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An investigation of the optimal funding strategies for South Africa's National Health insurance

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A research report submitted to the Faculty of Management, University of Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Business Administration

March 2017

THIS DECLARATION IS TO BE ATTACHED TO ALL ASSIGNMENTS

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Course Code:	Course Name: Research report
Assignment no.1	Due date: 20/07/2016
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Abstract

The World Health Organisation (WHO) reports that countries need to find a way to provide healthcare that is not only of a high quality, but that also does not lead to financial difficulties for its citizens. The move to Universal Health Care(UHC) is advocated for member states around the world and is part of the United Nations Millennium Declaration. South Africa's leading political party announced in 2007 that to pursue health for all, South Africa will implement a form of UHC termed the National Health Insurance.

The objective of this research was to explore the funding models available to the South African government for a universal health care system and therein ascertain which model will be the optimal funding choice for South Africa. The study focused on the funding of NHI only and not on other factors influencing its success. As such the research question posed was*: What funding mechanisms will be optimal for South Africa's National Health Insurance?*

The data for this report was obtained using the qualitative method. Specifically using semi-structured interviews. The 10 respondents used came from 3 groups of interest and are racially diverse. The 3 categories of interest to the researcher were:

1) doctors involved in the current implementation,
2) health economists with a deep technical understanding and
3) Experts from the department of health that are involved in the development of NHI.

The findings tell us that a two-tier approach is slightly favoured but it is of greater importance that South Africa's funding mechanism is as progressive as possible and should aim to bring more balance to the current inequalities of the country. The results do indicate that the single-payer system is not supported in its current state and perhaps a more thorough layout of the funding mechanisms and the reasons behind the choices are required by the Government.

The outcome of this research is to assist the South African government in its rollout of the NHI programme. In the 2017 budget speech, the South Africa's finance minister has stated that the NHI fund will be set up shortly and that government will liaise with stakeholders to define the funding mechanisms further (Gordhan, 2017). It

is the researchers hope that the research conducted in this paper will help find the most progressive method of funding South Africa's universal coverage.

DECLARATION

I, Sunira Rugnath, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

_____

Sunira Rugnath

2017

Dedication

This research is dedicated firstly to my Father for making my MBA journey possible, I'm grateful for all you do for us.

To my family who supported me through all the ups and downs

To my amazing friends who were with me every step of the way

And finally to my wonderful husband Avish, for his love, his patience and his unending belief in me. We made it love!

Acknowledgements

I must acknowledge the honest discussions I was able to have with the participants from all areas of the health sector. A big thank you to all participants and friends who were kind enough to open up your networks to me. Your assistance and advice has undoubtedly improved my research. Lastly I must thank my patient supervisor Zanele Ndaba for all her time and effort in assisting me with this report.

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CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The purpose of this research was to explore the funding models available to the South African government for a universal health care system called National Health Insurance (NHI) and therein ascertain which model will be the optimal funding choice for South Africa. The study focused on the funding of NHI only and not on other factors influencing its success.

1.2 Context of the study

In today's world, protecting and promoting health is an essential service that government must prioritise to ensure sustained social and economic development. The World Health Organisation (WHO) is the agency of the United Nations solely dedicated to international public health. According to the World Health Organization (2010), a health system has six building blocks:

i. "Leadership/governance;
ii. Health care financing;
iii. Health workforce;
iv. Medical products and technologies;
v. Information and research;
vi. Service delivery" (p. 5).

Each of these has to be strong to ensure a good foundation for healthcare in any country. If any of them present weaknesses, this will impact the entire foundation. The building block that has consistently been a weakness for developing countries the world over is health care financing. This is where Universal Health Care (UHC) poses a potential solution. The World Health Organisation (2010) has defined universal coverage as the "access of all people, to comprehensive health services at affordable cost and without financial hardship, through protection against catastrophic health expenditures'' (p.1).

Countries need to find a way to provide healthcare that is of a high quality but that also does not lead to financial difficulties for its citizens. WHO has acknowledged this, and in its World Health Assembly resolution WHA58.33 (2005) called on all member states to plan their transition towards universal coverage of their citizens.

The resolution states that this move to UHC will result in member states meeting the needs of their citizens in terms of providing quality health care and reducing poverty This will enable the countries to attain internationally agreed development goals, such as those included in the United Nations Millennium Declaration (World Health Organisation, 2005). Most importantly, Universal coverage will assist in the member states achieving health for all (World Health Organisation, 2005). This declaration was a significant step forward for UHC implementation and many countries began planning for their future around this implementation.

Many countries such as Brazil, Canada, Finland, Norway, Sweden, Thailand, Turkey and the United Kingdom have successfully implemented universal healthcare systems. (Republic of South Africa, 2015b). This implementation of improved healthcare financing has already led to greater access to health services and health outcomes in these countries.

In Brazil, after the implementation of their UHC, their portion of the population with access to health has improved from 30 million to 170 million (World Health Organization, 2013). This improvement is especially seen in their key health indicators, such as infant mortality rates which fell from 46 to 17.3 per 1000 live births between 1990 and 2010 and life expectancy which reached 73 years in 2010 from 70 years a decade earlier (World Health Organization, 2013).

In Thailand, child mortality rates fell by 5% between 2004 and 2010 after implementation of their UHC programmes (World Health Organization, 2013). These improvements are also seen in Sub-Saharan African countries that have made the move to UHC. Niger, for example has experienced a 5.1% reduction in infant mortality from 226 to 128 deaths per 1000 live births between 2000 and 2009 (World Health Organization, 2013). Although there are many factors that can explain the improvement in these key health indicators, the association between these improvements and the UHC reforms is cause for optimism.

South Africa's method of implementing universal health coverage will be through the National Health Insurance (NHI) system as the countries new healthcare system. This system will be brought into operation with the lessons learnt from universal health care structures in other developing countries. What will be essential to determine through this study is how NHI will be funded in the most optimal method in South Africa.

1.2.1 A short history of South Africa's health care sector

To understand where healthcare is going in South Africa, we need to understand where it has come from. Mcintyre (2010) tells us that the first recommendation for a health insurance scheme was in 1928, to cover medical, maternity and funeral benefits for low income, formal sector employees in urban areas.

The next significant step in South Africa's history was from 1942-1944, the National Health Services Commission recommended the introduction of national health taxes to provide free point of services care for South Africans. These proposals aimed to bring health services to all of their population according to their need and not any other socio-political factors. These proposals were accepted by the Smuts government and the introduction of 44 community-based health centres was taken forward (McIntyre, 2010).

However, the progress made by this commission was reversed when the Nationalist Party government was elected in 1948. During the apartheid years there was relative silence on health issues. In 1990s there was again calls made to implement some form of mandatory health insurance, and after the 1994 elections, there were policy initiatives reviewing this option (McIntyre, 2010).

Prior to South Africa's introduction to democracy in 1994, the health system was divided along racial lines. With one highly resourced system for the privileged white population and a systematically underfunded system for the black majority. Since the implementation of our constitution in 1994 a new single and de-racialized public health system was put into effect. According to the 1997 white paper on the transformation of the health care system, this new single health care system was set up for each governmental level to provide comprehensive health care (Republic of South AFrica, 1997).

In 2007 at Polokwane, South Africa's ruling party-The African National Congress (ANC), declared its intention to establish a national health insurance (NHI) system to reform the current healthcare sector (Ataguba & Akazili, 2010). Since then, we have seen the release of the Green Paper document in 2011 and most recently in December 2015 the White Paper document entitled "National health insurance for South Africa: towards universal health coverage" which details South Africa's strategy to implement a successful universal health care system.

1.2.2 South Africa's present day health care system

According to the 2015 White paper on NHI, the governments previous attempts to solve the inequalities in our system left over from the past have been inadequate and the current health financing systems are biased towards the privileged few *(Republic of South Africa, 2015b)*. This failure to address the inequalities in the health care system have further entrenched the system we have now; our healthcare system is now no longer divided along racial lines but is divided along socioeconomic lines.

Currently South Africa's health sector leaves much to be desired in many aspects but most notably in terms of the fragmentation of funding. This has resulted in a two tiered system (Republic of South Africa, 2015b).

This is referring to the public health sector - which is funded by government and is free to the public, utilising government health facilities versus the private health sector that is funded by medical aids and utilises mainly private health facilities (Republic of South Africa, 2015b). The public health sector is responsible for and funds 84% of the total population while the private sector medical schemes funds just 16% of the population (Republic of South Africa, 2015b). With 83 different medical aids the private sector has become very hospi-centric, meaning that healthcare in the country is aimed at a curative level and not preventative (Republic of South Africa, 2015b).

The two tiered system that South Africa currently operates under has led to a funding structure, in terms of overall spending, that is inefficient and ineffective. As a percentage of GDP spent, the South African population spends 8.5% on health in 2015/16 (Republic of South Africa, 2015b). Less than half of this spend (4.1% of the 8.5% healthcare spend pool) is used by government for the healthcare of 84% of the

population. The majority of these funds are being utilized in the public health sector while 4.4 % of GDP is spent privately on the remaining 16% (Republic of South Africa, 2015b). This type of socioeconomic divide disadvantages the poor and the vulnerable citizens and is unsustainable at its current rate.

According to a paper by Lorenzoni & Roubal (2016), commissioned by the Organisation for Economic Co-operation and Development (OECD) directorate to investigate the international comparison of South African private hospital price levels, *"Private voluntary health insurance accounts for 41.8% of total health spending, which is more than 6 times the 2013 OECD average of 6.3%"*(p.8). This paper's findings, were that South African private hospital prices are on par with prices in countries with much higher GDP levels - including the United Kingdom, Germany, and France (Lorenzoni & Roubal, 2016). This will be further explored in the literature review.

1.2.3 Universal health care for South Africa

The white paper (2015), suggests that the implementation of NHI will reduce out-of-pocket payments by combining private and public health funding pools (Republic of South Africa, 2015b). Currently only those with private medical schemes can access both private and public healthcare due to cost of services. Whilst this may be the case, these same individuals are usually unable to access health care when they have run out of benefits in their insurance prior to year-end. Under NHI, access to health will be available to all South African citizens irrespective of socioeconomic status.

The release of the white paper in December 2015 has brought about the debate about NHI once again. According to this document the implementation of NHI will be done through a single fund that will be financed and administered publicly. NHI will be phased in over 14 years. The first phase has already begun and will extend to the 2016/2017 financial year. The first phase involves the strengthening of the existing public health facilities and the associated infrastructure. Administratively this phase will also include the creation of a project team which will oversee all phases in order to establish a well-coordinated NHI fund (Republic of South Africa, 2015b).

In the white paper (2015) the issue of how to fund the NHI system is detailed. The funding basis will be various combinations of different taxing options

(Republic of South Africa, 2015b). The white paper does not define a clear choice that has been made going forward on the future funding of the entire implementation or operation of NHI. Hence the business problem (addressed by this research) was thus to understand what the options are to fund a policy shift of this magnitude and then to determine which option will be most efficient for South Africa. The study will focus on the funding aspect of the NHI system alone in terms of efficiency and not detail any other factors that affect the efficiency of the programme.

1.3 Problem statement

1.3.1 Main problem

The current proposals for South Africa's NHI include options for how South Africa could fund this programme. However, there are many questions that revolve around which funding mechanisms are available to us and which ones are most feasible for South Africa's current economic situation. This research will investigate these options to find the optimal funding mechanism for South Africa.

1.4 Significance of the study

The study will provide guidance and insight into the funding of NHI in South Africa. There have been many studies and articles written on universal health care and potential funding mechanisms, but the recent release of the Governments White paper (2015) shows that a funding mechanism has not yet been outlined (United States of America mission, 2015). This study can potentially assist policy makers in South Africa when deciding on those funding options for NHI as well as assisting the public in understanding the eventual choices made by our government on the funding of NHI. This study will hopefully also assist future developing countries that are trying to implement a UHC with knowledge of their options, and rationale for how the choice of funding was eventually decided.

1.5 Delimitations of the study

- This study is investigating the funding aspect of NHI only and not other factors that will affect its overall success such as infrastructure and human resources.
- This study has focused on South Africa only and therefore cannot be generalised to apply to other developing countries.

1.6 Definition of terms

- **National Health Insurance:** a healthcare financing system which is intended to use pooled funds to provide quality healthcare that is affordable to all South Africans (Republic of South Africa, 2015b).

- **Catastrophic Health care expenditure:** This refers to costs from severe injury or illness which would typically result into long periods of hospitalization, resulting in exorbitant fees leading to severe financial strain on the patient and their household (Republic of South Africa, 2015b).

- **Organisation for Economic Co-operation and Development (OECD):** A government forum consisting of 34 democratic member countries, as well as 70 non-member countries. This group of countries aim to promote growth in their economies as well as sustainable development through shared knowledge and consultation (United States of America mission, 2015) .

- **White Paper:** A document drafted by a ministry or department that is a statement of policy. This is a second draft of the initial policy paper called a green paper. The white paper is intended to include all comments and opinions submitted by interested parties in the green paper (Dayi & Grayii, 2011).

1.7 Assumptions

- It is assumed that the most efficient method of financing is preferred.
- The total number of respondents will be sufficient to gain adequate data.
- The respondents in the sample were willing to share information with regard to their knowledge and exposure to the NHI implementation, and responded honestly and truthfully.
- The respondents used in this research report have had some experience with or role in the NHI implementation or drafting and are willing to disclose their informed opinions about the topic.
- The researcher would not be able to share any sensitive information that interviewees provided

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This literature review serves to investigate the financing of South Africa's health care system. The researcher will discuss the current system and the issues South Africans experience and then we look at the future of the health care financing through the National Health Insurance system. The review then looks at international examples of funding mechanisms that worked and didn't work.

The review will then end with a discussion of what is planned for the financing of South Africa's NHI and whether or not this aligns with the lessons we have learnt internationally and what stakeholders have to say about the proposed methods. These discussions will lay the foundation for the researcher to investigate what the optimal funding mechanisms for South Africa will be.

2.2. Overview of South Africa's healthcare sector

Internationally the move towards achieving universal healthcare has been profound. In 2005 the World Health Organization (WHO) acknowledged that many health systems, especially in developing countries, do not meet the prerequisites for universal coverage and therefore require further development in order to guarantee access to necessary services whilst also providing financial risk protection (World Health Organisation, 2005). In its 58th round of the World Health Assembly, the WHO member countries were encouraged to move towards achieving universal coverage. WHO has defined a universal health system as one that provides all citizens with adequate health care at an affordable cost (World Health Organisation, 2005).

South Africa is one of many countries who have started on this path to achieving Universal healthcare in the form of National Health Insurance. One of the many reasons government has given for implementing this reform is to solve the inequalities we currently have in our Healthcare system.

South Africa's current healthcare system is similar to other countries systems in that there is a two tier system, the public and private sector. The public health sector is

funded by general taxes and is significantly subsidized by the government while the private health care sector is made up of various voluntary health insurers called medical aid schemes. The concept of out-of-pocket (OOP) expenses should be explained here as it constitutes an essential part of our healthcare expenses in South Africa.

The White paper (2015) tells us that South Africans are exposed to three forms of out-of-pocket payments (OOPs) namely:

a) Every time a patient has to pay cash when they seek healthcare whether in the public or private sectors;

b) Additional payments (co-payments or levies) for those on medical schemes but whose benefit option does not cover all the costs; and

c) Cash payment for those on medical schemes whose benefits are prematurely exhausted before the end of the year (p.16)

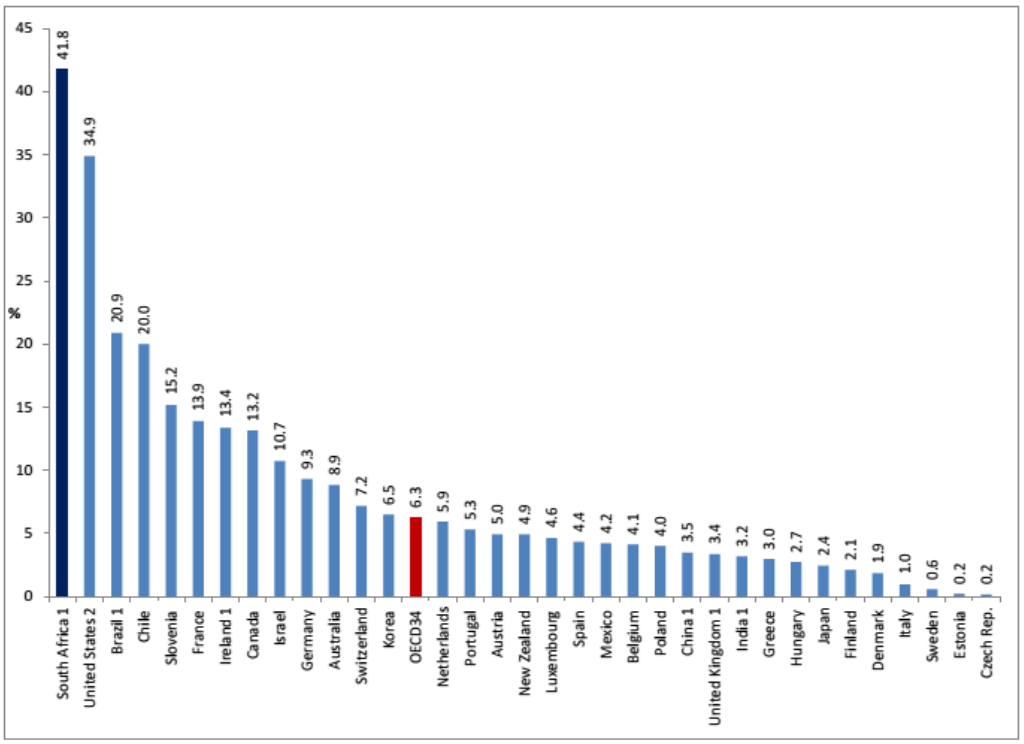
Unfortunately, South Africa has been found to be unique in the high cost of its healthcare. So much so that the OECD and WHO commissioned a study by Lorenzoni and Roubal to look into the cost of private healthcare in South Africa and compared this to their other member nations. This study found that South Africa spends a larger share of its total health expenditure on private voluntary health insurance then any of the OECD countries (Lorenzoni & Roubal, 2016).

In 2013, South Africa's total health expenditure was R311 billion, of which 41.8% was spent on private voluntary health insurance. This is 6 times more than the average spent by the OECD countries that year, as seen in figure 1 below.

In addition to this, about 6.5% of total health expenditure was due to out of pocket spending. What makes South Africa unique is not just how much we spend on private voluntary insurance, but that this sector serves only about 17% of the population emphasising the equality gaps in our healthcare sector (Lorenzoni & Roubal, 2016).

It was only the remaining 52% of this R311 billion which was spent on the public sector - which services the remaining 83% of the population. To state this differently, in 2013 only R162 billion was spent on 44 million people using the public health facilities - or just R3 861 per annum, per person (Statistics South Africa, 2014). This is in comparison with the R14 400 per person using the medical aid schemes. This highlights the extreme inequities in our funding of the healthcare sector.

Figure 1. Private health insurance as a share of total current health expenditures (%), 2013



1. Data refer to total health expenditure (= current health expenditure plus capital formation).
2. Social security reported together with general government.

Figure 1 : Private Health Insurance as a share of total current health expenditure (%).2013 (Lorenzoni & Roubal, 2016)

Lorenzoni and Roubal (2016) explains that through South Africa's constitution, universal access to health services is granted, at no or little cost, to patients. This obligation to offer services to the public is fulfilled through subsidizing the costs of care from public hospitals, primary care clinics, and emergency services (Lorenzoni & Roubal, 2016). In the private sector, the medical schemes offer a duplicative and

supplementary private health insurance which is done on a purely voluntary basis, although some employers do insist on enrolment (Lorenzoni & Roubal, 2016).

According to Ataguba and Akazili (2010), medical schemes cover middle to high income formal sector workers and their dependants. These groups then pay out-of-pocket to private sector providers such as general practioners and retail pharmacies for primary care services (Ataguba & Akazili, 2010). Medical schemes function to offer an alternative to seeking medical care within the public sector and this function is financed by reimbursing private hospitals and specialists. In this way they are able to offer duplicate services that are available in the public sector as well as supplementary services not provided by the public facilities (Lorenzoni & Roubal, 2016).

This gross misdistribution of resources extends to human resources as well. According to the Lorenzoni and Roubal (2016), private facilities are able to spend large amounts on their facilities which then attract medical professionals to these better facilities and access to better technologies. They posit that the private sectors role in attracting doctors, has led to the prices being used in the private sector setting labour market benchmarks (Lorenzoni & Roubal, 2016). Doctors face these benchmarks when choosing between public and private sector employment.

According to the Lorenzoni and Roubal's study (2016), private hospitals account for 26% of the country's total hospital bed capacity but attract 55% of medical specialists. This has a huge impact on the entire health care system as this skewed distribution of personnel constrains the public sectors expansion immensely. According to the medical schemes annual report, the ratio of private general practioners (GPs) to beneficiaries is 13.6 GP'S per 10 000 beneficiaries in the medical scheme industry (The council for medical schemes, 2015).

While this compares well with the global ratio of 14.1 physicians per 10 000 population. The average for South Africa as a whole is 7.8 physicians per 10 000 population as demonstrated in Figure 2 seen below (The council for medical schemes, 2015). This means that within the private sector they are close to the global average in terms of doctor-to-patient ratio, however within the rest of the country, i.e. the 83% of the population within the public sector,

the ratio is almost half this average. This clearly shows the extent of the inequity in our health care system and why a reform is so crucial.

Global trends	Physician per 10 000 population
Global	14.1
Upper middle income countries	15.5
BRICS countries	
South Africa	7.8
India	7.0
China	14.6
Brazil	18.9
Russia	43.1
Africa Region	2.6

Source: *World Health Statistics (2014)*

Figure 2: Global trend: Physicians per 10 000 population (The council for medical schemes, 2015)

Ataguba and Akazili (2010), argue that the macro-economic context of a country influences its ability and the need to achieve universal coverage. In this context South Africa is said to contribute about half of the total economic output in sub-Saharan Africa but its income inequality is not only one of the highest in the world but appears to be worsening (Ataguba & Akazili, 2010). Ataguba and Akazili (2010) use the Gini index to illustrate this. This is a quantitative measure of income inequality where the closer the co-efficient is to one (1), the more unequal is the distribution of incomes. A co-efficient of one (1) implies that all incomes are commanded by the richest person in the economy. A co-efficient of zero (0) theoretically means that incomes are equalised among every citizen (Ataguba & Akazili, 2010). In South Africa our Gini index co-efficient increased (i.e. deteriorated) from 0.65 in the late 1990s to 0.72 in 2005/2006.

Ataguba and Akazili (2010) summarize this as:

> *"The distribution of income in South Africa is such that the poorest 10% of the population shared only about R1.1 billion (representing about 0.1% of total incomes) compared with R381 billion (representing 51%) by the top 10% of the population. This alarming misdistribution of income is accompanied by high poverty and unemployment figures (p.74)".*

The above factors clearly illustrate the extreme misdistribution of resources in South Africa's health care system. The resources afforded to each sector in relation to the size of the population that sector cater for is inefficient and demonstrates large inequities. Ataguba and Akazili (2010) argue that this is the reason South Africa fell so far short of attaining the Millennium Development Goals.

In a recent study compiled by A. Mills et al., (2012) the progressivity of the current healthcare sector in South Africa was analysed. When a financing system is found to be progressive this implies that the richer members of that population contributed a higher percentage of their household income to health care funding than the poor in that population. A regressive mechanism will hence mean that the poor population contributes more than the rich. The study found that at the components level general taxes and private medical scheme contributions are progressive but out-of-pocket payments are regressive (Mills et al., 2012). The combination of these, leads to the overall health financing system to be progressive due to the medical scheme contributions and taxes skewing the outcome (Mills et al., 2012).

Ataguba and Akazili (2010) argue that a different study found that the benefits of using both public and private health sector services in South Africa are skewed in favour of the rich. They also found that even though the poor have relatively greater need for health care, they derive fewer benefits from the health services in South Africa. Ataguba and Akazili (2010) notes that this skewed distribution of benefits relative to need for health care can exist even if the financing distribution is progressive.

This is occurring currently in South Africa due to the high degree of fragmentation in the financing of our health care system. The above factors all lead to the same conclusion, a reform of the health care system in South Africa can bring an end to the gross inequalities and fragmentation that currently permeates. The National Health Insurance Programme could be the solution to this but only if done carefully and with due consideration of all factors involved in the financing of a Universal healthcare system.

2.3. Funding models of UHC and international examples

As previously mentioned, UHC has been successfully implemented in many countries across the world and these countries have learnt many lessons along their journey to achieving UHC. There is much that South Africa can learn from these countries examples, especially in terms of funding mechanisms. This is clearly seen in our Governments white paper on NHI, the motivation for the proposed funding mechanisms are the systems Canada and Scandinavia have utilised (Republic of South Africa, 2015b). As such, this section will look at international examples of UHC funding.

The world health report (2010) contains the following definition of health financing for universal coverage:

> *Financing systems need to be specifically designed to: provide all people with access to needed health services (including prevention, promotion, treatment and rehabilitation) of sufficient quality to be effective; [and to] ensure that the use of these services does not expose the user to financial hardship (p.55).*

This statement highlights one of the core principles of universal health care, ensuring adequate funding of the programme in order to achieve population coverage and make health care affordable and thereby available to all. This principle of health for all is in keeping with the Bill of Rights and our constitution and is why we must ensure proper steps are taken in the design and rollout of NHI in South Africa. If done without this definition in mind the outcomes of the implementation will lead to a further propagation of the inequities, we see in our healthcare system currently.

The best way to investigate our options is to look at and learn from international examples. After the WHO 2010 report on universal health coverage and its inclusion in the Millennium development goals, many countries have started on the path to UHC and so we find many different examples of how health financing can be successfully achieved (World Health Organization, 2010).

This section of the review will look deeper into what lessons we can learn from other countries that are implementing and are achieving successful UHC. Part of this review will entail an important study that was published in January 2016 by M.R.Reich et al., (2016). This study detailed the different paths these countries took on their journey to UHC and some lessons they have learnt from their experiences. These countries are Bangladesh, Ethiopia, Ghana, Indonesia, Peru, Vietnam, Brazil, Thailand, Turkey, France and Japan (Reich et al., 2016).
According to the G. Carrin, James. C., & Evans. D (2005) study, there are 3 components that must be discussed surrounding financing mechanisms for UHC.

These components are:

> • *Revenue collection: financial contributions to the health system have to be collected equitably and efficiently;*
>
> • *Risk Pooling and resource distribution: contributions are pooled so that the costs of health care are shared by all and not borne by individuals at the time they fall ill (this requires a certain level of solidarity in the society); and*
>
> • *Purchasing: the contributions are used to buy or provide appropriate and effective health interventions (p.3).*

These elements adequately outline the discussions and lessons needed from the international examples. As such in the following sections, each of these components will be discussed in terms of international examples and how they will be applied to South Africa.

2.3.1. Revenue collection

Raising revenues is essential for the UHC programme to function and to have the resources to provide population coverage. Revenue collection has been mentioned as a key component of the UHC funding structure (Carrin.G et al., 2005). This is a challenge for all countries embarking on this type of structure. According to Mcintyre (2010) the sources of healthcare funding are households and firms. They provide

this either through direct (usually called out-of-pocket payments) or through pre-payments mechanisms (McIntyre, 2010). Carrin et al., (2005) describes UHC countries as having prepayment mechanisms either through a tax-based or social health insurance-based (SHI). Mcintyre (2010) summarises this as using a compulsory or voluntary pre-payments system. In the tax based system (compulsory), different forms of tax or mandatory contributions are used to provide or purchase health services while In the voluntary prepayment system, usually various forms of private health insurance are used. These are funded by workers, the self-employed, enterprises and government (McIntyre, 2010).

McIntyre, (2010) tells us when considering the appropriateness of financing mechanisms; an emphasis should be placed on assessing the relative progressivity of these mechanisms. The concept of progressivity was explained at the beginning of the review. This concept on the importance of progressivity analysis is supported by Mills et al., (2012) who did a study assessing relative progressivity in South Africa, Ghana and Tanzania's health sectors to investigate equality implications of different financing mechanisms. In terms of progressivity, pre-payments are regarded as the most appropriate financing mechanism because it has been determined that out-of-pocket payments are the most regressive financing method (McIntyre, 2010).

Within the Organisation for Economic Co-operation and Development (OECD) countries at the time of Mcintyres report (2010), the most regressive health financing countries were Switzerland and the USA. They were found to both have majority of their funding come from private funding mechanisms. Private insurance accounted for 41% in Switzerland and 29% in the USA, while direct payments accounted for 24% and 22% respectively (McIntyre, 2010). These private health insurance contributions were both found to be regressive. France, however has a national health insurance scheme but has also been found to be regressive.

This is due to high co-payments which have led much of the population to take out private health insurance(PHI) to cover these co-payments (McIntyre, 2010). International evidence tells us that the overall regressivness of heath financing can be controlled by clearly defining and limiting the role of PHI in the health system. Mcintyre (2010) does tell us though that PHI that covers co-payments or

supplements entitlements to publicly funded services, has less regressive effects. The UK and Italy are found to be the OECD countries with the most progressive health financing systems and are both very largely publicly funded. Public funding makes up 84% of the UKs health care financing. This is made up of 64% general tax revenues with 20% made up from mandatory health contributions. The public funding in Italy is 77% of all funding (McIntyre, 2010).

Mcintyre (2010) concludes that international evidence tells us that to achieve progressivity in UHC, public funding should be responsible for the major share of health care financing. She finds that general tax could be the most progressive mechanism depending on the underlying mix of taxes and the structuring of personal income and corporate tax rates (McIntyre, 2010).

According to Reich et al., (2016), revenue funding entails an increase in Government spending towards Healthcare. When a countries government prioritises the budget for Healthcare spending, Reich et al., (2016) finds that financial coverage of the populations is usually attained. The problem that arises here is that political commitments don't usually lead to an explicit budget set aside for Healthcare. The examples we have for this are that only 3 of the 11 countries, namely Brazil, France and Ghana have funds specifically put aside from the budget for the health care. Other countries will simply commit to making health a priority in its budget allocations (Reich et al., 2016).

The methods of raising funds used by other countries are varied and according to Reich et al., (2016) they are seeking to diversify this to ensure more funds for their programmes. An important aspect of this funding is the role of the private sector as well as private voluntary insurance. In Brazil, for example, about 25% of the population has private health insurance. This 2 tier system has led to problems managing inequities in that population. Unlike Brazil, Japan, has made efficient use of their private sector through the use of a single fee schedule for both private and public sectors (Reich et al., 2016). In South Africa we have a large private sector that currently utilizes over 40% of the health expenditure of the country but services only 16% of the population (Lorenzoni & Roubal, 2016).

Unfortunately, the White paper released in December 2015 does not explicitly state the future for these South Africa's current voluntary health insurance or 'medical aid'

schemes (Republic of South Africa, 2015a). The paper does imply that they will not be dissolved away completely. Private Health Insurance could have a positive future in the funding and even operation of NHI if done correctly and cautiously. According to Carrin et al., (2005) it is common for countries to have a mixed financing system. It must, however be taken into account that in all of these systems out-of-pocket payments are still required for selected services but Carrin et al., (2005) notes that the contribution these payments make to total health expenditures is generally small compared to countries that have not yet attained universal coverage.

2.3.2. Risk pooling and resource distribution

This is an essential factor in developing a successful UHC in that if it's done correctly it ensures that inequalities that are so often found in most health sectors can be erased. Mcintyre (2010) tells us that it is more feasible to predict health care needs for a group rather than an individual if we draw on epidemiological and actuarial data. In risk pooling, the larger the pool, the greater the ability to predict and spread risks related to ill-health and hence the more sustainable the funding is. In UHC individuals contribute regularly to a pooled fund so that when they take ill, the 'pool' will cover their costs (McIntyre, 2010). Reich et al., (2016) has found that to provide complete population coverage different mixes of cross subsidisation is needed. Both from rich to poor and from low-risk groups (e.g., the young) to high-risk populations (e.g., the elderly). Risk pooling allows for these cross-subsidisations and they are critical to achieve equitable, efficient and sustainable health care financing system. Hence UHC cannot be achieved in a system with fragmented risk pools (Reich et al., 2016). As noted by Davies and Carrin (2001), "there is growing consensus that, other things being equal, systems in which the degree of risk-pooling is greater, achieve more" (p.587).

An example of a country with such fragmentation is the USA which has a large number of PHI schemes and two government-funded schemes to cover the poor and the elderly (Medicaid and Medicare). They have as such been unable to achieve UHC. Other countries have achieved population coverage by making insurance scheme membership compulsory such as the Netherlands (McIntyre, 2010) . From the international examples of the Reich et al., (2016) study it seems that the

combination of multiple insurance schemes can achieve the cross-plan fairness UHC is looking for. In Turkey they have achieved this well through consolidation of several different benefit schemes. It is for this reason as well that South Korea integrated 139 separate private insurance associations, 227 insurance associations for the self-employed and numerous other insurance associations into a single National Health Insurance Corporation (Reich et al., 2016).

2.3.3. Purchasing and cost containment

As discussed at the beginning of this section Carrin et al., (2005) has found that purchasing of benefits within the UHC design is critical. The World Health Organisation defines purchasing as the contributions that are used to buy or provide appropriate and effective health interventions (Carrin.G et al. (2005). Mcintyre (2010) tells us that purchasing involves transferring funds from the risk pools mentioned above to health care providers and includes considerations of the benefits package and provider payment mechanisms. Active purchasing is critical to achieve population coverage as without it citizens are left without a clear outlay of what they are entitled to (McIntyre, 2010).

Mcintyre (2010) states that one of the many questions to consider when designing countries benefits packages is what proportion of care should it provide for. Two of these consider the type of benefits that a UHC could cater towards. The first being whether emphasis should be placed on low-frequency, high-cost services, such as inpatient hospital care and long-term, terminal illnesses. Whilst an alternative considers whether emphasis should be placed on high-frequency, low-cost services, such as acute and chronic care that can be provided at the primary care level. McIntyre (2010) also considers a mix of both of these services (McIntyre, 2010). In a country such as South Africa, with a (relatively) low employment rate and high poverty rate, even utilising primary health care services can have ‘catastrophic’ consequences for poorer households who have to travel to these facilities. Hence the packages need to be tailored to the population. With the focus on primary health care and prevention of illnesses in our healthcare sector the primary health care services would be prioritised in SA (McIntyre, 2010).

Internationally many countries utilised primary health care providers as ‘gatekeepers’ to hospital care in a sense according to Mcintyre (2010). Active gate keeping to keep costs down is essential in order to avoid out-of-pocket payments as they are the most regressive of the funding tools as well as being a barrier to access for the low-income population (McIntyre, 2010).

Thailand is given as a good example of a middle-income country that has achieved universal coverage with very comprehensive benefits packages. Their benefits have a mix of primary and tertiary services but, importantly, they also include a ‘negative list’. This is a list of services that are excluded such as the obvious cosmetic procedures but also very high cost services such as organ transplantation and dialysis for end stage renal disease (McIntyre, 2010). Thailand also maintains a strict referral route, ensuring effective gatekeeping and charges no co-payments or fees (McIntyre, 2010).

Finally, within the international examples we need to consider available mechanisms to control cost pressures. This is something that will need continuous careful management during the implementation and even after achieving universal coverage. Cost pressures needs continuous scrutiny because if there are too many cost cutting measure implemented then financial coverage can be eroded and give way to inequalities (Reich et al., 2016).

Good examples of effective cost controlling within UHC are Turkey and Thailand. These countries used strong negotiations with pharmaceutical companies to get better pricing and coupled this with leveraging provider payment schemes to ensure that coverage is not eroded (Reich et al., 2016). Reich et al., (2016) has found that open-ended fee-for-service payment systems typically lead to cost-escalations. This is a good lesson for South Africa to take into consideration when policies for cost control are handled. With the use of generic drugs especially ARVs in South Africa, we will need to closely look at the pharmaceutical industries role in NHI and the benefits of the state negotiating on behalf of the countries combined healthcare plan to get better rates for such life-saving treatment.

2.4. Which funding mechanisms will work best for South Africa's NHI

The white paper entitled National Health Insurance for South Africa: Towards Universal Health Coverage was released in December 2015. This document was a follow up from the Green paper released in 2011. This documents purpose is to layout the government's plans and strategies to achieve UHC in South Africa. As part of this plan the much anticipated funding plan was unveiled. The key take a way's of this section of the White paper are:

Whilst the White paper goes into detail as to why it is Governments belief that estimating a cost for NHI is not essential. The costing has been estimated and showed in figure 3 below to be a cost projection in 2025/26 of R256 billion in 2010 prices. This table shows the expected funding shortfalls in the public health budget. (Republic of South Africa, 2015b).

		Average annual per cent increase	**Cost Projection R m (2010 prices)**
Baseline public health budget:	**2010/11**		**109 769**
Projected NHI expenditure:	2015/16	4.1%	134 324
	2020/21	6.7%	185 370
	2025/26	6.7%	**255 815**
Funding shortfall in 2025/26 if baseline increases by:		2.0%	108 080
		3.5%	71 914
		5.0%	27 613

Figure 3: Projection of NHI costs adapted from the Green Paper (Republic of South Africa, 2015b).

The NHI will utilise a single-payer and single-purchaser fund, namely the NHIF.

The white paper (2015) defines this as:

> *An entity that pays for all health care costs on behalf of the population. A single-payer contracts for healthcare services from providers. The term "single-payer" describes the funding mechanism and not the type of provider (pg. 9).*

This fund will be responsible for pooling of funds and purchasing of personal health services. The funding for NHI will be through a combination of various mandatory pre-payment sources(Republic of South Africa, 2015b).

Medical schemes will be limited to providing top-up cover for unspecified "complementary" services (Republic of South Africa, 2015b).

In order to fund these pre-payments, the White paper lists the potential tax mechanisms that can be used. These include use of direct taxation through personal income or inheritance tax; payroll or premium taxation, or indirect taxes such as VAT. These tax types and their definitions are shown in Figure 4 below. However, use of Value-Added Tax (VAT) is of concern as it is considered regressive in that the poorer population would suffer the consequences (Republic of South Africa, 2015b).

These potential sources are listed in table 3 below.

Revenue Source	Definition	Examples
Direct Taxation	Taxes imposed on individuals or entities in relation to their income, earnings or wealth.	Personal or corporate income tax, surcharge on income, inheritance tax
Indirect Taxation	Taxes levied on transactions or goods and services, irrespective of circumstances of buyer or seller.	Value-added tax, national health insurance levy, financial transactions, fuel levy, taxes on alcohol and tobacco
Payroll Taxation	Taxes calculated on payroll, as either employer or employee contributions, or both.	Contribution to National Health Insurance deducted from pay check
Premiums	Collection of premiums or membership contributions from employee or informal sector.	Ghana NHI for informal sector workers

Figure 4 : Potential revenue sources for NHI (Republic of South Africa, 2015b).

Different combinations of the potential tax sources have been summarised in Figure 5 seen below. As we can see there are 5 scenarios here with different combinations of tax usage for prepayment (Republic of South Africa, 2015b)

		Payroll tax	Surcharge on taxable income	Increase in value-added tax
Scenario A: Surcharge on taxable income, VAT increase and payroll tax	2016/17 2018/19 2022/23 2023/24 2024/25	0.5% 0.5% 1.0% 1.0% 1.0%	0.5% 0.5% 1.0% 1.0% 1.0%	0.0% 0.5% 0.5% 1.0% 1.0%
Scenario B: Payroll tax and surcharge on taxable income	2016/17 2019/20 2022/23 2025/26	0.5% 1.0% 1.5% 2.0%	0.5% 1.0% 1.5% 2.0%	
Scenario C: Surcharge on taxable income and VAT increase	2016/17 2018/19 2019/20 2020/21 2022/23 2024/25 2025/26		0.5% 0.5% 1.0% 1.0% 1.5% 1.5% 2.0%	 0.5% 0.5% 1.0% 1.0% 1.5% 1.5%
Scenario D: Payroll tax and VAT increase	201617 2017/18 2019/20 2022/23 2024/25 2025/26	0.5% 0.5% 1.0% 1.5% 1.5% 2.0%		 0.5% 0.5% 1.0% 1.5% 1.5%
Scenario E: Surcharge on taxable income	2016/17 2017/18 2019/20 2021/22 2022/23 2023/24 2024/25 2025/26		0.5% 1.0% 1.5% 2.0% 2.5% 3.0% 3.5% 4.0%	

Figure 5: sets out five alternative tax scenarios for funding the NHI shortfall by 2025/26 (Republic of South Africa, 2015b).

In Figure 5 seen above the payroll tax has a similar role to the current skills development levy in that a percentage of the total salary paid to employees would be taxable. The White paper (2015) notes that no threshold will be applied to limit the taxation on the poorer population as that would lead to decreased overall tax revenues and would therefore require a higher percentage of salaries of the middle-to-higher income population to be taxable.

The surcharge on taxable income mentioned here is the same as an increase in marginal personal tax rates. The percentage point increases that we see in the table

would apply across all the personal income tax brackets. It is important to note here that if the bottom brackets marginal tax rate is left unchanged in order to maintain the tax-free threshold in use now, this would mean the remaining brackets would potentially see a doubling of their percentage point increases to compensate(Republic of South Africa, 2015b).

For the value-added tax mentioned here it is assumed that there is no change in the number of zero rated items. Ataguba & Akazili (2010) make note that if the UHC is funded mostly through general taxation made up of direct and indirect taxes then essentially all South Africans, even the poor and unemployed, are contributing towards healthcare in the form of indirect taxes (VAT, Fuel levies, excise taxes etc.). However, analysis of these taxes in South Africa has shown a regressive pattern, and these taxes already put a substantial burden onto the poorest members of the population (Ataguba & Akazili, 2010).

The White paper (2015) then goes on to list potential other avenues of funding such as duties on alcohol and tobacco products, use of the proposed carbon tax as well as redirecting funds from the current employer contributions (subsidies) to medical schemes (such as the Government Employees Medical Scheme, the Police Medical Scheme, Parliamentary Medical Scheme, Municipal Workers Union Medical Scheme, State entity medical schemes e.g. Transmed as well as various private medical schemes to which State employees belong) and reallocate these towards the funding requirements for NHI (Republic of South Africa, 2015b).

Unfortunately, the White paper lists all of these possibilities for funding but does not specifically state which avenues they have decided to pursue. The White paper concludes the financing chapter by admitting the uncertainties around funding and that these are partially dependent on public health system improvements as well as medical scheme regulatory reforms that have yet to be fulfilled (Republic of South Africa, 2015b).

This has led to the poor outlook on NHI from many stakeholders that were eagerly awaiting the release of the White Paper.

Barlow and Simkins (2016) argue that the single payer funding mechanism is perhaps not the best fit for South Africa and he discusses alternative mechanisms

should be considered. In their report for the Helen Suzman Foundation they give their reasoning as the following:

- The International examples of the single-payer system that Government is modelling our system are Canada and Scandinavia but we are very different from those countries in terms of affluence and the issues we currently face(Barlow & Simkins, 2016).

- They make the point that a two-tier system such as the systems utilised in Austria, Germany, Israel and the Netherlands could be beneficial in South Africa as we already have the basis for that but with policy changes the inequities can become more balance. Each of these countries utilise a different version of the two-tier system and hence we could definitely benefit from following their examples (Barlow & Simkins, 2016).

- Barlow and Simkins believe that the single payer system for South Africa is extravagant and highly ambitious and that the common misconception of the single payer system being synonymous with UHC has led to this. This is why they propose focusing on consolidating the public sector with mandated intervention from the private sector to efficiency and quality of service (Barlow & Simkins, 2016).

As such with all the opinions on the proposed funding mechanisms for South Africa's NHI it is the researchers hope that the continued debates will lead to the best outcome and will bring universal health coverage to the entire population of South Africa.

2.5. Conclusion of Literature Review

The literature review has outlined many factors that come into play when deciding on the most efficient funding mechanism of a country. Indeed, there is no 'correct' answer as we have seen from the analysis into international examples: very countries situation is unique.

As such the road ahead to implementation of National Health Insurance will be long and potentially difficult for South Africa but with continued involvement of stakeholders and citizens of South Africa the goal of universal access to all will be achieved in South Africa.

2.6 Research Question

What funding mechanisms will be optimal for South Africa's National Health Insurance?

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This chapter explains the methodology used to investigate the research questions derived from the literature review.

The research methodology will begin with an overview of the qualitative research methodology the researcher has chosen to utilise and why this was used. This will then be followed by a description of the intended research design. Followed by the research instrument itself and lastly the researcher will detail the expected validity and reliability of the research to be collected

3.2. Research methodology / paradigm

According to Bryman (2012) there are three types of research paradigms, namely qualitative research, quantitative research and mixed methods research. Bryman (2012) also tells us that the choice of paradigm selected will depend on the research problem that will be addressed.

With this in mind the researcher has chosen the qualitative research method. According to Leedy and Ormrod (2001) qualitative research is used in order to answer questions about the complex nature of phenomena, most often with the purpose of describing and understanding the phenomena from the participants point of view. According to Coast (1999), the strength of qualitative research lies in its ability to aid understanding, provide explanations and explore issues. This is especially true when those issues are of a complex nature. Qualitative research does have some weaknesses, especially on comparison to quantitative methods such as its inability to provide empirical data that are statistically generable to whole populations (Coast, 1999).

Ulin, Robinson and Tolley (2005) tell us that qualitative research is favoured in the public health field as these methods help us in understanding underlying behaviours, attitudes, perceptions, and culture in a way that quantitative methods can’t achieve. Ulin et al., (2005) also argue that qualitative results help us to better understand social, political, and economic factors especially those associated with contemporary

and emerging health problems. In this way they also can be effective in determining and more importantly understanding facilitators and barriers to the implementation of new public health programs (Ulin, Robinson, & Tolley, 2005).

The strength of qualitative research is its ability to aid understanding, provide explanations and explore issues, particularly those of a complex nature. Its weakness, in comparison to quantitative research, is that it does not provide empirical data which are statistically generalizable to whole populations. For these reasons the researcher feels that qualitative research methods will be effective to analyse the research questions surround South Africa's National Health Insurance.

3.3. Research Design

As the researcher has chosen to use qualitative research methods for data collection and analysis the next step is to choose the design of the research itself.

Within the qualitative method there are four design types to consider: comparative design, case study design, longitudinal design and the cross- sectional design. The cross-sectional design is described by Saunders, Lewis and Thornhill (2009) as the study of particular phenomena at a particular time; it is also referred to as the 'snapshot' method in terms of time horizon considerations. The research problem surrounding National Health Insurance is analysing the current state of South Africa in its funding implications and hence a cross-sectional design is more appropriate.

The researcher believes that within this design the interview method will be most suited. According to Saunders et al., (2009) the purpose of the research being done can guide us on deciding the most appropriate interview method to utilise, the types of interviews are structure, semi structured and unstructured.

The semi- structured interview can be defined as "non-standardised questioning, in which the researcher will have a list of themes and questions to be covered, although these will vary from interview to interview" (Saunders et al., 2009). The interviews will be conducted on a face-to-face basis. According to Janes (2001) the face-to-face method can provide the best and highest quality data as it allows the researcher to ask more specific questions. This method also allows a rapport to be

built up between the respondents and researcher and therefor their cooperation can be gained (Leedy & Ormrod, 2001).

This semi-structured interview method will suit the research topic well as the researcher may follow a standard set of questions while still allowing for variance of the flow, content and questions themselves depending on the respondents responses and the context of the interview (Leedy & Ormrod, 2001). According to Bailey (1987), semi-structured interviews are open ended in order to allow for this type of flexibility and to allow for unanticipated responses .

Even though this approach has been chosen as appropriate for this research the researcher is aware of some disadvantages associated with the semi structured interview approach. The researcher will strive to avoid these potential pitfalls. Saunders et al., (2009) tells us that the element of potential is the key disadvantage to this method. The two most common biases encountered are Interviewer bias and Interviewee or response bias.

Interviewer bias involves the interviewers tone, comments and non-verbal behaviour indicating to the interviewee their feelings about the responses. Interviewer bias also can manifest in the manner that data is interpreted (Saunders et al., 2009). Interviewee bias can be caused by perceptions about the interviewer or even in relation to perceived interviewer bias. This type of bias can also be caused by sensitivities the interviewee may have to sharing certain information or opinions on the topic. They could structure their answers to avoid further follow questions (Saunders et al., 2009).

With these potential issues combined with a specific sample size Leedy & Ormrod (2001) tells us that results would be difficult to replicate as well as extrapolate to a larger population.

In order to combat the likelihood of these disadvantages triangulation is sought by the researcher by studying as much literature on the funding of universal health coverage systems, stakeholder’s positions and National Health Insurance data from Government to ensure accurate interpretation of the data from the interviews. The researcher will also state any biases identified or encountered during the interviews.

3.4. Population and sample

3.4.1. Population

According to Bryman (2012), a population can be defined as the set of units, for example people, from which a sample can then be selected. The target population for this research is all stakeholders and participants in the implementation of National Health Insurance in South Africa. This includes groups such as policy makers, health professionals, thought leaders, medical aid schemes and health economics academics.

3.4.2. Sample and sampling method

Bryman (2012), defines a sample as the subset or portion of a population that has been selected for research purposes. For the purposes of this research purposive sampling methods were used. In purposive sampling, the researcher uses his or her own judgement about which respondents to choose and only picks those who best serve the purpose of the study (Bailey, 1987). Within the stakeholders that will be affected by the National Health Insurance implementation, as described in the population above, samples within 3 specific groups have been chosen.10 respondents will be used from these groups. These groups were chosen based on expected subject matter expertise, accessibility by the researcher and willingness to engage on this subject matter.

These groups are:

1. South African health economics academics from Wits school of public health as well as from UCT health economics department.
2. Health professionals in the primary healthcare environment. These health professionals are directly involved in the implementation of phase one of the NHI implementation and hence are very knowledgeable about the subject.
3. Policy makers involved on the drafting of the National Health Insurance Green and White papers.

The above categories have been chosen to vary the interests of the respondents to avoid duplication of data as well as to allow for respondents with a deep knowledge

of the subject matter to contribute. The researcher believes that these groups will be best equipped to discuss specifically the funding mechanisms behind the NHI hence they were the chosen sample groups from the population of stakeholders.

The researcher is a medical doctor currently working in the primary healthcare field and as such has access to health professionals in her environment as mentioned in the second category. Due to the researcher's current enrolment at Wits Business School access to the school of public health is attainable and through colleagues at UCT, access to their academics is attainable. Through my employment with the Department of Health access to the policy makers is attainable as well.

3.5. The research instrument

The very nature of the semi structured interview limits the source of data and information to the researchers open-mindedness and creative ability (Leedy & Ormrod, 2001).

Ulin et al., (2005), tell us that there are always at least two key players in qualitative research:

"the participant who contributes the information and the researcher who, as learner and co-interpreter, guides the process toward the understanding that both seek to articulate. Creation of this partnership not only requires skill but critically carries with profound ethical obligations because the relationship is based on trust and mutual understanding of a common goal." (p.5)

The intended consent form and interview schedule can be found in Appendix A and B.

3.6. Procedure for data collection

According to Leedy & ormrod (2001), data collection in a collective study takes a great deal of time. They advise as well that any potentially useful data should be recorded thoroughly, accurately and systematically. Lastly and perhaps most importantly they advocate that chosen data collection methods should be consistent

with ethical principles of informed consent; protection from harm; right to privacy and honesty with professional colleagues (Leedy & Ormrod, 2001).

As the researcher, at this point, has secured the preliminary agreement of the respondents in the second category of the sample groups, they will next be contacted via email thanking them for their participation, appointments for the interview will be set up, they will receive an electronic copy of the consent form for them to read beforehand and an electronic extract from the proposal will be sent to them.

The next step will be to utilise my networks and contact the proposed respondents in the first and last sample groups. These respondents will be initially contacted telephonically to explain the nature of the request and offered some context on the research method and anticipated duration of the interview .They will then receive the follow up email as outlined above. The preferred venue for the interviews will be meeting rooms as this will assist the audio-recording of the interview.

The interviews will then be conducted face to face and audio-recorded, with permission from the respondents attained through the aforementioned consent form. The cover letter, consent form and interview questions can be found as appendix A, B and C.

3.7. Data analysis and interpretation

Transcripts and notes are the raw data of qualitative research and provide a descriptive record of the research. Unfortunately they cannot provide explanations and so the researcher must make sense of the data by sifting through and interpreting them (Pope, Ziebland, & Mays, 2000).

Saunders at al (2009) tells us that the need to create a full record of the interview soon after its occurrence is an important method of controlling bias as well as producing reliable data for analysis.

Pope et al., (2000), details the ‘Framework approach” to data analysis. This approach utilises 5 stages of analysis and will be utilised by the researcher for data analysis after transcription of the interviews.

3.7.1. Five stages of data analysis in the framework approach:

- **Familiarisation**—This involves immersion in the raw data and can be done by listening to tapes or rereading transcripts etc in order to list key ideas and recurrent themes (Pope et al., 2000).

- **Identifying a thematic framework**— This step involves mapping out key issues, concepts and themes by which the data can be examined and referenced. These themes can be found by drawing on issues raised before the data collection as well as from issues raised by the respondents themselves (Pope et al., 2000).

- **Indexing**—In this step the above thematic framework will be applied to and populated with the data. This will be done on textual form, first by annotating the transcripts with numerical codes from the framework. These codes are usually supported by a short description to elaborate that index title. In a single passage of text, multiple themes could exist and these must be recorded (Pope et al., 2000).

- **Charting**—this step will involve charting the data according to the appropriate part of the thematic framework to which they relate. This process can involve a considerable amount of abstraction and synthesis (Pope et al., 2000).

- **Mapping and interpretation**— lastly the researcher will then use the charts to define concepts and map the range and nature of the data. Associations between themes will be found on this process and can provide explanations for the findings. Mapping and interpretation is guided by the original research objectives and themes that emerged from the data themselves (Pope et al., 2000).

3.8. Limitations of the study

The limitations of this study include the limitations of utilising the semi-structured interview method which are, as previously mentioned, interviewer and respondent biases (Saunders et al., 2009).

Another potential weakness of this research is the lack of representation of the private healthcare sector in the sample groups. This is due to the purposive nature of the sampling methodology as the groups chosen are specifically ale to discuss the funding mechanisms and not just NHI as a whole, they are also accessible to the researcher and will enable the researcher to answer research questions and meet the objectives of the research.

The analysis utilises a framework approach that relies on thematic analysis. This could lead to biases from the interpreter. The researcher will strive to avoid these biases by triangulating her research before the data collection.

3.9. Validity and reliability

According to Golafshani (2003) the most important test of any qualitative study is the quality, reliability and validity of the study and a good qualitative study will result in understanding of a situation that would otherwise have been confusing . It is the aim of the researcher to generate a good understanding of the National Health Insurance policy in South Africa and the factors surrounding its funding mechanisms.

Ruyter and scholl (1998), tell us that critics of qualitative research refer to the fact that this type of methodology does not meet the demands of validity and reliability, criteria which are the cornerstone of any research. The reason for this is mainly due to the relative freedom and general lack of structure that characterises most qualitative research methods (De Ruyter & Scholl, 1998).

3.9.1. External validity

Leedy and Ormrod (2005) define external validity as the extent to which a research study's results apply to situations beyond the study itself .Which is the extent to which the conclusions drawn can be generalised to other contexts.

Since the sampling for this research has already been stated to be purposive sampling and only includes a small number of stakeholders affected by the NHI programme due to their knowledge of the funding side of the NHI programme. Purposive sampling is described by Saunders et al., (2009) to "not be statistically representative of the total population". Hence the research cannot claim to be

generalised to all other contexts. However as discussed in limitations the researcher believes that even though this cannot be extrapolated, the use of these three groups for their expertise will enhance the quality of the data attained and hence will enhance the validity of the study.

Validity as described by Joppe (2000) determines whether the research truly measure that which it was intended to measure or how truthful the research results are. This research has been designed to measure the intended subject as carefully and truthfully as possible.

3.9.2. Internal validity

Saunders et al., (2009) tells us that the researcher can gain internal validity if they are able to "gain access to the interviewees' knowledge, and is able to infer a meaning that interviewee intended". This will be conveyed through thorough analysis of the data and inclusion of behavioural ques gathered in the interview. As mentioned previously the researcher plans to undertake extensive triangulation of knowledge on the subject before the interviews in order to attain access to the respondent's knowledge base by asking pertinent questions.

3.9.3. Reliability

Seale (2002), tells us that to ensure reliability in a qualitative research, an examination of trustworthiness is crucial. Golafsheni (2003), argues that in order to ensure credibility and transferability in research the researcher must strictly adhere to ethical guidelines and account for any bias.

The researcher will ensure that the semi-structure interview process is conducted in an ethical format and is not influenced by the views of the interviewer. To ensure reliability of the research care has been taken to document every step and note of the data collection process and analysis in order to allow other researchers to assist other researchers to replicate the research if they so wish to.

CHAPTER 4: PRESENTATION & DISCUSSION OF RESULTS

4.1. Introduction

Chapter four's purpose is to present and interpret the data obtained in order to answer the research question. This data was obtained through semi-structured interviews conducted on the willing respondents. The findings in this chapter are based on the interviews done with 10 respondents. These respondents can be grouped into doctors involved in the phase 1 implementation, health economists and experts involved in Department of Health's implementation of NHI.

The data collected from the qualitative approach were analysed using thematic content analysis. The results are presented in order to determine the answer to this dissertations research question which is what funding mechanisms will be optimal for South Africa's national health insurance.

The data will be presented graphically where possible, for ease of understanding. In some instances, quotes are utilised so that the participant's opinions can be more clearly discussed.

4.2. Demographics of participants

My participants include 2 white females, 4 Indian males, 1 coloured male and 3 white males. The ages of the respondents range from 30 to 52. All respondents have either some involvement in the implementation of the first phase of NHI or are involved as stakeholders with financial knowledge about NHI. Detailed information about the participants is not included in this report as anonymity allowed the respondents to express their opinions without risk of identification.

4.3. Results pertaining to Research Question

The results have been grouped into sub-headings to compile all the results in a manner that answers the question what funding mechanisms will be optimal for South Africa's national health insurance.

These sub-headings are:

- Is Universal health care needed in South Africa
- Essential components of the funding mechanism for universal health coverage
- Single payer or two-tier approach?
- Proposed tax combinations in a single payer fund
- Alternative funding sources

4.3.1 Is Universal health care needed in South Africa?

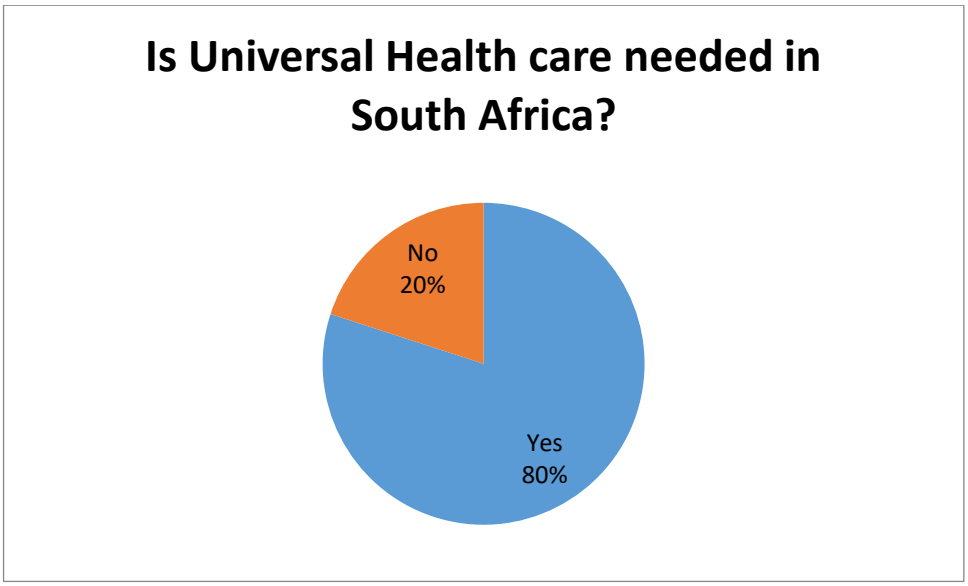


Figure 6: Is universal health care needed in South Africa

The research found that the eight out of ten respondents believe that NHI is necessary in South Africa. The respondents in favour of NHI supported their opinion by emphasising the fundamental need of basic healthcare as a human right. In addition, many of the proponents of NHI stated that given South Africa's wide income inequality, a universal healthcare coverage system would provide a form of financial protection for the majority of the population who cannot afford even basic health care. This is eloquently explained by respondent 6, who stated:

> *"I believe that financial protection should be proved to those who cannot afford healthcare, and everyone should have access to needed health services. It could be argued that South Africa already has this to a certain extent (though uneven access in terms of quality), and user fees are only paid when people can afford it"*

The opinion was further supported by respondent 8, who made mention of the population which finds itself between the two income extremes:

> *"At this stage only the poorest and richest South Africans are protected against financial hardship resulting from adverse health events. The "middle" group (would prefer to not make use of) the sub-standard public sector services or are unable to afford private healthcare. With universal coverage (in whatever form) all will be able to access needed health services – as guaranteed in the Constitution"*

One of the medical professionals in the study (R4) felt quite strongly that South Africa's use of Universal health coverage would, over time, bring about a decrease in the country's maternal mortality rates. This is important point because the World Health Organisation(WHO) utilises maternal mortality as a health indicator judging the effectiveness of the health sector in that country as it clearly shows the gaps between rich and poor as well as urban and rural areas (Alkema et al., 2016) .Maternal mortality made up one of the millennium development goals(MDGs) set out in 2000 by WHO and is now a part of the sustainable development goals(SDGs). (Alkema et al., 2016)

The two respondents who did not agree that UHC was required in South Africa both felt that the resources which would be directed towards an NHI implementation could be better utilised in the improvement of the current public health sector.

This follows the findings in the literature that a developing country such as South Africa, might need to focus on improvement to existing infrastructure, rather than take the risk of worsening the current inequalities in the healthcare sector. This is particularly important given the complexity of the existing system, which would necessitate an overhaul of the industry.

4.3.2. Essential components of the funding mechanism for universal health coverage

According to the literature, the three major components were: Revenue funding; risk pooling and purchasing and cost containment (Carrin.G et al., 2005).

Revenue funding

As mentioned in the literature review, this refers to the various options available to a country to find funding for their UHC. South Africa has proposed the mandatory pre-payment method (Carrin.G et al., 2005).

The respondents in general, had a negative outlook on the revenue funding mechanisms proposed. Their broad concerns were that the use of additional forms of taxes (such as an NHI fee) would not result in enough revenue to provide population coverage. Thus, it was the popular opinion that more of the funding should stem from the governments health allocation in its fiscal budget.

These results confirm the findings in the literature review in which Reich et al., (2016) has found that attaining financial coverage of a population under UHC is more likely in countries where governments prioritised the healthcare budget. Further detail on the respondents views on taxes are presented in section 4.6 below.

Risk pooling

All participants believe that this must be strived for in South Africa's NHI funding mechanisms. The general consensus was that regardless of the funding mechanism chosen, risk pooling as a principle had to be utilised so as to promote the sustainability of the UHC model. Three of the respondents commented that the reason for their strong belief in the need for risk pooling was the fact that South Africa was so fragmented in terms of social and health inequalities. Two of the three respondents felt that the most important factor of any UHC was the total coverage of the entire population.

As discussed by respondent R6, the current private health insurance sector has created multiple risk pools covering only 16% of the South African population – this mechanism would be much more efficient if the risk pool included the additional 84% of the population. This follows the findings of McIntyre (2010), which stated that, if

one draws on epidemiological and actuarial data, it was more feasible to predict health care needs for a large group rather than a small group or (an) individual.

Opinion of respondents also tie in with findings from Reich et al., (2016) who discussed the importance of different mixes of cross subsidisation, such as rich to poor and low-risk (young) to high risk (elderly) groups.

Purchasing and Cost containment

A common theme from the respondents was that if adequate cost containment is not practised then no funding mechanism would be adequate or sustainable. The respondents discussed that continual cost optimizations would need to be conducted so as to assist in the effective distribution of financial resources. This would impact the quality of care provided across the population, along with a decrease in the coverage of the population in the long term. Whilst not discussed in detail, respondents briefly discussed the areas which could be focused on, such as the purchase of pharmaceuticals and medical equipment.

This confirmed the findings by Reich et al., (2016) which stated that South Africa should look to countries such as Turkey and Thailand who have successfully used strong negotiations with pharmaceutical companies to ensure that coverage is not eroded as suggested by the above respondent.

Respondent R7 made the example of specialist services such as cardiac and oncology could be directed to specific facilities that already have an efficient and functional model to manage the expenses these services come with as well as utilising volume purchasing when dealing with drug procurement.

Lastly respondent R8 emphasised that good governance and accountability must be in place to achieve cost containment.

4.3.3 Single payer or two-tier approach?

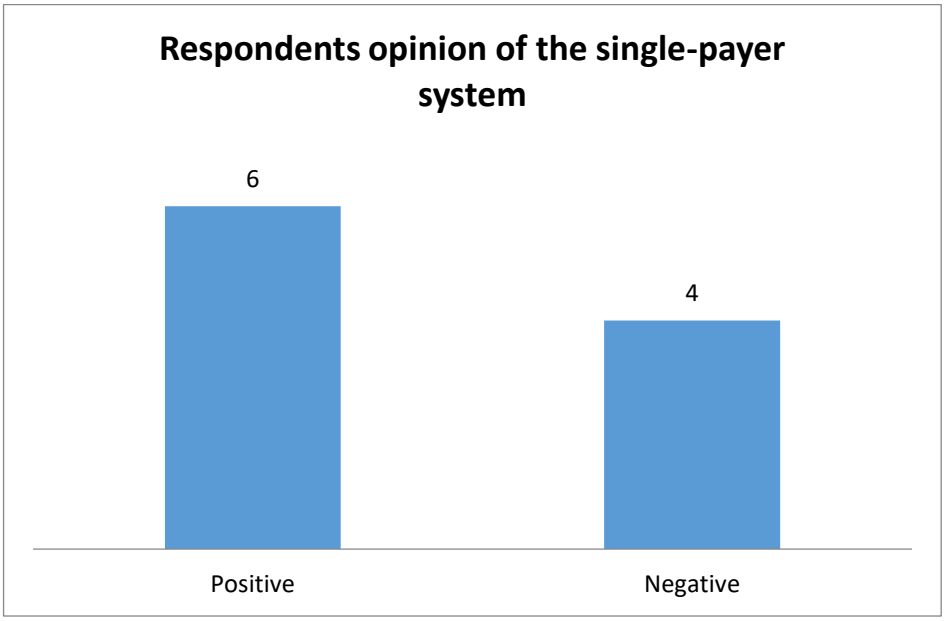


Figure 7: Respondents opinion of the single-payer system

The research found that the interviewees were all suitably familiar with the concept of the single-payer system and how the white paper sets out the proposed NHI fund in order for them to be participants of this study. However, question 4 shows us that the majority of the respondents don't believe the single-payer system is most appropriate for South Africa as seen in figure 7 and 8.

Whilst the key reason appears to be that the current government would mishandle a single payer system and it is too much of a change from the current public-private system, there were other reasons raised by respondents.

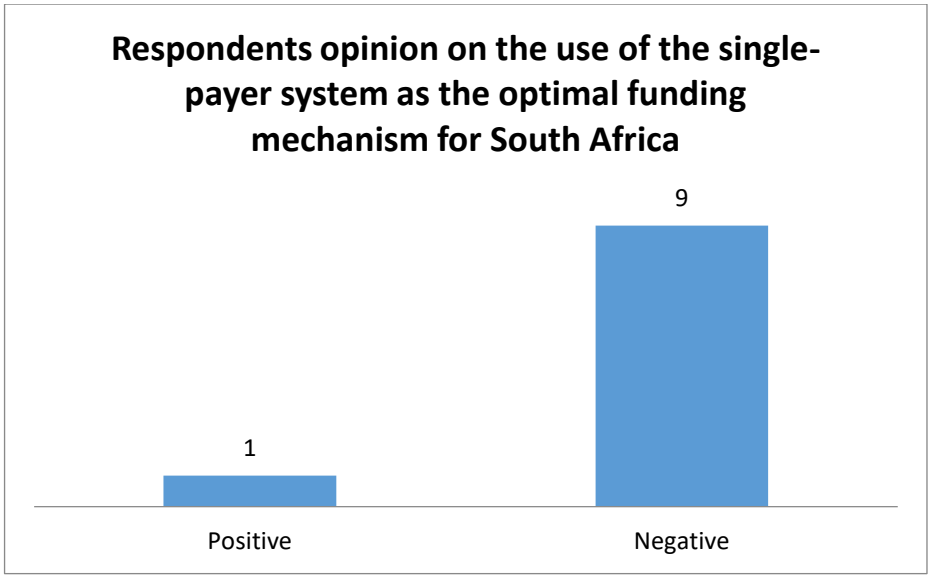


Figure 8: Respondents opinion on the use of the single-payer system as the optimal funding mechanism for South Africa

Respondent R5 discussed the high unemployment rates in South Africa. The respondent explained that for the single payer system to work, the country needs to have a high employment rate as shown with international examples like South Korea, the UK and many EU countries. This respondent's opinion is supported by Reich et al., (2016),who tells us that developing countries who have successfully implemented UHC, such as Brazil for example, do tend to favour the two-tier system.

A point which was discussed by three of the respondents was that the single-payer system would require increased governance and controls for the system to be utilised optimally. Respondent R6 made specific mention that the level of governance required would be significantly higher than that currently in existence in the health sector. Respondents R6 and 8 both discussed the increased bureaucracy of the single-payer system. The concern was that this increased bureaucracy will limit potential efficiencies of the system. Respondent R8 stated that:

> *"…(the single payer system) can become very bureaucratic and inefficient, especially at local/clinic level. At least at district level, they should be able to purchase services. There are some advantages to central purchasing – especially for big input items like pharmaceuticals and medical equipment – but these need to be management efficiently."*

In the next question the respondents found that a two-tier funding mechanism would be much more advantageous to our UHC system. Their response is seen in figure 9 below. Respondents 9 and 10 provided further detail by discussing that the current private health sector has been allowed to operate without pricing caps, and as such has become one of the most expensive private health insurance sectors in the world. The respondents felt that the private health insurance of the two tier system must be restructured so as to avoid the current inequalities that are being made.

Respondent R8 said:

> *"I would agree that building on the current system is the most pragmatic way forward, i.e. correct/ address current failures in the two sectors and allow them to compete in terms of quality and price. The rich who can fund healthcare out of their own disposable income should do so, in order to alleviate the burden on the state*."

This ties in with respondent R6:

> *"Yes we need to persist with the two tier system, implement a successful NHI in stages, parallel regulation of the Private sector and slow attrition of the Private sector."*

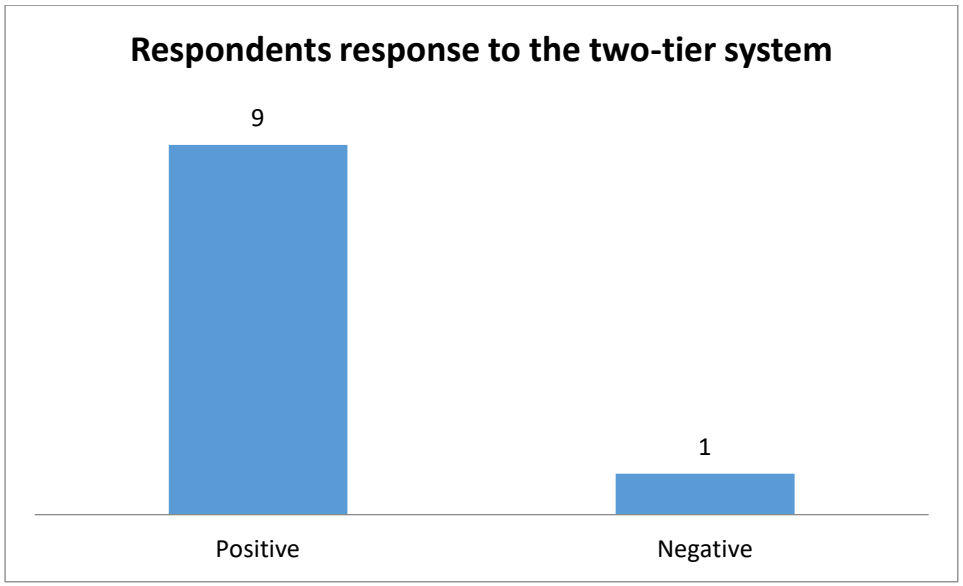


Figure 9: Respondents response to the two-tier system

What we must carefully consider in this funding solution is the role of the private sector as well as private voluntary insurance. This is what is meant when referring to a two tier system. Depending on how the private sector is managed the outcome can be positive or negative.

However a respondent did warn against use of the private system in the UHC funding as current inequalities could be worsened. This respondent is correct as Mcintyre (2010) finds that out-of-pocket payments are regressive. However, she also tells us that that international evidence indicates that the overall regressiveness of heath financing can be controlled by clearly defining and limiting the role of PHI in the health system (McIntyre, 2010). This could be the solution the respondents have in mind when replying that a two-tier or alternative system would be beneficial for NHI.

In Brazil, for example, about 25% of the population has private health insurance and in this 2 tier system, problems managing inequities have arisen as the system favours the richer population (Reich et al., 2016). However countries like Japan, have made efficient use of their private sector through the use of a single fee schedule for both private and public sectors (Reich et al., 2016).The Netherlands have also been successful with a two tier system by making insurance scheme membership compulsory(McIntyre, 2010).

4.3.4 Proposed tax combinations in a single payer fund

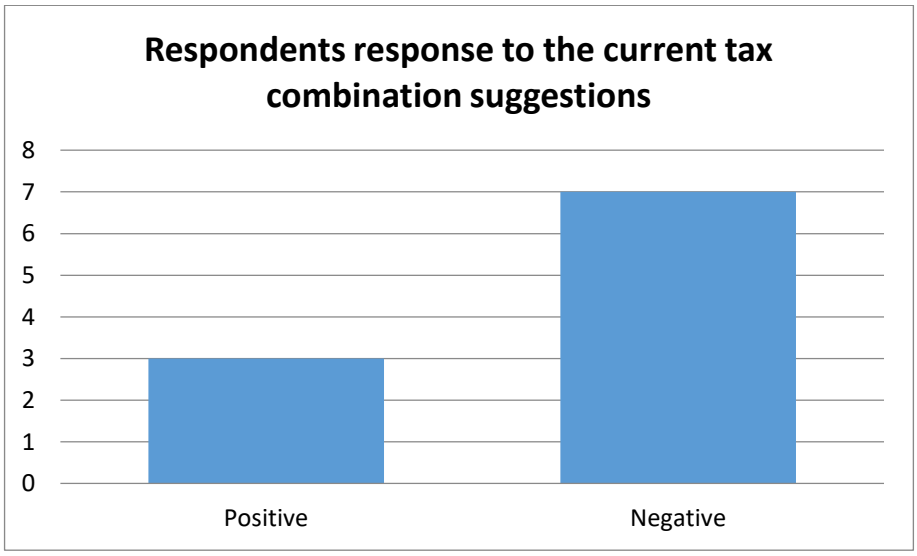


Figure 10: Respondents response to the current tax combination suggestions

This question deals with the proposed tax combinations in the white paper the NHI fund. Most of the respondents reacted negatively to the proposed tax combinations as seen in figure 10, above. The rationales for the negative responses provided were mostly about the use of salaried tax, given that South Africa has such a high rate of unemployment. The respondents believe that this form of tax generation would not amount to enough revenue to support an enhanced health sector bill, particularly given the relatively small tax-paying population. However, respondent 8 discussed the practicality of making use of a direct or payroll tax on a country with as small a tax base as South Africa:

> *"Personally, I think the payroll tax will be least harmful to the economy, but also difficult to implement as you will be taxing salary earners of which the majority do not use public health services"*

The majority of the respondents supported a mixture of direct and payroll taxes, but stated that VAT and other indirect taxes should not be utilised as it was not optimal for this purpose. Respondent 8 did however discuss that whilst regressive, VAT could have a part to play in the funding of NHI – this is represented below:

> *"Although VAT is regressive, there is a social argument to be made that the poor will be using the improved public services more and will have a simultaneous decrease in out of pocket expenditure on health. However, it is politically sensitive and will be very difficult to earmark the additional funding for the NHI"*

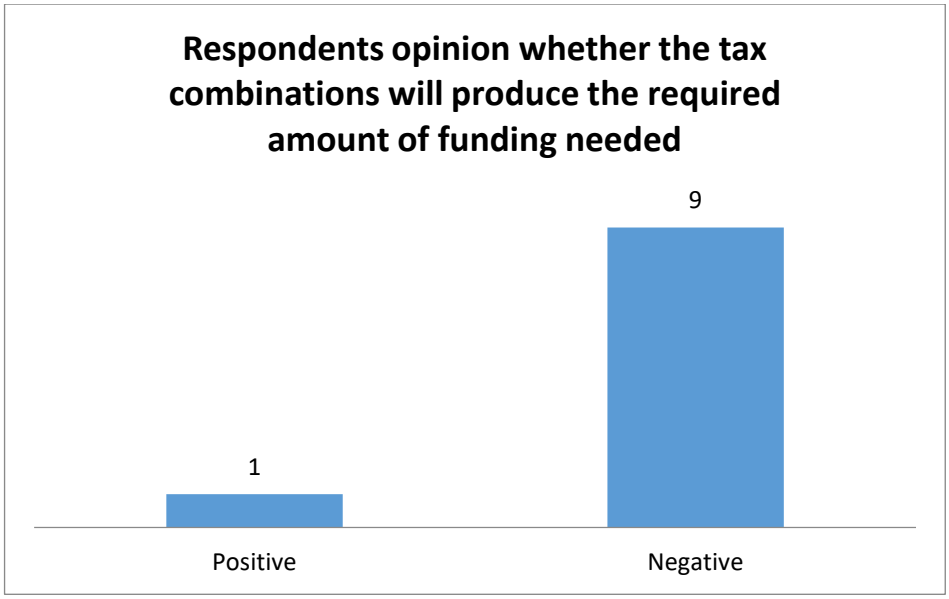


Figure 11: Respondents opinion whether the tax combinations will produce the required amount of funding needed

Whilst in agreement as to the form of taxation which would be most sustainable, nine of the ten respondents felt that it was unlikely that enough revenue would be generated by the suggested taxes alone as seen in figure 11 and once again, the respondents made mention of the necessity of increased governments allocated budget for healthcare. In addition, alternative taxes which could be linked to the health field, such as sugar and alcohol (sin) taxes could be used to offset at least a portion of the costs. These alternative funding sources will be discussed in section 4.7 below.

These responses support the discussions in the literature review that the use of indirect taxation such as VAT, fuel levies, health destroyer or sin taxes etc will further worsen the socioeconomic inequalities that the UHC is trying to balance out.

According to figure 5 in chapter two, the respondents were asked which scenarios they believe would be most successful. From the respondents replies it seems that scenario B and E are most supported. These scenarios are the only options that do not utilise indirect taxes.

4.3.5 Alternative funding sources

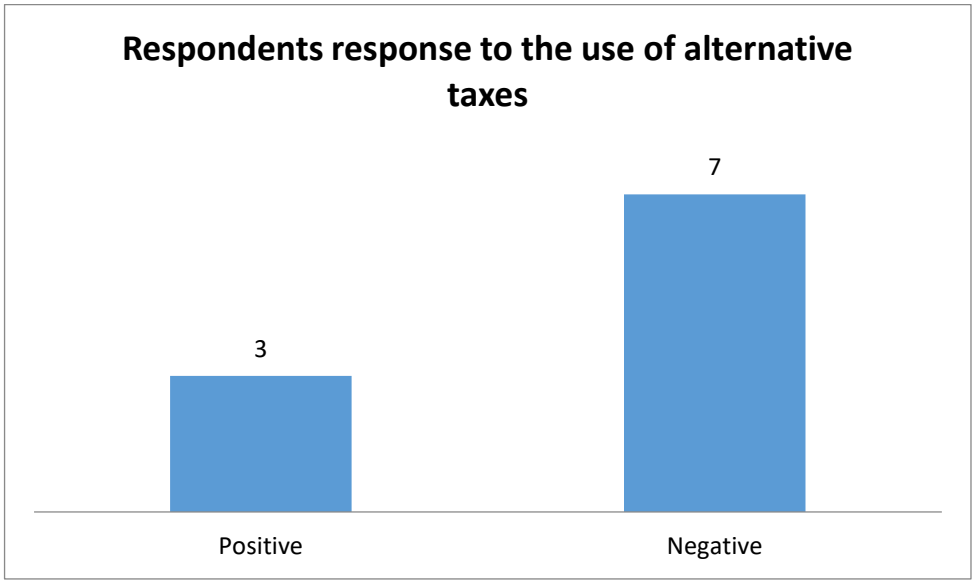


Figure 12: Respondents response to the use of alternative taxes

These questions deal with the proposed alternative taxes suggested in the white paper such as use of sin taxes, carbon taxes and even the use of contributions that employers were making to medical schemes. The majority of respondents reacted negatively to theses alternative tax uses as seen in figure 12. Most stated reasons such as that these taxes have allocations already and that these taxes would minimally contribute to the amount needed to afford complete population coverage.

Some suggested unique sources of revenue are:

1. Wealth tax
2. Additional tax on Alcohol especially beer
3. U.I.F. has a huge surplus and a percentage should go to NHI
4. Lottery fund to contribute a percentage. Tax on Winnings
5. Workmen's Compensation fund to contribute
6. Additional tax on Fuel
7. Tax on taxi licenses
8. A very, very low tax on each banking transaction 0.001 cent on every transaction
9. Sugar Tax/ Salt tax
10. Additional tax on cigarettes/tobacco/vapour cigarettes

11. A low tax on Motor Vehicle Insurance-Short term insurance companies
12. Increase in Value Added Tax (VAT)
13. Increase Income Tax especially high earners (>750 000)
14. New tax on new Motor Vehicles sold especially vehicles used as Taxis e.g. Mini Bus Taxis
15. Tax on Fast Foods
16. Tax on Tyres- Motor Vehicle tyres
17. Tax on Cell-Phones/Air- Time
18. Special Tax on Televisions

4.4. Summary of the results

The respondents believe that the current state of the health system cannot continue as is and needs an overhaul. That being said, the data shows that they are wary of the compulsory prepayment method attached to the single payer mechanism. They also greatly value risk pooling and cost containment and want a funding mechanism that adequately utilises these tools to obtain population coverage. The data shows a positive outlook on a suggested two-tier approach to the funding mechanism that involves use of private health insurance while controlling out-of-pocket expenses. The favoured tax mechanisms in the scenario of compulsory prepayment are direct and payroll taxes and the respondents were against the use of indirect taxes, such as VAT. This was stated to be due to the proven regressive nature of utilising indirect taxes. They have responded that they don't believe that any usable unique avenues of funding will be found within areas such as sin tax and carbon.

In light of these results the answer to the research question posed is that a two-tier approach is slightly favoured but of more importance is that South Africa's funding mechanism is as progressive as possible and should aim to bring more balance to the current inequalities. The results do indicate that the single-payer system is not supported in its current state and perhaps a more thorough layout of the funding mechanisms and the reasons behind the choices are needed.

CHAPTER 5: CONCLUSIONS & RECOMMENDATIONS

5.1. Introduction

This chapter will detail the conclusions of this research paper based on the findings detailed in chapter four. This chapter will also outline the researcher's recommendations and suggestions for further research in this field of study. This research aimed to investigate the funding mechanisms available to South Africa for the universal health care programme and to determine what would be most efficient. The research question in this paper was:

What funding mechanisms will be optimal for South Africa's National Health Insurance?

5.2. Conclusions of the study

This research sought the participation of experts and participants in the current NHI implementation. From the analysis of these results it would appear that the funding mechanisms proposed by the governments white paper are currently not supported by the stakeholders and experts consulted. This is due to a number of factors, chief amongst these that it is believed that the proposed revenue funding mechanisms will not generate an adequate amount of funding to provide sufficient population coverage. The respondents were also concerned that the current two-tier state of our health sector is being ignored and it could be of value to evaluate the use of a modified two-tier funding system.

It was a prevalent concern of the respondents that the funding mechanism should be proved to be progressive so as to ensure that the current inequalities in our health system will not be worsened. The research showed that respondents were primarily concerned with ensuring the tax combinations used in the single payer scenario would avoid the use of indirect taxes, such as VAT – as this would pose a regressive outcome, and thus further the inequalities in the system.

However, there were multiple respondents who felt that the existing tax paying base was relatively small, and that there could be instances of tax revolt if the direct tax burden increased. This is emphasised by the respondent's comments on the low

employment rates in our country, and its impact on further tax generation, given this low tax base. The research found that there was also concern about the immediate impact of implementing a system such as UHC, without adequate preparation of both healthcare infrastructure and the majority portion of South Africans who had never had private healthcare insurance – albeit these issues would be present for the short term. This spoke to the current inequalities between the private and public health sector and the spending gap between the two groups.

Finally, on the concept of alternative taxes, the research finds that the respondents believed that these alternative taxes would have fiscal allocations already, and that these taxes would thus minimally contribute to the amount needed to afford complete population coverage.

5.3 Recommendations

The outcome of this research is to assist the South African government in its rollout of the NHI programme. In the 2017 budget speech, the South Africa's finance minister has stated that the NHI fund will shortly be set up and that government will liaise with stakeholders to define the funding mechanisms further (Gordhan, 2017). It is the researchers hope that the research conducted in this paper will help find the most progressive method of funding South Africa's universal coverage.

In terms of other countries utilising this paper, it is the researchers hope that other developing countries will utilise the findings when laying out their own green and white papers. The findings in this paper will be most useful for other developing countries and most likely other African countries.

It is essential that when proposing universal healthcare for a country, the funding strategy has been carefully thought out – with considerable thought being given to the downstream impact of the various funding choices. This paper could assist in understanding the elements that make up an efficient and progressive funding mechanism to attain universal healthcare.

5.4. Suggestions for further research

My suggestions for any researchers looking into South Africa's universal health care funding methods would be to include the private sector in the data collection as well.

The question that has come up for the researcher during this process refers to the possible methods of improving the South African medical aid models, so that they are not as expensive as compared to the rest of the world. This could be researched in collaboration with the existing medical aid research councils and economists.

In addition, there is scope to assess how the private sector could be most efficiently included in an NHI future, so as to make NHI more attainable and of a higher quality than the approach recommended in the white paper.

5.5 Limitations of the research report

Although this research was carefully prepared, I am still aware of its limitations and shortcomings. First of all the sample size was kept small due to the political nature of the topic and willingness of respondents to give their opinions. This sample size could be looked at as not representative of the views shared by other experts. Secondly the data collected was analysed using only one method of analysis and interpretation.

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Appendix A: Cover letter:

I am a final year MBA student at Wits Business School. I am in the process of completing a research report as a requirement of the course and am collecting data for that purpose. I am a medical doctor currently working for the Department of Health in Soweto. My research report aims to assess what the optimal funding mechanism for South Africa's National Health Insurance will be. As a health professional this topic deeply interests me and is very relevant research.

The purpose of this letter is to ask for your assistance as someone who has knowledge of South Africa's National Health Insurance to be a participant in the study by allowing me to interview you. This letter also serves to inform you of your rights as an interview respondent in order for me to obtain informed consent.

Participation in the study involves a face-to face interview with me that should last an hour. This interview will be audio taped, with your permission of course, and later transcribed for the purpose of data analysis.

There are no anticipated risks to your participation in this interview. Anticipated benefits would be assisting the researcher with knowledge collection on a vital topic in South Africa's public health space.

The information collected during this study will remain confidential and in secure premises during this project. Only I will have access to the study data and information. There will be no identifying names on the interview transcripts. Your names and any identifying details will never be revealed in any publication of the results of this study and the tapes will be destroyed at the completion of the research.

Participation in this research project is completely voluntary. Consent can be withdrawn in the project at any time. You are also free to refuse to answer any of my questions in the interview process. If you are comfortable with these rights, please sign the consent form given to you. Please feel free to contact me at any time with any questions or queries you may have around the study and your participation.

Warm regards,

Sunira Rugnath Cell: 0836588378; Email: srugnath@gmail.com

Appendix B: Consent Form

Title of research project:

An investigation of the optimal funding strategies for South Africa's National Health insurance

Name and position of researcher:
Please initial box:

Dr Sunira Rugnath, Final year part-time MBA student, Wits Business School

1. I confirm that I have read and understood the electronic information sheet I received for the above study and have had the opportunity to ask questions of the researcher.

2. I understand that my participation is voluntary and that I am free to withdraw at any given time.

3. I agree to participate in this study.

4. I agree to the interview being audio recorded.

Please tick box

Yes No

Name of participant: Date:
Signature:

Dr Sunira Rugnath (Researcher) Date:
Signature:

Appendix C: Interview Schedule

Opening statement:

The aim of my research is to find out what funding mechanisms will be most appropriate for South Africa to utilise for the implementation of a universal healthcare system ie National Health Insurance. As such I would like to draw on your expertise to determine this

1) Do you believe that universal health coverage is needed in South Africa and why?

2) What are your thoughts on funding mechanisms for South Africa's NHI in terms of :

3.1) Revenue funding

3.2) Risk pooling

3.3) Purchasing and cost containment

3) What do you know about the current intended mechanisms that the South African government have proposed for NHI?

4) The White paper on the NHI system released by our government in 2015 talks about utilising a single-payer system of funding for NHI. What do you think of the single-payer system?

5) There has been debate that a modified two-tier system would be more appropriate for South Africa, what are your opinions on this?

6) What do you think of the proposed tax combinations in the White paper? What tax combination do you believe would work best?

7) Do you believe the use of these taxes will achieve the amount of funds needed through prepayment and why?

8) The White paper makes mention of other avenues of funding such as sin taxes, carbon taxes and even the use of contributions that employers were making to medical schemes. What do you think of these alternatives?

9) Do you have any unique revenue collecting methods suggestions?

10) What funding mechanisms do you believe will be most successful in South Africa and why?

11) What is your current or past involvement with NHI implementation? What is your current age range?