr>
</tbody>
</table>

2.1.3 History and shift towards Universal Health Coverage

In low- and middle-income countries, over a billion individuals are unable to access required healthcare services as a result of these services being unaffordable (WHO, 2010). The World Health Report (WHO, 2008b:24) explains that most of the globe’s healthcare systems depend on an unjust approach for funding healthcare services. These systems are financed through OOP payments from sick individuals and their families (WHO, 2008b:24). Of individuals living in low- and middle-income countries, overall health expenditure is accounted for by about 5.6 billion individuals paying an excess of 50% in OOP (WHO, 2008b:24). The result is that many families cannot afford to compensate for healthcare services. These individuals are thus deprived of the healthcare services that they need. The highest attainable level of health is not possible without health financing systems that guarantee security in terms of financial risk and these health systems cannot operate effectively (WHO, 2008b:24).

Countries at all income levels are increasingly seeing UHC as an imperative objective for advancing their healthcare system (Evans et al., 2012:864). UHC is also broader than just health. By improving people’s health, it enables them to work and earn an income and children to gain an education (Evans et al., 2012:864). UHC allows many people to escape poverty and it also prevents others from being forced into poverty because it protects people from financial suffering as a result of compensating for required healthcare services (Evans et al., 2012:864).
Reforming healthcare systems pointed towards UHC can be pinned down to the 19th century (Bärnighausen & Sauerborn, 2002). Under the leadership of Otto von Bismarck, the phenomenon first started in Germany (Reid, 2009:17). Later the phenomenon spread throughout Europe to nations including France, Britain and Sweden (McKee et al., 2013, Savedoff et al., 2012). In 1948 the WHO Constitution implicitly preserved the notion of UHC (WHO, 1948). The constitution acknowledged that UHC entailed “the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, and political belief, economic or social condition” (WHO, 1948). With the “health for all” avowal made at the Alma-Ata conference in 1978, pertaining to PHC, this fundamental human right was reaffirmed (Declaration of Alma-Ata, 1978).

In 2005, the theory of UHC was yet again recognized and recommended by the World Health Assembly (WHA) as the goal of sustainable healthcare financing systems (WHA) (WHO, 2005). The WHA resolution (WHA58.33) openly requested the realization of healthcare financing systems that were centred upon prepaid and pooling procedures (WHO, 2005:139-140). In maintaining that UHC requires that “pooling pre-paid contributions collected on the basis of ability to pay, and using these funds to ensure that services are available, accessible and produce quality care for those who need them, without exposing them to the risk of catastrophic expenditures”, the 2008 World Health Report reemphasised that vital mechanisms for UHC include prepaid- and pooling systems (WHO, 2008b).

The role of health system financing for UHC was further emphasized in the 2010 World Health Report through its reasoning that “countries must raise sufficient funds, reduce the reliance on direct payments to finance services, and improve efficiency and equity” (WHO, 2010). In 2013, the World Health Report stated that research evidence is needed in order to assist countries with their move to UHC (WHO, 2013). In the midst of numerous regional and international advancement organisations, the move towards UHC had also been promoted by the UN, the World Bank, the Gates Foundation, Oxfam, the United States Agency for International Development (USAID), the United Nations Children’s Fund (UNICEF), the Results for Development Institute, the International Labour Organization, the Joint Learning Network and the Rockefeller Foundation (UNICEF, 1987; United Nations, 2012; Oxfam, 2013; World Bank/WHO, 2013a; World Bank/WHO, 2013b; Bristol, 2014; World Bank/WHO, 2014; World Bank, 2015a; World Bank, 2015b).

On 6 December 2012, Resolution A/67/L.36 of the WHA was published and embraced by the UN’s Member States. This resolution highlighted that UHC was an important goal for overall human development. The WHO Constitution (WHO, 1948) states that “one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition” is “the enjoyment of the highest attainable standard of health”. UHC promotes
this statement and it is also consistent with the concept of “health for all” that was declared at Alma-Ata Declaration in 1978 (Denill et al., 1999:6).

Universal awareness of the theory and discussion regarding UHC has been progressively demonstrated by this history (Latko et al., 2011:2161; WHO, 2010). A clear consensus of the importance of UHC is presented by the literature to date (World Bank/WHO, 2013; Borgonovi & Compagni, 2013; Kutzin, 2012). In 2012, the WHO’s Director-General, Dr Margaret Chan, described UHC as being “the single most powerful concept that public health has to offer” (Chan, 2012). The capacity for UHC to enhance people’s health has also been shown and is particularly evident for the underprivileged (Lee et al., 2008; Moreno-Serra & Smith, 2012).

Rodin and De Ferranti (2012) are of the opinion that the phenomenon of UHC will result in the third international transformation and majorly impact the funding and arrangement of future healthcare systems. A necessity for maintainable advancement is considered to be UHC (Evans et al., 2012) as it is an essential catalyst for economic growth and poverty reduction (Kieny & Evans, 2013; Jamison et al., 2013). The objective of UHC can be reached according to the Lancet’s Commission on ‘Investing in Health reports’ by 2035 (Jamison et al., 2013).

According to the World Bank (2015b), there are globally more than 30 classified middle-income countries that are putting procedures into effect that should move them forward to achieving UHC. There are also many more countries of low- and middle-income that, in order to achieve UHC, should contemplate to launch similar systems (World Bank, 2015b).

### 2.1.4 Models of universal healthcare

#### 2.1.4.1 Classification of healthcare models

Healthcare systems around the world are generally categorised by Reid (2009:17-19) into four different models. Figure 2.1 illustrates Reid’s models of healthcare (Reid, 2009:17-19).

![Figure 2.1: Different healthcare models](image-url)
In Figure 2.1 the four distinctive healthcare models are presented as the Beveridge-, Bismarck, NHI- and OOP-model (Reid, 2009:17-19). The models of UHC are used by many, primarily developed and industrialised, countries all over the world (Reid, 2009:17-19). They are customised to the needs of a specific country and may include features from different models and systems of healthcare (Reid, 2009:17-19).

The OOP-model is not a model of UHC, nevertheless it is important to mention as SA uses a variation of this model. This model is used by most countries in the world as a result of many being extremely disorganised and too financially deprived to deliver essential healthcare services (Reid, 2009:18-19). The OOP-model is also termed a non-system by Hamilton (2009) for the basic reason that OOP-payments are used in order to finance healthcare services. Some countries using the OOP-model might have minimum health insurance coverage, nonetheless a great percentage of these individuals generally do not have access to healthcare services as a result of them being unable to pay (Hamilton, 2009).

One of the world’s wealthiest nations, the United States of America (USA), also uses a variation of the OOP-model which is called the “American Blue Cross” and “Blue Shield” model (Lloyd, 2010). This model was established in 1934 and includes private insurance and private provider markets (Lloyd, 2010). The capacity to compensate for healthcare services is thus a major determinant for the population’s access to healthcare. There are provisions available for the poorest and most vulnerable (Lloyd, 2010).

Figure 2.2 illustrates the different healthcare models used around the world in terms of a general description, advantages, challenges and countries using a specific model or a variation thereof (Cichon & Normand, 1994:323, Van der Zee & Kroneman, 2007:14,21; Reid, 2009:17-18, 105-107; Lloyd, 2010).
Figure 2.2: Description of the different models of healthcare

Bismarck model
- Founded in the 19th century by Prussian chancellor Otto von Bismarck.
- Referred to as Social Security Health.
- Decentralised and makes use of private health insurance plans called sickness funds.
- Sickness funds derive funding from payroll deductions.
- Everyone is covered and there is no profit gain. Healthcare providers and payers are private.
- Strict government management enables the same degree of cost-control as in Beveridge models.
- Advantages: High quality care, high expenditure growth rates, high population satisfaction and public support.
- Challenges: Cannot ensure affordable care for all.
- Countries: France, Netherlands, Austria, Luxembourg, Japan, Belgium, Switzerland, Belgium and Germany.

Beveridge model
- Established in 1948 by Lord Beveridge in the United Kingdom.
- Referred to as National Health Services.
- Centralised and the government funds and deliver healthcare.
- Funding derived from tax payments and there are no medical bills as treatment can be seen as a public service.
- Government owns most hospitals and clinics. GP’s are either government employees or private.
- Government controls range and cost of services, therefore these models have low costs per capita.
- Advantages: Cost advantage with affordable care for all. Benefit for health outcomes associated with prearranged population-based tests.
- Challenges: Cannot avoid the dangers of poor quality.
- Countries: Cuba, Great Britain, Spain, Italy, Denmark, Ireland, Australia, Brazil, Sweden, New Zealand, Finland, Iceland, Norway and Scandinavia.

NHI model
- Elements of both the Bismarck and Beveridge models.
- Healthcare providers are private but payment is derived from a government-run insurance program.
- Every citizen pays into the government-run program.
- Monthly premiums are collected and medical bills are paid by the national or provincial insurance plan.
- Manages to have considerable market power and better prices can be negotiated. There is no profit gain.
- Costs are controlled by a limited package of covered medical services, or by compelling patients to wait to be treated.
- Advantages: Less expensive, simpler administration, no advertising required and no expensive underwriting offices which can deny claims.
- Challenges: The benefits package for patients is limited.
- Countries: China, Taiwan, Ghana and South Korea.

OOP-model
- Countries that implement this model are also known as “no-system” countries.
- Medical expenses are accounted for by the patient and they pay OOP directly for medical care.
- There is no insurance or government plan which could provide reimbursement.
- Basic rule is that wealthy individuals have access to healthcare and less fortunate individuals remain sick and die.
- In rural regions many individuals never have the opportunity to see a GP.
- In rural regions there may however be access to a village healer but traditional medicine may not be effective.
- Advantages: Individuals with enough money have access to healthcare services and they can chose their own provider.
- Challenges: Many individuals generally do not have access to healthcare and this translates into a less productive workforce. Modern medications are also not available in these countries.
- Countries: China, India, Cambodia, SA, Uruguay, the Bahamas, Chile and Argentina.
Figure 2.2 provides a summary of the workings of Reid’s (2009) different models of healthcare. It was also explained in Figure 2.2 that there are two systems of healthcare delivery. These systems include the National Health Services (NHS) and Social Security Health (SSH) system and they are important in terms of how healthcare is provided and financed in countries using these systems. Figure 2.3 provides a description of the principles on which these systems are based (Van der Zee & Kroneman, 2007:21).

**Figure 2.3:** Healthcare delivery systems

Figure 2.3 provides a description of the NHS and SSH systems that are used in Reid’s (2009) healthcare models.

### 2.1.4.2 Comparing the healthcare systems of different countries

The literature presently available is inconclusive regarding which of these models function better and there is no “one size fits all’ model (Hsiao, 2007). Countries make use of a certain model which is modified to fit the needs of the country (Reid, 2009:17-19). In the following tables a number of countries using different healthcare models are compared in terms of various factors. These countries that were selected ranged from countries with small to large populations and
countries in low to high income groups. The reason for selecting different countries was to enable comparisons relating to what countries tend to use which models. Tables 2.3 to 2.8 describe the health systems of countries using different UHC models. Table 2.3 describes the French health system which uses the Bismarck model.
Table 2.3: Description of the health system in France where the Bismarck model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
</table>
| 64291 (WHO, 2014c) | 10.40 (Husna, 2015)   | High (World Bank, 2016) | 82 (WHO, 2014c)               | 10.9 (OECD, 2015a)          | 9.0 (World Bank, 2015c)     | 2.6 (Wold Bank, 2015d)       | SSH             | • Hospital services for rehabilitation, healthcare or physiotherapy;  
                       |                       |                         |                               |                             |                             |                             |                 | • Ordered diagnostic services and care (carried out by laboratories and paramedic professionals);  
                       |                       |                         |                               |                             |                             |                             |                 | • Specialists, GPs, midwives and dentists outpatient care;  
                       |                       |                         |                               |                             |                             |                             |                 | • Ordered appropriate pharmaceutical medicine and devices.  
                       |                       |                         |                               |                             |                             |                             |                 | • Prostheses approved for reimbursement.  
                       |                       |                         |                               |                             |                             |                             |                 | • Mental- and long-term healthcare (partial coverage);  
                       |                       |                         |                               |                             |                             |                             |                 | • Preventive care practices for defined target populations i.e. colorectal cancer screenings, immunisations and mammography (full reimbursement);  
                       |                       |                         |                               |                             |                             |                             |                 | • Ordered healthcare- associated transportation;  
                       |                       |                         |                               |                             |                             |                             |                 | • Certain preventive care practices (limited coverage);  
                       |                       |                         |                               |                             |                             |                             |                 | • Out-patient vision and dental care (minimum coverage); and  
                       |                       |                         |                               |                             |                             |                             |                 | • Expansive coverage for mental illness, addictions, the elderly and the disabled (Schabloski, 2008:11, Durand-Zaleski, 2014:53). |

The residents of countries that make use of the Bismarck model are required to have health insurance of some kind (Hamilton, 2009). In the French health system most healthcare services necessitate hefty co-payments at the point of service and for this reason complementary health insurance is provided by for-profit- and non-profit insurance companies (Reid, 2009:31). Table 2.4 describes the German health system that use the Bismarck model.
Table 2.4: Description of the German health system where the Bismarck model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
<tbody>
<tr>
<td>82727 (WHO, 2014b)</td>
<td>4.5 (Ferreira, 2015)</td>
<td>High (World Bank, 2016)</td>
<td>81 (WHO, 2014b)</td>
<td>11.0 (OECD, 2015b)</td>
<td>8.7 (Wold Bank, 2015c)</td>
<td>2.6 (Wold Bank, 2015d)</td>
<td>SSH</td>
<td>• Preventive services (basic immunisations, regular dental check-ups, check-ups for chronic diseases, child check-ups and at certain ages cancer screenings); • Both Out- and Inpatient hospital care; • GP services; • Dental care; • Mental healthcare (comprehensive psychological therapy, behavioural therapy and psychoanalysis); • Optometry; • Physical therapy; • Prescription drugs (all prescription drugs are covered unless they are explicitly excluded by law or pending evaluations); • Medical aids; • Rehabilitation, hospice and palliative care; and • Sick leave compensation (Blümel &amp; Busse, 2014:63-66).</td>
</tr>
</tbody>
</table>

In Germany, individuals who earn less than a certain amount per month are required to register with one of the available sickness funds for state-provided healthcare (Green et al., 2010). Individuals who earn above the specified amount are able to forgo access to state-provided healthcare services and procure healthcare services by means of optional private insurance (Tanner, 2008:29). Table 2.5 describes the Brazilian health system where the Beverdige model is used.
Table 2.5: Description of the Brazilian health system where the Beverdige model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
</table>
| 200362 (WHO, 2014d) | 6.9 (Taborda, 2016a) | Upper-middle (World Bank, 2016) | 74 (WHO, 2014d) | 9.7 (World Bank, 2015d) | 4.7 (World Bank, 2015c) | 5.0 (World Bank, 2015d) | NHS | • Women and child health;  
• Promotive hypertension, diabetes, TB, leprosy, HIV, and oral healthcare services;  
• Disease prevention;  
• Medical specialists; and  
• Complex care with highly sophisticated theology and equipment (Joint Network Learning, 2013). |

Table 2.6 describes the Spanish health system where the Beverdige model is used.
Table 2.6: Description of the health system in Spain where the Beverdige model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
</table>
| 46927 (WHO, 2014e) | 20.9 (Taborda, 2016b) | High (World Bank, 2016) | 82 (WHO, 2014e) | 8.9 (World Bank, 2015d) | 6.3 (World Bank, 2015c) | 2.6 (World Bank, 2015d) | NHS | • Precautionary care;  
• Diagnostic and therapeutic techniques;  
• Rehabilitation;  
• Health promotion and maintenance;  
• Child, youth, adult and geriatric care;  
• Mental health;  
• Dental care;  
• Care for the terminally ill;  
• Specialist care;  
• Emergency care;  
• Pharmaceutical services;  
• Orthopaedic and prosthetic care;  
• Nutritional goods; and  
• Transport of the sick (Peralta, 2006). |

Table 2.7 describes the Canadian health system where the NHI model is used.
Table 2.7: Description of Canada’s health system where the National Health Insurance model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
</table>
| 35812 (WHO, 2014g) | 7.2 (Guchshina, 2016) | High (World Bank, 2016) | 82 (WHO, 2014g) | 10.9 (World Bank, 2015d) | 7.6 (World Bank, 2015c) | 3.3 (World Bank, 2015d) | Mix | • Hospital;  
• Physician;  
• PHC; and  
• Diagnostic services (covered under the provincial Medicare plans)  
• Different domains and regions also offer long-term care which includes home-based care (offered in both sectors), chronic care (service for high-need patients) and residential care (a few assisted-living services) (Schabloski, 2008:4). |

Table 2.8 describes the health system of Ghana where the NHI model is used.
### Table 2.8: Description of the health system in Ghana where the National Health Insurance model is used

<table>
<thead>
<tr>
<th>Population (000s)</th>
<th>Unemployment rate (%)</th>
<th>World Bank income group</th>
<th>Life expectancy at birth (years)</th>
<th>Total health expenditure (%)</th>
<th>Public health expenditure (%)</th>
<th>Private health expenditure (%)</th>
<th>Health service delivery system</th>
<th>Services included</th>
</tr>
</thead>
</table>
| 25905 (WHO, 2014h) | 4.6 (Quandl, 2015h)   | Lower-middle (World Bank, 2016) | 62 (WHO, 2014h)                 | 5.4 (World Bank, 2015d)      | 3.3 (World Bank, 2015c)      | 2.1 (World Bank, 2015d)      | Mix                           | • Inpatient care (wide range of diseases, x-rays, laboratory tests and procedures, ultrasound, wide range of cancers, wide range of surgeries, physiotherapy, prescribed NHI Scheme medication, general ward stay, approved traditional medication, feeding, symptomatic HIV/AIDS treatment)  
• Out-patient care (general day surgeries, prescribed NHI Scheme medication, physiotherapy, approved traditional medication)  
• Optometry Services (Wide range of tests and surgeries)  
• Emergency care (Gynaecological- and obstetric emergencies, surgical- and medical emergencies, vehicle related incidents and automobile- and work related accidents); and  
• Oral care (wide range of dental procedures). |
2.2 National Health Insurance

The definition and objectives of the NHI have already been discussed in Chapter 1 and this section will therefore focus on describing the need for the NHI in SA and the NHI in the context of the essentials of UHC.

2.2.1 The need for National Health Insurance in South Africa

Discussions from the last 21 years have led to a shared perception of reasoning that the NHI is the most appropriate solution to solve existing difficulties in the South African healthcare system. The common view is that NHI will address the key challenges that the health system is facing (McIntyre & van den Heever, 2007:73). In this section the key challenges that the South African health system faces will be discussed.

Naidu-Hoffmeester (2014) states that the University of South Africa’s (UNISA), Prof. Zethu Nkosi, is of the opinion that “health is a social, economic and political issue, and above all, a fundamental right”. He continues that as access to healthcare is a constitutional recognised right, it is the moral obligation of the government to offer access to healthcare for all. He also adds that some of the existing health issues in SA include a quadruple burden of disease, mal-distributed of financial resources and high healthcare-related costs (Naidu-Hoffmeester, 2014). Naidoo (2012:149) also notes these problems. The Green Paper on the NHI (Department of Health, 2011:4) also argues that the current South African healthcare system is unmaintainable, overly expensive and hospicentric. Another challenge includes lack of human resources, particularly in the public health sector, with approximately 79% of GP’s practising in the private sector (Day & Gray, 2007; Department of Health, 2011:4).

Naidu-Hoffmeester (2014) continues that Nkosi also stated that many healthcare approaches in SA have been tried and tested, but these approaches have not performed as planned. He explains that the “primary health care approach was adopted by the ANC government from the onset of the democratic dispensation, and the comprehensive healthcare system advocated an equity-oriented approach to healthcare and preventive and promotive health. Policies and programmes implemented to improve the lives of all South Africans were the Reconstruction and Development Programme (RDP), Growth, Employment and Redistribution (GEAR), Accelerated and Shared Growth Initiative for South Africa (AsgiSA), and, the latest, the National Development Plan (NDP)” (Naidu-Hoffmeester, 2014).

To address the current health system challenges, the government has proposed that SA adopt the NHI.
The path towards the implementation of the NHI in SA has not been one without resistance from certain groups. Gerbi (2014) wrote in the *Eyewitness News* of 16 October 2014 that the spokesperson from the Democratic Alliance (DA), Mike Walters, said that the DA believes that the implementation of the NHI would probably cause less privileged individuals to experience even more travail. Research that was carried out by the DA pointed to significant uncertainties in regard to the achievability of the NHI.

Gerbi (2014) also wrote that according to the Minister of Health, “It’s not going to bridge the divide and is even going to the United Nations to be debated. It’s going to be a programme which everyone is going to embrace. It doesn’t matter which party you belong to. It’s going to be embraced by the whole world”. He also added that NHI will be implemented regardless of resistance from the Western Cape government by saying that “it doesn’t matter how much the Western Cape doesn’t believe in it, they are going to embrace it. There is no question about it. I can assure you and I’ll put my signature on it. There is no escape from it” (Gerbi, 2014).

### 2.2.2 National Health Insurance in the context of the essentials of Universal Health Coverage

The essentials of UHC have already been discussed under section 2.1.2 (see Essentials in section 2.1.2) and in that context; this section describes the NHI in terms of policy proposals, challenges and progress that has been made toward achieving the NHI in SA. The Green Paper on NHI (Department of Health, 2011) did not reveal any information regarding these essentials and the White Paper on NHI (Department of Health, 2015:15) mentioned that if even one these essentials are lacking or inadequate, it will negatively influence the healthcare systems performance and it will influence its functionality.

#### 2.2.2.1 Financing

Economically, one of the greatest significant aspects of establishing the NHI system will be the cost. The Green Paper (Department of Health, 2011:37) estimates that if the NHI system is established throughout the proposed 14-year time period, the system will cost ZAR256 billion in 2025. The White Paper (Department of Health, 2015:53) also mentioned the exact same amount but did not clearly describe what expenditure tax payers should expect.

As mentioned previously, the NHI will derive funding from compulsory individual contributions to the NHIF i.e. premiums (Department of Health, 2011:40). The White Paper (Department of Health, 2015:59) broadened the financing sources as to possibly include in addition of premiums, direct, indirect and payroll taxes. Figure 2.4 provides the definitions
and examples of the implicated possible tax sources as defined in the White Paper (Department of Health, 2015:59).

<table>
<thead>
<tr>
<th>Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collection of premiums or membership contributions from employee or informal sector.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direct taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes, for example personal or corporate income tax, surcharge on income, or inheritance tax, imposed on individuals or entities in relation to their income, earnings or wealth.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes, for example value-added tax, national health insurance levy, financial transactions, fuel levies and taxes on alcohol and tobacco, levied on transactions or goods and services, irrespective of circumstances of buyer or seller.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payroll taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes, for example contribution to NHI deducted from pay check, calculated on payroll as either employer or employee contributions, or both.</td>
</tr>
</tbody>
</table>

**Figure 2.4: Definition and examples of possible tax sources**

The White Paper (Department of Health, 2015:56-67) continued to describe various possible sources of taxation, provided the principles on which they should be based and the implications they would have. No final layout of the specific mechanisms that will be used was provided.

There is currently no mention of incorporating co-payments as it is not generally promoted by UHC (Department of Health, 2011:35; Department of Health, 2015:37). The Green Paper (Department of Health, 2011:35-36) did express that in certain situations, for example for non-members (for instance tourists) the NHI might be compelled to incorporate them. The White Paper (Department of Health, 2015:37) explained that in the first phase of the move toward the NHI system, the Uniform Patient Fee Schedule (UPFS) which is currently applied
in the public sector will be eliminated and no charges will thus be imposed (not applicable to non-citizens and third-party financiers).

The South African Revenue Services (SARS) will be responsible for the collection of all NHI-related proceeds as well as compulsory membership payments (Department of Health, 2011:41). The NHIF will manage the total funding allocated for individual healthcare services and the Treasury, through discussions with the NHI as well as the Minister of Health, will be responsible for the assignment of general tax proceeds and payroll-associated compulsory payments (Department of Health, 2011:41).

The Green Paper (Department of Health, 2011:41) indicates a restructuring of establishments implicated in financing, pooling, procuring and delivering healthcare services. It was also proposed in the Green Paper (Department of Health, 2011:46) that the income armament approach and pooling structure must be fine-tuned and involve a coalition of pricing and healthcare benefits in regard to the Compensation Commission for Occupational Diseases, Road Accident Fund and the Occupational Diseases in Mines and Works Act. The current provider reimbursement system also needs to be modified and intervening systems employed in order to progress toward a performance-centred reimbursement arrangement (Department of Health, 2011:46).

Concerns and challenges related to the financing of the NHI include a possible increase in tax and current and future medical negligence lawsuits. A major concern, especially for members of the public, is the speculation that tax might be increased in order to fund the NHI. In 2010, the Saturday Star published an article written by Du Preez (2010:1) entitled "Higher taxes to fund NHI". According to Du Preez (2010:1), the Minister of Finance, Pravin Gordhan, stated that "taxes will not yet be increased" in order to fund the NHI as the National Treasury at that period of time had not yet been acquainted with the estimated costs of the NHI system. He later added that there is a possibility that an expanded tax base could be used in future to compensate the NHI system. Reuters (2011) wrote in the News24 of 26 October 2011, that the Minister reassured members of parliament that the NHI will be a project implemented over a long period of time and that concern relating to the effect that it might have on the budget in the short term is not necessary.

In 2013, in an article published in the Sowetan, Sibanyoni and Monama (2013:5) wrote that Minister Pravin Gordhan once again stated that at this time the NHI won’t put further strains on taxes. The Minister met this statement with: “over the longer term, however, it is anticipated that a tax increase will be needed”. He also added that if SA succeeded to drive the economy in the direction of 5% per annum and twofold government income achieved by
the following two decades, the NHI and extended occupational education would be within reach with minor tax amendments. In the instance that the economy develops in line with current trends, major changes in income and expenses would have to be made. Gordhan also explained that funding options for the NHI might consist of a raised VAT percentage, adjusted taxable income rates of individuals and payroll taxes. According to the Minister of Finance, additional revenue of R6-billion would be needed to fund NHI between 2014 and 2015 (Sibanyoni & Monama, 2013:5).

Forslund wrote in the Star of 27 November 2013 that the Minister of Finance stated that tax income in accordance to GDP ratio should be raised with about 25%. An increase should be applied to tax rates of high-income individuals and tax evaders should be conveyed into the tax system. Companies that evade or avoid tax should be restricted. Tax cuts within the Treasury should also be stopped and freed-up money should be added to tax revenue. The Gear (Growth, Employment and Redistribution) article of 1996 presented the tax revenue policy of 25% and it was also restated in the 2012 Budget speech (Forslund, 2013:18). Gordhan also vowed to minimise the budget debit from 4.8% to 3% of the GDP in order to reduce public sector loans from 7.1% to 5% over a period of three years. He is also of the opinion that the Treasury and the DoH are miles apart from each other’s vision to create a reformed public healthcare system (Forslund, 2013:18).

In addition, medical negligence lawsuits provide a major threat for the implementation of the NHI. Green (2014) wrote in the Mail & Guardian of 16 April that experts are in agreement that elevated expenses related to medical negligence claims could potentially liquidate the NHI. Green (2014) also wrote that Sylvester Chima of the University of KwaZulu-Natal’s Health Science faculty, expressed in a media announcement that “the cost of unregulated medical negligence claims may likely impact the NHI scheme if funds needed to run the programme are diverted to pay for medical negligence claims”. According to Green (2014), KwaZulu-Natal and Gauteng’s health department both have billions of Rands of medical negligence claims against them. This statement is also supported by that of a health representative of the Democratic Alliance (DA), Jack Bloom, made in early 2014, in which he stated that medical negligence claims amounting to upwards of R1.268-billion have been made against hospitals in these two provinces (Green, 2014).

Green (2014) also noted that Chima cautioned that extraordinarily high legal costs nearly led to the destruction of the United Kingdom’s NHS in the 1990’s and may well likewise compromise the NHI. Chima proposed that “South Africa may need a no-fault compensation scheme similar to the Road Accident Fund in order to limit the costs of medical negligence and its impact on NHI”. Poor patients who cannot afford a lawyer would be enabled to claim by a no-fault compensation scheme. As a result there would be fewer court cases and that
would also limit legal costs for the DoH. Chima explained that “if a patient isn’t satisfied with the compensation they receive, they can take the case to court. But you will find most patients would prefer not to go through prolonged and expensive legal battles themselves”. The Minister of Health responded to this statement by expressing to the Mail & Guardian that “if we don’t do something, the whole system will suffer immeasurable damage” (Green, 2014).

2.2.2.2 Policies

Progress has been slow and NHI-related policy documents tend to not be released after the expected publication dates. Figure 2.5 outlines the timeline in which policy documents were proposed to be released and the progress made thus far (Department of Health, 2011:12-15,48,50; Kahn, 2014; Department of Health, 2015:1).
Figure 2.5: Timeline for the proposal and release of National Health Insurance related policies

- **2007**: Polokwane Resolution on the implementation of the NHl.
- **2009**: The NHl is set as a key ANC selection promise. Two ANC Policy proposals on the implementation of the NHl system were leaked.
- **2012**: Proposed starting period of legislative procedures surrounding the NHl in January. In February, the Treasury said that a discussion document outlining possible financing mechanisms for NHl will be published in April. 11 NHl Pilot sites were launched in March.
- **2014**: A White Paper on NHl and a discussion document summarising the possible financing mechanisms would be released for public comment before the national election on 7 May.
- **2015**: In August, Health Minister Aaron Motsoaledi said that the White Paper on NHl and the related discussion document were set to enter the cabinet process. The White Paper on NHl was released in December.
- **2016-2020**: Establishment of the NHl Act.
The timeline portrayed in Figure 2.5 suggests that the track record of proposed policy release dates and actual release dates differ quite extensively. One example of such delays is the establishment of the National Health Insurance Advisory Committee which was scheduled for 2009 with the aim to “advise the Minister on the development of policy and legislation relating to the introduction of a NHI System”, complete an implementation strategy by June 2010 and oversee the eventual execution of the NHI system in its entirety after five years (Department of Health, 2009).

According to Van den Heever (2013:1), SA has a serious need to reform the current healthcare system. Despite this fact, there has yet to be a well-framed strategy that is sufficient to address the areas of systematic non-performance released by the government. The only originally available documents that provided details about the suggested system was a disclosed ANC document consisting of 200 pages (ANC, 2009b), a disclosed ANC Policy proposal on the NHI consisting of 68 pages (ANC, 2009b) and a four page elucidation in the ANC Today (2009a).

As mentioned previously, a Green Paper on the NHI was released in August 2011 (Department of Health, 2011:1) and proposed that present judicial and governing bylaws need to be re-examined in order to establish the groundwork for the Act or Bill that will set up supporting conditions for the implementation of the NHI (Department of Health, 2011:46). This Act or Bill is proposed to be established from 2016 to 2020 during the second phase of the implementation of the NHI (Department of Health, 2011:50). Van den Heever (2013:1) states that the Green Paper on NHI should have served as a well-framed strategy that addressed current issues, but instead offered a vague set of reforms of the public sector that lack any relationship to what is not working. He also points out that an important blind spot in both the Green Paper and various other associated policy documents, include the failure to recognise that SA as a developing country has very little option but to achieve UHC by using multiple mechanisms, rather than a single financing mechanism (Van den Heever, 2013:1).

The much-anticipated White paper on NHI had not been released on any of its promised release dates (Department of Health, 2011:50, Matsoso & Fryatt, 2013:156-158). Kahn (2015b) wrote in the Business Day Live of 24 August 2015, that the Minister of Health expressed to members of Parliament’s portfolio committee on health on 21 August 2015, that “We have completed the work. The part that was lagging behind was the financial part, but that has been done”. When pressed by journalists, Dr Motsoaledi declined to comment on the financial implications of the NHI White Paper, stating that NHI is a system that the government believes is affordable (Kahn, 2015b).
Forslund (2013:18) wrote in the *Star of 27 November 2013* that the National Treasury also promised to release a discussion document on the possible financing options for the NHI in April 2012, but this document has also not been delivered. According to Forslund (2013:18), the acronym NHI does not even appear in the medium-term budget policy which was released in October 2013. Forslund also states that in real terms for 2012/16 alone, the Treasury is about R150 billion behind the plan for public health reform which was modelled in the Green Paper released in 2011.

The *White Paper* (Department of Health, 2015) was released on 10 December 2015 and has been confronted by various public media outlets questioning why it took nearly five years to complete as a minimum new information has been included (No remedy in, 2015, Kahn, 2016). Kahn (2016) wrote in the *Financial Mail of 25 February 2016* that “The problem is that it fails to take a position on any of the tough issues. It does not spell out what benefits patients will get; what they will cost; where the money will come from; or how all the all-powerful provincial health departments fit into this picture”. Kahn (2016) also wrote that as a result of a concern that critical observations would be seen as anti-ANC and aggravates the government; numerous major players in healthcare had rejected the opportunity to voice their opinions and concerns publicly.

### 2.2.2.3 Healthcare workforce

In order to ensure that the transition process to the NHI is effective, the Green Paper (Department of Health, 2011:44-45) proposed that a long-term strategy should be developed that could deal with the present human resources in the health system. This strategy will involve an increase in the number of healthcare professionals that will be trained and delivered from 2012 to 2014 (Department of Health, 2011:45, 49).

The *White Paper* (Department of Health, 2015:11) provided more details related to this proposed strategy by stating that commissioning with private GP’s at PHC level will be increased in order to use the existing human resources more effectively. Commissioning will also be extended to healthcare professionals who are involved with handling school children’s physical obstacles to learning. These professionals will concentrate on children that were identified throughout the piloting of the NHI and will include speech therapists, occupational therapists, audiologists, oral hygienists, optometrists, physiotherapists and psychologists (Department of Health, 2015:11).

Employment prerequisites that are essential for guaranteeing reasonable workload distribution and performing distinct responsibilities will be established by means of the Workload Indicators of Staffing Need (WISN) tool (Department of Health, 2015:49).
essential element in expanding “access to quality services in rural and hard-to-reach areas” is providing “incentives” in order to appeal to healthcare professionals to be employment in these areas (Department of Health, 2015:49). This approach is supported by George et al. (2013:6). In an attempt to deal with the human resources disparity, various private sector healthcare professionals “will be engaged through innovative contractual arrangements” (Department of Health, 2015:49). It is furthermore essential to guarantee that “recruited” employees “are satisfied and motivated enough to be productive and likely to be retained” (Department of Health, 2015:50).

Nursing schools will be increased and the amount of financial grants for students enrolled in health science’s multiplied (through cooperation with the Department of Higher Education and Training) (Department of Health, 2015:49). Amid other approaches, additional “registrar posts” will assist “post-graduate training and specialisation” (Department of Health, 2015:49-50). The Financial24 (Fin24) wrote on 9 February 2012 that President Jacob Zuma stated that an amount of R300 million had by that time been assigned to erect new universities in the provinces of the Northern Cape and Mpumalanga (Fin24, 2012).

The Green- or White Paper does not provide any information on pharmacists as Human Resources (apart from the increased training and production strategy) in the NHI system and makes no further mention of how human resources will be assigned. Nevertheless, the role of community- and private healthcare workers under the NHI was discussed in some public sources. The following information in regards to community healthcare workers and the private sector workforce was derived from various public sources.

- **Community healthcare workers**

Kahn (2015b) wrote in the Business Day Live 24 August, that the Health Minister told the Members of Parliament that community healthcare workers will serve a very significant function under the NHI with regard to the delivery of PHC services. Integrating them into the health service posed a challenge as many of them had no formal qualifications. There are an estimated 70,000 community healthcare workers in SA, many of whom were drawn into their role in response to SA’s HIV/AIDS crisis. He explained that “Some are earning salaries, some get stipends, some are employed by municipalities, some by churches, but all are working on patients and it is causing a mess” (Kahn, 2015b).

- **Private sector workforce**

Kahn (2015a, 2015b) furthermore wrote in the Business Day Live of 16 March and 24 August 2015 that after four years into the implementation of the NHI, the DoH has been
unsuccessful in its attempts to convince an adequate number of GP’s to be employed in public sector facilities and that this hesitation caused uncertainties in terms of achievability. The DoH had hoped to reach a target of 900 doctors by the end of March 2015, but by then merely 175 GP’s had been commissioned for employment at the pilot districts. The sign-up rate had been so slow that the NHI Pilot Programme’s financing for the following three years had been reduced by the Treasury with R767 million. Kahn (2015a) wrote in the *Business Day Live* of 16 March 2015 that in a response to the slow sign-up rate, PHC head, Jeanette Hunter, expressed that “you cannot speak of a slow pace of sign-up any more since we have signed up all the doctors who are available”. She explained that “the GP’s sign up for the time they have available, over and above the time they spend in their own practices. This varies from five to 50 hours a week. This programme is not intended to draw GP’s away from their own practices, but is asking GP’s who are not fully occupied at their own practices to use their available time to provide services in public clinics”.

Kahn (2015a) also wrote in the *Business Day Live* of 16 March 2015 that in a statement made by the South African Medical Association (SAMA), they concluded that the reaction from private GP’s were exaggerated by the DoH. The head of SAMA’s private practices committee, Dr Jacob Maphatswe, said that “the problem is GP’s who own independent practices did not sign up. Mostly newly qualified doctors took these posts”. He added that “these were not GP’s. These were actually public sector candidates who resigned. Private sector GP participation in NHI has been insignificant”.

Maphatswe furthermore expressed that private GP’s were inclined to participate in the NHI Pilot Programme but they wished to perform consultations in their own facilities. He continued that the proffered compensation from the DoH did not make an impression on private GP’s and that numerous SAMA members conveyed that travel time was not compensated for. Dr Maphatswe concluded that “The NHI pilot sites are intended to test how NHI might work. The Department of Health must try different models, but it hasn’t tested contracting GP’s (in their own rooms). We want all the models to be tested so we have evidence” (Kahn, 2015a).

Kahn (2015b) wrote in the *Business Day Live* of 24 August 2015 that in Dr Aaron Motsoaledi’s progress report to the Parliament, it is expressed that the government’s plans to recruit private sector GP’s to work in the NHI pilot districts had got off to a slow start, but since they had appointed the Foundation for Professional Development (FDP) to take over the responsibility, the participation rate had improved. A little more than 150 doctors were recruited in the 21 months before the FDP was appointed in November. Since then it had appointed approximately 150 doctors, with another 300 contracts in the pipeline (Kahn, 2015b).
2.2.2.4 Essential medicines and products

The White Paper (Department of Health, 2015:50) indicated that the complete “range of essential medicines and other medical supplies” which must be “available in all public health facilities” in order to enhance service delivery and interventions regarding the “distribution of medicines” and “direct delivery by suppliers to health facilities” are being evaluated at this time (Department of Health, 2015:50). As a result of “inherent risks of pilferage, expired stocks, lack of security of supply, drug stock outs and inefficient distribution to healthcare facilities”, pharmaceutical depots are not considered to be the ideal procedure for guaranteeing a “sustainable” medicine supply. A procedure for direct delivery will be developed and established (Department of Health, 2015:85).

The current public system, where patients who are considered to be chronically stable visit a healthcare facility on a monthly basis and often wait for a long time to receive their prescribed chronic medication, will in due course be abolished (Department of Health, 2015:50). The White Paper (Department of Health, 2015:50) proposed that there are numerous other options which are currently piloted in certain districts and these involve the utilisation of “chronic medicine pre-dispensing and delivery to a point closest to the patient”.

The Centralised Chronic Medication Dispensing and Distribution (CCMDD) programme has been also been established in order to provide improved access to necessitous medicines and decongest public healthcare clinics. Pick-up-points (PuPs), which entails providing pre-dispensed medication to private pharmacies or other convenient facilities, and CCMDD’s conjointly form this program and the providing of antiretrovirals (ARVs), specifically Fixed-dose Combinations (FDCs), have up to this point been the focal point (Department of Health, 2015:50). With time this program will come to include every chronically stable patient which requires “clinical visits and check-ups”.

The White Paper (Department of Health, 2015:50) concluded that in excess of 260,000 patients have been enrolled in the program and that this initiative has facilitated better access to chronic medicines.

2.2.2.5 Health statistics and information systems

The Green Paper (Department of Health, 2011:44, 49) described that an improved National Health Information system, in the shape of a National Health Information Repository and Data Warehousing (NHIRD) system, will be formed which will play a central role in the manageability of healthcare services and identifying the health requirements and outcomes of the South African population. This system is proposed to operate electronically and
connect member- and provider databases. In order to guarantee that this system is executed successfully, the cost of such as system should be sufficiently considered. Initial efforts will relate to performing research and creating assistive information programs and a NHI patient card (Department of Health, 2011:44, 46).

The NHI will take on a coding procedure that is considered to be an essential element of both payment structures and health informatics. With this procedure, healthcare providers will be able to regularly convey their delivered commodities and healthcare services with a specific code in order to be compensated by the NHIF. In terms of development and determination, a key function of the coding system should be that it provides essential data related to the burden of disease (Department of Health, 2011:33-34).

2.2.2.6 Service delivery and safety

In order to ensure that the transition process to the proposed NHI is effective, the Green Paper (Department of Health, 2011:44-45) proposes that the current health infrastructure should be assessed and that in order to support the provision and delivery of health services within the NHI, a plan should be developed that will improve the current infrastructure's effectiveness and capacity. The Green Paper (Department of Health, 2011:29) also acknowledges that access to healthcare services should be available at the time that they are required and that proper strategies should be included in the system design in order to be able to guarantee the safety of patients and others. The White Paper (Department of Health, 2015:10) continues that safe and encouraging circumstances should be created for the health workforce as well as patients by developing the public health infrastructure in terms of adequate service supplies (water, electricity, sanitation etc.) in order to achieve a better quality. An appropriate maintenance strategy will be established to maintain these provisions.

The Green Paper (Department of Health, 2011:45) adds that a strategy should also be developed that will strengthen district health structures in order to allow appropriate support for service delivery in the system of NHI. Accordingly, this strategy would necessitate the accelerated re-engineering of the PHC approach in terms of establishing specialist teams that are district-based, family health teams that are municipally ward-based and a series of health programmes that are school-based. In order to improve District Health Management teams’ aptitude to contract with the NHI, they will have to be strengthened at an accelerated pace as well (Department of Health, 2011:45). The White Paper (Department of Health, 2015:40) supplements that “contracting of private health practitioners at non-specialist level” will be added as another area that the PHC approach will be re-engineered. Operation
Phakisa Ideal Clinic Realisation Programme will be implemented in PHC facilities with the purpose of enhancing their performance and quality of care and that at a later stage it will be implemented in public hospitals as well (Department of Health, 2015:10).

The reform of the health sector will also include that hospitals will be re-designated to district-, regional-, tertiary-, central- and specialised hospitals that provide healthcare services based on an evidence-based comprehensive package (Department of Health, 2011:28-29). The Green Paper (Department of Health, 2011:28-31) continues to provide more detail in terms of the types of healthcare services that will be provided in each of the different hospitals levels and concludes that National Health Council will outline the appropriate skills and qualifications that will be required to manage each of these hospital levels.

The White Paper (Department of Health, 2015:11) adds that central hospitals’ financing and structures will be converted into nationalised resource, research centres, training complexes and facilities of distinction during the first phase of the implementation of the NHI. These hospitals are going to be semi-autonomous in order to establish them as the providers of choice for reasonably priced as well as highly specialised healthcare services. Neither the Green- nor White Paper mentions how hospital pharmacies will be re-designated within the NHI system and what level of services that will provide.

Another important element for the implementation of the NHI includes the contracting and payment of healthcare providers by the NHIF. The Green Paper (Department of Health, 2011:45) suggests that an ample plan that is supported by the Office of Health Standards Compliance (OHSC), an independent body that will ensure adherence to standards, should be developed and applied in order to improve the quality, compliance and assurance of every healthcare provider.

An Act of Parliament will institute the OHSC and its role will be to review, license and certify every healthcare provider and facility and in routine intervals, perform regular evaluations in order to make sure that the provided standards are upheld (Department of Health, 2011:31,45). Evaluations will focus primarily on high-risk factors that are present in public healthcare facilities and the OHSC will provide suggestions, with the related training, in terms of unceasingly improving quality in public healthcare facilities (Department of Health, 2011:31). These providers could then be contracted with the NHIF if they adhere to the list of approved standards and criteria (Department of Health, 2011:45). The White Paper (Department of Health, 2015:10,48) concluded that the OHSC has been instituted in 2013.
and that it will be the responsibility of the Ombudsman to coerce liability and execute counteractive methods in necessitous situations.

The White Paper (Department of Health, 2015:48) listed that the “National Quality Standards for Health” are centred on “seven domains and six national core standards”. These “domains” and “standards” are portrayed in Figures 2.6 and 2.7. Figure 2.6 illustrates the seven domains (Department of Health, 2015:48).

![Domains of the National Quality Standards for Health](image)

**Figure 2.6:** Domains of the National Quality Standards for Health

Figure 2.7 illustrates the core standards of the “National Quality Standards for Health” (Department of Health, 2015:48).
The White Paper Department of Health, 2015:49) concluded that assessments of the pilot sites have been performed and the results in terms of complying with the “National Quality Standards for Health” were primarily “poor” for PHC facilities and “slightly better” for hospitals. These results have led to the development and execution strategies that would improve quality throughout these facilities Department of Health, 2015:49).

The Green Paper (Department of Health, 2011:34 suggested the creation of a District Health Authority (DHA) that will be contracted with the NHI and is envisioned to assist the NHI in terms of provider choices for the procurement of services. The White Paper (Department of Health, 2015:11), however, made no mention of a DHA but instead proposed that a provisional fund be formed that will procure PHC services at a non-specialist level from both OHSC approved public- and private sector healthcare providers. In a later phase this
provisional fund will also procure services from public hospitals at all levels, National Laboratory Health Services (NHLS) and EMS.

Kahn (2015b) wrote in the *Business Day Live* of 24 August 2015, that according to Dr Aaron Motsoaledi’s progress report to the Parliament, it is emphasised that the White Paper envisaged a role for the private sector as a result of services being procured from both health sectors. This statement is supported in the White Paper (Department of Health, 2015:12) and furthermore explains that both specialists and private hospitals will be commissioned by the NHI in the later stages of its implementation. The Green Paper (2011:31) noted that both public- and private sector healthcare providers whom desire to contract with the NHI in order to provide healthcare services would have to comply with the standards set in terms of quality in order to be accredited. These standards include factors such as management systems, service coverage and performance and should in turn provide improved access and safety (Department of Health, 2011:31).

The Green Paper (Department of Health, 2011:28,32) explained that private healthcare providers who are accredited and contracted with the NHI will provide a specific range of PHC services at different levels. Healthcare providers will need to ensure that they have competent and necessary skilled health personnel and comply with the NHI’s outlined referral practices. In order to guarantee continuous care and efficient cost control, the referral system will distinctly outline the appropriate referral of services between different districts and provinces (Department of Health, 2011:31). The White Paper (Department of Health, 2015:40) included the aspect of pre-arranged “patient transport” in the referral system.

The White Paper (Department of Health, 2015:36) provided that in order to extend “access to medicines and related pharmaceutical products”, the NHI will also contract with certified private retail pharmacies. These pharmacies will be proficient to procure medicines and health commodities from approved contracted pharmaceutical suppliers (Department of Health, 2015:36). Medicine will be dispensed at “subsidised” rates and strict medicine dispensing observational procedures will be implemented in order to guarantee that patients are benefitted (Department of Health: 2015:36). Approved pharmacies will be reimbursed for the “subsidised” medicines and health commodities by the NHIF and receive a “capitated administration fee” (Department of Health, 2015:36). Access to laboratory- and radiology services will also be extended under the NHI (Department of Health, 2015:36).

The NHIF will, in general, compensate accredited providers by using the following methods (Department of Health, 2011:33):
• Primary health care level – by means of a payment structure that is risk-regulated and centred on performance;

• Hospital level – initially, payment structures will be based on international budgets and in later stages it will be based on diagnosis related groups (DRGs) and performance;

• Public EMS – at first, payment structures will be managed via the international budget of public hospitals and in the later stages it will be incident-based; and

• Private EMS – by means of an incident-based payment structure.

The DoH will remain the custodian of the health system and continue to be responsible for developing health related policies and strategies, improving the health infrastructure and arranging and guiding appropriate training for the health workforce. Through the capacity of DoH’s district, provincial and national level facilities and structures, it will also continue to be one of the key healthcare service providers (Department of Health, 2011:42).

Another factor of concern is the moral hazard of over-utilisation of free and accessible healthcare services under the NHI. The White Paper (Department of Health, 2015:35) touched on this subject by providing the explanation that moral hazard denotes to “risky behaviour undertaken by the insured or incurring of unnecessary expenditure when the insured knows that the costs are borne by the other party and the insured are protected from the consequences of the action”. The White Paper (Department of Health, 2015:35) also explained that moral hazard might transpire as a result of NHI covered individuals, who in recognising that they are insured, will more likely expose themselves to risky behaviour without a second thought. This will result in unwarranted expenses that could have been avoided (Department of Health, 2015:35). Procedures will be implemented to prevent individuals from taking advantage of the NHI system by putting firm referral procedures, strengthened by efficient gate-keeping, into place (Department of Health, 2015:35,37). Strategies for “health promotion and disease prevention” will also be put into effect as additional strengthening procedures (Department of Health, 2015:35).

2.3 Chapter summary

This chapter provided an overview on the concepts of UHC and the NHI. It described different aspects of UHC pertaining to the definition, objectives, history and essentials. It also described the shift toward UHC and compared different countries healthcare systems. It furthermore explored SA’s need for the implementation of UHC in the form of NHI and provided information in the context of the essentials of UHC, related to the progress that has
been made in achieving NHI, as well as the challenges that has occurred in this process. With this, the specific objectives of the literature review have been answered.

The next chapter focuses on the results obtained from the empirical investigation and the discussion thereof.
CHAPTER 3: RESULTS AND DISCUSSION

In this chapter the results of the empirical investigation are discussed. The results are categorised according to the major topics of the questionnaire which include, in chronological order, demographic information, knowledge about the NHI, opinions and attitudes toward the NHI, pricing and reimbursement, medicine supply and supply chain management, obstacles and challenges as perceived by the respondents, availability of pharmacies and human resources and concerns.

The results were analysed and are discussed in correlation with the principal research aim and specific research objectives of the study and references to the literature were made where possible. The specific objectives included were to determine whether pharmacists have perceived knowledge on the working of the NHI, illuminate the role of the pharmacist within the NHI, determine the possible role of community pharmacies within the NHI and determine whether pharmacists foresee any possible obstacles with the implementation of the NHI in SA.

3  Results, analysis and discussion

3.1  Demographic analysis

The structured questionnaire was sent to 122 respondents that consisted of different race groups, genders, age groups and working sectors. The response rate was 18.2% which is relatively low in comparison to Nulty’s (2008:303) findings that suggest that the average response rate for online surveys tend to be 33%.

Table 3.1 provides the descriptive statistics of the demographic information of the respondents.
Table 3.1: Respondents’ demographic characteristics

<table>
<thead>
<tr>
<th>Description</th>
<th>Sample frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race (n=22)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>19</td>
<td>86.4</td>
</tr>
<tr>
<td>Asian</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td><strong>Gender (n=21)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>57.1</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>42.9</td>
</tr>
<tr>
<td><strong>Language preference (n=22)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afrikaans</td>
<td>12</td>
<td>54.5</td>
</tr>
<tr>
<td>English</td>
<td>10</td>
<td>45.5</td>
</tr>
<tr>
<td><strong>Age (n=19)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29 years</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>30-39 years</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>40-49 years</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>50-59 years</td>
<td>10</td>
<td>52.7</td>
</tr>
<tr>
<td>60-69 years</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td><strong>Sector (n=21)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health sector</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Private health sector</td>
<td>18</td>
<td>85.7</td>
</tr>
<tr>
<td><strong>Current work environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community pharmacy</td>
<td>10</td>
<td>47.6</td>
</tr>
<tr>
<td>Corporate community pharmacy</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Hospital – private</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Hospital - provincial</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Medical aid environment</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Clinical research</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>Academic</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Mail order pharmacy</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Manufacturing / production</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Quality control</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>4.8</td>
</tr>
</tbody>
</table>
From Table 3.1 it can be concluded that the majority of respondents were white (86.4%) and ranged from ages 25 to 67 years. Most of the respondents were, however, concentrated in the age group 50 to 59 years (52.7%). There was an almost equal distribution between respondents' gender and language preference, with males (57.1%) and Afrikaans (54.5%) respectively being the majority. The majority of respondents had a BPharm degree (40.9%) with an equal number of respondents holding an MPharm / MSc Pharm degree or a PhD / DSc Pharm degree (22.7%).

Of the 22 respondents, 87.5% were practicing in the private health sector and 14.3% in the public health sector. The highest percentage of respondents was employed in community pharmacies (CPs) (47.6%), clinical research (19.0%) and academia (14.3%). The rest of the respondents were more or less equally distributed throughout other sectors, including the medical scheme environment, corporate CPs, public- and private hospitals, mail-order, manufacturing and quality control. The majority of respondents have had five years or less working experience in the public sector (62.5%) and more than 20 years working experience in the private sector (61.9%).

<table>
<thead>
<tr>
<th>Description</th>
<th>Sample frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Experience in public sector (n=16)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 5 years</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td>6-10 years</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>11-15 years</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>16-20 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Experience in private sector (n=21)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 5 years</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>6-10 years</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>11-15 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16-20 years</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>13</td>
<td>61.9</td>
</tr>
<tr>
<td><strong>Highest qualification (n=22)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPharm / BSc Pharm</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>MSc Pharm / MPharm</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>DSc Pharm / PhD</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>Dip. Pharmacy</td>
<td>3</td>
<td>13.6</td>
</tr>
</tbody>
</table>
3.2 Knowledge about the National Health Insurance

A few statements were included in the questionnaire in order to determine if the respondents’ had perceived knowledge on different topics relating to the NHI. Table 3.2 provides an analysis of the respondents’ knowledge regarding a number of statements associated with the NHI.

Table 3.2: Respondents’ knowledge of the National Health Insurance

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The NHI will provide access to healthcare for all South African citizens.</td>
<td>16 (72.7)</td>
<td>6 (27.3)</td>
</tr>
<tr>
<td>2</td>
<td>When the NHI is implemented, private medical aid schemes will no longer be in use.</td>
<td>0</td>
<td>22 (100)</td>
</tr>
<tr>
<td>3</td>
<td>All private healthcare providers will be forced to contract with the NHI.</td>
<td>8 (36.4)</td>
<td>14 (63.6)</td>
</tr>
<tr>
<td>4</td>
<td>With the implementation of the NHI, the private healthcare sector will be completely destroyed.</td>
<td>3 (13.6)</td>
<td>19 (86.4)</td>
</tr>
<tr>
<td>5</td>
<td>If an individual can afford private healthcare, they do not have to pay for the NHI.</td>
<td>4 (18.2)</td>
<td>18 (81.8)</td>
</tr>
<tr>
<td>6</td>
<td>Medical schemes will provide top-up medical cover for those individuals who choose it.</td>
<td>21 (95.5)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>7</td>
<td>Pilot sites have already been introduced in certain provinces where the NHI model is being piloted.</td>
<td>19 (86.4)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>8</td>
<td>If an individual does not make use of the NHI, they will not be expected to make any financial contribution toward the NHI.</td>
<td>0</td>
<td>22 (100)</td>
</tr>
</tbody>
</table>

The knowledge of the respondents with regard to several statements concerning the NHI is depicted in Table 3.2. Figure 3.1 demonstrates the knowledge of the respondents by showing the percentage of respondents that provided the correct answer for each of the particular statements.
Figure 3.1: Respondents’ percentage of correct responses for each statement regarding the National Health Insurance

From Figure 3.1 it can be concluded that the respondents showed that they have a good knowledge base regarding the NHI (in terms of the provided statements) as the average for the correct answers were 85.8%. Only statements one, three and five were below this average (refer to Figure 3.1 and Table 3.2). These statements and the respondents’ responses to each of them are discussed subsequently.

The majority of respondents (72.7%) agreed that the NHI will provide access to healthcare for all South African citizens (see statement 1 in Table 3.2). This statement is true as the Green Paper (Department of Health, 2011:18) and White Paper (Department of Health, 2015:21) mention that one of the objectives of the NHI is to provide improved access to healthcare for all South African citizens. Some respondents (27.3%) showed a lack of knowledge by disagreeing with this statement. This lack of knowledge may, however, have resulted from responses being made that were not based on knowledge, but rather on assumptions regarding the possible influence of the NHI. It can therefore be concluded that the majority of respondents had perceived knowledge regarding this statement.

All the respondents disagreed that private medical schemes will no longer be in use with the implementation of the NHI (see statement 2 in Table 3.2). This statement is false as the Green Paper (2011:43) explained that individuals could also choose to continue with voluntary membership to private medical schemes, nonetheless the White Paper speculated
that the number of private medical schemes will considerably decrease (Department of Health, 2015:90). Medical schemes will thus remain in use and co-exist with the NHI and therefore it is thus concluded that all of respondents had perceived knowledge regarding this statement.

More than half of the respondents (63.6%) disagreed that all private healthcare providers will be forced to contract with the NHI (see statement 3 in Table 3.2). This statement is false because it is not mentioned anywhere that contracting with the NHI will be a requirement, only that contracts will be negotiated with appropriately accredited healthcare providers who comply with a list of set standards (Department of Health, 2011:41). Thus, contracting will be optional and 36.4% of respondents showed a lack of knowledge regarding this statement. It can therefore be concluded that the majority of respondents had perceived knowledge regarding this statement.

Most respondents (86.4%) disagreed that the private healthcare sector will be completely destroyed with the implementation of the NHI (see statement 4 in Table 3.2). This statement is false as the White Paper pictured a role for the private sector within the NHI system where services will be purchased from both the public- and private sector healthcare providers (Department of Health, 2015:11,31). The private sector will thus remain in use and 13.6% of respondents showed a lack of relating to this statement. Consequently, the majority of respondents had perceived knowledge regarding this statement.

A large number of respondents (81.5%) disagreed that if an individual can afford private healthcare, they do not have to pay for the NHI (see statement 5 in Table 3.2). This statement is false as the Green Paper (Department of Health, 2011:43) noted that all South Africans will have compulsory membership to the NHI and that this will involve mandatory payments to the NHIF even if they chose to carry on with their private medical schemes membership. Other respondents (18.2%) showed a lack of knowledge towards this statement. Therefore, it can be concluded that the majority of respondents had perceived knowledge regarding this statement.

Almost all of the respondents (95.5%) agreed that medical schemes will provide top-up medical cover for those individuals who choose it (see statement 6 in Table 3.2). This statement is correct as the White Paper (Department of Health, 2015:11) explained that medical schemes may include some form of top-up insurance in later stages once the Medical Schemes Act has been amended. Only one respondent showed a lack of knowledge towards this statement and it can therefore be concluded that the majority of respondents had perceived knowledge regarding this statement.
The majority of respondents (86.4%) agreed that pilot sites have already been introduced in certain provinces where the NHI model is being piloted (see statement 7 in Table 3.2). This statement is true as the Green Paper (2011:52) explained that pilot sites for the implementation of the NHI have been chosen and Matsoso and Fryatt (2013:156) provided a list of the identified provinces and districts where these sites had been implemented since April 2012. A small number of respondents (13.6%) showed a lack of knowledge towards this statement and as a result it can be concluded that the majority of respondents had perceived knowledge regarding this statement.

All the respondents disagreed that if an individual does not make use of the NHI, they will not be expected to make any financial contribution toward the NHI (see statement 8 in Table 3.2). This statement is false as the Green Paper (2011:43) noted that membership to the NHI will be required for all citizens and payments compulsory. Thus, the entire South African population will be expected to make mandatory payments to the NHIF regardless of whether or not they make use of the NHI services. It can therefore be concluded that all respondents had perceived knowledge regarding this statement.

3.3 Opinions and attitudes relating to National Health Insurance

The results were analysed to establish the opinions and attitudes of pharmacists regarding the implementation of the NHI in SA. By means of the Likert scale, the respondents were offered six pre-coded responses that ranged from one (1) being “completely disagree” to six (6) being “completely agree”. Table 3.3 provides the opinions and attitudes of respondents toward the implementation of the NHI in SA in terms of the frequencies, mean and standard deviation.
Table 3.3: Respondents’ opinions and attitudes toward the National Health Insurance

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Completely disagree n (%)</th>
<th>Strongly disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Strongly agree n (%)</th>
<th>Completely agree n (%)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The current South African health system has the proper infrastructure (healthcare facilities, medical resources etc.) for the implementation of NHI.</td>
<td>10 (45.5)</td>
<td>7 (31.8)</td>
<td>3 (13.6)</td>
<td>1 (4.5)</td>
<td>1 (4.5)</td>
<td>0</td>
<td>1.91</td>
<td>1.13</td>
</tr>
<tr>
<td>2</td>
<td>The South African economy can afford NHI.</td>
<td>12 (54.5)</td>
<td>6 (27.3)</td>
<td>1 (4.5)</td>
<td>2 (9.1)</td>
<td>0</td>
<td>1 (4.5)</td>
<td>1.86</td>
<td>1.32</td>
</tr>
<tr>
<td>3</td>
<td>The absence of mention of medicine in the Green Paper (apart from the references to originator medicines and co-payments) is a problem.</td>
<td>3 (13.6)</td>
<td>0</td>
<td>1 (4.5)</td>
<td>4 (18.2)</td>
<td>8 (36.4)</td>
<td>6 (27.3)</td>
<td>4.45</td>
<td>1.63</td>
</tr>
<tr>
<td>4</td>
<td>The absence of mention of medicine in the Green Paper should be corrected by integrating medicines policy reform proposals into the NHI proposals.</td>
<td>2 (9.1)</td>
<td>0</td>
<td>1 (4.5)</td>
<td>7 (31.8)</td>
<td>4 (18.2)</td>
<td>8 (36.4)</td>
<td>4.59</td>
<td>1.50</td>
</tr>
<tr>
<td>5</td>
<td>If NHI is not implemented in the proper manner, it will possibly put even more strain on the health system.</td>
<td>1 (4.5)</td>
<td>0</td>
<td>0</td>
<td>1 (4.5)</td>
<td>7 (31.8)</td>
<td>13 (59.1)</td>
<td>5.36</td>
<td>1.14</td>
</tr>
<tr>
<td>6</td>
<td>If NHI is not implemented in the proper manner, it will possibly lead to even more inequalities in healthcare.</td>
<td>1 (4.5)</td>
<td>0</td>
<td>0</td>
<td>6 (27.3)</td>
<td>7 (31.8)</td>
<td>8 (36.4)</td>
<td>4.91</td>
<td>1.19</td>
</tr>
<tr>
<td>7</td>
<td>The inclusion of private CPs and private hospitals as additional medicine distribution points will promote equity.</td>
<td>0</td>
<td>0</td>
<td>2 (9.1)</td>
<td>6 (27.3)</td>
<td>7 (31.8)</td>
<td>7 (31.8)</td>
<td>4.86</td>
<td>0.99</td>
</tr>
<tr>
<td>8</td>
<td>Inequality between the public and private sector is a huge stumbling block for the implementation of NHI.</td>
<td>2 (9.1)</td>
<td>0</td>
<td>0</td>
<td>2 (9.1)</td>
<td>5 (22.7)</td>
<td>13 (59.1)</td>
<td>5.14</td>
<td>1.49</td>
</tr>
</tbody>
</table>
Table 3.3: Respondents’ opinions and attitudes toward National Health Insurance (continued)

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Completely disagree n (%)</th>
<th>Strongly disagree n (%)</th>
<th>Disagree n (%)</th>
<th>Agree n (%)</th>
<th>Strongly agree n (%)</th>
<th>Completely agree n (%)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>South Africa has the know-how, expertise and knowledge to reform the health system.</td>
<td>4 (18.2)</td>
<td>6 (27.3)</td>
<td>7 (31.8)</td>
<td>4 (18.2)</td>
<td>1 (4.5)</td>
<td>0</td>
<td>2.64</td>
<td>1.14</td>
</tr>
<tr>
<td>10</td>
<td>NHI will not change the condition of the South African health system.</td>
<td>4 (18.2)</td>
<td>2 (9.1)</td>
<td>4 (18.2)</td>
<td>6 (27.3)</td>
<td>3 (13.6)</td>
<td>3 (13.6)</td>
<td>3.50</td>
<td>1.66</td>
</tr>
<tr>
<td>11</td>
<td>The implementation of NHI will lead to the mass emigration of healthcare professionals.</td>
<td>1 (4.5)</td>
<td>3 (13.6)</td>
<td>5 (22.7)</td>
<td>5 (22.7)</td>
<td>4 (18.2)</td>
<td>4 (18.2)</td>
<td>3.91</td>
<td>1.48</td>
</tr>
<tr>
<td>12</td>
<td>A huge concern for the public and health professionals is that the government will be in control of the allocation of funds.</td>
<td>1 (4.5)</td>
<td>1 (4.5)</td>
<td>2 (9.1)</td>
<td>4 (18.2)</td>
<td>4 (18.2)</td>
<td>10 (45.5)</td>
<td>4.77</td>
<td>1.48</td>
</tr>
<tr>
<td>13</td>
<td>Targeted action should be used to deal with the current issues the health system is facing.</td>
<td>0</td>
<td>2 (9.1)</td>
<td>0</td>
<td>6 (27.3)</td>
<td>5 (22.7)</td>
<td>8 (36.4)</td>
<td>4.81</td>
<td>1.25</td>
</tr>
<tr>
<td>14</td>
<td>The pharmacy profession can contribute to the reform of the health system by means of disease management programmes, medicines information services and patient compliance initiatives.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7 (31.8)</td>
<td>15 (68.2)</td>
<td>5.68</td>
<td>0.48</td>
</tr>
<tr>
<td>15</td>
<td>Pharmacists will be able to focus on patient care rather than spend valuable time dealing with insurance companies.</td>
<td>0</td>
<td>0</td>
<td>4 (18.2)</td>
<td>5 (22.7)</td>
<td>7 (31.8)</td>
<td>6 (27.3)</td>
<td>4.68</td>
<td>1.09</td>
</tr>
<tr>
<td>16</td>
<td>The cost of drugs could be lowered as drug prices could be better negotiated because drugs will be bought in bigger bulk.</td>
<td>3 (13.6)</td>
<td>0</td>
<td>8 (36.4)</td>
<td>7 (31.8)</td>
<td>2 (9.1)</td>
<td>2 (9.1)</td>
<td>3.50</td>
<td>1.37</td>
</tr>
<tr>
<td>No.</td>
<td>Statement</td>
<td>Completely disagree n (%)</td>
<td>Strongly disagree n (%)</td>
<td>Disagree n (%)</td>
<td>Agree n (%)</td>
<td>Strongly agree n (%)</td>
<td>Completely agree n (%)</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------</td>
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<td>----------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>------------------------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>17</td>
<td>With the implementation of NHI, patients may modify their help-seeking behaviour to consult a doctor more regularly.</td>
<td>2 (9.1)</td>
<td>4 (18.2)</td>
<td>7 (31.8)</td>
<td>8 (36.4)</td>
<td>1 (4.5)</td>
<td>0</td>
<td>3.09</td>
<td>1.07</td>
</tr>
<tr>
<td>18</td>
<td>Private CPs should be included as additional medicine distribution points in the NHI system.</td>
<td>1 (4.5)</td>
<td>0</td>
<td>1 (4.5)</td>
<td>3 (13.6)</td>
<td>9 (40.9)</td>
<td>8 (36.4)</td>
<td>4.95</td>
<td>1.21</td>
</tr>
</tbody>
</table>
Based on Table 3.3, of the 22 respondents 45.5% completely disagreed, 31.8% strongly disagreed, 13.6% disagreed, 4.5% agreed and 4.5% strongly agreed with statement 1, which resulted in a mean of 1.91±1.13 on a scale of 1 to 6. The indication is that the majority of respondents “strongly disagree” that the current South African health system does have the proper infrastructure (healthcare facilities, medical resources etc.) for the implementation of the NHI. For statement 2 (see Table 3.3), 54.5% completely disagreed, 27.3% strongly disagreed, 4.5% disagreed, 9.1% agreed and 4.5% completely agreed with this statement which resulted in a mean of 1.86±1.32. The indication is that the majority of respondents “strongly disagree” that the South African economy can afford the NHI.

For statement 3 (see Table 3.3), of the 22 respondents 13.6% completely disagreed, 4.5% disagreed, 18.2% agreed, 36.4% strongly agreed and 27.3% completely agreed with this statement, which resulted in a mean of 4.45±1.63 on a scale of 1 to 6. The indication is that the majority of respondents “agree” that the absence of mention of medicine in the Green Paper, apart from the references to originator medicines and co-payments, is a problem. In addition, 9.1% of respondents completely disagreed, 4.5% disagreed, 31.8% agreed, 18.2% strongly agreed and 36.4% completely agree with statement 4 (see Table 3.3), which resulted in a mean of 4.59±1.50 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that the absence of mention of medicine in the Green Paper should be corrected by integrating medicines policy reform proposals into the NHI proposals.

Results from Table 3.3 also indicate that of the 22 respondents, 4.5% completely disagreed, 4.5% agreed, 31.8% strongly agreed and 59.1% completely agreed with statement 5, which resulted in a mean of 5.36±1.14 on a scale of 1 to 6. The indication is that the majority of respondents “completely agree” that if NHI is not implemented in the proper manner, it will possibly put even more strain on the health system. For statement 6 (see Table 3.3), of the 22 respondents 4.5% completely disagreed, 27.3% agreed, 36.4% strongly agreed and 36.4% completely agreed with this statement, which resulted in a mean of 4.91±1.19 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that if NHI is not implemented in the proper manner, it will possibly lead to even more inequalities in healthcare.

For statement 7, of the 22 respondents 9.1% disagreed, 27.3% agreed, 31.8% strongly agreed and 31.8% completely agreed with the statement, which resulted in a mean of 4.86±0.99. The indication is that the majority of respondents “strongly agree” that the inclusion of private- CPs and hospitals as additional medicine distribution points will promote equity. The White Paper (Department of Health, 2015:36) confirmed that accredited CPs will be included in the NHI system in order to provide extended “access to medicines and related pharmaceutical products” and private hospitals will be commissioned at later stages of the NHI’s implementation (Department of Health, 2015:12).
Furthermore, 9.1% of respondents completely disagreed, 9.1% agreed, 22.7% strongly agreed and 59.1% completely agreed with statement 8 (see Table 3.3), which resulted in a mean of 5.14±1.49 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that the inequality between the public and private sector is a huge stumbling block for the implementation of NHI.

For statement 9 (see Table 3.3), of the 22 respondents, 18.2% completely disagreed, 27.3% strongly disagreed, 31.8% disagreed, 18.2% agreed and 4.5% strongly agreed with this statement, which resulted in a mean of 2.64±1.14 on a scale of 1 to 6. The indication is that the majority of respondents “disagree” that SA does have the know-how, expertise and knowledge to reform the health system. For statement 10 (see Table 3.3), of the 22 respondents 18.2% completely disagreed, 9.1% strongly disagreed, 18.2% disagreed, 28.3% agreed, 13.6% strongly agreed and 13.6% completely agreed with this statement, which resulted in a mean of 3.50±1.66 on a scale of 1 to 6. The indication is that the majority of respondents “agree” that the NHI will not change the condition of the South African health system.

Of the 22 respondents 4.5% completely disagreed, 13.6% strongly disagreed, 22.7% disagreed, 22.7% agreed, 8.2% strongly agreed and 18.2% completely agreed with statement 11 (see Table 3.3), which resulted in a mean of 3.91±1.48 on a scale of 1 to 6. The indication is that the majority of respondents “agree” that the implementation of NHI will lead to the mass emigration of healthcare professionals. In addition, 4.5% of respondents completely disagreed, 4.5% strongly disagree, 9.1% disagreed, 18.2% agreed, 18.2% strongly agreed and 45.5% completely agreed with statement 12 (see Table 3.3), which resulted in a mean of 4.77±1.48 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that a huge concern for the public and health professionals is that the government will be in control of the allocation of funds. This is consistent with the public’s mistrust in the government as a result of their track record of corruption and mismanagement of funds (Amado et al., 2012:7).

Results from Table 3.3 furthermore indicate that of the 22 respondents, 9.1% strongly disagreed, 27.3% agreed, 22.7% strongly agreed and 36.4% completely agreed with statement 13, which resulted in a mean of 4.81±1.25 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that targeted action should be used to deal with the current issues the health system is facing.

For statement 14 (see Table 3.3), 31.8% of respondents strongly agreed and 68.2% completely agreed with this statement, which resulted in a mean of 5.68±0.48 on a scale of 1 to 6. The indication is that the respondents “completely agree” that the pharmacy profession can contribute to the reform of the health system by means of disease management programmes,
medicines information services and patient compliance initiatives. Additionally, 18.2% of respondents disagreed, 22.7% agreed, 31.8% strongly agreed and 27.3% completely agreed with statement 15 (see Table 3.3), which resulted in a mean of 4.68±1.09 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that pharmacists will be able to focus on patient care rather than spend valuable time dealing with insurance companies which is consistent with the advantages of UHC in terms of GP’s (Department of Health, 2011:19; White, 2011).

For statement 16 (see Table 3.3), of the 22 respondents 13.6% completely disagreed, 36.4% disagreed, 31.8% agreed, 9.1% strongly agreed and 9.1% completely agreed with this statement, which resulted in a mean of 3.50±1.37 on a scale of 1 to 6. The indication is that majority the respondents “agree” that the cost of drugs could be lowered as drug prices could be better negotiated because drugs will be bought in bigger bulk. Moreover, 9.15% of respondents completely disagreed, 18.2% strongly disagreed, 31.8% disagreed, 36.4% agreed and 4.5% strongly agreed with statement 17 (see Table 3.3), which resulted in a mean of 3.09±1.07 on a scale of 1 to 6. The indication is that the majority of respondents “disagree” that with the implementation of NHI, patients modify their help-seeking behaviour to consult a doctor more regularly which is inconsistent with the advantages of UHC (Department of Health, 2011:19; White, 2011).

Lastly, of the 22 respondents 14.5% completely disagreed, 4.5% disagreed, 13.6% agreed, 40.9% strongly agreed and 36.4% completely agreed with statement 18 (see Table 3.3), which resulted in a mean of 4.95±1.21 on a scale of 1 to 6. The indication is that the majority of respondents “strongly agree” that private CPs should be included as additional medicine distribution points in the NHI system. The Green Paper (Department of Health, 2011) did not mention the inclusion of CPs, but the White Paper (Department of Health, 2015:36) confirmed that they will be included — depending on accreditation and coherence to a list of set standards (Department of Health, 2011:45).

3.4 Pricing and reimbursement

Table 3.4 provides the result of the respondents’ perception in terms of the preferred administrator for the NHI system.
Table 3.4: Respondents’ perception regarding the administration of the National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should NHI be administered by a single-payer public entity or by private medical schemes?</td>
<td>Single-payer public entity</td>
<td>10 (47.6)</td>
</tr>
<tr>
<td></td>
<td>Private medical schemes</td>
<td>11 (52.4)</td>
</tr>
</tbody>
</table>

From Table 3.4 it could be concluded that of 21 respondents, 47.6% indicated that they feel a single-payer public entity should administer the NHI and 52.4% of respondents indicated that they feel the NHI should be administered by private medical schemes. In reference to the literature, the South African public does not have much confidence in the government’s capability to successfully run programs as a result of various contributing factors (Amado et al., 2012:7). If the NHI is administered by a single-payer public entity, it would mean that the government would be the single-payer and responsible for the NHI in its entirety. For the other half of respondents who indicated that a single-payer public entity should administer the NHI, it could be due to the fact that it is the logical option as the majority of countries using the NHI model or a variation thereof is administered by a single-payer public entity.

Table 3.5 provides the respondents’ perception in terms of the financial sustainability of CPs with the implementation of the NHI.

Table 3.5: Respondents’ perception regarding the financial sustainability of community pharmacies with the implementation of National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes n (%)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that the remainder of the population that opts to remain making use of private medical aid will be sufficient to support community pharmacies?</td>
<td>7 (31.8)</td>
<td>15 (68.2)</td>
</tr>
</tbody>
</table>

Results from Table 3.5 show that with 68.2%, the majority of respondents indicate that with the implementation of the NHI, the remainder of the population that chooses to continue making use of private medical aid will not be sufficient to support CPs.

Table 3.6 provides the respondents perception in terms of the financial feasibility of private healthcare providers who are contracted with the NHI.
Table 3.6: Respondents’ perception regarding the financial feasibility of private healthcare providers contracted with the National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes n (%)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that it would be financially beneficial for private hospitals, community pharmacies and pharmaceutical companies to contract with NHI?</td>
<td>16 (72.7)</td>
<td>6 (27.3)</td>
</tr>
</tbody>
</table>

From Table 3.6 it could be concluded that with 72.7%, the majority of respondents felt that it would be financially beneficial for private hospitals, CPs and pharmaceutical companies to contract with the NHI.

Table 3.7 provides the analysis of the respondents’ perception regarding what the time period for reimbursement from the NHI, in particular to contracted pharmacies, will be.

Table 3.7: Time period for reimbursement from the National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What period of time do you believe it will take for pharmacies that are contracted with NHI to be reimbursed for services rendered to patients of NHI?</td>
<td>30 days 5 (22.7)</td>
<td>60 days 3 (13.6)</td>
</tr>
</tbody>
</table>

Based on the analysis of Table 3.7, it can be determined that with 40.9%, the majority of respondents believe that the time period for pharmacies that are contracted with the NHI to be reimbursed for service rendered will be 90 days. Some respondents (22.7%) feel optimistic that reimbursement will take 30 days and 18.2% do not by indicating it will take anything from 180 days and upward.

Table 3.8 provides the respondents perceptions in terms of co-payments and moral hazard within the NHI system.

Table 3.8: Respondents’ perception of co-payments and moral hazard

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes n (%)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that the incorporation of co-payments for medicines and service delivery in the NHI policy will hinder the over-use of healthcare service, thereby reducing moral hazard?</td>
<td>14 (66.7)</td>
<td>7 (33.3)</td>
</tr>
</tbody>
</table>
Results from Table 3.8 reveal that with 66.7%, the majority of respondents felt that the incorporation of co-payments for medicines and service delivery should be included into the NHI policy as it will hinder the over-use of healthcare service and thereby reduce moral hazard.

There is currently no mention in either the Green- (Department of Health, 2011:35) or White Paper (Department of Health, 2015:37) of the incorporation of co-payments in the NHI policy except in very particular situations (Department of Health, 2011:35-36). It can be argued that if all medicines and services are provided free of charge, individuals will be able to take advantage of the system by over-using healthcare services or exposing themselves to unnecessary risks (Department of Health, 2015:35). This would also have a negative financial impact as the NHI is attempting to lower the state’s health expenditure (Department of Health, 2015:35).

3.5 Medicine supply and supply chain management

Table 3.9 provides the respondents perception in terms of their feelings toward obstacles or challenges for the medicine supply chain of CPs contracted with the NHI.

Table 3.9: Respondents’ perception of the obstacles or challenges with the medicine supply chain for community pharmacies contracted with the National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes n (%)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you foresee any obstacles or challenges with the medicine supply chain in terms of community pharmacies and NHI?</td>
<td>16 (72.7)</td>
<td>6 (27.3)</td>
</tr>
</tbody>
</table>

From Table 3.9 it could be concluded that with 72.7%, the majority of respondents indicated that they foresee obstacles or challenges with the medicine supply chain for CPs contracted with the NHI.

The respondents who indicated “yes” in Table 22 were also asked to explain their reasons. The following provide their direct responses:

- “If the supply of medication is controlled by the government, it will definitely be a mess. Clinics and hospitals are currently functioning without basic medicines that are not available. More than 100 Interns that have to perform community service were not placed as a result of mismanagement and budgets that are not worked out properly and therefore cause financial problems.”
• “Provision and management of government medicines to private pharmacies, which includes out-of-stocks.”

• “Government does not have the expertise to operate this system.”

• “Medicine supply in the public sector is of poorer quality than in the private sector and reliable supply is not always available.”

• “They can’t even manage the current system of supply successfully - how are they going to do it with an increased workload? The more items to buy and distribute the more items to steal and bribe money to pay and receive. This sounds to me like a rotten business.”

• “Inadequate planning plays a daily role in provincial clinics, provincial depots and provincial hospitals. I do not know if this rollout will be planned and handled correctly.”

• “Medication demand is currently high and contractors can’t seem to get ahead of the demand. There will be obstacles in regard to the delivery of medication – which is currently already being experienced by public hospital pharmacies because stock is ordered from a depot. The workload may increase because the system is under pressure.”

• “Payment structure would have to be such that pharmacies aren't prejudiced by poor cash flow. The system would have to be very efficient to work properly and shows no promise of efficiency so far. Once again 'jobs for pals' will bedevil the system and unless a serious change is made in the way things are run there will not be sufficient hard work, discipline and diligence to make the system work.”

• “The present infrastructure prohibits an economical supply chain to community pharmacies which will become an additional financial burden as the state will not entertain supplementation of this distribution pattern and pharmaceutical manufacturers will also not be willing to contribute financially.”

• “Many community pharmacists are still stuck in the era of payment for services. They don't realise that it's adapt or die.”

• “Mistrust by Government. Lack of vision in making the opportunity work by Government Dual system of rural vs. urban creates bias towards rural. May be reluctant to use urban and peri-urban resources until rural has private pharmacies.”

• “The bulk of medicine supply will go into the public sector and leave the scraps for the private sector.”
• “Current shortages and delivery issues at district hospitals - won't improve.”

The most prominent and relevant themes that emerged from these responses were:

• General mistrust – Mistrust in the government's expertise and capability to plan and manage an even bigger supply system with regard to the provision and control of medicines to community pharmacies.

• Current public sector inadequacies - Inadequate supply of essential medicines and unreliable medicines delivery system in the public health sector. Improvement on the current issues seems unlikely.

• Financial loss - Financial loss as result of increased theft and bribery due to an increase in the items that will be in circulation

• Workload – The workload may increase as a result of the system being under more pressure and a shortage in human resources.

• Unequal opportunities - There is a risk that opportunities will be granted to individuals with 'connections' and that CPs with poor cash inflows will be prejudiced.

• Infrastructure - The current infrastructure does not allow an economical supply chain to CPs.

The respondents were asked to read the following statement and answer the questions provided in Table 3.10.

“The public sector selects its drugs on a tender basis, where the cheapest drugs are acquired. SA has a quadruple burden of disease and many individuals have more than one underlying condition.”

Table 3.10 provides the respondents perceptions of the current medicine supply procurement method used in the public sector.

Table 3.10: Respondents' perception of the medicine supply procurement method

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that it would be beneficial to re-evaluate this method of medicine supply procurement?</td>
<td>19 (86.4)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>Do you believe that the current medicine procurement system needs to be converted into a system where the selection of drugs is based on drugs that can be used in the treatment of various conditions?</td>
<td>18 (81.8%)</td>
<td>4 (18.2)</td>
</tr>
</tbody>
</table>
Results from Table 3.10 indicate that the majority of respondents (86.4%) feel that it would be beneficial to re-evaluate the above mentioned method of medicine supply procurement in the public sector. With 81.8%, the majority of respondents also felt that the current medicine procurement system needs to be converted into a system where the selection of drugs is based on drugs that can be used in the treatment of various conditions.

3.6 Availability of pharmacies and human resources

The respondents were asked to read the following statement and answer the questions provided in Table 3.11.

“The South African healthcare system faces a great deal of important problems. One in particular is the severe shortage of medical professionals. There is a very high level of emigration of medical professionals to other countries and that drains South Africa’s resources. With the implementation of NHI, a large number of healthcare practitioners and other medical professionals will be needed to staff the NHI facilities.”

Table 3.11 provides the respondents’ perceptions regarding the utilisation of pharmacist’s scarce skills and the NHI.

Table 3.11: Respondents’ perception of the utilisation of pharmacists’ scarce skills within the national health insurance

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that the implementation of NHI creates the opportunity to</td>
<td>16 (72.7)</td>
<td>6 (27.3)</td>
</tr>
<tr>
<td>utilise the pharmacists’ scarce skills more effectively to the best</td>
<td></td>
<td></td>
</tr>
<tr>
<td>advantage the public’s health needs?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 3.11 display that with 72.7%, the majority of respondents believe that the implementation of the NHI creates the opportunity to utilise the pharmacists’ scarce skills more effectively in order to best advantage the public’s health needs.

The respondents were asked to explain how they think CPs will need to adjust in terms of competing with state-funded NHI facilities and other corporate CP groups. Their direct responses are provided below:

- “Community pharmacies are doomed to fail as they are now due to corporate ownership and medical aid meddling. NHI will probably just be another nail in the coffin. Health professionals will move on as this setup does not even work in first world countries i.e. NHS in the U.K.”
• “I don’t believe community pharmacies would need to adjust as they already provide the quality healthcare services required for their respective communities, but are not adequately reimbursed. However, a lot more focus can be given to such services.”

• “State run facilities will be inefficient and unpleasant just as they generally are now and anybody with enough money will endeavour to go to the private sector for better care. Community run pharmacies will compete with corporate just as they do now with better service and a more flexible offering.”

• “By adopting a more professional image.”

• “There is no need for competition as the community pharmacy needs to be part of NHI to ensure broader access to medicines.”

• “They need to be able to focus on service delivery without worrying about financial survival.”

• “By this do you mean independent community pharmacists? If so they need to provide quality patient care services.”

• “Add efficiency, employed skilled staff, create strong representative organisation to assist in contracting, focus on other services outside of medicine supply such as MTM, New Medicine Service, Chronic management, Minor ailments, become community resource on wellness.”

• “State must realise that community pharmacies are not going to give away services for free, a realistic remuneration must be negotiated.”

• “They would have to be included or face closure.”

• “The price for services delivered must be set for all pharmacies. It must not differ from community pharmacies and corporate groups. It must be guided by legislation to prevent a price war. Community pharmacies must also become more involved in delivering PCDT in order to thereby generate additional funds and to help relieve the pressure on the already overloaded system.”

• “Be available close to the patient’s home or workplace; must develop alternative models, especially for the supply or distribution of chronic medication, which is affordable; independent pharmacies, especially, will have to unite in order to achieve better price competition; greater emphasis on preventive services than just medicine supply.”

• “Will need to adapt quickly to the administrative system of the state.”
“Pharmacists will get used as a source of information on medication instead of only being a point of distribution. Rational medication usage and knowledge thereof can be a great opportunity for cost savings.”

“Cheaper generic drugs should be stocked.”

“Community Pharmacies must not compete, but rather contract.”

“Neither the private pharmacy or corporate pharmacy will survive.”

“More focus on patient disease state, treatment specific.”

“Initially, the services of the state-funded institutions will not be fully operational, thus community pharmacies will have to make provision for those services. If community pharmacies’ number of clients decreases, they must compensate with good service, provide alternative services and provide services and medications at affordable prices.”

The most prominent and relevant themes that emerged from these responses include:

- Range of quality services - Focus on the provision of quality pharmaceutical and alternative services should be expanded.

- Affordability - Pharmaceutical services and medicines should be provided at more affordable prices.

- Efficacy and skilled personnel - Increase efficacy and employ competent personnel.

- Price adjustments - Prices should be adjusted to be fair and reasonable and in line with other competitors.

- PCDT - Focus on delivering PCDT should be expanded.

- None - CPs will not have to adjust and competing will remain the same.

- CPs will not survive - CPs needs to be incorporated into NHI and adequate reimbursement should be offered for services delivered.

### 3.7 Concerns

In reference to the literature, there are already many factors that were identified as challenges or obstacles for the implementation of NHI. Nevertheless, there is no available literature from pharmacists’ perspectives as to what specific factors they foresee as possible challenges or
obstacles. Table 3.12 provides the respondents' perception toward the NHI as a solution for the problems currently experienced in the health system.

Table 3.12: Respondents' perception regarding the National Health Insurance as the solution for the South African health system

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think NHI is the appropriate solution to fix the inadequate public health system of SA?</td>
<td>6 (27.3)</td>
<td>16 (72.7)</td>
</tr>
<tr>
<td>Do you believe that the problems the health system is facing can be fixed without the implementation of NHI?</td>
<td>11 (50)</td>
<td>11 (50)</td>
</tr>
</tbody>
</table>

From Table 3.12 it could be concluded that with 72.7%, the majority of respondents believed that the NHI is not the appropriate solution to fix the inadequate public health system of SA. When asked if respondents felt that the problems the health system is facing can be fixed without the implementation of the NHI, 50% of the respondents agreed and 50% disagreed.

Certain factors could contribute to the successful implementation of the NHI and Table 3.13 provides these factors as indicated by the respondents.

Table 3.13: Factors that could contribute to the success of National Health Insurance

<table>
<thead>
<tr>
<th>Question</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHI alone will not change the condition of the South African health system, but a few factors could contribute to the successful implementation of NHI. Which of these factors could contribute to the successful implementation of NHI?</td>
<td>Better governance and accountability</td>
<td>22 (100)</td>
</tr>
<tr>
<td></td>
<td>Greater political will within the Department of Health</td>
<td>12 (54.5)</td>
</tr>
<tr>
<td></td>
<td>Strong public participation</td>
<td>17 (77.3)</td>
</tr>
<tr>
<td></td>
<td>Government transparency</td>
<td>21 (95.5)</td>
</tr>
<tr>
<td></td>
<td>Renewed focus on the training of healthcare professionals</td>
<td>18 (81.8)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6 (27.3)</td>
</tr>
</tbody>
</table>
• Better governance and accountability (100%).

• Government transparency (95.5%).

• Renewed focus on the training of healthcare professionals (81.8%).

• Strong public participation (77.3%).

• Greater political will within the Department of Health (54.5%).

Some respondents (27.3%) also indicated that there were other factors that they feel could contribute to the successful implementation of NHI.

Their direct responses were included in the following:

• “Administrative support and adequate systems.”

• “Our people are inherently lazy. You can’t make them work briskly. The system requires that people report on time, do their jobs and be productive. If the top structure does not do this, the bottom structure won’t either. Labour legislation in South Africa will hinder this.”

• “There must be some sort of payment at point of service or healthcare becomes a right that people don’t value and take for granted. It perpetuates the big brother mentality where the state is responsible for everything and it will be even harder to persuade people to make an effort with preventative measures.”

• “Use of all available healthcare personnel.”

• “Adequate remuneration of healthcare professionals, including community pharmacists.”

• “Commitment from healthcare professionals both private and public creates a single system rather than private and public.”

The most prominent and relevant themes that emerged include:

• Tone at the top – Management should lead by example.

• Fee at point of service delivery – Incorporate particular fee-for-services and co-payments in order to hinder moral hazard.

• Effective utilisation of health resources – All health resources should be utilised, including CPs.
- Adequate remuneration – Remuneration for services rendered by contracted healthcare providers should be adequate.

- Unified system – Commitment from public and private sector healthcare professionals to create a unified health system rather than a public and private sector.

Table 3.14 provides the respondents concerns for the increased amount of individuals that will be dependent on the public’s NHI facilities.

**Table 3.14: Concerns regarding the increased number of people that will make use of public National Health Insurance facilities**

<table>
<thead>
<tr>
<th>Question</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are your concerns for the increased number of people who will make use of public NHI facilities?</td>
<td>The waiting periods for patients will be longer</td>
<td>18 (81.8)</td>
</tr>
<tr>
<td></td>
<td>Drugs that are needed will not always be available</td>
<td>19 (86.4)</td>
</tr>
<tr>
<td></td>
<td>Overworked and frustrated staff will be rude and uncaring towards patients</td>
<td>10 (50)</td>
</tr>
<tr>
<td></td>
<td>Processing of information will be very slow because necessary technologies are not available in public facilities</td>
<td>17 (77.3)</td>
</tr>
<tr>
<td></td>
<td>Poor quality of care by doctors struggling to attend to large numbers of patients</td>
<td>18 (81.8)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>3 (13.6)</td>
</tr>
</tbody>
</table>

Based on the results displayed in Table 3.14, it could be concluded that the concerns for the increased number of people who will make use of public NHI facilities as indicated by the respondents, ranging from the most important to the least, include:

- Drugs that are needed will not always be available (86.4%).

- The waiting periods for patients will be longer and poor quality of care by doctors struggling to attend to large numbers of patients (both 81.8%).

- Processing of information will be very slow because necessary technologies are not available in public facilities (77.3%).

- Overworked and frustrated staff will be rude and uncaring towards patients (50%).

Some respondents (13.6%) indicated that there were other concerns for the increased number of people that will make use of public NHI facilities. They include the following:

- “If the private sectors contracts with the NHI, none of the above mentioned factors will be relevant. The benefits can only be greater.”
- “Inadequate numbers of facilities with suitably trained personnel.”
- “We need buy-in from community pharmacists, who need to realise that their professional contribution should not be compromised by economic issues, and we need adequate remuneration of community pharmacists so that they are able to render the service.”

The most prominent and relevant theme that emerged includes that there is an inadequate number of facilities with suitably trained personnel in the public health sector. The respondents also suggested that by including CPs in the NHI system and by providing adequate remuneration, many of the factors of concern could be eliminated.

Table 3.15 provides the respondents willingness to be employed in the public sector.

**Table 3.15: Respondents’ willingness to work in the public sector**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With the implementation of NHI, a large number of health professionals will be required to work in the public sector. Would you be open to working in the public sector?</td>
<td>14 (63.6)</td>
<td>8 (36.4)</td>
</tr>
</tbody>
</table>

Results from Table 3.15 indicate that the majority of respondents (63.3%) would be willing to work in the public sector.

Table 3.16 provides the respondents’ concerns in terms for employment in the public sector.

**Table 3.16: Respondents’ concerns regarding working in the public sector**

<table>
<thead>
<tr>
<th>Question</th>
<th>Range</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following factors of working in the public sector concern you?</td>
<td>Increased working hours</td>
<td>4 (18.2)</td>
</tr>
<tr>
<td></td>
<td>Less money</td>
<td>4 (18.2)</td>
</tr>
<tr>
<td></td>
<td>Late salary payments</td>
<td>8 (36.4)</td>
</tr>
<tr>
<td></td>
<td>Harsh working conditions</td>
<td>6 (27.3)</td>
</tr>
<tr>
<td></td>
<td>Working in rural or squatter camp areas</td>
<td>4 (18.2)</td>
</tr>
<tr>
<td></td>
<td>Limited choice of preferred drugs</td>
<td>8 (36.4)</td>
</tr>
<tr>
<td></td>
<td>Shortages in essential medication</td>
<td>10 (50)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6 (27.3)</td>
</tr>
</tbody>
</table>

From Table 3.16, it could be concluded that the concerns for working in the public sector as indicated by the respondents, ranging from the most important to the least, include:

- Shortages in essential medication (50%).
Late salary payments (36.4%) and a limited choice of required drugs (36.4%).

Harsh working conditions (27.3%).

Increased working hours (18.2%).

Less money (18.2%)

Some respondents (27.3%) indicated that there were other concerns for working in the public sector. They included the following:

“Lack of advancement opportunities due to affirmative action. Unable to be flexible and innovative in dealing with problems because of a rigid overly bureaucratic system and invariably people get put into positions of authority that they don't have the skills for due to political ideology and they tend to stifle others hard work and innovation when they don't know what is going on.”

“NHI will not be seen as an extension into communities where healthcare professionals already practice and where services will meet patient needs locally, but rather continue to be hospicentric. You will certainly then need more professionals to be employed rather than contract.”

“Have worked in district hospitals - no basic equipment such as stethoscopes and auroscopes, better basic equipment would go a long way to improving conditions for doctors in district hospitals, this system works but is not backed up properly - NHI will be the same.”

The most prominent and relevant themes that emerged include:

Unfair and lack of advancement opportunities – Individuals that are not adequately skilled are put into management positions as a result of political agendas.

Lack of basic equipment - There is a lack of basic equipment in public facilities.

These concerns are consistent with the concerning factors for employment in the public sector, specifically related to hospital pharmacists brought forth by Haagensen (2010:1) and a study conducted by Rothmann and Malan (2007:241). Consistent concerns included unsatisfactory salaries; unavailable medicines and increased working hours, poor quality or unsatisfactory equipment (Rothmann & Malan, 2007:241; Haagensen, 2010:1).
3.8 Information systems

Table 3.17 provided the respondents perceptions in terms of contracted NHI CPs information systems.

Table 3.17: Respondents’ perceptions regarding contracted community pharmacies’ information systems with the National Health Insurance

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you believe that CPs that contract with NHI will have to have two separate dispensaries and computerised systems in order to serve the needs of both NHI patients and patients making use of private medical aid?</td>
<td>8 (36.4)</td>
<td>14 (63.6)</td>
</tr>
<tr>
<td>Do you believe it will be possible for private pharmacies that contract with NHI to serve both NHI patients and patients making use of private medical aid in the same dispensary using the same computerised system?</td>
<td>17 (77.3)</td>
<td>5 (22.7)</td>
</tr>
</tbody>
</table>

The results displayed in Table 3.17 suggests that with 63.6%, the majority of respondents feel that CPs contracted with the NHI will not have to have two separate dispensaries and computerised systems in order to serve the needs of both NHI patients and patients making use of private medical aid. As a result, the majority of respondents (77.3%) feel that it will be possible to have a single dispensary using the same computerised system to serve private medical aid and patients of NHI, which will be much less expensive.

3.9 Pharmacist’s scope of practice within National Health Insurance

Neither the Green- nor White Paper on the NHI made any mention of the role that pharmacists will fulfil within the NHI system. Therefore, one of the specific objectives of this study was to illuminate the role of pharmacists within the NHI. This objective also extended to answering one of the research questions that pertain to how the pharmacists’ scope of practice will change with the implementation of the NHI. Table 3.18 provides the respondents perception in terms of how the pharmacists’ scope of practice could be influenced or expanded with the implementation of the NHI.
Table 3.18: Respondents’ perception regarding the pharmacist’s scope of practice within the National Health Insurance

<table>
<thead>
<tr>
<th>Questions</th>
<th>Yes n (%)</th>
<th>No n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With the completion of the PCDT course, a community pharmacy would have</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the human resources to run a primary healthcare clinic that can provide</td>
<td>19 (86.4)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>scarce pharmaceutical skills to patients of NHI and private medical aid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe that pharmacists’ skills, such as the performing of tests</td>
<td>16 (72.2)</td>
<td>6 (27.3)</td>
</tr>
<tr>
<td>such as blood pressure, cholesterol, glucose, lung function and screening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tests will be better utilised with the implementation of NHI?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe that pharmacists’ practising in private pharmacies could</td>
<td>18 (81.8)</td>
<td>4 (18.2)</td>
</tr>
<tr>
<td>expand their scope of practice by completing the PCDT course that will</td>
<td></td>
<td></td>
</tr>
<tr>
<td>enable them to diagnose and prescribe treatment for patients of the NHI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and private medical aid?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe that if pharmacists practising in private pharmacies</td>
<td>17 (77.3)</td>
<td>5 (22.7)</td>
</tr>
<tr>
<td>complete the PCDT course and could use their skills in a primary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>healthcare clinic in a community pharmacy it could lessen the strain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>that will be put on NHI facilities by the massive amounts of patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>that will be dependent on these facilities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you believe that scarce pharmaceutical services being utilised in a</td>
<td>21 (95.5)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>primary healthcare clinic of a community pharmacy could lead to better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>preventative disease management and for the greater part lessen the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>quadruple burden of disease that South Africa is facing?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It could be concluded from the analysis of Table 3.18 that the majority of respondents (72.2%) felt that pharmacists’ scarce skills will be better utilised with the implementation of the NHI. These skills include the performing of tests such as blood pressure, cholesterol, glucose, lung function and screening tests. The majority of respondents (81.8%) also felt that pharmacists’ practising in CPs could expand their scope of practice by completing the PCDT course in order to diagnose and describe treatment to both patients using private medical aid and those who depend on the NHIF.

Table 3.18 also indicates that the majority of respondents (86.4%) feel that with the completion of the PCDT course, CPs would contain the necessary human resources to run a PHC clinic that can provide scarce pharmaceutical skills to both private medical aid- and NHI patients in order to reduce the strain put on NHI facilities by the substantial number of patients that will be reliant on these facilities (77.3%), lead to better preventative disease management and lessen the existing quadruple burden of disease (95.5%).

The respondents were asked how they believed the pharmacists’ scope of practice will change with the implementation of NHI in SA and their direct responses are provided below:
• “The pharmacist is trained to handle all scheduled medication and should be allowed to prescribe it when a patient needs it, not like this idiotic set-up at the moment where pharmacists are pill counters.”

• “More focus on patient care and identifying risks of poly-pharmacy and over prescribing.”

• “There seems little political will to use pharmacists as anything other than logistics managers despite the potential for offering services of great value. Unless this starts being incorporated into the planning a great opportunity will be lost.”

• “Pharmacists will be better prepared to complete suitable screening tests and refer only those patients needed additional medical attention.”

• “If pharmacists go the PCDT route, it should follow the UK system where they do not dispense their own prescriptions. They should also focus more on the cognitive skills of a pharmacist than the manipulative skills and should be prepared to appropriately supervise and control pharmacy support personnel who provide the manipulative skills.”

• “We will be able to practice more of what we are trained to do - and be more able to enter into groups practices - e.g. work more closely with GPs - as in the UK.”

• “Should not change but rather skills should be better utilized. Budgets must include all types of pharmaceutical services required such as MTM, NMS, DUR, Education, screening.”

• “The pharmacist will become more useful to the overall poor state of healthcare in the public sector by bringing greater professionalism and ethics into the state NHI system.”

• “The Pharmacist, if qualified in prescribing and diagnosing according to the EDL, could definitely decrease the burden.”

• “Focus will be more clinical.”

• “More patient focused care.”

• “Yes with greater emphasis on preventive service delivery and medicine optimisation and dispensing will be mainly left to pharmacy support staff.”

• “Greater patient load, greater administrative burden, better stockpiling systems will have to be implemented, staff appointments will have to be increased, clinical skills will have to be improved.”
• “The pharmacist will no longer play the role of dispensing. Dispensing will be left to assistants and technical staff. The pharmacist should provide information and educate patients about the proper use of medication, the reasons for the use of the medication and how to deal with potential side effects.”

• “The pharmacist will be able to fill his rightful place in the healthcare team.”

• “A larger operating area and clinic is required, appoint more professional employees for primary healthcare clinics and dispensing.”

• “Individual patient care will decrease as a result of the clients load.”

A few of these responses were unrelated to the direct pharmacists’ scope of practice and as a result the most prominent and relevant themes that emerged include:

• Diagnose, prescribe or refer – The pharmacist will be more actively involved in diagnosing and prescribing medicine for patients and refer patients where additional care is needed; and

• A minimised dispensing role – The pharmacist will be less involved with the dispensing process and the dispensing role will be provided by assistants.

From the respondents’ direct responses, they also indicated that the pharmacists’ will focus more on providing preventative, clinical and patient-orientated care and that they will be more actively involved in the provision of a wide range of pharmaceutical services. Pharmacists are currently trained to perform a wide range of pharmaceutical services, but in practice there are limited opportunities to provide these services.

3.10 Comments and suggestions

In conclusion of the questionnaire, the respondents were asked if they had any comments or suggestions and the following was provided:

• “Pharmacy is a dying profession and I would expect where the pharmacist has not been recognised in the NHI, only doctors and sisters, why would one want to be a community pharmacist for hardly any remuneration. Look at what pharmacists are paid in America for the level of responsibility they carry, not here.”

• “Despite the complaining about the disparity in spending between the public and private sectors, at present it seems to be forgotten that those getting private healthcare are the ones paying their own way as well as paying for those who go to the state. If you
significantly alter their level of healthcare it won’t be tolerated and a wave of emigration will be triggered and the country can ill afford to lose the people who own and start businesses and create productive employment. The money shortage for healthcare will only get worse if this happens."

- “A Professional and non-corrupt approach to NHI is essential and measures to ensure this will have to be put in place. It is important that all medical disciplines are involved in the implementation of a NHI system and that the care of patients is the paramount driver of such a system.”

- “We as a profession should get behind the implementation of the NHI - it will help overcome the huge inequalities in healthcare that we currently have if resources are pooled.”

- “PCDT is a ‘scope creep’ i.e. half qualifying people to do what others are qualified to do because of skills shortage. In the scope of practice of a pharmacist there is more than enough to do to add value to the healthcare system from both a patient outcome point of view and a cost saving contribution.”

- “If the community pharmacist is not going to be used and payments are not made on time for services rendered then the whole NHI will founder. Relying on nurses to fulfil the role of the pharmacist is a folly too scary to imagine.”

- “The current healthcare system would work fine if it was effectively managed, proper transport from primary and secondary facilities to tertiary and proper referral systems control and management of theft of equipment and better efficiencies - NHI will be mismanaged and if funding is not ring-fenced will be plundered. All funding in this country is mismanaged in some way - what will change in this regard?”

The most prominent and relevant themes that emerged from these comments and suggestions were:

- Adequate and prompt remuneration – Remuneration for NHI contracted healthcare providers should be adequate and on time.

- Quality services – High quality services need to be provided in both the public and private healthcare sector.

- Pooled resources – All available and certified healthcare providers, including CPs, should be included in the NHI system.
Pharmacists as assets – Pharmacist, without expanding their scope of practice, can contribute to the healthcare system in terms of patient outcomes and cost-saving.

Proper management – Professional, effective and non-corrupt management tactics should be applied in terms of transport, referral systems and funding.

3.11 Chapter summary

In this chapter, the results of the empirical investigation were displayed and discussed in line with the major topics of the structured questionnaire. These results and perceptions are not representative of any pharmaceutical society, council or corporate community pharmacy. The next chapter provides the conclusions and key findings from the literature review and the empirical investigation, the study limitations as well as recommendations for future research.
CHAPTER 4: CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

In this chapter, the conclusions and key findings of both the literature review and empirical investigation will be provided along with the limitations of the study and recommendations for future research.

4 Conclusions, recommendations and limitations

4.1 Conclusions from the literature review

In this section, the conclusions from the literature review are provided according to the literature objectives of this study. These objectives include:

- comparisons of international forms of UHC that have been implemented in other countries;
- descriptions of the current health system in SA;
- identification of the need for reformation of the South African health system; and
- identification of the reason why the NHI is proposed to reform the South African health system.

The conclusions and key findings from the literature review of this study are provided subsequently.

4.1.1 Compare international forms of UHC that have been implemented in other countries.

Reid (2009:17-19) categorises healthcare systems into four different models, namely the Bismarck-, Beveridge-, NHI- and OOP models. It could be concluded that the OOP-model is unsustainable as large proportions of poor countries populations simply do not have the money to pay for healthcare services (Hamilton, 2009). The current defective state of the South African healthcare system - where the OOP-model is used and health insurance coverage is only available to those who can pay - as illustrated throughout this study, confirms the conclusion that the OOP-model is unsustainable.

Countries that make use of the Bismarck model or a variation thereof mainly include high income countries such as France and Germany respectively (World Bank, 2016). This model is financed through tax-based and mandatory health insurance and is to a large degree managed by insurance plans and private hospital GP's (Reid, 2009:17-18). In all of the countries using...
this model, residents must acquire health insurance of some type (Hamilton, 2009). Health insurance plans are called sickness funds and these are funded through a combination of employer- and employee payroll deductions (Reid, 2009:17-18). Strict government regulation provides this multi-payer model with similar cost-control as seen with the Beverdige model (Reid, 2009:17-18). The benefits of this model include that it can achieve high quality care (Cichon & Normand, 1994:323), have high rates of growth in health expenditures (Lloyd, 2010), have high population satisfaction (Van der Zee & Kroneman, 2007:14) and as a result have strong public support (Van der Zee & Kroneman, 2007:21). This model faces challenges in that it cannot ensure care for all at an affordable price (Cichon & Normand, 1994:323). Co-payments within this model are also not unfounded as the French health system requires co-payments at a point of service in order to fund healthcare services (Reid, 2009:31).

The Beveridge model is used by high and upper-middle income countries such as Spain and Brazil respectively (World Bank, 2016). In this model, healthcare is financed and provided by the government, as the single payer, and private options are offered as well. The government also controls what range of services can be provided and charged for by GP’s and as result this model tends to have low costs per capita (Reid, 2009:18). Residents of these countries are not required to pay medical bills but rather make tax contributions (Reid, 2009:18). The advantages of this model include that healthcare for all can be provided at a reasonable cost (Cichon & Normand, 1994:323) and for that reason it also has a cost advantage (Lloyd, 2010). This model, however, cannot circumvent the perils of poor quality (Cichon & Normand, 1994:323).

The NHI model is used by high and lower-middle income countries such as Canada and Ghana respectively (World Bank, 2016). In this model, where elements of both the Beverdige- and Bismarck models are present, healthcare services are provided by private sector healthcare providers and funding is derived from an insurance program that is managed by the government (Reid, 2009:18). Every citizen is required to make monthly payments to this government-run program (Reid, 2009:18). This model uses a single-payer governing body that manages to have considerable market power in terms of negotiating for lower prices (Reid, 2009:18). Costs are controlled by limiting the package of medical services that the system is willing to pay for or by compelling patients to wait to be treated (Reid, 2009:18). This model has advantages in that it tends to be cheaper and has much simpler administration than for example American-style private insurance. A disadvantage of this model is that the benefits package offered to patients is limited (Reid, 2009:18).

4.1.2 Describe the current health system in South Africa.

Reforming the South African health system dates back to as early as 1928 (Dhai, 2011:48). However, the quality of the healthcare services that has been delivered to and received by
South African citizens for the past 20 years has majorly been determined by factors such as race, geological location, ethnicity and income (Dhai & Etheredge, 2011:143). SA is currently exhibiting a burden of disease that is characterized as quadruple (Coovadia et al., 2009, Dhai, 2011:48-50) as the current health system focuses primarily on curing of disease, rather than disease prevention (Department of Health, 2011:1).

The current South African health system is made up of a private sector and a state-provided public sector (Gilson & McIntyre, 2007b) which is deemed inequitable as the minority of the South African population has disproportionate access to private healthcare (Department of Health, 2011:4). The public health sector is large and although it serves the majority of the South African population, it is under-resourced and does not provide highly specialised services (Haagensen, 2010:2). Numerous systematic and operational challenges are experienced in the public health sector and these include an unbalanced resource (financial, human, equipment etc.) distribution between the two sectors; financial mismanagement of assigned resources; unsatisfactory services; dwindling hospital conditions; long waiting times; safety and security of patients and staff; decrepit infrastructure; staff attitudes; mismanagement of funds and shortages relating to human resources and supplies (Department of Health, 2011:9; Haagensen, 2010:2). Haagensen (2010:21) explained that existing problems for public sector healthcare employees include increased working hours and reduced salaries.

In the private health sector, compensation for the services provided is either on a basis of fee-for-service or the patient’s medical scheme or hospital cash plan (Van Rensburg et al., 1992:28, Gilson & McIntyre, 2007a:1; Department of Health, 2011:11). The private sector has difficulties that mainly relate to the costs of services. These include elevated service tariffs; continuous over-servicing of patients on a fee-for-service basis; and provider-encouraged utilisation of services (Haagensen, 2010:2).

According to the South African DoH (Department of Health, 2011:4), the growing need for healthcare in SA is indefinitely surpassing the availability of healthcare services and is furthermore exacerbated by disproportionate access to healthcare and social inequality. The health outcomes for patients in SA are poor in comparison to other upper-middle countries according to the DoH (Department of Health, 2011:9).

4.1.3 Identify why there is a need for reformation of the South African health system.

The current state of the South African health system is inadequate as it does not provide access to quality healthcare services for the entire South African population. The minority of the population has access to quality private healthcare through their ability to pay for these services, whereas the majority of the population is reliant on the defective public health sector
where access and quality are extremely lacking. This fact is in direct contradiction to Section 27 of the Constitution of the Republic of SA (SA, 1996:1255), which states that every individual has the right to access healthcare services. The current system is simply put, unfair, and it can be concluded that change is necessary in order to realise every citizen’s right to healthcare.

4.1.4 Identify why the National Health Insurance is proposed to reform the South African health system.

Hsiao (2007) explained that it is impossible to generalise which of the healthcare models are the best, but through the comparison of countries using different models of healthcare, it could be concluded that the NHI- and Beverdige models are the most suited for reform in SA. This conclusion is consistent with findings from a study performed in 2011 by Mack (2011:108) and is based on the fact that SA, as an upper-middle income country (World Bank, 2016), would be more likely to continue with current trends where the Beveridge model for instance is implemented in high- and upper-middle incomes countries and the NHI model is implemented in high- and lower-income countries.

The NHI model, which has elements of both the Beveridge- and Bismarck model, is used by, for instance, Canada, a high-income country, and Ghana, a lower-middle income country, which suggests that it is possible implement this model in any country irrelevant of their economic situation. Furthermore, the NHI-model has proved to have considerably more advantages than other models. The primary advantage is that it is less expensive to administer (Reid, 2009:18) which coincides to SA where funding for the NHI is considered to be a major concern. For these reasons, the NHI model seems to be the most appropriate option for reform of the South African health system.

4.2 Conclusions from the empirical investigation

From the discussion of the results of the study, conclusions could be drawn to finally establish the principal aim of the study which was to determine the pharmacists’ perception of the implementation of the NHI in SA. Conclusions were made based on the specific objectives of the empirical investigation which included to:

- determine whether pharmacists have perceived knowledge on the working of the NHI;
- illuminate the role of the pharmacist within the NHI,
- determine the role of CPs within the NHI; and
- establish whether pharmacists foresee any possible obstacles with the implementation of the NHI in SA.
The conclusions and key findings from the empirical investigation of this study are provided subsequently.

4.2.1 Do pharmacists have perceived knowledge on the working of the National Health Insurance?

From the discussions of the empirical investigation it could be concluded that the targeted pharmacists’ did have perceived knowledge on the working of the NHI as they achieved an average of 85.8% for the correct answers. The respondents know that:

- the NHI will provide access to healthcare for all South African citizens;
- private medical schemes will remain in use with the implementation of the NHI;
- healthcare providers will not be forced to contract with the NHI;
- the private healthcare sector will not be destroyed with the implementation of the NHI;
- all South African citizens will be obliged to contribute to the NHIF, irrelevant of them making use of the NHI services or additionally contributing to a private medical scheme;
- with the implementation of the NHI, medical schemes will in future provide top-up medical cover for those individuals who choose it; and
- pilot sites have already been introduced in certain provinces where the NHI model is being piloted.

The sample of the study population was too small to be generalised to the entire population of South African pharmacists, but rather to pharmacists that holds some managerial position.

4.2.2 What role will pharmacists play within the National Health Insurance?

Neither the Green- nor White Paper on the NHI made any mention of the role that pharmacists will fulfil within the NHI system. Therefore, one of the specific objectives of this study was to illuminate the role of pharmacists within the NHI. This objective also extends to answering one of the research questions that pertain to how the pharmacists’ scope of practice will change with the implementation of the NHI.
It is clear from the respondents' reactions that in the current South African health system, pharmacists’ are underutilised. The respondents do, however, feel that pharmacists could contribute to the successful reform of the health system by means of (refer to section 3.3):

- Disease management programmes.
- Patient compliance initiatives.
- Medicines information services.

The results showed that the respondents believe that the implementation of the NHI will create the opportunity to utilise the pharmacists’ scarce skills more effectively. These skills include performing tests such as blood pressure monitoring, cholesterol, glucose, lung function and screening tests (refer to section 3.6). The respondents feel that pharmacists’ focus will be more oriented on patient care and that their scope of practice could be expanded by completing the PCDT course (refer to section 3.9). By completing this course, pharmacists will be able to diagnose and prescribe treatment for patients in line with the PHC EML and Standard Treatment Guidelines.

The study also identified that the implementation of the NHI might affect some changes to the pharmacists’ scope of practice and these could be summarised as (refer to section 3.9):

- a minimised dispensing role;
- a more preventative, clinical and patient-orientated care approach; and
- the ability to diagnose, prescribe treatment or refer patients where necessary (by completion of the PCDT course).

4.2.3 What role will community pharmacies play within the National Health Insurance?

The respondents felt that with the implementation of the NHI, the remainder of the population that opts for continuous use of private medical aid will not be sufficient to support CPs (refer to section 3.4). The respondents indicated that CPs will need to adjust in terms of competing with the state-funded NHI in the following ways (refer to section 3.6):

- Range of quality services - Focus on the provision of quality pharmaceutical and alternative services should be expanded.
- Affordability - Pharmaceutical services and medicines should be provided at more affordable prices.
• Efficacy and skilled personnel - Increase efficacy and employ competent personnel.

• Price adjustments - Prices should be adjusted to be fair and reasonable and in line with other competitors.

• PCDT - Focus on delivering PCDT should be expanded.

• None - CPs will not have to adjust and competing will remain the same.

• CPs will not survive - CPs needs to be incorporated into the NHI and adequate reimbursement should be offered for services delivered.

Community Pharmacies should be included as additional medicine distribution points in the NHI system which will in-turn promote equity (refer to section 3.3). It would also be financially beneficial for CPs to contract with the NHI and the time period for CPs that are contracted with the NHI to be reimbursement for service rendered will be 90 days (refer to section 3.4).

The respondents also felt that if CP pharmacists completed the PCDT course, a CP would have the human resources to run a PHC that can provide scarce pharmaceutical skills to both NHI- and private medical aid patients. There is a clear consensus that this approach could lead to better preventative disease management, lessen the quadruple burden of disease that SA is facing and lessen the strain that will be put on NHI facilities by the massive amounts of patients that will be dependent on these facilities (refer to section 3.9).

The respondents felt that that CPs that contract with the NHI will not have to have two separate dispensaries and computerised systems in order to serve the needs of both NHI patients and patients making use of private medical aid (refer to section 3.8).

4.2.4 What obstacles or challenges do pharmacists foresee with the implementation of the National Health Insurance?

In the literature there were already many factors that were identified as challenges or obstacles for the implementation of the NHI. Nevertheless, there is a lack of available literature from pharmacists' perspective as to what specific factors they foresee as possible challenges or obstacles. The results from the study provided the obstacles or challenges with the implementation of the NHI as foreseen by respondents. These obstacles and challenges will be discussed subsequently.

The result indicated that the respondents felt that the NHI is not the appropriate solution to improve the inadequate public health system of SA, but they were divided on whether the problems the health system is facing can be fixed without the implementation of the NHI. In
addition, they felt that the NHI will not change the condition of the South African health system and if the NHI is not implemented in the proper manner, it will possibly put even more strain on the health system and result in even more inequalities in healthcare. The respondents felt that targeted action should be used to deal with the current issues the health system is facing (refer to section 3.3).

The respondents also felt that the current health system does not have the proper infrastructure (healthcare facilities, medical resources etc.) as well as the know-how, expertise and knowledge for the implementation of the NHI. The South African economy cannot afford the NHI and it is a huge concern for the public and health professionals that the government will be in control of the allocation of funds (refer to section 3.3).

The respondents were in agreement that the inequality between the public and private sector is a huge stumbling block for the implementation of the NHI (refer to section 3.3). The respondents indicated that they would be willing to work in the public sector; however there were certain concerns relating to working in the public sector (refer to section 3.6). Ranging from the most to the least important, these included:

- Shortages in essential medication.
- Late salary payments and a limited choice of preferred drugs.
- Harsh working conditions.
- Increased working hours and less money.

Other factors of concern also included unfair and lack of advancement opportunities and a lack of basic equipment. The respondents were almost divided when asked if the implementation of the NHI will lead to the mass emigration of healthcare professionals; nonetheless the majority feels that it will (refer to section 3.3).

The respondents concerns for the increased number of people who will make use of public NHI facilities as indicated by respondents, ranging from the most important to the least, included (refer to section 3.7):

- Drugs that are needed will not always be available.
- The waiting periods for patients will be longer and poor quality of care by doctors struggling to attend to large numbers of patients.
• Processing of information will be very slow because necessary technologies are not available in public facilities.

• Overworked and frustrated staff will be rude and uncaring towards patients.

Another concern for respondents was that there are an inadequate number of facilities with suitably trained personnel in the public health sector. The respondents also suggested that by including CPs in the NHI system and by providing adequate remuneration, many of the factors of concern could be eliminated (refer to section 3.7).

The respondents also provided certain obstacles or challenges with the medicine supply chain for CPs contracted with the NHI. These include (refer to section 3.5):

• General mistrust – Mistrust in the government’s expertise and capability to plan and manage an even bigger supply system with regard to the provision and control of medicines to CPs.

• Current public sector inadequacies - Inadequate supply of essential medicines and unreliable medicines delivery system in the public health sector. Improvement of the current issues seems unlikely.

• Financial loss – Financial loss as result of increased theft and bribery due to increased items in circulation.

• Workload – The workload may increase as a result of the system being under more pressure and a shortage in human resources.

• Unequal opportunities - There is a risk that opportunities will be granted to individuals with ‘connections’ and that community pharmacies with poor cash inflows will be prejudiced.

• Infrastructure - The current infrastructure does not allow an economical supply chain to community pharmacies.

4.2.5 Other findings

The respondents indicated that the following factors could contribute to the successful implementation of the NHI. Ranging from the most important to the least, these included (refer to section 3.7):

• Better governance and accountability.

• Government transparency.
• Renewed focus on the training of healthcare professionals.

• Strong public participation.

• Greater political will within the Department of Health.

Other factors for the successful implementation of the NHI that came forth in the study included (refer to section 3.7 and 3.10):

• Tone at the top – Management should lead by example.

• Fee at point of service delivery – Incorporate particular fee-for-services and co-payments in order to hinder moral hazard.

• Effective utilisation of health resources – All health resources should be utilised, including CPs.

• Adequate and prompt remuneration – Remuneration for services rendered by both public sector and private sector contracted healthcare providers should be adequate and on time.

• Unified system – Commitment from public and private sector healthcare professionals to create a unified health system rather than a public and private sector.

• Quality services – High quality services need to be provided in both the public and private healthcare sector.

• Pooled resources – All available and certified healthcare providers, including CPs, should be included into the NHI system.

• Pharmacists as assets – Pharmacist, without expanding their scope of practice, can contribute to the healthcare system in terms of patient outcomes and cost-saving.

• Proper management – Professional, effective and non-corrupt management tactics should be applied in terms of transport, referral systems and funding.

4.3 Study limitations

Limitations for this study included the available literature, sample size, response rate and the questionnaire. These limitations are discussed subsequently and recommendations provided.
4.3.1 Available literature

In SA, the NHI is currently in its initiation phase and it is an actual developing event. For this reason there is little existing literature available, especially pertaining to pharmacists in the South African context. The availability of relevant research was thus limited and the researcher had to utilise information that was not necessarily published in scientific peer reviewed academic journals. Both Policy Proposals, the Green- and White Paper had a lack of technical details and therefore the researcher also had to rely on stakeholders- and media publications.

4.3.2 Sample size

The researcher encountered difficulty in forming a significant population that would be able to provide valuable knowledge on this research topic. The sample size of the study population was small as a result of very specific inclusion criteria and despite variations in the actual exposure which respondents had previously had of the NHI, valuable information was nonetheless obtained. However, as a result of the small sample size, the results of the study cannot be generalised to the entire population of pharmacists.

Recommendations:

Future studies should focus on a more comprehensive sample in order for better generalisations to be made. One suggestion is to include all SAPC registered pharmacists in a study population and from there create the sample population based on a particular inclusion criteria of for example knowledge, years of experience etc.

4.3.3 Response rate

The response rate was very low compared to the number of individuals who indicated that they were willing to participate in the study. The response rate was 18.2%, which is relatively low in comparison to other studies that used similar methods to deliver the questionnaire, despite numerous reminders sent to all participants. The small sample size plus this low response rate thus had a further negative effect on the generalisation of results. In this study, although speculative in nature, possible factors that could have had an influence on the response rate was the fact that some of the respondents e-mail addresses might have changed during the course of the study or could be ascribed to the respondents’ busy time schedules.

Recommendations:

From the low response rate of this study and other studies that used online questionnaires to obtain information, it is clear that an alternative approach should rather be followed. The response rate for paper-based questionnaires, according to Nulty (2008:303), is much higher
(56%) than that of online questionnaires (33%) and for that reason the use of paper-based questionnaires is recommended. However, for future studies using a similar sample, it is recommended that paper-based questionnaires be delivered with prior arrangement at events such as meetings or conferences where the majority of the sample group is present.

4.3.3 Questionnaire

Some of the questions in the questionnaire were interpreted incorrectly or skipped and the researcher was not there to help with any uncertainties that the respondents might have had. Skipped questions might have been unintentional or intentional, the latter being the result of a lack of knowledge on the particular area. The questionnaire was available in English and Afrikaans and this might have had a negative impact on the response rate as well as the interpretation of questions by respondents with other first languages'. Some respondents also did not complete certain questions that relate to demographic information, which although is speculative in nature, could have been to protect their anonymity. Another factor might have been that the number of categories in the questionnaire were possibly not extensive enough to provide for all the possibilities, i.e. gender which gave only a choice of male or female. Adding to the already small sample and low response rate, this resulted in the study not being able to do any further statistical analysis.

Recommendations:

The use of a paper-based questionnaire is recommended where the researcher is present in order to avoid the incorrect interpretation of questions or the skipping of questions as a result of a lack of knowledge. The questionnaire could be set in multiple languages in order to include more of the respondents’ first languages, which might lessen the misinterpretation of results and possibly increase the response rate. A further suggestion is the inclusion of a more comprehensive list of possible options for all categories of demographic information.

Recommendations for future research:

It is evident that more research is required to determine the pharmacists’ perception of the implementation of NHI in SA. Future studies should be performed on a much broader scale in order to have the necessary impact. It is also recommended that future studies should follow a more qualitative research approach by using methods such as open interviews or focus groups.
4.4 Chapter summary

This chapter concludes the study by linking the specific research objectives to what has been achieved. The limitations of the study and recommendations for future research were also provided.

The objectives of the study were hereby met.
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PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

Title: Pharmacists’ perception of the implementation of the National Health Insurance in South Africa

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Jolandé Pienaar: 082 758 0204
Dear president / chairperson / branch director / director:

I am Jolandé Pienaar, a master’s student from the North-West University (NWU), South Africa (SA), working on a study that explores the perception of pharmacists’ on different managerial levels toward the implementation of National Health Insurance (NHI) in South Africa. I would like to invite your society / council / corporate group / association to take part in a research project and to give your permission for your council / society / association to participate in my study. To follow, is information about the study so that you can make an informed decision.

Please take some time to read through the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Furthermore, your society / council / corporate group / association’s participation in this study is entirely voluntary and you are free to decline to participate. If you say no, this will not affect your society / council / corporate group / association negatively in any way whatsoever. Furthermore, no society / council / corporate group / association’s answers will be directly analysed. Your society / council / corporate group / association are also free to withdraw from the study at any point, even if your society / council / corporate group / association has agreed to take part. The researcher would like to ask for permission to use the society / council / association that you represent’s email addresses in order to send the questionnaire via email through to the respondents.

This study has been approved by the NWU (Potchefstroom) Health Research Ethics Committee (HREC) of the Faculty of Health Sciences. The study will be conducted according to the ethical guidelines and principles of the International Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research. It might be necessary for the research ethics committee members to inspect the research records.

What is this research study all about?

This study will be conducted at the North-West University, Potchefstroom Campus, and will involve gathering information regarding the perception of pharmacists on the different management levels of the Pharmaceutical Society of South Africa’s (PSSA) different branches and sectors, the South African Society of Clinical Pharmacy (SASOCP), the Independent Community Pharmacy Association (ICPA), the South African Pharmacy Council (SAPC), and pharmacists who are dispensary category managers, national group pharmacy managers or regional office managers of the selected corporate community pharmacy groups, toward the implementation of the NHI in South Africa.
The objectives of this research are to explore, interpret and describe pharmacists’ perceptions on the implementation of NHI in South Africa.

**Who will be invited to participate in this study?**

The study population will include pharmacists on the different management levels of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC, and pharmacists who are dispensary category managers, national group pharmacy managers or regional office managers of the different corporate community pharmacy groups.

**Why have the respondents been invited to participate?**

The respondents have been invited to participate because they are pharmacists on the different management levels of one of the PSSA’s different branches and sectors, the SASOCP, the ICPA, the SAPC and corporates and the researcher believes that they can make a valuable and knowledgeable contribution to the study.

**What will the respondents’ responsibilities be?**

The respondent will be expected to complete the electronic questionnaire and submit it back to the study mediator via email. The questionnaire can be completed on the respondents’ own time and in their own privacy, and can also be temporarily saved and completed at a more convenient time.

**What amount of time will it take to complete the questionnaire?**

The questionnaire will take approximately 30 minutes to complete and the completed questionnaire should be returned as soon as possible.

**Will the respondent benefit from taking part in this research?**

The indirect benefits for the respondent will be the opportunity to share his/her views and practical wisdom to contribute to the debate on NHI. The bigger benefit is that in moving forward with NHI, a more in-depth understanding of the pharmacist’s role within NHI can be described and possible obstacles or challenges in the implementation of the NHI can be identified. There are no direct benefits for the respondents.

**Are there risks involved in taking part in this research?**

The risks in this study are minimal since anonymity is ensured. Participation in this study is optional and no harm will come to the respondent if he/she chooses not to participate in the study. Only the researcher, project leader and study mediator will have access to the
respondents’ email addresses and the study mediator converts all data to Microsoft Excel® before it is sent back to the researcher. The study mediator is also not able to see which respondent had what response. Therefore, the respondents’ email address can by no means be linked to any answers that have been given. Therefore, anonymity is ensured. The respondents’ email addresses will only be used to send out the questionnaire and not for any other purposes of the study. The returned data will also be saved on the researcher’s computer, which is password protected and in a locked room at all times.

**Who will have access to the data?**

To protect the respondents’ information, only the researcher, project leader and study mediator will have access to the respondents’ email addresses. The respondents’ email addresses will not be used in the analysis of the data of the study. The returned data from the study mediator will be saved on the researcher’s computer, which is password protected and in a locked room at all times. All information will be managed in a strictly professional and confidential manner.

**Will the respondent be paid to take part in this study and are there any costs involved?**

No, the respondent will not be paid to take part in the study. There will be no costs involved for you, if you do take part.

**What will the duration of the study be?**

The respondents’ participation in this study will take place from July 2015 to February 2016.

**How will feedback in terms of the findings of the study be handled?**

The findings of the research will be shared with you via email. You are welcome to contact us regarding the findings of the research. We will be sharing the findings with you as soon as it is available.

**Is there anything else that you should know or do?**

You can contact Miss Jolandé Pienaar at 082 758 0204, Ms Irma Kotze at 083 6619 289 or any other member of the research team if you have any further queries or encounter any problems.

You are also welcome to contact the health research ethics committee of the Faculty of Health Sciences via Ms Carolien van Zyl at +2718 299 2094, Carolien.VanZyl@nwu.ac.za.

You will receive a copy of this information and consent form for your own records.
If your society / association / council / corporate group is willing to participate in this study, an email can be sent to the researcher (Miss Jolandé Pienaar), in which your society / association / council / corporate group can confirm or decline participation. The researcher will need a signed list of email addresses of the members in your society / association / council / corporate group in order to send the questionnaire to the respondents via the study mediator.

Your participation in the study will be greatly appreciated and would make a valuable contribution towards the debate on NHI in South Africa.
ANNEXURE B: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

INFORMATION LEAFLET FOR CONSENT TO BE A RESEARCH PARTICIPANT

Faculty of Health Sciences

Title of the research project: Pharmacists’ perception of the implementation of the National Health Insurance in South Africa

Reference numbers: NWU-00053-15-S1

Principal investigator: Miss Jolandé J Plenaar (BPharm)

Address: Magnolia Park 23, Hitge Street, Potchefstroom

Contact number: Cell phone: 082 758 0204

You are being invited to take part in a research project that forms part of my master’s study that explores the perception of pharmacists toward the implementation of National Health Insurance (NHI) in South Africa (SA). Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Furthermore, your participation is entirely voluntary and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU-00053-15-S1) and will be conducted according to the ethical guidelines and principles of the International Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council. It might be necessary for the research ethics committee members to inspect the research records.
What is National Health Insurance (NHI)?

NHI is a form of Universal Health Coverage (UHC) and is described as a financing system that will ensure that all citizens of South Africa (SA) have access to appropriate, efficient and quality healthcare services without suffering financial hardship when paying for these services. NHI is intended to address the inequalities in healthcare, bring reform and improve health service delivery in SA.

Where will this study be conducted?

This study will be conducted at the North-West University (NWU), Potchefstroom Campus.

What is this research study all about?

This study will involve gathering information regarding the perception of pharmacists on different management levels toward the implementation of NHI in SA.

The objectives of this research are to explore, interpret and describe pharmacists' perceptions of the implementation of NHI in SA.

Why have you been invited to participate?

You have been invited to participate in this study because you have complied with the following inclusion criteria: you are a pharmacist on the management level of the Pharmaceutical Society of South Africa’s (PSSA) different branches and sectors, the South African Society of Clinical Pharmacy (SASOCP), the Independent Community Pharmacy Association (ICPA), the South African Pharmacy Council (SAPC), or if you are pharmacists and a dispensary category manager, national group pharmacy manager or a regional office manager of a corporate community pharmacy group. You will be excluded from the study if you do not comply with the above-mentioned criteria for inclusion to the study.

The researcher also believes that you can make a valuable and knowledgeable contribution to the study.

What will your responsibilities be?

You will be expected to complete the electronic questionnaire and submit it back to the study mediator via email. The questionnaire can be completed on your own time and in your privacy, and can also be temporarily saved and completed at a more convenient time.
What amount of time will it take to complete the questionnaire?

The questionnaire will take approximately 30 minutes to complete.

Will you benefit from taking part in this research?

The indirect benefits for you as a participant will be the opportunity to share your views and practical wisdom to contribute to the debate on NHI. The bigger benefit is that in moving forward with NHI, a more in-depth understanding of the pharmacist’s role within NHI can be described and possible obstacles or challenges in the implementation of NHI can be identified.

Are there risks involved in your taking part in this research?

The risks in this study are minimal since anonymity and confidentiality are ensured (see Who will have access to the data?). Participation in this study is also optional and no harm will come to you if you choose not to participate in the study. There are no direct benefits for you as a participant.

The benefits outweigh the risk.

What will happen in the unlikely event of some form of discomfort occurring as a direct result of your taking part in this research study?

Should you have the need for discussion due to possible discomfort, you can contact the supervisor of the study, Ms Irma Kotze, via email (Irma.Kotze@nwu.ac.za) or phone (083 661 9289) and an opportunity will be arranged for you to speak your mind. This service will be provided free of charge and all conversations will be handled in a professional manner.

Who will have access to the data?

Anonymity and confidentiality will be insured by using the administrator of the EvaSys system as the study mediator. EvaSys is a procedure of the University of the Free State (UFS) and is described as a web-based survey program used for the development and distribution of questionnaires. The study mediator will be responsible for the distribution of the questionnaire to each respondent and each questionnaire will be then be submitted back to the study mediator.

To protect your information, only the researcher, project leader and study mediator will have access to your email address, which will only be used in order to send you the questionnaire. Your email address will not be used in the analysis of the data. The study mediator is not able to see which respondent had what response and also only sends the converted data from the questionnaires back to the researcher and project leader. Therefore, your email address can by no means be linked to any answers that have been given.
The returned data from the study mediator will be kept safe and secure by locking hard copies in locked cupboards in the researcher’s office and for electronic data it will be stored on a password protected computer and in a locked room at all times. Data will be stored for five years, after which all information and data will be destroyed in the appropriate manner.

**Will you be paid to take part in this study and are there any costs involved?**

No, you will not be paid to take part in the study. There will be no costs involved for you, if you do take part.

**What will the duration of the study be?**

Your participation in this study will take place from July 2015 to February 2016.

**Is there anything else that you should know or do?**

You can contact Miss Jolandé Pienaar at 082 758 0204, Ms Irma Kotze at 083 661 9289, or any other member of the research team if you have any further queries or encounter any problems.

You are also welcome to contact the health research ethics committee of the Faculty of Health Sciences via Ms Carolien van Zyl at +2718 299 2094, Carolien.VanZyl@nwu.ac.za.

You will receive a copy of this information and consent form for your own records.

**What will happen in terms of feedback regarding the findings of the study?**

The findings of the research will be shared with you via email. You are welcome to contact us regarding the findings of the research. We will be sharing the findings with you as soon as it is available.
Information regarding the research team:

**Primary Investigator:** Miss Jolandé J Pienaar (BPharm); email: 22157018@nwu.ac.za

**Supervisor:** Ms Irma Kotze (MBA & BPharm), School of Pharmacy, Pharmacy Practice, North-West University, South-Africa; email: Irma.Kotze@nwu.ac.za

**Co-supervisors:** Prof Martie S Lubbe (PhD), School of Pharmacy, Pharmacy Practice, North-West University, South-Africa; email: Martie.Lubbe@nwu.ac.za

Dr Johanita R Burger (PhD), School of Pharmacy, Pharmacy Practice, North-West University, South-Africa; email: Johanita.Burger@nwu.ac.za

**Address:**

North-West University

Private Bag X6001

Potchefstroom

2522

**Contact number:**

Jolandé Pienaar: 082 758 0204

If you have any comments or recommendations with regard to the study, please send your feedback to 22157018@nwu.ac.za or contact the researcher at 082 758 0204.
CONSENT FORM

PARTICIPATION IN THIS RESEARCH IS VOLUNTARY

Declaration by participant

You are free to decline to participate in this study, or to withdraw at any point until the analysed data is formally reported even after you have given consent without any consequences.

By completing the questionnaire it will automatically convey your compliance to participate in the study and complete the questionnaire packet.

I hereby voluntarily consent to participate in the above-mentioned study. I am not coerced in any way to participate and I understand that I can withdraw at any time should I feel uncomfortable during the study. I also understand that my name will not be disclosed to anybody who is not part of the study and that the information will be kept confidential and not linked to my name or email address at any stage. I also understand what I might benefit from participation as well as what might be the possible risks and should I need further discussions someone will be available.
ANNEXURE C: THE STRUCTURED QUESTIONNAIRE (ENGLISH)

Pharmacists’ perception of the implementation of the National Health Insurance in South Africa

Section A – Demographic information

Please answer the following questions by either selecting the correct option with an ‘x’ or filling in the correct information in the space provided. Also note that more than one option may be selected in certain questions. Please do not skip any questions.

1. Indicate your gender:

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

2. Indicate your age (in years):

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>

3. Indicate your race:

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Coloured</th>
<th>Asian</th>
<th>Other</th>
</tr>
</thead>
</table>

4. Indicate in which sector you currently practice in:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Indicate (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health sector</td>
<td></td>
</tr>
<tr>
<td>Private health sector</td>
<td></td>
</tr>
</tbody>
</table>

5.1 Indicate your current work environment (indicate more than one, if necessary):

<table>
<thead>
<tr>
<th>Sector</th>
<th>Indicate (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community pharmacy</td>
<td></td>
</tr>
<tr>
<td>Corporate community pharmacy</td>
<td></td>
</tr>
<tr>
<td>Hospital - private</td>
<td></td>
</tr>
<tr>
<td>Hospital - provincial</td>
<td></td>
</tr>
<tr>
<td>Health maintenance organisation (HMO)</td>
<td></td>
</tr>
<tr>
<td>Sector</td>
<td>Indicate (X)</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Transmed, kdm, etc.</td>
<td></td>
</tr>
<tr>
<td>Medical aid environment</td>
<td></td>
</tr>
<tr>
<td>Clinical research</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td></td>
</tr>
<tr>
<td>Mail order pharmacy</td>
<td></td>
</tr>
<tr>
<td>Wholesale / distributor facility</td>
<td></td>
</tr>
<tr>
<td>Manufacturing / production</td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical development</td>
<td></td>
</tr>
<tr>
<td>Medicine registration / control</td>
<td></td>
</tr>
<tr>
<td>Quality control</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

5.2 If you answered “other” in question 5.1, please specify your answer in the space provided below:

6. Indicate your combined total years of experience in each sector that you have practiced in:

<table>
<thead>
<tr>
<th>Public health sector</th>
<th>6-10 years</th>
<th>11-15 years</th>
<th>16-20 years</th>
<th>20 years +</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 years +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private health sector</th>
<th>6-10 years</th>
<th>11-15 years</th>
<th>16-20 years</th>
<th>20 years +</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 years +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section B – Knowledge about National Health Insurance

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NHI will provide access to healthcare for all South African citizens.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>When NHI is implemented, private medical aid schemes will no longer be in use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>All private healthcare providers will be forced to contract with NHI.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>With the implementation of NHI, the private healthcare sector will be completely destroyed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>If an individual can afford private healthcare, they do not have to pay for NHI.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Medical schemes will provide top-up medical cover for those individuals who choose it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pilot sites have already been introduced in certain provinces where the NHI model is being piloted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>If an individual does not make use of NHI, they will not be expected to make any financial contribution toward NHI.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section C – Opinions and attitudes toward National Health Insurance

Please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>No</th>
<th>Agreement statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The current South African health system has the proper infrastructure (healthcare facilities, medical resources etc.) for the implementation of the NHI.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The South African economy can afford the NHI.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The absence of mention of medicine in the Green Paper (apart from the references to originator medicines and co-payments) is a problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The absence of mention of medicine in the Green Paper should be corrected by integrating medicines policy reform proposals into the NHI proposals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>If the NHI is not implemented in the proper manner, it will possibly put even more strain on the health system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>If the NHI is not implemented in the proper manner, it will possibly lead to even more inequalities in healthcare.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The inclusion of private community pharmacies and private hospitals as additional medicine distribution points will promote equity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Inequality between the public and private sector is a huge stumbling block for the implementation of the NHI.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>South Africa has the know-how, expertise and knowledge to reform the health system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The NHI will not change the condition of the South African health system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The implementation of the NHI will lead to the mass emigration of healthcare professionals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>A huge concern for the public and health professionals is that the government will be in control of the allocation of funds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Targeted action should be used to deal with the current issues the health system is facing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Agreement statements</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>----</td>
<td>---------------------------------------------------------------------------------------</td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>16</td>
<td>The pharmacy profession can contribute to the reform of the health system by means of disease management programmes, medicines information services and patient compliance initiatives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Pharmacists will be able to focus on patient care rather than spend valuable time dealing with insurance companies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>The cost of drugs could be lowered as drug prices could be better negotiated because drugs will be bought in bigger bulk.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>With the implementation of the NHI, patients may modify their help-seeking behaviour to consult a doctor more regularly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Private community pharmacies should be included as additional medicine distribution points in the NHI system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section D– Pricing and reimbursement**

1. Should the NHI be administered by a single-payer public entity or by private medical schemes?

<table>
<thead>
<tr>
<th>Single-payer public entity</th>
<th>Private medical schemes</th>
</tr>
</thead>
</table>

2. Do you believe that the remainder of the population that opts to remain making use of private medical aid will be sufficient to support community pharmacies?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

3. Do you believe that it would be financially beneficial for private hospitals, community pharmacies and pharmaceutical companies to contract with the NHI?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

4. What period of time do you believe it will take for pharmacies that are contracted with NHI to be reimbursed for services rendered to patients of the NHI?

<table>
<thead>
<tr>
<th>30 days</th>
<th>60 days</th>
<th>90 days</th>
<th>120 days</th>
<th>150 days</th>
<th>180 days +</th>
</tr>
</thead>
</table>
5. Do you believe that the incorporation of co-payments for medicines and service delivery in the NHI policy will hinder the over-use of healthcare service, thereby reducing moral hazard?

| Yes | No |

Section E – Medicine supply and supply chain management

1.1. Do you foresee any obstacles or challenges with the medicine supply chain in terms of community pharmacies and the NHI?

| Yes | No |

1.2. If you answered “yes” in question 1.1, please provide reasons for your answer in the space provided below:

Please read the following statement, and then answer the questions below:

“The public sector selects its drugs on a tender basis, where the cheapest drugs are acquired. South Africa has a quadruple burden of disease and many individuals have more than one underlying condition”.

2. Do you believe that it would be beneficial to re-evaluate this method of medicine supply procurement?

| Yes | No |

3. Do you believe that the current medicine procurement system needs to be converted into a system where the selection of drugs is based on drugs that can be used in the treatment of various conditions?

| Yes | No |
Section F - Availability of pharmacies and human resources

Please read the following statement, and then answer the questions below:

“The South African healthcare system faces a great deal of important problems. One in particular is the severe shortage of medical professionals. There is a very high level of emigration of medical professionals to other countries and that drains South Africa’s resources. With the implementation of NHI, a large number of healthcare practitioners and other medical professionals will be needed to staff the NHI facilities”.

1. Do you believe that the implementation of the NHI creates the opportunity to utilise the pharmacists’ scarce skills more effectively to the best advantage the public’s health needs?

   Yes   No

2. In your opinion, how will community pharmacies need to adjust in terms of competing with state-funded NHI facilities and other corporate community pharmacy groups?

Section G – Concerns

1. Do you think the NHI is the appropriate solution to fix the inadequate public health system of South Africa?

   Yes   No

2.1 Do you believe that the problems the health system is facing can be fixed without the implementation of the NHI?

   Yes   No
2.2 If you answered “yes” in question 2.1, please provide reasons for your answer in the space provided below:


2.3 If you answered “no” in question 2.1, please provide reasons for your answer in the space provided below:


3.1. The NHI alone will not change the condition of the South African health system, but a few factors could contribute to the successful implementation of the NHI. Which of these factors could contribute to the successful implementation of NHI?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Indicate (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better governance and accountability</td>
<td></td>
</tr>
<tr>
<td>Greater political will within the Department of Health</td>
<td></td>
</tr>
<tr>
<td>Strong public participation</td>
<td></td>
</tr>
<tr>
<td>Government transparency</td>
<td></td>
</tr>
<tr>
<td>Renewed focus on the training of healthcare professionals</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
3.2. If you answered “other” in the previous question, please provide reasons for your answer in the space provided below:


4.1 What are your concerns for the increased number of people who will make use of public NHI facilities? More than one answer may be applicable.

<table>
<thead>
<tr>
<th>Concern</th>
<th>Indicate (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The waiting period for patients will be longer</td>
<td></td>
</tr>
<tr>
<td>Drugs that are needed will not always be available</td>
<td></td>
</tr>
<tr>
<td>Overworked and frustrated staff will be rude or uncaring towards patients</td>
<td></td>
</tr>
<tr>
<td>Processing of information will be very slow because the necessary technologies are not available in public facilities</td>
<td></td>
</tr>
<tr>
<td>Poor quality of care by doctors struggling to attend to large numbers of patients</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

4.2 If you answered “other” in question 4.1, please provide reasons for your answer in the space provided below:
5. With the implementation of the NHI, a large number of health professionals will be required to work in the public sector. Would you be open to working in the public sector?

Yes  No

6.1 Which of the following factors of working in the public sector concern you?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Indicate (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased working hours</td>
<td></td>
</tr>
<tr>
<td>Less money</td>
<td></td>
</tr>
<tr>
<td>Late salary payments</td>
<td></td>
</tr>
<tr>
<td>Harsh working conditions</td>
<td></td>
</tr>
<tr>
<td>Working in rural or squatter camp areas</td>
<td></td>
</tr>
<tr>
<td>Limited choice of prescription drugs</td>
<td></td>
</tr>
<tr>
<td>Shortages in essential medication</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

6.2 If you answered “other” in question 6.1, please provide reasons for your answer in the space provided below:

Section H – Information systems

1. Do you believe that community pharmacies that contract with the NHI will have to have two separate dispensaries and computerised systems in order to serve the needs of both NHI patients and patients making use of private medical aid?

Yes  No
2. Do you believe it will be possible for private pharmacies that contract with the NHI to serve both NHI patients and patients making use of private medical aid in the same dispensary using the same computerised system?

| Yes | No |

Section I – Pharmacists’ scope of practice within the National Health Insurance

1. Do you agree that with the completion of the Primary Care Drug Therapy (PCDT) course, a community pharmacy would have the human resources to run a primary healthcare clinic that can provide scarce pharmaceutical skills to patients of the NHI and private medical aid?

| Yes | No |

2. Do you believe that pharmacists’ skills, such as the performing of tests such as blood pressure, cholesterol, glucose, lung function and screening tests will be better utilised with the implementation of the NHI?

| Yes | No |

3. Do you believe that pharmacists’ practising in private pharmacies could expand their scope of practice by completing the PCDT course that will enable them to diagnose and prescribe treatment for patients of the NHI and private medical aid?

| Yes | No |

4. Do you believe that if pharmacists practising in private pharmacies complete the PCDT course and could use their skills in a primary healthcare clinic in a community pharmacy it could lessen the strain that will be put on NHI facilities by the massive amounts of patients that will be dependent on these facilities?

| Yes | No |

5. Do you believe that scarce pharmaceutical services being utilised in a primary healthcare clinic of a community pharmacy could lead to better preventative disease management and for the greater part lessen the quadruple burden of disease that South Africa is facing?

| Yes | No |
6. In your opinion, how will the pharmacist’s scope of practice change within the NHI framework?

Section J – Comments and suggestions

1. Do you have any comments or suggestions that you want to add?
ANNEXURE D: STRUCTURED QUESTIONNAIRE (AFRIKAANS)

Aptekers se persepsi teenoor die implementering van die Nasionale Gesondheidsversekering in Suid Afrika

Afdeling A – Demografiese inligting

Antwoord asseblief die volgende vrae deur die korrekte opsie aan te dui met 'n ‘X’ of deur die korrekte antwoord in die gegewe spasie in te vul. Let op by sommige vrae is meer as een antwoord moontlik. Moet asseblief geen vrae oorslaan nie.

1. Dui u geslag aan:

   Manlik   Vroulik

2. Dui u ouderdom aan (in jare):

   

3. Dui u etnisiteit aan:

   Wit   Swart   Kleurling   Asiër   Ander

4. Dui aan in watter gesondheidsektor u tans praktiseer:

   Sektor   Dui aan (X)
   Publieke gesondheidstelsel
   Private gesondheidstelsel

5.1 Dui u huidige werksomgewing aan:

   Sektor   Dui aan (X)
   Gemeenskapsapteek
   Korporatiewe gemeenskapsapteek
   Hospitaal – privaat
   Hospitaal – provinsiaal
   Gesondheidsorg instandhoudingsorganisasie
### Sektor

<table>
<thead>
<tr>
<th>Sektor</th>
<th>Dui aan (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediese fonds-omgewing</td>
<td></td>
</tr>
<tr>
<td>Kliniese navorsing</td>
<td></td>
</tr>
<tr>
<td>Akademie</td>
<td></td>
</tr>
<tr>
<td>Koerier-aptiek</td>
<td></td>
</tr>
<tr>
<td>Groothandel / verspreiding</td>
<td></td>
</tr>
<tr>
<td>Vervaardiging</td>
<td></td>
</tr>
<tr>
<td>Farmaseutiese ontwikkeling</td>
<td></td>
</tr>
<tr>
<td>Medisynergeregistrasie/-beheer</td>
<td></td>
</tr>
<tr>
<td>Kwaliteitskontrole</td>
<td></td>
</tr>
<tr>
<td>Ander</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Indien u “ander” aangedui het in vraag 5.1, spesifiseer asseblief in die gegewe spasie:

6. Dui u totale gekombineerde jare van ervaring aan vir elke sektor waarin u al gepraktiseer het:

#### Publieke gesondheidsstelsel

<table>
<thead>
<tr>
<th>≤ 5 jaar</th>
<th>6-10 jaar</th>
<th>11-15 jaar</th>
<th>16-20 jaar</th>
<th>20 jaar +</th>
</tr>
</thead>
</table>

#### Privaat gesondheidsstelsel

<table>
<thead>
<tr>
<th>≤ 5 jaar</th>
<th>6-10 jaar</th>
<th>11-15 jaar</th>
<th>16-20 jaar</th>
<th>20 jaar +</th>
</tr>
</thead>
</table>

7. Dui u hoogste kwalifikasie aan:

<table>
<thead>
<tr>
<th>Kwalifikasie</th>
<th>Dui aan</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPharm / BSc Pharm</td>
<td></td>
</tr>
<tr>
<td>MSc Pharm / MPharm</td>
<td></td>
</tr>
<tr>
<td>DSc Pharm / DPharm / PhD</td>
<td></td>
</tr>
<tr>
<td>Dip. Pharm</td>
<td></td>
</tr>
<tr>
<td>Geen van die bogenoemde nie</td>
<td></td>
</tr>
</tbody>
</table>
Afdeling B – Kennis oor die Nasionale Gesondheidsversekering (NGV)

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Vraag</th>
<th>Ja</th>
<th>Nee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Die NGV sal toegang tot gesondheidsorg toelaat vir alle Suid-Afrikaners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Wanneer die NGV ingestel word, sal private mediese skemas nie meer gebruik word nie.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Alle verskaffers van private gesondheidsorg sal gedwing word om kontrakte te sluit met die NGV.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Die private gesondheidsektor sal heeltemal vernietig word met die implementering van die NGV.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Indien 'n individu private gesondheidsorg kan bekostig, hoef hy/sy nie vir die NGV te betaal nie.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mediese fondse sal aanvullende mediese dekking bied vir die individue wat dit verkies.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Die NGV-model is alreeds in sekere provinsies by toetsterreine geloot.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Indien 'n individu nie gebruik maak van die NGV nie, sal daar nie van hom/haar verwag word om enige finansiële bydrae tot die NGV te maak nie.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Afdeling C – Opinies en houdings teenoor NGV**

Dui asseblief die vlak waarmee u saamstem met die volgende stellings aan:

<table>
<thead>
<tr>
<th>Nr.</th>
<th>Stelling</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Die huidige Suid-Afrikaanse gesondheidsstelsel beskik oor die toepaslike infrastruktuur (gesondheidsorg-fasiliteite, mediese hulpbronne ens.) vir die implementering van die NGV.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Die Suid-Afrikaanse ekonomie kan die NGV bekostig.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Die afwesigheid van melding van medisyne in die Groenskrif (afgesien van die verwysings na die oorspronklike medisyne en bybetalings) is ‘n probleem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Die afwesigheid van melding van medisyne in die Groenskrif moet gekorrigeer word deur die integrasie van medisynebeleidshervormingsvoorstelle in die NGV beleid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Indien NGV nie op die korrekte manier geïmplementeer word nie, sal dit moontlik nog meer druk op die gesondheidsstelsel plaas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Indien NGV nie op die korrekte manier geïmplementeer word nie, sal dit moontlik lei tot nog meer ongelykhede in gesondheidsorg.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>7</td>
<td>Die insluiting van private gemeenskapsapteke en privaat hospitale as addisionele medisyneverspreidingpunte sal ekwiteit bevorder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Ongelykheid tussen die publieke en private sektor is ‘n groot hindernis in die implementering van die NGV.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Suid-Afrika het die kundigheid en kennis om die gesondheidsorgstelsel te hervorm.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Die NGV sal nie die toestand van die Suid-Afrikaanse gesondheidsstelsel verander nie.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Implementering van die NGV sal die massa-emigrasie van gesondheidswerkers tot gevolg hê.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>‘n Groot bekommerenis vir die publiek en gesondheidswerkers is dat die regering in beheer sal wees van die bestuur van fondse.</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15</td>
<td>Regspraakaksie moet gebruik word om die huidige kwessies van die gesondheidsstelsel te hanteer.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Die aptekersberoep kan bydra tot die hervorming van die gesondheidsstelsel deur siektebestuursprogramme, medisyne inligtingsdienste en pasiënt meewerkendheid inisiatiewe.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Aptekers se sal kan fokus op pasiëntsoor eerder as om kosbare tyd te spandeer met versekeringsmaatskappye.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Omdat medisyne in grootmaat aangekoop gaan word, kan pryse beter onderhandel word en die koste van medisyne kan dus verlaag.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Met die implementering van die NGV kan pasiënte hul hulpsoekgedrag aanpas om 'n of dokter meer gereeld te raadpleeg.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Privaat gemeenskapsapteke sal ingesluit word as addisionele medisyneverspreidingspunte in die NGV-stelsel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Afdeling D – Kostes en vergoeding**

1. **Moet die NGV toegedien word deur 'n enkel-betaler openbare liggaam of deur die private mediese skemas?**

<table>
<thead>
<tr>
<th>Enkel-betaler openbare liggaam</th>
<th>Private mediese skemas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Glo u dat die res van die bevolking wat kies om eerder gebruik te maak van private mediese skemas, voldoende sal wees om gemeenskapsapteke te ondersteun?**

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Glo u dat dit voordelig sal wees vir privaat hospitale, gemeenskapsapteke en farmaseutiese maatskappye om kontrakte te sluit met die NGV?**

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **Hoe lank dink u gaan dit neem vir apteke wat met die NGV gekontrakteer is om betaling te ontvang vir dienste wat gebied is vir pasiënte van die NGV?**

<table>
<thead>
<tr>
<th>30 dae</th>
<th>60 dae</th>
<th>90 dae</th>
<th>120 dae</th>
<th>150 dae</th>
<th>180 dae</th>
<th>+</th>
</tr>
</thead>
</table>
5. Glo u dat die inkorporasie van bybetalings vir medisyne en dienslewering in die NGV-beleid die oorbenutting van gesondheidsorgdienste sal verhinder (dus ’n verlaging van morele gevaar).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ja</td>
<td>Nee</td>
</tr>
</tbody>
</table>

**Afdeling E – Medisyneverskaffing en verskaffingskettingbestuur**

1.1. Voorsien u enige hindernisse of uitdagings met die medisynevoorraadketting in terme van gemeenskapsapteke en die NGV?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ja</td>
<td>Nee</td>
</tr>
</tbody>
</table>

1.2. As u “ja” geantwoord het in vraag 1.2, verskaf asseblief redes vir u antwoord in die gegewe spasie:

Lees asseblief die volgende stelling en beantwoord dan die vrae wat volg:

"Die publieke sektor selekteer medisyne op ’n tenderbasis waar die goedkoopste medisyne aangekoop word. Suid-Afrika het tans ’n vierversige siektelas en baie individue het meer as een onderliggende siektetoestand".

2. Glo u dat dit voordelig sou wees om hierdie metode van medisyneverkryging te herevalueer?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ja</td>
<td>Nee</td>
</tr>
</tbody>
</table>

3. Glo u dat die huidige medisyneverkrygingstelsel omskep moet word in ’n stelsel waar die seleksie van medisyne gebaseer is op geneesmiddels wat gebruik kan word vir verskillende toestande?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ja</td>
<td>Nee</td>
</tr>
</tbody>
</table>
Afdeling F – Die beskikbaarheid van apteke en mensehulpbronne

Lees asseblief die volgende stelling en beantwoord dan die vrae wat volg:

“Die Suid-Afrikaanse gesondheidstelsel staar baie belangrike probleme in die gesig. Een in die besonder is die ernstige tekort aan mediese beroepslui. Daar is ’n hoë vlak van emigrasie van mediese beroepslui na ander lande en dit dreineer Suid-Afrika se hulpbronne. Met die implementering van die NGV sal ’n groot hoeveelheid gesondheidswerkers nodig wees om die NGV-fasiliteite van personeel te voorsien”.

1. Glo u dat die implementering van die NGV die geleentheid skep om skaars aptekersvaardighede meer effektief te benut tot beste voordeel van die publiek se gesondheidsbehoeftes?

   Ja    Nee

2. In u opinie, hoe sal gemeenskapsapteke moet aanpas in terme van om te kompeteer met staatsgefinansierde NGV-fasiliteite en korporatiewe gemeenskapsapteekgroepe?

Afdeling G – Bekommernisse

1. Dink u die NGV is die toepaslike oplossing om die gebrekkige publieke gesondheidsektor van Suid-Afrika op te los?

   Ja    Nee

2.1 Glo u dat die probleme wat die gesondheidsorgstelsel in die gesig staar, reggestel kan word sonder die implementering van die NGV?

   Ja    Nee
2.2 Indien u “ja” geantwoord het in vraag 2.1, verduidelik asseblief u rede in die gegewe spasie:


2.3 Indien u “nee” geantwoord het in vraag 2.1, verduidelik asseblief u rede in die gegewe spasie:


3.1. NGV alleen sal nie die toestand van die Suid-Afrikaanse gesondheidstelsel verander nie, maar 'n paar faktore kan bydra tot die suksesvolle implementering van NGV. In u opinie, watter van die volgende faktore kan bydra tot die suksesvolle implementering van NGV?

<table>
<thead>
<tr>
<th>Faktor</th>
<th>Dui aan (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beter bestuur en aanspreeklikheid</td>
<td></td>
</tr>
<tr>
<td>Groter politieke wil in die Departement van Gesondheid</td>
<td></td>
</tr>
<tr>
<td>Sterk openbare deelname</td>
<td></td>
</tr>
<tr>
<td>Regeringsdeursigtigheid</td>
<td></td>
</tr>
<tr>
<td>Hernieude fokus op die opleiding van gesondheidswerkers</td>
<td></td>
</tr>
<tr>
<td>Ander</td>
<td></td>
</tr>
</tbody>
</table>
3.2. Indien u in vraag 3.1 “ander” aangedui het, verskaf asseblief redes vir u antwoord in die gegewe spasie:

4.1 Wat is u bekommernisse in verband met die toenemende aantal mense wat sal gebruik maak van die publieke NGV-fasiliteite?

<table>
<thead>
<tr>
<th>Bekommernis</th>
<th>Dui aan (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die wagperiode vir pasiënte sal langer wees</td>
<td></td>
</tr>
<tr>
<td>Noodsaaklike medisyne sal nie altyd beskikbaar wees nie</td>
<td></td>
</tr>
<tr>
<td>Verwerking van inligting kan baie stadig wees omdat die nodige tegnologie nie in die publieke sektor beskikbaar is nie</td>
<td></td>
</tr>
<tr>
<td>Swak gehalte sorg deur geneeshere en aptekers wat sukkel om aandag te gee aan ’n baie groot aantal pasiënte</td>
<td></td>
</tr>
<tr>
<td>Ander</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Indien u in vraag 4.1 “ander” aangedui het, verskaf asseblief redes vir u antwoord in die gegewe spasie:

5. Met die implementering van die NGV sal ’n groot aantal gesondheidswerkers vereis word om in die publieke sektor te werk. Sal u dit oorweeg om in Suid-Afrika se publieke sektor te werk?

<table>
<thead>
<tr>
<th>Ja</th>
<th>Nee</th>
</tr>
</thead>
</table>
6.1 Watter van die volgende faktore met betrekking tot werk in die publieke sektor is 'n bekommernis vir u?

<table>
<thead>
<tr>
<th>Faktor</th>
<th>Dui aan (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verlengde werksure</td>
<td></td>
</tr>
<tr>
<td>Minder geld</td>
<td></td>
</tr>
<tr>
<td>Laat salarisbetalings</td>
<td></td>
</tr>
<tr>
<td>Strawwe werkstoestande</td>
<td></td>
</tr>
<tr>
<td>Om in afgelê areas of plakkerskampe te werk</td>
<td></td>
</tr>
<tr>
<td>Die beperkte keuse aan verkose geneesmiddels</td>
<td></td>
</tr>
<tr>
<td>Tekorte aan noodsaaklike medikasie</td>
<td></td>
</tr>
<tr>
<td>Ander</td>
<td></td>
</tr>
</tbody>
</table>

6.2 Indien u in vraag 6.1 “ander” aangedui het, verskaf asseblief redes vir u antwoord in die gegewe spase:

Afdeling H – Inligtingsisteme

1. Glo u dat gemeenskapsapteke wat kontrakteer met die NGV twee aparte resepteer-areas en gerekenariseerde stelsels sal moet hê om aan die behoeftes van beide NGV-pasiënte en pasiënte wat gebruik maak van privaat mediese skemas te voorsien?

   | Ja | Nee |

2. Glo u dat dit moontlik sal wees vir privaat apteke wat kontrakteer met die NGV om beide pasiënte wat gebruik maak van NGV en privaat mediese skemas in dieselfde apteek en met dieselfde gerekenariseerde stelsel te dien?

   | Ja | Nee |
Afdeling I – Die aptekers se praktikbestek met betrekking tot die Nasionale Gesondheidsversekering

1. Glo u dat, met die voltooiing van die Primêre Gesondheidsorg Terapiekursus, 'n gemeenskapsapteek oor die mensehulpbronne sal beskik om 'n primêre gesondheidsorgkliniek te bedryf wat skaars aptekersvaardighede aan pasiënte van die NGV en privaat mediese skemas bied?

   Ja  Nee

2. Glo u dat aptekersvaardighede, soos die uitvoering van toetse soos bloeddruk, cholesterol, glukose, longfunksie en siftingstoetse, beter aangewend kan word met die implementering van die NGV?

   Ja  Nee

3. Glo u dat aptekers wat in privaat apteke praktiseer hul praktikbestek kan uitbrei deur die Primêre Gesondheidsorg Terapiekursus te voltooi wat hulle in staat sal stel om te diagnoseer om behandeling voor te skryf vir beide pasiënte van die NGV en private mediese skemas?

   Ja  Nee

4. Glo u dat as aptekers wat in privaat apteke praktiseer die Primêre Gesondheidsorg Terapiekursus voltooi en hulle dan hul vaardighede in 'n primêre gesondheidsorgkliniek in 'n gemeenskapsapteek gebruik, die spanning wat deur die groot hoeveelhede pasiënte wat afhanklik is van die NGV-fasiliteite sal verminder?

   Ja  Nee

5. Glo u dat as skaars aptekersdienste aangewend kan word in 'n primêre gesondheidskliniek van 'n gemeenskapsapteek dit kan lei tot beter voorkomende siekte-bestuur en vir die groter deel dat die viervoudige siektelas van Suid-Afrika verminder kan word?

   Ja  Nee

6. In u opinie, hoe sal die apteker se praktikbestek verander binne die NGV-raamwerk?
Afdeling J – Kommentaar en voorstelle

1. Het u enige kommentaar of voorstelle?